POTTSTOWN METROPOLITAN REGIONAL COMPREHENSIVE PLAN August, 2005



Douglass Township

East Coventry Township

Lower Pottsgrove Township

New Hanover Township

North Coventry Township

Pottstown Borough

Upper Pottsgrove Township

West Pottsgrove Township

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Pottstown Metropolitan Regional Comprehensive Plan

August, 2005

The Pottstown Metropolitan Regional Comprehensive Plan
was prepared by the Montgomery County Planning Commission
with technical and professional assistance from the
Chester County Planning Commission and,
financial assistance from the
Commonwealth of Pennsylvania's
Department of Community and Economic Development

For the Municipalities of:

In Montgomery County:

West Pottsgrove Township

Upper Pottsgrove Township

Lower Pottsgrove Township

Douglass Township

New Hanover Township

Pottstown Borough

In Chester County:

East Coventry Township

North Coventry Township

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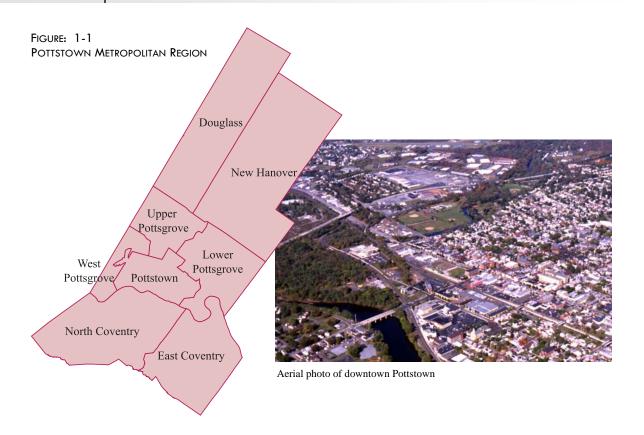
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Chapter 10

Chapter Regional Profile



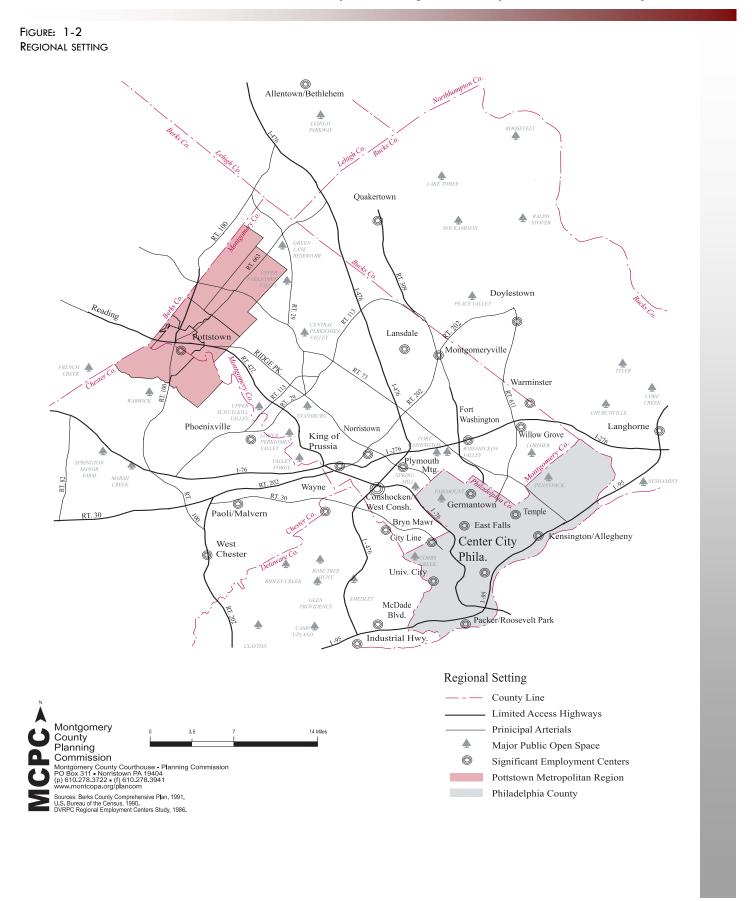
Regional Setting

The Pottstown Metropolitan Region is located approximately 40 miles west of the City of Philadelphia in Montgomery and Chester Counties and abuts the southeastern border of Berks County. The metropolitan Region is comprised of

The Pottstown Metropolitan Region contains a land area approximately 82 square miles, one of the largest regional planning areas in the Commonwealth to date.

Douglass, New Hanover, Lower Pottsgrove, Upper Pottsgrove and West Pottsgrove Townships and Pottstown Borough in Montgomery County and East Coventry and North Coventry Townships in Chester County. The Schuylkill River runs through the center of the Region and separates Montgomery and Chester Counties.

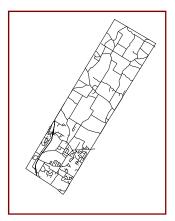
Centrally located in the Region along the Schuylkill River is the Borough of Pottstown. It is the only borough in the study area and thus contains the highest density development of all the municipalities. The Region is also the crossroads of Route 422, a major east-west U.S. Route, and Route 100, a major north-south State Route.



Municipal Overview

The municipalities of the Pottstown Metropolitan Region desire to plan together for more effective growth management. A strength of this Region is the variety of communities that are working together in this effort. This section briefly describes some of the unique history and qualities of each municipality.

Douglass Township



The original boundaries of Douglass included the land of New Hanover and extended south to the Schuylkill River. In 1683, the first German settlers arrived as part of William Penn's recruiting effort and organized themselves as the

Frankfurt Company. In 1741, New Hanover, Douglass, Upper Hanover and Pottsgrove Townships were formed by the division of Hanover Township. In 1807 the southern boundary of Douglass Township was established forming the current-day township boundary.

A "publick house" or inn built along East Philadelphia Avenue in Gilbertsville in the 1700's was a landmark within Gilbertsville. From the late 1800's to 1920, East Philadelphia Avenue was a toll road run by the Limerick and Colebrookdale Turnpike Company. By 1848, the development of Gilbertsville made it large enough to be recognized as a specific place. The Village of Congo, north of Gilbertsville came about in 1848 when a hotel was established there along Hoffmansville Road.

The Village of Niantic, also north of Gilbertsville became a place after the development of a Gristmill along the West Branch of the Perkiomen Creek. The Village of Sassmansville was created in 1888 to honor the organizer of a Reformed church who built the village.

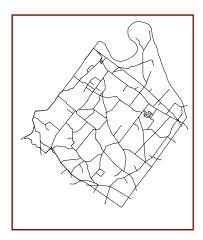
Early schools within the Township were affiliated with neighboring churches. A Township-wide public school system was created in 1851 at which time numerous neighborhood schools were constructed to serve the local school-aged children. In 1965, a jointure was formed with the Boyertown Area School District. Boyertown remains the school district for the Township today.

Trolley tracks were laid in Gilbertsville in 1909, however the trolley did not run for several more years due to controversy over its development. The trolley did finally run from Pottstown to the Swamp Hotel in New Hanover and through Gilbertsville to Boyertown where it ended. This rail line allowed residents to use public transportation all the way to Philadelphia until service was suspended in 1937. In the 1960's, well after the automobile had taken over as the main mode of transportation in the Region, Route 100 was constructed through the Township.

The Berks-Montgomery municipal sewer system was extended to Douglass Township in the 1960's.

Today, the rural character of Douglass still remains in the northern and central parts of the Township. However, the Township is seeing increasing pressure to develop as suburbanization spreads into the area.

East Coventry Township



The region where East Coventry is located was known as the "Skoolkill District. The name Coventry was given to it by Samuel Nutt, an early settler, whose forebearers were from the English town of the same

name. It was first settled in 1718 by twenty-eight families and there were four non-resident landowners.

One of these landowners was Owen Roberts. By 1774, the population had almost tripled. That same year, Coventry had 78 landowners, among who were some whose names still exist on Township roads. Farming was then the chief pursuit, although several grist mills were located along Pigeon Creek.

Coventry Township was instrumental during Revolutionary War. An 1879 newspaper clipping related that"...on Herman Prizer's farm on Ellis Woods Road stood a barn used as a hospital for American forces in the Revolutionary War...about 150 yards northwest of the barn, in a small copse of woods belonging to John Ellis are the graves of 16 American Soldiers. The mounds over the graves are still visible, being side by side, in a straight line, and about four feet apart. There are no head or foot stones..." Following the Revolutionary War, there was a steady increase in population, and by 1840, the year before the Township was split in half to form North and South Coventry, the number of residents had climbed to 2620. In 1844, there was a further division, with East Coventry being carved out of North Coventry. The population in East Coventry Township in 1850 was recorded as 1228.

The water power of the Township provided industrial opportunities for early settlers. There were several mills in operation in the early to mid 1800's. In addition, the early settlers found opportunities in agriculture. The land area adjacent to the Schuylkill River and Pigeon Creek provided exceptionally productive land for farming.

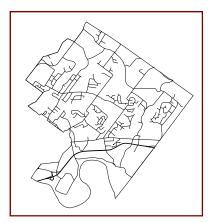
The Schuylkill Canal Navigation System, located along the Schuylkill River in the northern portion of East Coventry Township, was incorporated in 1815 and completed in 1824. The purpose of the Schuylkill Canal was to provide a system for transporting coal, iron, lumber, merchandise and produce between Mt. Carbon/Mill Creek (Schuylkill County) and the City of Philadelphia. The total length of the system was 108 miles. The canal system played an important role in the growth and development of East Coventry Township and provided opportunities to its residents.

By 1870, the Schuylkill Canal become obsolete and eventually was abandoned in favor of other improved transportation systems. Between 1850 and 1950, there was

little change or growth within the Township. appearance, it was still a rural community with agriculture as the dominant land use. During the 100 year time period, the population of East Coventry Township increased by only 271 residents. population of the Township in 1950 was recorded as 1499. Between 1950 and 1960, the population increased to 2183 residents. This growth rate (45.5 percent) is mostly attributed to the availability of reasonably priced land, regional locality, a growing economy, and the improvements to the regional transportation network. As of the 2000 Census, the Township population was 4566, representing slightly more than a doubling in population over the most recent 40 years. Much of the recent growth has occurred in the northern areas of the Township, in the form of residential housing built on productive farmland.

East Coventry Township has maintained a great deal of its historic character over the time of its existence. That character has been primarily agricultural. However, like most areas in the Region, low density residential development is occurring as families find the area a pleasant place to live and access to employment centers improves.

Lower Pottsgrove Township



Lower Pottsgrove was formed 1889 from the larger Pottsgrove Township. Pottsgrove Township was originally made up of the current day Lower, West and Upper Pottsgrove Townships, which

were once all included in the former Hanover Township. In 1875, Pottsgrove Township was divided into two election districts, Upper and Lower, because of the size of the district and the increasing population. In 1889,

Lower Pottsgrove separated from Upper Pottsgrove and West Pottsgrove. After the separation, several annexation attempts were made by the Borough of Pottstown throughout the early 1900's, some of which were successful. Lower Pottsgrove Township became a first class Township in 1954 partly in an attempt to prevent future annexation.

The Sanatoga Run, called Senetoga (meaning "swift stony stream") by the native inhabitants of the area, was used by five gristmills, three sawmills, a carding mill and a clover mill in the 1800's. In 1890, two stores opened in the Village of Sanatoga. By 1900, only four gristmills and two sawmills remained along the Sanatoga Run.

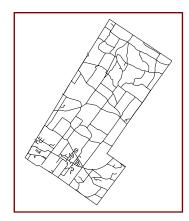
The Township was initially accessible by horse and buggy, which was made easier by the opening of the Perkiomen and Reading Turnpike in 1815. Within 10 years of the Turnpike opening, the Schuylkill River was utilized for transportation by the Schuylkill Navigation Company. By 1938, the railroad had come through the town with a stop at Sanatoga Station. In the 1960's, development pressure began to increase and by 1971, public sewer lines were installed in some areas of the Township.

In the 1890's, Ringing Rocks Park was developed. It had many attractions including a roller coaster, zoo, merrygo-round and dancing pavilion. Around the same time, people were attracted to Sanatoga Park because of the trails, bridges and boats for rent on Sanatoga Lake, which also included an amusement section with a rollercoaster and dancing pavilion.

Pottsgrove Township was served by five, one-room schoolhouses throughout the 1800's. In 1890, when Lower, Upper and West Pottsgrove Township's separated, so did the schools, with each running schools in their municipality. In 1955, Lower, West and Upper Pottsgrove schools consolidated to form the Pottsgrove School District that serves all three municipalities today.

In recent times, the Township has seen noticeable growth from migration to the outer suburbs. While the amusement parks of the past are gone, the Village of Sanatoga and some of the parks developed in the early days of the Township still remain.

New Hanover Township



New Hanover Township was established in 1741 by the division of the Township of Hanover into New Hanover, Upper Hanover, Douglass and Pottsgrove Townships.

New Hanover was bisected by Skippack Pike (now called Big

Road), one of the County's oldest east-west highways. A second major road through the Township, Swamp Pike, was constructed from Limerick to Boyertown in 1723 and became a toll road in the middle of the nineteenth century.

Trolley service from Pottstown went through the farmland of New Hanover to the Swamp Hotel and continued on through Douglass to the Borough of Boyertown. In the 1930's, bus service replaced the trolley system.

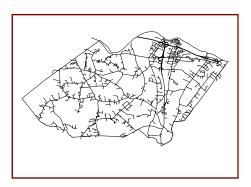
Early education in New Hanover was provided by neighborhood schools, as it was in neighboring communities. In 1966 a jointure with the Boyertown Area School District was formed. The Boyertown School District remains the school district for the Township today.

A Sewer Authority was formed in 1973, and a sewer system was operational by 1982. Most of the system ran (and still runs) by gravity flows. Drinking water was provided by hand dug wells in the Township, including some 70 to 90 ft. artesian wells.

Much of New Hanover Township continues to be utilized

for farming today. The rural/suburban character of the Township has brought about increased development pressure, but a significant amount of the northern and central parts of the Township still retain the rural character and feel of the past.

North Coventry Township



The first wave of European settlers came in the early 1700's as William Penn was conveying large tracts of land throughout the Region. This northern area of Chester County was first mapped by the Europeans as the "Skoolkill District" and later renamed to "Coventry" by Samuel Nutt.

In the 1790's, the Pennsylvania Legislature authorized the construction of toll roads throughout the state. One of the toll roads was the Wilmington - Exton Turnpike, now Route 100. With the construction of this turnpike came the first bridge in the area across the Schuylkill River. Within 25 years of Route 100 being built, the Schuylkill Canal was completed. It had a significant impact on the commerce, trade and transportation aspects of the Township and Region.

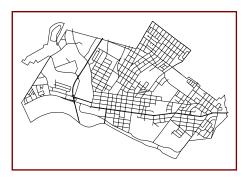
Education in the township came about in the early 1800's when farmers joined together to hire teachers. The wealthy went to the newly established local academies, but widespread education was not brought about in the Township until 1834 when the Free Public School Act was passed by the State Legislature. As with other area municipalities, the end of the civil war brought about a renewed interest in education. There were several one

room school houses throughout the Township providing at least an elementary education. After the Civil War, school houses became larger and the level of education expanded. A high school was constructed in 1912. In the late 1950's, North Coventry joined other neighboring municipalities and formed the Owen J. Roberts School District.

Through the 1950's and 1960's, North Coventry experienced a housing boom caused by the nationwide move to a suburban lifestyle. The increased development of the Township brought with it a demand for more services. During this time, roads throughout the Township were paved, sewage disposal was brought to the Township and zoning was first enacted

Today, North Coventry is still experiencing growth pressures for residential development. A recently passed open space preservation tax referendum will help provide for a better quality of life in the Township. It shows that people still desire to maintain North Coventry's rural feel.

Pottstown Borough



The convergence of the Manatawny Creek and Schuylkill River was an attractive location for members of the Delaware Indian tribe and foreign explorers. Settlements were formed in the area of Pottstown, but the current location of was not created until 1717 when the area around the Manatawny was bought and used for iron production. By the mid 1700's, Thomas Potts, who was an ironmaster, had multiple iron interests in the Pottstown

area. John Potts bought the area that would become Pottstown and eventually, the name Pottstown was created from people referring to it as Pott's Town. Pottstown was incorporated as a Borough in 1815.

Pottstown was a metal manufacturing town, first as an iron producer and later as a steel producer. This industry was prevalent in Pottstown until the early 1900's, picked up during both World Wars, and all but ended after WWII when increased competition started to slow production demand.

The Schuylkill River played a significant role in the development of Pottstown. The Schuylkill Canal opened in 1824 and provided the first mode of transportation besides horse, bike or walking. Bicycling was a very popular means of transportation in and around Pottstown. By 1839, steam locomotives were running between Reading and Philadelphia, with a stop in Pottstown. Citizens who opted for motorized transit also had two trolley lines running from Sanatoga to Stowe and High Street to Ringing Rocks Park.

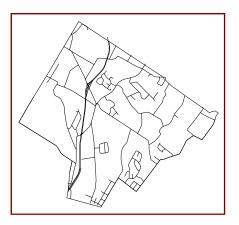
Pottstown was the traditional hub of activity. The Borough was a large employment center and had many cultural activities, shops and banks that lined the streets.

The school system dates back to before 1800 when two log cabin school houses existed. In 1838, Pottstown established a public school system. Multiple school buildings were built around this time and in 1890, a large school building with multiple rooms was constructed. Private schools were always a prominent part of the history of Pottstown. The Hill School was opened in 1851 and run as a family operated school until 1920 when it became a not-for profit operation.

In the 1860's, a water company was formed and water was pumped to a reservoir on Washington Hill. A municipal sewer system was not installed in the current day Borough until development pressures in 1915 brought about a need for it. Today, there is public water and sewer and an adequate road network throughout the Borough that is an asset to future redevelopment of the area.

Today the Borough has been hit by the dwindling presence of the steel industry and by the closing of other major employers within the Borough. Positive steps to turn the tide have been made and more work is being done to revitalize the Borough.

Upper Pottsgrove Township



Upper Pottsgrove Township was settled by the English and Germans. The land was part of a manor set up by William Penn and was eventually sold to a wealthy Philadelphia merchant named George McCall. At his death, the manor was divided between McCall's children. One of the divisions encompassed at least the area of Upper Pottsgrove Township and West Pottsgrove Township. A further division occurred in 1889 officially separating the current day Township of Upper Pottsgrove from West Pottsgrove.

The Village of Halfway House was named for a tavern located halfway between Pottstown and Boyertown on Farmington Road. The tavern's location led to the development of this small community within the Township. In the mid - 1900's, development began to expand north from Pottstown Borough and the more developed areas surrounding the Borough. The new residents wanted to be annexed to the Borough of Pottstown for the services it provided. Those hopes ended

in 1965 when Upper Pottsgrove became a first class township, removing any possibility of further annexation.

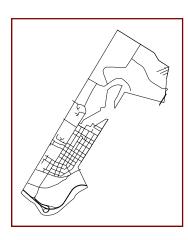
Farmers and farm related occupations were historically the main source of business in the Township. Workers were also employed in the iron mills in Pottstown. During WWII, wages for industrial workers took people off of the farms and got them into the factories. Today, farming as a way of life in Upper Pottsgrove has given way to other employment opportunities in the area.

In the early days, elementary school children were educated in one of two one-room schoolhouses. High school students went to Pottstown. A brick consolidated school, built on Farmington Avenue in 1929, was used until it closed in 1973. Students in the Township today are educated in the Pottsgrove School District.

A sewer authority was established in 1972 to serve Upper Pottsgrove residents, however most homes had, and still have, on-lot septic systems. Some water for the Township continues to be supplied by private wells.

Development has been continuing throughout the Township since the housing boom of the 1950's and 1960's, given the proximity to the Borough of Pottstown and its services. However, large areas of the Township still remain undeveloped compared to its neighboring communities.

West Pottsgrove Township



This land was originally settled by Native Americans with the main draw being the Manatawny Creek and Schuylkill River. William Penn owned most of this land in the late 1600's and gave a significant amount of it to his son, John, in 1701. In 1900, West

Pottsgrove separated from Upper Pottsgrove. West Pottsgrove became a second class Township in 1900, and a first class Township in 1922.

The Village of Stowe, formerly Buchanville, was a village populated by immigrant labor. In 1885, a stop for the Philadelphia and Reading Railroad Company was constructed. The stop was called Stowe, so named because of the Stowe farm located near the station.

Prior to 1900, children were educated in a one room schoolhouse by a single teacher who taught all pupils. A two room school building was built in 1892. In 1905, a larger school building was constructed and a one room schoolhouse. Between 1914 and 1932, multiple room additions were made to the larger school building. A new building was constructed in 1940, but it was destroyed by a fire. Another new school was completed in 1944. In 1956, West Pottsgrove joined both Upper and Lower Pottsgrove to form the Pottsgrove School System.

Municipal sewer and water has been provided and is still provided to West Pottsgrove under a contract with the Borough of Pottstown. Since the Township is established and mostly built-out, and since the road system is set up as a grid, significant new roads are unlikely. The other public "utility" that exists in the Township is the waste management facility. The future use of this facility is a significant question since the landfill only has a few years of use left before it will close.

Today, while West Pottsgrove Township is mostly built-out, there is some land that could be developed. The landfill area and the land between High Street and Route 422 also have the possibility for redevelopment in the future.

Socio-Economic Conditions

The socio-economic characteristics of a region are vital to providing a snapshot of the trends in population, employment and housing. These trends provide the basis for creating future goals that will help guide the Region toward a unified planning vision. This demographic report has been developed using the most recent information available.

Population

The Pottstown Region as a whole saw almost 11% growth in population, an increase of 6,666 people from 1990 - 2000. Most of the growth was concentrated in 4 of the 8 municipalities, Douglass Township, New Hanover Township, Lower Pottsgrove Township and Upper Pottsgrove Township. The population of these 4 municipalities grew over 20% during the decade 1990 - 2000. These were the more rural, undeveloped communities. Conversely, North

Coventry Township lost population during the same period (North Coventry's population loss was approximately 1.67%). The Borough of Pottstown and

West Pottsgrove Township had less than 1/2 of 1% change (Pottstown saw an increase of 28 people or .13%,

West Pottsgrove saw population loss of 14 people or .37%). These declines and small increases occurred in the older, more developed communities.

According to the 2001 North Coventry Comprehensive Plan, the loss of population in North Coventry was not anticipated. The plan examined the individual census block data for 2000 and found that the population loss occurred primarily in the older (northern) portions of the Township. The aging of the population and decrease in household size accounts for some of the loss in population, but when comparing the

average household size, number of housing units, population, and number of households, there appears to be a statistical anomaly.

Y2000 Population o Municipalities in the Region

Douglass: 9,104

• East Coventry: 4,566

Lower Pottsgrove: 11,213

• New Hanover: 7,369

• North Coventry: 7,381

• Pottstown: 21,859

Upper Pottsgrove: 4,102

West Pottsgrove: 3,815

FIGURE: 1-3
POPULATION INCREASE 1950-2000

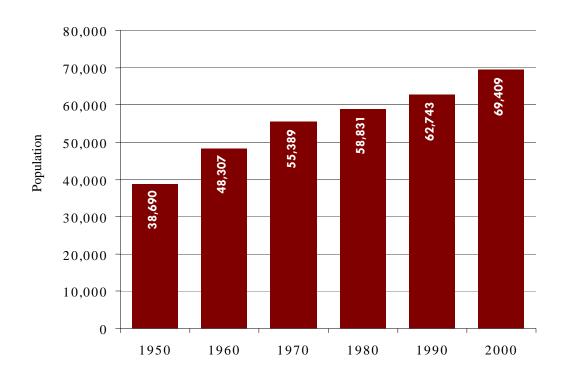


FIGURE: 1-4
POPULATION CHANGE 1990-2000

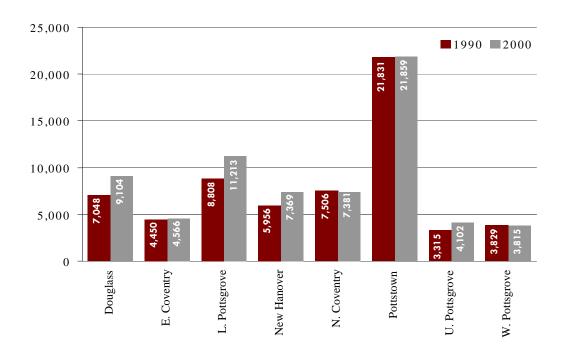
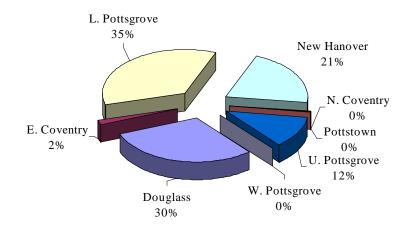


FIGURE: 1-5
PERCENTAGE OF REGIONAL POPULATION INCREASE 1990-2000



In the period 1950 - 2000, the Region as a whole has seen a population increase of 76.81% (29,719 people). This is a significant increase in a period of 50 years, but as significant as it is, the increase in both Chester and Montgomery Counties is higher. Chester County has seen a population increase of 172.40% since 1950 while Montgomery County's increase was 112.45% during the same time period.

According to the 2000 U.S. Census, the Borough of Pottstown contains the largest percentage of the population (21,859 people) of all the municipalities in the Region. Lower Pottsgrove Township has the second largest population (11,213 people) with approximately half that of the Borough, and Douglass Township rounds out the top three with approximately 13% (9,101 people) of the total regional population.

As shown in Figure 1-5, Lower Pottsgrove received the highest percentage of the regional population increase at 35%. The next highest percentage increases were in Douglass with 30% and New

FIGURE: 1-6
POTTSTOWN METROPOLITAN REGION POPULATION FORCASTS*

Hanover with 21%.

Population Forecasts

Population growth in the Pottstown Metropolitan Region is projected to continue at a substantial rate. There are many reasons for the continued growth, but the most significant reason is the Region's location at the crossroads of State Route 100 and U.S. Route 422. The Region has large areas of undeveloped land, and is easily accessible by automobile and bus to the greater Philadelphia area.

These population forecasts were developed by the Delaware Valley Regional Planning Commission (DVRPC) using 2000 Census numbers. The one exception is East Coventry which projects a larger population forecast due to a surge in new residential construction (1,000 new housing units proposed as of 2005.) The population forecast is consistent with the recent history of population migration in the Pottstown Region. The Borough of Pottstown and the Township of

Municipality	2000	2005	2010	2015	2020	2025	Change '	00—'25
Douglass Township	9,104	10,290	11,300	12,120	12,720	13,480	4,376	48%
East Coventry Township**	4,566	5,070	5,570	6,070	6,320	6,570	2,004	44%
New Hanover Township	7,369	8,170	9,230	10,390	12,340	14,610	7,241	98%
Lower Pottsgrove Township	11,213	12,710	13,880	14,540	15,140	15,540	4,327	39%
North Coventry Township	7,381	7,770	8,240	8,540	8,640	8,710	1,329	18%
Pottstown Borough	21,859	21,670	21,150	20,880	20,660	20,570	(1,289)	-6%
Upper Pottsgrove Township	4,102	4,390	4,900	5,750	6,890	7,300	3,198	78%
West Pottsgrove Township	3,815	3,820	3,820	3,760	3,760	3,720	(95)	-2%
Region Total	68,799	73,890	78,090	82,050	86,470	90,500	21,701	32%

*The information above represents the most current forecast from the DVRPC. The full document explaining the methodology used to create the population forecasts can be found in the March 2002 DVRPC Regional Data Bulletin titled, Population and Employment Forecasts, 2000 – 2025. Publish date - March 2002, No. 73.

^{**}East Coventry adjustment based on residential construction of 1,000 units as of August 2005.

FIGURE: 1-7 POPULATION AGE COHORTS

Municipality						Αξ	Age Groups	5					
Y2000	Under 5	6-5	10-14	15-19	20-24	25-34	35-44	45-54	62-55	60-64	65-74	75-84	85 +
Douglass	899	LLL	815	809	367	1,023	1,801	1,311	419	345	544	348	78
E. Coventry	234	262	370	278	163	368	812	714	288	246	377	293	161
L. Pottsgrove	840	974	919	751	423	1,509	2,010	1,572	513	370	629	537	166
New Hanover	444	564	655	510	245	815	1,507	1,103	418	314	483	254	57
N. Coventry	367	439	501	489	389	882	1,245	1,276	452	295	609	362	75
Pottstown	1,644	1,635	1,495	1,262	1,196	3,275	3,474	2,514	1,023	793	1,712	1,406	430
U. Pottsgrove	293	334	367	258	156	528	792	605	190	140	267	142	33
W. Pottsgrove	229	280	286	232	203	280	653	517	167	154	278	189	47
Total	4,719	5,265	5,408	4,388	3,142	8,980	12,294	609,6	3,470	2,657	4,899	3,531	1,047

Municipality						Ag	Age Groups	s					
V1990	Under 5	6-5	10-14	15-19	20-24	25-34	35-44	45-54	55-59	60-64	65-74	75-84	85÷
Douglass	570	578	512	200	400	1,211	1,227	727	288	312	475	210	38
E. Coventry	314	304	282	263	208	629	662	570	241	240	362	217	128
L. Pottsgrove	726	092	029	630	488	1,548	1,505	913	341	349	909	235	38
New Hanover	200	498	411	365	284	1,056	1,003	989	307	273	382	154	37
N. Coventry	449	528	499	564	513	1,217	1,270	916	379	338	580	204	49
Pottstown	1,729	1,493	1,138	1,190	1,591	4,113	2,605	1,931	930	1,138	2,257	1,311	405
U. Pottsgrove	270	247	255	216	156	625	543	364	158	180	233	92	22
W. Pottsgrove	299	263	248	239	311	681	541	389	161	184	335	154	24
Total	4,857	4,671	4,015	3,967	3,951	11,064	9326	6,496	2,805	2,657	5,229	2,577	741

West Pottsgrove are forecast to lose some of their population, though not substantially, while the other 6 townships in the Region are forecast to grow. The strongest growth is projected to occur in the northern part of the Region and East Coventry. See Figure 1-6.

Age Group Trends

Knowing the total increase in population only provides general information necessary to plan for the future of the Region. The increases in population by age category over the last decade provides information that can be used to ensure adequate resources are targeted at the correct age groups.

The overall age of the population in the Region has increased from 1990 - 2000, consistent with national trends of an aging baby-boom generation. This generation can be defined as those people born between the years of 1946 and 1964. This makes the baby boom generation those adults currently between the ages of 37 and 55.

The increase in the number of children can be directly correlated to the baby-boomer generation and as is

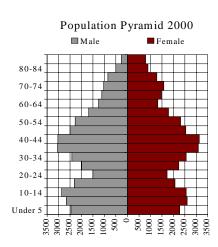
evident in the population pyramids above in Figure 1-7, the baby boomers and their children make up the largest age groups in the Region.

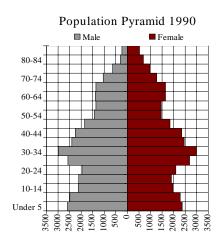
The population pyramids above show the male and female population recorded by the U.S. Census in 1990 and 2000. A comparison of the two graphs show that the largest percentage of the population in the 1990's, the baby boomers (defined above), are still the largest percentage of the population in 2000, however the baby boomers have aged (10 years) and now represent an older segment of the population. The next most significant population "bubble" occurs with the age group that is represented by the children of the baby-boomers.

It is possible and likely that the older baby boomers, those in the 45-55 age group with children in their 20's and 30's, have more children than shown on the population pyramid. The population of 20 and 30-something's have most likely left the Region for a larger metropolitan area, such as Boston, New York City, or Washington D.C.

This loss of 20-30 year old people is a national trend that is known as a "brain drain" or "youth drain" - the

FIGURE: 1-8
REGIONAL POPULATION PYRAMIDS





loss of younger adult professionals to large metropolitan areas. This usually happens because the larger metro. areas have more jobs and activities that tend to cater to younger professionals.

Employment Centers

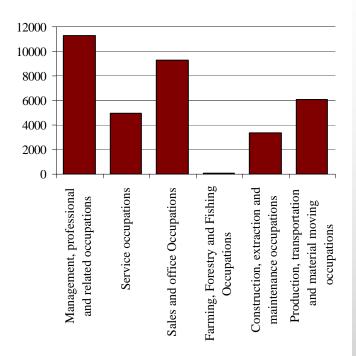
The Delaware Valley Regional Planning Commission (DVRPC) produced a document in 1990 titled, 1990 Employment Centers in the Delaware Valley. It lists all of the employment centers in the 9 county DVRPC region (The 9 county region includes Philadelphia, Delaware, Chester, Montgomery and Bucks Counties in Pennsylvania and Gloucester, Camden, Burlington and Mercer Counties in New Jersey). They define an employment center as "...areas of non-residential developed land combined with employment densities greater than .5 employees per acre (or as recommended by particular county planning staff)." Montgomery County has 22 employment centers that accounted for 346,115 employed persons in 1990. The largest center was Jenkintown followed by King of Prussia. Chester County has 12 employment centers that accounted for 170,062 employed persons in 1990. The largest center was the Route 202-Great Valley-Malvern center followed by the Route 30-Exton-Coatesville center.

A portion of the Pottstown Region, centered by the Borough of Pottstown, was listed as an employment center. The Borough and parts of Lower Pottsgrove, West Pottsgrove, Upper Pottsgrove, North Coventry and East Coventry made up the boundaries of this center. This center was considered to be a service sector center. According to the 2000 census numbers, this area is still heavily service-oriented.

Employment by Occupation

Employment of the population that lives in the Region is shown in Figure 1-9. It is easy to see that management, professional and related occupations lead the way in the employment by occupation. This is distantly followed by sales and office occupations. These two categories make

FIGURE: 1-9
EMPLOYMENT BY OCCUPATION: 2000 CENSUS



up the largest number of workers and show why DVRPC has determined the Pottstown Employment Center to be considered a service sector center.

Despite the fact that the Region contains a significant amount of farmland there are few people employed in farming, forestry or fishing. There continues to be a significant number of people employed as production oriented occupations. The Pottstown Region has a history of "heavy" industrial employment, centering around iron and coal, that has significantly decreased since the 1940's and 1950's.

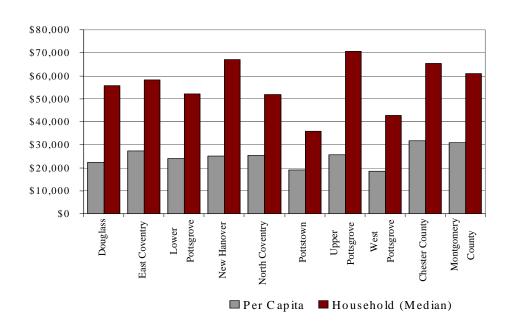
Income

The income characteristics in this analysis not only show how local municipalities compare with one another, but how they compare with Chester and Montgomery Counties as well. As is shown in Figure 1-10 and 1-11, there are some significant differences between the communities

FIGURE: 1-10 REGIONAL INCOME, 1990-2000

	1990	2000	2000
Incomes	Per Capita	Per Capita	Household (Median)
Douglass Township	\$16,636	\$22,476	\$55,679
East Coventry Township	\$17,079	\$27,257	\$58,125
Lower Pottsgrove Township	\$16,206	\$23,958	\$52,100
New Hanover Township	\$16,651	\$25,084	\$67,097
North Coventry Township	\$19,224	\$25,418	\$51,954
Pottstown Borough	\$13,291	\$19,078	\$35,785
Upper Pottsgrove Township	\$15,437	\$25,607	\$70,500
West Pottsgrove Township	\$13,936	\$18,413	\$42,759
Chester County	\$20,601	\$31,627	\$65,295
Montgomery County	\$21,990	\$30,898	\$60,829

FIGURE: 1-11 REGIONAL INCOME, 2000



involved in the regional planning process.

The per capita income is defined by the U.S. Census Bureau as "...the mean income computed for every man, woman and child in a particular group. It is derived by dividing the total income of a particular group by the total population in that group." In this case, that means taking the total income for a municipality and dividing it by the population of that municipality.

As shown above, the per capita incomes for townships with more recent suburban growth are somewhat similar. The per capita incomes for the Borough of Pottstown and West Pottsgrove Township, both older communities, are significantly lower than the "newer" suburban communities, but the two have per capita incomes that are very close to one another.

The household income is a measure of the income of the householder and all other persons 15 years of age or older in the household, whether related to the householder or not. This income measure is taken from the median; a median divides the income distribution into two equal parts, one half having incomes above the median and the other half having incomes below the median. Using the median income is a more accurate picture of income.

In this case, the median household incomes are again,

FIGURE: 1-12
REGIONAL EDUCATIONAL ATTAINMENT

Educational Attainment	Pottstown Region
Population 25 years and over	46,665
Less than 9th grade	2,054
9th to 12th grade, no diploma	5,892
High school graduate (includes equivalency)	19,207
Some college, no degree	6,950
Associate degree	2,850
Bachelor's degree	6,512
Graduate or professional degree	3,181

highest in the fast-growing communities and lowest in the older communities of West Pottsgrove and Pottstown. Upper Pottsgrove Township had the highest median household income in the Region in 2000 followed by New Hanover.

Educational Attainment

The educational attainment of the population is measured by looking at the population aged 25 and older. In the Pottstown Region, there are 46,655 people aged 25 and older. The educational attainment levels for the Pottstown Region are shown in the chart below.

Households

Just like the regional population increase, Lower Pottsgrove Township had the largest percentage increase of new households in the Region. This was followed by Douglass Township and then New Hanover Township, respectively. This is consistent with the population increase breakdowns.

The size of households has been decreasing every year since the Census recorded this statistic. Every municipality in the Region except for New Hanover saw

FIGURE: 1-13

AVERAGE HOUSEHOLD SIZE 1990 AND 2000

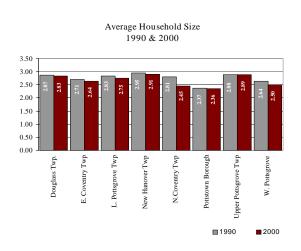
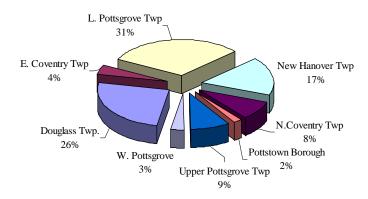


FIGURE: 1-14
PERCENTAGE OF REGIONAL HOUSEHOLD GROWTH BY
MUNICIPALITY 2000

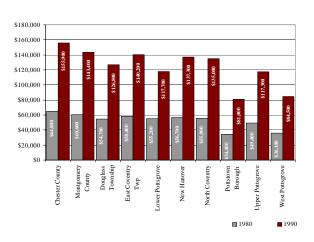


a decrease in the household size from 1990 - 2000. New Hanover had a slight increase that is most likely due to a large number of young families with children moving into the township.

Housing Costs

As shown below in Figure 1-15, the median price of a new housing unit in every municipality at least doubled from 1980 to 1990. In 1990, the highest median prices for

FIGURE: 1-15
MEDIAN HOUSING PRICE 1980-1990



housing were found in East Coventry, New Hanover and North Coventry. The lowest median price was found in the Borough of Pottstown, with the second lowest median price found in West Pottsgrove.

There was a substantial increase in the median housing value from the 1990 Census to the 2000 Census, but the rate of increase declined from the previous 10 year period.

In 1990 and 2000 none of the individual communities had median housing prices that equaled or exceeded that of Chester County or Montgomery County as a whole. In 2000, New Hanover surpassed East Coventry and had the highest median housing price in the Region, \$158,500, compared to East Coventry's \$157,300. The Borough of Pottstown has had the lowest median housing price. The growing townships have all had substantial increases in median housing price and in general, have similarly priced housing stock.

Housing Units

The total number of housing units in the Region has increased substantially, as stated previously and shown in the table in Figure 1-17.

FIGURE: 1-16
MEDIAN HOUSING PRICE 1990-2000

Municipality	1990	2000
Chester County	\$155,900	\$182,500
Montgomery County	\$143,400	\$160,700
Douglass Township	\$126,800	\$142,800
East Coventry Twp	\$140,200	\$157,300
Lower Pottsgrove	\$117,700	\$131,300
New Hanover	\$137,300	\$158,500
North Coventry	\$135,000	\$151,800
Pottstown Borough	\$81,000	\$87,600
Upper Pottsgrove	\$117,300	\$143,800
West Pottsgrove	\$84,500	\$95,600

FIGURE: 1-17
TOTAL HOUSING UNITS

Municipality	1990	2000	% Change
Douglass Township	2,559	3,292	28.64%
East Coventry Township	1,559	1,684	8.02%
Lower Pottsgrove	3,175	4,127	29.98%
New Hanover	2,076	2,615	25.96%
North Coventry	2,896	3,114	7.53%
Pottstown Borough	9,700	9,973	2.81%
Upper Pottsgrove	1,196	1,459	21.99%
West Pottsgrove	1,500	1,606	7.07%
Pottstown Region	24,661	27,870	13.01%
State of PENNA	4,938,140	5,249,750	6.31%
Montgomery County	265,856	297,434	11.88%
Chester County	139,597	163,773	17.32%

FIGURE: 1-18

NUMBER OF RENTAL UNITS BY MUNICIPALITY

Township	1990	2000
Douglass	559	655
East Coventry	186	199
Lower Pottsgrove	547	705
New Hanover	140	173
North Coventry	803	842
Pottstown	3,746	4,004
Upper Pottsgrove	118	140
West Pottsgrove	404	502

The largest increase in housing units was in Lower Pottsgrove, followed by Douglass and New Hanover Townships, respectively. This follows the increases that were found in households and population over the last decade.

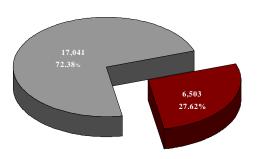
The increases in Douglass Township, Lower Pottsgrove Township, New Hanover Township, and Upper Pottsgrove Township are substantially more than the increases for both Montgomery and Chester Counties, the Pottstown Region as a whole, and the State of Pennsylvania. The 20% - 30% change in these townships is very significant and shows that growth is well above average.

Owner Occupied v. Renter Occupied Residential Units

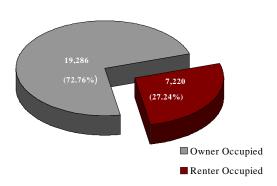
The percentage of owner occupied and renter occupied residential units has remained essentially the same over the last decade in the Region. The pie charts below show that the number of units has increased, but the increase for each of the two categories has increased equally, keeping the percentages of owner occupied and renter occupied the same from 1990 to 2000.

FIGURE: 1-19

Owner Occupied v. Renter Occupied Residential Units 1990



Owner Occupied v. Renter Occupied Residential Units 2000



The number of rental units in the Region has increased in every municipality involved in the study. The number of rental units by municipality is shown in the adjacent chart.

It is clearly shown in the chart in Figure 1-18 that the Borough of Pottstown far exceeds the other municipalities in the Region in the number of rental units. In 2000, the Borough has 55.5% of the total rental units in the Region, down approximately 2% from 1990.

The largest percentage change in rental units occurred in Lower Pottsgrove Township where there are just under 29% more rental units in 2000 than there were in 1990. The smallest

FIGURE: 1-20

VACANT HOUSING IN REGION

Township	1990	2000	
Douglass	82	81	
East Coventry	32	35	
Lower Pottsgrove	50	112	
New Hanover	30	83	
North Coventry	123	102	
Pottstown Borough	450	827	
Upper Pottsgrove	34	42	
West Pottsgrove	36	82	

increase in rental units occurred in North Coventry Township. Overall, there was an increase of 717 rental units in the Pottstown Region during the last decade.

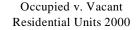
Occupied v. Vacant Residential Units

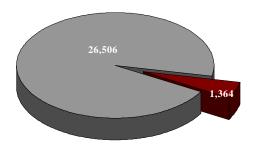
Since 1990, the number of vacant units in the Region, which includes units for rent, for sale, rented or sold but not occupied, seasonal or occasional use, units for migratory workers, and "other", has increased approximately 1.5%. The total number of both occupied and vacant units have increased over the last 10 years, as shown in the pie charts in Figure 1-21 and previous demographic statistics.

The percentage of housing units that are vacant on the regional level has increased approximately 1.4% over the past 10 years. However, the total number of vacant units in some communities has increased substantially. These increases occurred in both growing and older developed communities.

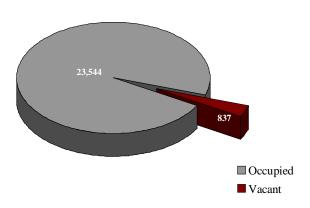
In the Borough of Pottstown, the number of vacant units increased by 377 from 1990 to 2000. Lower Pottsgrove had an increase of 62 units, New Hanover had an increase of 53 units and West Pottsgrove had an increase of 46 units.

FIGURE: 1-21





Occupied v. Vacant Residential Units 1990



Conclusion

The Pottstown Metropolitan Region's position on the edge of the greater Philadelphia area makes it a desirable location for growth and new investment. Strong population growth is expected to continue due to good access and land availability, with the strongest growth occurring in the northern parts of the Pottstown Region. This will have substantial impacts for community infrastructure across the Region, but particularly in Douglass Township, New Hanover Township, Upper and Lower Pottsgrove Townships, and East Coventry.

The demographic influence of the aging baby boomers and

their children is creating a high demand for housing, family services, and schools in the Region. Housing costs have increased dramatically in the Region to meet this demand. The need for senior services and housing options will also grow.

The high cost housing market and demands of the Region's growing and aging population presents economic opportunities for the Borough of Pottstown and the villages of the Region. These walkable places tend to have lower housing costs that appeal to starting families and active older adults seeking housing in walkable neighborhoods. This could help to balance income differences between the Region's older neighborhoods and the newer suburban communities, and address the current concentration of rental housing and vacancy issues in Pottstown Borough.

The Pottstown Region is considered to be an employment center of the greater Philadelphia area dominated by the service sector. This reflects the Pottstown Region's transition from a industrial to an information age economy. Income and educational levels appear adequate, in some cases even exceeding Chester and Montgomery County as a whole. These economic directions are expected to continue. One area for economic revitalization is the low income and investment levels in the Region's older, more developed areas, particularly Pottstown Borough.

The growth and demographic trends of this profile clearly show that the municipalities of the Pottstown Metropolitan Region need to understand how they will manage future growth in order to take advantage of its opportunities and provide the infrastructure and services that will be needed. Addressing these issues together as a region will increase the effectiveness of each municipality's planning efforts.

Chapter Goals and Objectives



The Pottstown Metropolitan Region is positioned directly in the path of growth as new development continues to expand outward from Philadelphia and its suburbs. It is a well-balanced region with a richly diverse landscape of historic communities, attractive suburban neighborhoods, industry, commercial centers, rolling farmlands and abundant natural resources. The intersection of US Route 422 and PA Route 100 in the middle of the Region provides a gateway for new growth. The Region's communities recognize that they are at a crossroads for directing growth and this is the catalyst for the Region's eight municipalities working together to plan their future. Especially important for the Region is directing growth into the Region's older communities and designated growth areas, particularly the Borough of Pottstown, in order to revitalize these older places, maximize the costly public infrastructure of the Region, and preserve the Region's rural areas. Through multi-municipal planning and the implementation of the Pottstown Metropolitan Regional Comprehensive Plan, the Region's municipalities intend to achieve the following goals and objectives.

General Goals

- Protect the unique historical, cultural, and natural resources of the Region.
- Promote the economic vitality and quality of life of the Region's existing communities.
- Implement growth management techniques to provide for orderly and well-planned new development.

- Preserve open space and agriculture.
- Develop transportation choices for better mobility in and through the Region.
- Encourage walkable communities with a mix of uses and a range of housing options where appropriate.
- Promote new economic opportunities and jobs.
- Maintain and improve recreation options.
- Address the specific needs and unique conditions of each municipality.

Housing Goal

Housing is a basic element of a community's economic health and growth. The Pottstown Metropolitan Regional Comprehensive Plan will provide adequate housing opportunities for current and future residents.

Objectives:

- Meet residential fair share requirements as a region.
- Maintain and promote revitalization of existing residential neighborhoods and villages.
- Concentrate new housing where infrastructure is currently located and in designated growth areas.
- Encourage pedestrian-oriented, residential neighborhoods that foster a sense of community.
- Accommodate housing opportunities for a range of income levels and age groups.

Commercial/Retail Goal

The Pottstown Region's commercial options are diverse, from traditional downtown and village shopping to new suburban commercial centers. Change is a constant for the Region's consumers and retailers, and the Pottstown Metropolitan Regional Comprehensive Plan will encourage revitalization of the Region's existing retail areas and limit new commercial development.

Objectives:

- Maintain and enhance existing commercial areas.
- Limit the amount of new commercial development outside of existing commercial areas.
- Promote revitalization of downtown Pottstown as a regional destination.
- Preserve and enhance village areas that support a mix of uses in a pedestrian-friendly environment.

Office Goal

The dynamic economy has brought new economic needs and opportunities for the Pottstown Region. The regional comprehensive plan will encourage the development of office uses in locations that have the necessary transportation and facilities infrastructure.

Objectives:

- Provide high-quality employment opportunities.
- Enhance the Region's tax base.
- Accommodate various office types for a range of users.
- Locate office uses where adequate transportation access and necessary utilities are available and planned for.

Industrial/Light Manufacturing Goal

Industry has been and continues to be an important economic base for the Pottstown Metropolitan Region. The regional comprehensive plan will encourage industrial development in established industrial areas and in locations which have the necessary transportation and utilities infrastructure.

Objectives:

- Provide high-quality employment opportunities.
- Enhance the Region's tax base.
- Provide for industrial/light manufacturing uses that meet the needs of a range of users.
- Prioritize redevelopment of underutilized, existing industrial sites.
- Promote clean and environmentally friendly industrial/light manufacturing uses.
- Locate industrial/light manufacturing uses where adequate transportation access and necessary utilities are available and planned for.

Parks and Recreation Goal

Recreation facilities add to the quality of life of a community. The regional comprehensive plan will provide recreational opportunities to meet the needs of present and future residents.

Objectives:

- Coordinate park and recreational opportunities among the Region's eight municipalities.
- Implement the park and recreation goals of municipal open space plans.
- Maintain and enhance existing park and recreation facilities.
- Encourage parks and open space be provided with new development.
- Create active and passive recreation opportunities.
- Emphasize park and recreation opportunities that preserve natural linkages, environmental resources and viewsheds.
- Expand recreational opportunities along the Schuylkill River.

- Develop a regional trail network to connect communities and recreation areas.
- Work with private organizations to provide recreational options.

Open Space Goal

Open space provides many natural, aesthetic and economic benefits and the Pottstown Metropolitan Regional Comprehensive Plan intends to preserve open space for present and future residents.

Objectives:

- Implement the open space goals of municipal open space plans.
- Designate growth and rural resource areas within the Region to ensure preservation of open space areas.
- Promote design options for new development that preserve open space.
- Encourage coordination and connection of open space areas between municipalities.
- Actively pursue strategies and resources to preserve open space.
- Emphasize open space opportunities that preserve natural linkages, environmental resources and viewsheds, especially along the Schuylkill River.

Natural Resource Protection Goal

Natural resources are the foundation on which communities are built. The Pottstown Metropolitan Regional Comprehensive Plan will preserve and protect the Region's natural resources to sustain present and future residents.

Objectives:

- Protect existing groundwater resources and encourage groundwater recharge in the designs of new development.
- Preserve sensitive natural resources areas, including woodlands, stream systems, wetlands, steep slopes, and wildlife, especially along the Schuylkill River.
- Promote and protect street trees and other vegetation in developed areas.
- Protect all municipalities within the same watershed from impacts of improper development.
- Implement the natural resource preservation goals of municipal open space plans.

Agriculture Goal

Farming has a long history in the Pottstown Metropolitan Region and the region's comprehensive plan will promote the preservation of agricultural land and encourage maintaining agriculture as a viable industry in the Region.

Objectives:

• Encourage farmland preservation through participation in government and private preservation programs at the local, state, and national level.

Goals and Objectives Pottstown Metropolitan Regional Comprehensive Plan

- Designate growth areas and rural resource areas within the Region to ensure preservation of agriculture.
- Emphasize that new development in designated agricultural areas be limited and maximize agricultural preservation.

Transportation Goal

Mobility is essential for connecting people and encouraging economic growth. The regional comprehensive plan will provide a safe and efficient transportation system to move people and goods in and through the Region.

Objectives:

- Manage vehicular traffic congestion.
- Improve transportation safety.
- Emphasize transportation improvements in new developments that maintain/enhance the Region's road hierarchy and connectivity.
- Promote the design of new developments to be walkable and encourage multiple transportation options.
- Expand public transportation options, particularly regional rail service.
- Develop a local and regional pedestrian and bicycle network.
- Support innovative parking strategies to provide adequate parking that is safe and effective while minimizing traffic congestion and impervious coverage.
- Provide charter and other aviation transportation services at the Pottstown Municipal Airport.

Community Facilities Goal

The Pottstown Metropolitan Regional Comprehensive Plan will serve the needs of current and future residents regarding public utilities, emergency services, and educational facilities. These services greatly impact the quality of life and safety of the Region's residents.

Objectives:

- Encourage the coordination of municipal services / facilities.
- Use public sewer and water facilities efficiently by extending these systems only within designated growth areas.
- Protect surface water quality and ensure sufficient water supply by using public and private sewer and water systems effectively, including on-site systems.
- Support existing emergency services and improve their capacities to serve a growing population.
- Cooperate with the local school districts, Montgomery County Community College and local library systems to encourage appropriate locations for new or expanded facilities and promote pedestrian access to these facilities.
- Develop ways for residents from non-Montgomery County communities within the Region to greater utilize Montgomery County Community College.

Chapter

3 Natural and Historic Resources



Schuylkill River in Pottstown Region

Old Pottstown Historic Sign

Strong population and economic growth in the Pottstown Metropolitan Region as detailed in Chapter 1, Regional Profile, will impact the Region's natural and historic environment. The natural and historic features of the Region will also influence the intensity and patterns of the Region's land use. Understanding these features, including: geology, hydrology, soils, vegetation, wildlife and cultural and historic sites, and how they are parts of interrelated systems is important so the communities of the Region can better craft a plan for the future that balances conservation of these resources with sustainable growth.

Natural Resources

Geology

The Pottstown Region's underlying rock formations are the base of its natural systems. Changes in elevation and orientation of the land are the results of the Region's geology, climate, and other weathering effects. Locations of watercourses and the Region's soils, vegetation, and wildlife are also influenced by the rock formations and the land's orientation. Ultimately, all of these factors

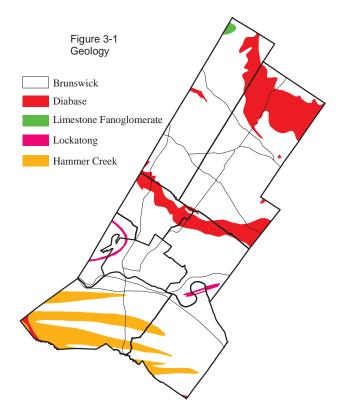
impact the locations and patterns of land use and human settlement.

The Region is located in the Triassic Lowland section of the Piedmont Physiographic Provience. The Triassic rock formations found in the Region Brunswick, Diabase, Hammer Creek Conglomerate, Lockatong, and Limestone Fanglomerate. (See Figure 3-1)

From both a visual and planning perspective, several prominent diabase ridges formed by molten rock extruding through large cracks in the Brunswick formation are the most significant rock formations in the Region. These high, hard, ridges divide the Region into two separate watersheds. One of these ridges is located in southwestern North Coventry Township. The other diabase ridgeline runs through the northern portions of Upper and Lower Pottsgrove Townships, including the Ringing Rocks area, and along the southern border areas of Douglass and New Hanover Townships. This same ridgeline arcs back in Western Montgomery County and crosses the northern sections of Douglass and New Hanover Townships in the Deep Creek area.

Several fingers of Hammer Creek Conglomerate bisect the Brunswick formation in North and East Coventry Townships creating a series of hills and valleys across the Coventrys. The slower eroding Hammer Creek Conglomerate forms the hills and the valleys were created by the faster weathering Brunswick rock.

Two different Lockatong formations also are present in East Coventry and West Pottsgrove Townships, forming high points in those communities.



Pottstown Region's Rock Formations

Brunswick — is characterized by reddish brown shale, mudstone, and siltstone. The topography of this formation is characterized by rolling hills. Groundwater yields are highly variable. The rocks are generally fine-grained and allow little primary porosity. Secondary openings, joints and fractures are the key to adequate flows.

Diabase — also referred to as "black granite" is very resistant to erosion, weathering, water infiltration, and groundwater movement. This formation is notorious for low well yields and is very difficult to excavate. Diabase areas are often steeply sloped and wooded, with numerous surface rocks and boulders.

Hammer Creek Conglomerate — is made up of very coarse quartz conglomerate with abundant pebbles and cobbles of gray quartzite and minor interbeds of coarse red sandstone. It is moderately resistant to weathering. The topography is rough terrain and its natural slopes are steep and stable. It has low porosity and permeability. Conglomerate beds are too discontinuous and interbedded with coarse red sandstone to be evaluated as a separate aquifer. It is also difficult to excavate.

Lockatong — consists mainly of dark, thick-bedded argillite, with occasional layers of shale. These rocks are hard, resist weathering, and have poor groundwater supplies.

Limestone Fanglomerate — composed chiefly of limestone and dolomite pebbles and fragments. It also moderately resists weathering and does so unevenly creating a topography of rolling hills. Groundwater yields are good. Stability of building foundations is adequate, however sinkholes have occurred in this formation and should be investigated.

The major planning issue to consider with the Region's geology is the substantial development limitations in areas of the Region underlain by Diabase rock. Sewer and water utilities are difficult to locate, and often the soil layer is thin and not easy to excavate or well suited for building structures.

Soils

The soils of the Region have formed over time by the continual interaction between the Region's weather, rock formations, and organisms. As a result, soils throughout the Region vary in their color, mineral characteristics, fertility, texture, erodibility, depth to bedrock and groundwater.

Soils affect our use of the land in various ways and are therefore one of the Region's most significant natural resources for planning purposes. In rural areas of the Region, the suitability of soils for productive agriculture and on-lot sewage disposal are very important characteristics. In developed areas "made land" is present. Alluvial, hydric, and other frequently wet soils need to be considered in all areas of the Region during land development, along with such factors as shallow depth to bedrock.

Agricultural Land

Prime farmland, farmland of statewide importance, and other land are the three soil classifications used for determining a soil's agricultural value by the Soil Conservation Service of the U.S. Department of Agriculture. Their value is based on the fertility, depth to bedrock or groundwater, texture, erodibility, slope, and the amount of large stones. Prime farmland includes deep, well-drained, and mildly sloped soils that can support high yields of crops with little management. Farmland of statewide importance includes soils that support cultivation but require careful crop management. Agricultural use of the "other" soils is generally limited to pasture, and woodlands.

Figure 3-2 details the Pottstown Region's agricultural



U.S. Soil Conservation Service Soil Survey

Soil scientists have classified soils into several groups call soil series. Soils listed within the same series will display similar subsurface characteristics. However, the surface characteristics of soils within a particular series can vary in slope, degree of erosion, size of stones, and other easily recognizable features. Detailed information pertaining to soil capabilities for agriculture and building purposes is available in the Soil Survey completed by the Soil Conservation Service of the U.S. Department of Agriculture.

soils. The Region has a rich history of farming and contains substantial soils that are important for sustaining agriculture. In particular, places where the Brunswick rock formation is located may contain important agricultural soils due to the extensive concentrations of soils having a high water table and shallow depth to bedrock.

Alluvial, Hydric and Other Soils Least Suitable for Development

Alluvial soils have been deposited by flowing water and are often, but not always, located in floodplain areas. Their texture and composition make them unstable. In addition, they often function as acquifer recharge areas. These characteristics make alluvial soils important to protect from encroachment and among the least suitable soils for development. Figure 3-3 shows the locations of the Region's alluvial soils and 100-year floodplain.

Hydric soils are periodically wet soils. Soils with major hydric components are conservative indicators of potential wetlands, but not all hydric soils support the growth of wetland vegetation. Other soils may have hydric components in specific locations, such as depressions, drainage ways, and alluvial soils. The Region's hydric soils are detailed in Figure 3-4.

Other soils limit development because of their poor drainage, shallow high water table, and slow rates of permeability and run-off. These soils constrain the effectiveness of on-lot sewage disposal because of their wet characteristics, but may be otherwise be developable with appropriate engineering, technology and construction practices.

Made Land

Another important soil type for the Region is "made land." "Made land" consists of areas where earth moving during land development has removed or altered the characteristics of the original soil. Pottstown and other historic population centers in the Region have substantial areas of this soil. From a planning standpoint it is valuable to utilize these disturbed areas for redevelopment in order to minimize the

impacts of development on the Region's land resources.

Hydrology

Water is a critical natural resource and as growth occurs in the Pottstown Metropolitan Region it is proving to be a very valuable resource. The geology and climate of the Region combine to create surface and groundwater systems. As the Region's precipitation reaches the earth's surface it will evaporate, infiltrate into the earth, or become surface runoff as it continues through the water cycle. Planning primarily focuses on infiltration and surface runoff and their effects. These systems are detailed here.

Precipitation & Other Water Sources

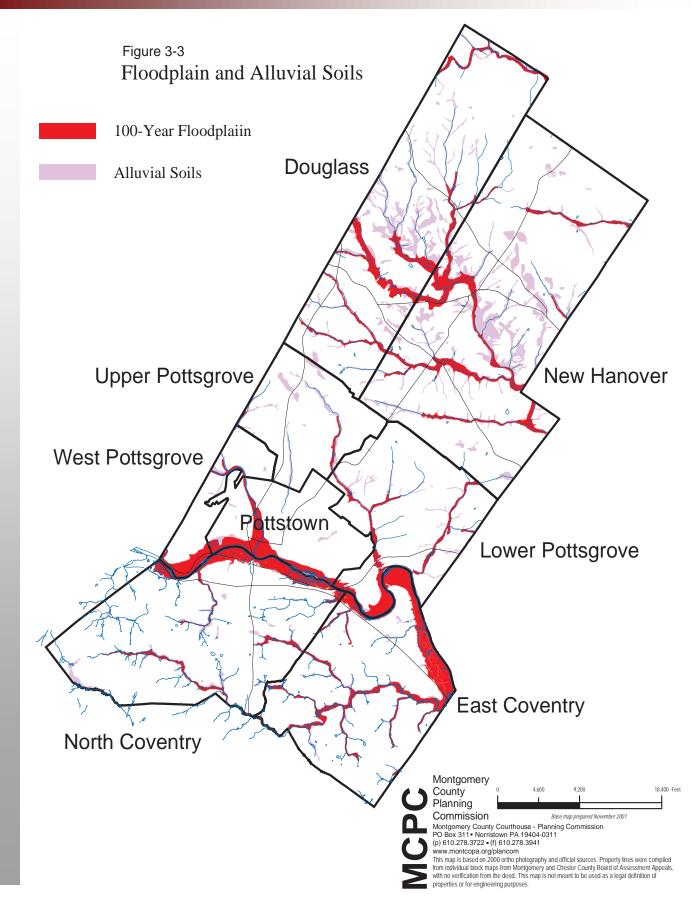
The Pottstown Metropolitan Region receives an average rainfall between 42 - 46 inches per year. (National Weather Service/National Climatic Data Center, Phoenixville) Water from precipitation follows many different routes after reaching the land surface. In general, direct runoff accounts for about 25 percent of the total, evaporation and transpiration 50 percent, and the remaining 25 percent replenishes the groundwater supply. The Region's water resources consist of all water stored on or in the ground plus the amounts added by precipitation and stream inflow from adjacent areas minus the amounts lost by plant transpiration, evaporation and outflow to adjacent areas. The relationship between all these factors can be expressed as an equation:

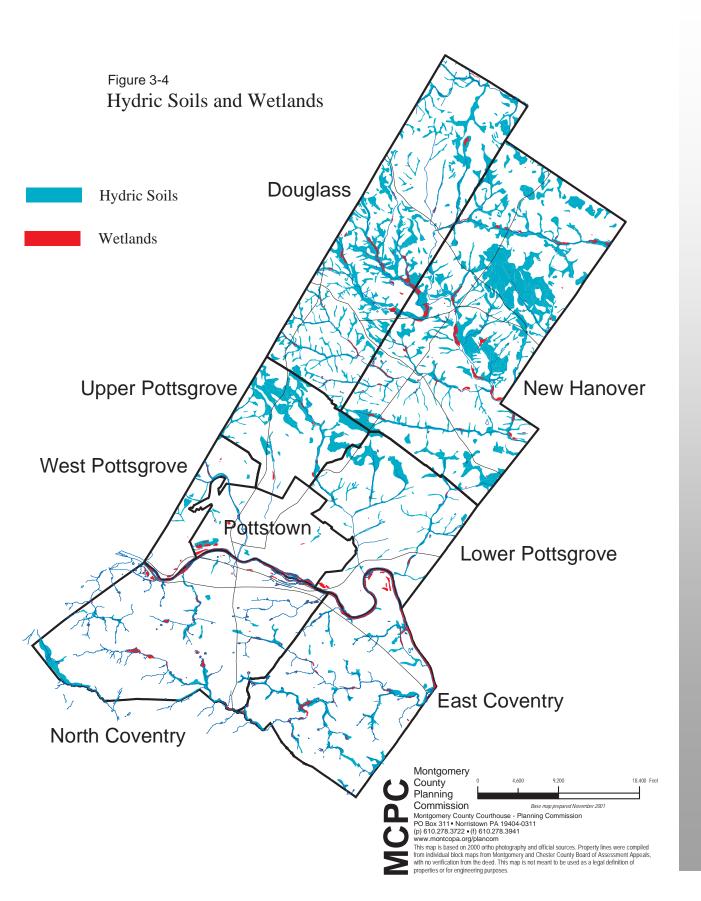
Storage + Precipitation + Inflow - Evaporation - Transpiration - Overflow = Water Resources

Surface Water

Watersheds

A large, diabase ridge located in the northern sections of Upper and Lower Pottsgrove and running along the southern boundaries of Douglass and New Hanover Townships separates the majority of the Region into two





different drainage basins. (See Figure 3-5) Douglass and New Hanover Townships, mostly north of the ridge, are located in the Perkiomen Basin, which includes the Swamp Creek and its tributaries. The area south of the ridge in Lower, Upper and West Pottsgrove Townships, North and East Coventry Townships and Pottstown Borough all are located within the Schuylkill River Basin, with the exception of a few relatively small areas in the southern portions of North and East Coventry within the French Creek Watershed. The Schuylkill River Basin includes the Manatawney, Sprogels and Sanatoga Creeks on the Montgomery County side of the River, and the Pigeon Creek and Stony Run on the Chester County side.

Rivers, Streams and Creeks

The Pottstown Region's rivers, streams and creeks are the most visible parts of the Region's hydrology. These waterways are fed from three sources: direct runoff, groundwater and sewage treatment effluent. Statewide water quality standards are established in Title 25 PA Code Chapter 93 as required by the Federal Clean Streams Act to protect designated water uses. These designations given to the Region's waterways indicate their value for the protection and propagation of aquatic life. Because each protected use has chemical and biological characteristics and other stream conditions that need to be maintained, the designations also indicate Streams designated WWF-Warm stream quality. Water Fishery—possess a basic level of quality that supports fish species, flora, and fauna such as bass that are indigenous to a warm-water habitat. The streams designated CWF—Cold Water Fishery—support fish species, flora, and fauna such as trout that are indigenous to a cold-water habitat. Other streams are designated TSF—Trout Stocking Fishery. They can support stocked trout, other fish species, and additional flora and fauna that are indigenous to cold-water habitat for a limited period of time.

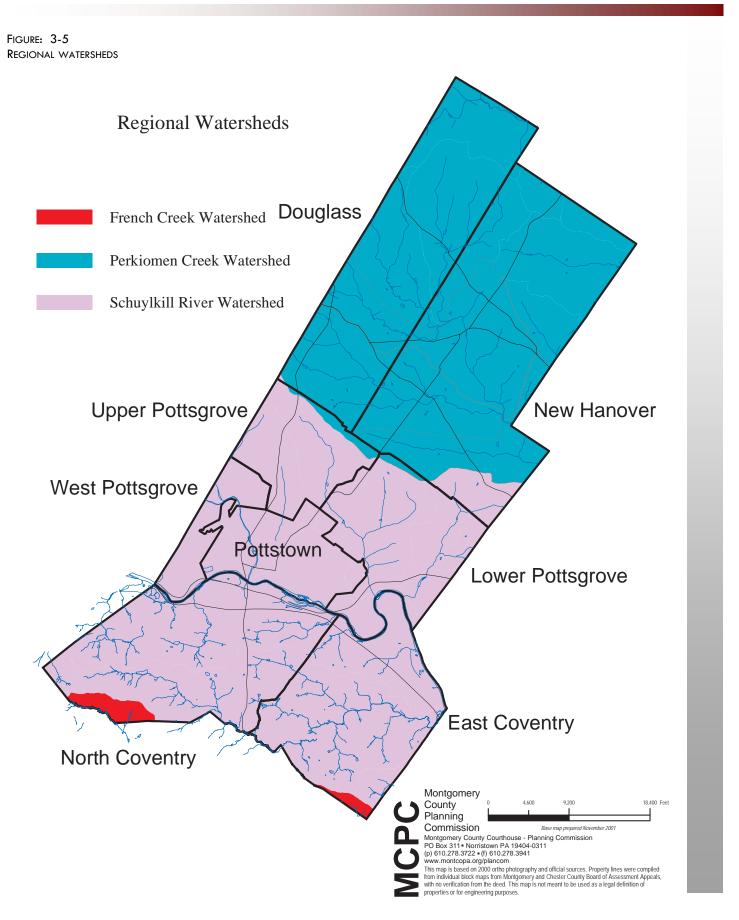
Waterways that exceed standard quality may receive a HQ-High Quality designation. These streams have a quality above the levels necessary to support the



The Schuylkill River is a major natural feature of the Pottstown Metropolitan Region that has strongly influenced its history, and presents environmental and recreation opportunities for the region's future.



The Swamp Creek at the Fagleysville Bridge in New Hanover Township.



propagation of fish, shellfish, wildlife and recreation in and on the water. The highest quality designation for a stream is EV– Exceptional Value Waters.

Streams of the Region located in the Perkiomen Basin are designated TSF—Trout Stock Fisheries, with the exception of the West Branch of the Perkiomen, which is a CWF—Cold Water Fishery.

The Schuylkill River and unnamed tributaries are considered a WWF—Warm Water Fishery. The Sprogels and Sanatoga Sub-Basins are also WWF—Warm Water Fisheries. The Manatawney Creek is a CWF—Cold Water Fishery.

In Chester County the quality of the streams is higher most likely due to more limited development in those drainage basins. The Pigeon Creek and Stony Run are both designated HQ—High Quality Trout Stocked Fisheries and the French Creek is a HQ—High Quality Cold Water Fishery.

Wetlands

Wetlands are valuable regional water features because of their critical ecosystems and important storage areas for surface and groundwater. As discussed in the previous soils section of this chapter, wetlands are identified by the presence of hydric soils, surface water and wetland vegetation. The National Wetlands Inventory (NWI) prepared by the U.S. Department of the Interior Fish and Wildlife Service, generally identifies wetlands one acre in size and larger. Figure 3-4 shows the location of these wetlands along with other hydric soils in the Pottstown Region. Riverine or pallustrine wetlands are typical wetlands adjacent to rivers and streams in the Region. These types of wetlands are important since they filter out impurities in stormwater flowing into streams.

Groundwater

Groundwater behaves much like surface water, flowing like a stream, only much slower. The quantity and quality of groundwater yields depends on the type of bedrock formation. The groundwater characteristics of each geology type is listed below:

- Brunswick Formation. This is a relatively porous formation that is considered a reliable source of small to moderate quantities of ground water. Brunswick shale has been reported to yield 100 gallons of water per minute from wells drilled more than 200 feet deep. Nonetheless, groundwater yields from this formation are highly variable. Secondary openings such as joints and fractures are key to adequate groundwater flow.
- Diabase Formation. Diabase has some fractures near the surface that allows minimal absorption of water. Groundwater movement within diabase is slow and the formation is notorious for low well yields, having a median yield of five gallons per minute. Fracture zones, sometimes represented by stream valleys or gullies, provide the best locations for wells in diabase areas.
- Hammer Creek Conglomerate Formation. This formation is known for its good water bearing capabilities. Its permeable rates are moderate. The groundwater yields of the formation are sufficient to support low density residential development. Depending on the depth, its well yields range from 20 to 100 gallons per minute, with the median being 35 gallons per minute. The water quality is generally acidic, soft, with low amounts of dissolved solids.
- Lockatong Formation. This is a poor aquifer due to its porosity and permeability rates. Lockatong yields smaller water supplies for domestic use, 5 to 15 gallons per minute. The water from Lockatong can be highly mineralized and hard. Lockatong also has very poor septic absorption capacity.
- *Limestone Fanglomerate*. Not a significant formation in the Region that affects groundwater.

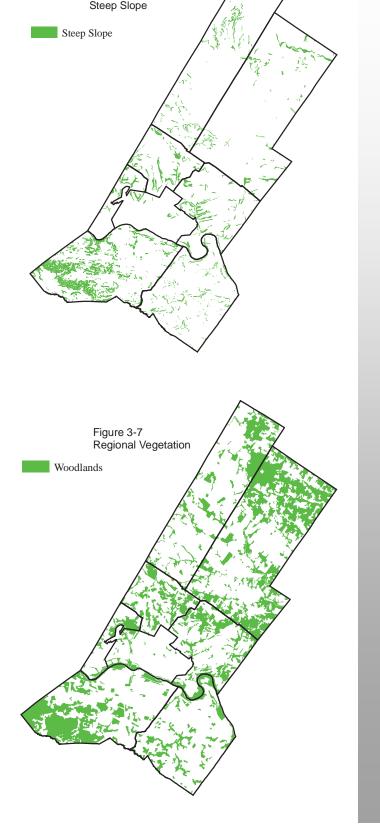
Figure 3-6

Aquifer Recharge

Maintaining the infiltration of water into the groundwater supply is a significant planning issue for conserving the quantity and quality of water of the Region's groundwater and surface waters. Excessive impervious surfaces, such as roads, parking lots, and buildings, created by development can substantially lower infiltration compared to undeveloped land. Prime aquifer recharge areas, such as faults and seeps in the bedrock are often in areas that are steeply sloped, heavily wooded, or located in areas of hydric and alluvial soils. The more natural constraints located in the recharge areas, the more likely these areas can be preserved through ordinances or innovative development techniques. Measures should be taken to preserve these sites in their natural state, or at least minimize the intrusion of impervious surface coverage.

Steep Slopes

Land with a slope of 15 percent or greater is generally considered steeply sloped. These areas of the Region shown in Figure 3-6 are considered environmentally sensitive areas. Generally, as slope increases the depth of topsoil and its ability to support structures decreases and the potential for erosion increases. This means that steeply sloped areas are often only suitable for lowintensity uses. Minimal disturbance of these sloped areas is preferred in order to prevent erosion, increased flooding, and water pollution. Steep slope environments also support unique plants and wildlife that are part of the Region's biodiversity and often they offer dramatic landscapes that define community character and recreational opportunities. Concentrations of steep slopes, particularly in North Coventry and Upper and Lower Pottsgrove Townships, create dramatic terrain and are high points in the entire Region.



Woodlands and Other Vegetation

Woodlands, particularly large contiguous tracts, are both functional and aesthetic. Woodlands prevent soil erosion, buffer surface waters, and provide habitats for wildlife. This not only benefits the wildlife but also offers recreational and educational opportunities for the Pottstown Metropolitan Region.

Soils, slopes and solar orientation influence the type of species associations found within woodlands. The soils on north-facing slopes tend to be cooler and more moist than south-facing slopes due to less exposure to sunlight. More softwoods (pines, hemlocks) mixed with some hardwoods such as beech and black walnut tend to be found in these locations. The warmer, drier southern slopes are usually more populated with hardwoods (tulip poplar, ash, and oak).

Several hundred years of clearing and agricultural production and more recent suburban development have significantly reduced the woodlands of the Region. There remains a large band of woodlands running from West Pottsgrove to New Hanover, which is part of the forests of the larger Highlands Region. The area of woodlands in northern Douglass and New Hanover is also part of this Highlands Region. The large stand of woodlands in southwestern corner of North Coventry Township is one edge of the Hopewell Big Woods. (See Chapter 9, Open Space for more information on these woodland features)

The stream valleys and hedgerows of the Pottstown Region provide "corridors" of woodlands and other vegetation that supply cover for wildlife habitats and migration. They also add to the scenic rural character and reduce soil erosion by slowing wind and water. The Region has many of these woodland corridors, also called riparian corridors, along its creeks such as the Swamp, Sprogels and Pigeon Creeks, and along roads and property lines.

Separate, unconnected stands of woodlands are also located throughout the Region. These scattered woodlands are often

on land that are too steep, too rock, or too wet for agriculture and they are a part of the Region's rural landscape.

Unique Natural Features

Within the Pottstown Metropolitan Region there are special natural features that add to the Region's biodiversity and make its communities distinct. The first set of features to highlight are those identified in the Natural Areas Inventory compiled and written by the Pennsylvania Office of The Nature Conservancy. Sites mapped in the inventory included Sites of Statewide Significance and Sites of Local Significance. Sites of Statewide Significance contain species (plants or animals) of concern (rare, threatened, or endangered), high quality natural communities (habitats) and significant geologic features. Sites of Local Significance include sites that have high species diversity and may harbor rare species, sites with uncommon vegetation types for the county, or sites with potential to recover to natural community status (e.g., a forest that is returning to a more natural state after selected logging). Following is a synopsis of the Inventory and general management recommendations to help protect these rare plants, animals, and natural communities.

Sites of State-wide Significance

Niantic Ne Woods

(Douglass Township and Upper Hanover Township)

A fair population of a rare wildflower is found in this diabase woodland along the West Branch of the Perkiomen Creek. The site also supports a diverse herb layer including sweet cicely, smooth yellow violet, and false solomon's seal. Maintaining the forest cover will help to minimize invasion of exotic species and continue to provide the shaded habitat required by the rare wildflower. Disturbance of the herb layer should also be minimized. Deer browse is also a potential problem.

Deep Creek Marsh

(New Hanover Township)

A good quality population (over 1000 plants) of a sedge of

special concern was found in the wet meadows and marshland along Deep Creek. Change in hydrology or water quality would be detrimental to the habitat and since the sedge needs open habitat, succession of a woody plant community could eventually crowd out the species.

Ringing Rocks

(Lower Pottsgrove Township)

This "boulder belt," located off of Keim Road within Ringing Rocks Park, is identified as a significant scenic geologic feature in the state (Geyer & Bolles 1979). It gets its name from the fact that various boulders ring out different sounds when struck with a hammer. The site is bordered by woodland which enhances the scenic and education value of the site.

Sites of Local Significance

Henning Road Woods

(New Hanover Township)

This site is within the Deep Creek drainage basin and contains a well-developed mixed-hardwood forest community on steep slopes strewn with diabase boulders. At least 13 species of trees, including red maple, oaks, ash, beech, hickory, flowering dogwood, sassafras and pawpaw, are found on the site. The site also contains a well-defined shrub strata and diverse herb layer and includes a section of younger forest that serves as a buffer to the older hardwood section.

New Road Swamp

(New Hanover Township)

Located north of New Hanover Square Road, this site is a locally significant example of a floodplain forest community. It provides habitat for pin oak, elm, white ash and red maple, with a well developed shrub and herb layer, including spicebush, viburnum, sedges, false nettle, violets, Jack-in-the-pulpit. The site also provides good breeding habitat for a variety of amphibian species. Maintaining the forest canopy will help prevent the spread of weedy species and maintain the integrity of the community as a whole.

Laughing Waters Hemlocks

(New Hanover and Upper Frederick Townships)

This site includes older growth hemlocks on steep slopes along Swamp Creek within Laughing Waters Girl Scout Camp. Severe erosion from heavy foot traffic is a threat to the longevity of the hemlock. Additional trail maintenance and rerouting of the high use trails could help to protect this natural area. The site also includes a young but healthy hardwood forest of sugar maple, shagbark hickory, and ash.

Glasgow Railroad Woods

(Pottstown Borough and West Pottsgrove Township)
Identified as two separate sites with locally significant flora along the Manatawny Creek and an adjacent railroad. Ivy and other exotics have crowded out some of the habitat. The woodland buffer should be retained to discourage further encroachment of weedy species.

Historic Resources

Globalization and new economic patterns have dramatically altered and "standardized" the landscape in many communities. With these rapid changes buildings, objects and places that remind us of our past and connect us to our historic environment are considered important community resources that can affect the value of a place.

The Pennsylvania Historical and Museum Commission maintains a list of historic resources in Pennsylvania that are listed on the National Register of Historic Places, or that have been determined to be potentially eligible for the National Register. Figure 3-9 shows the location of these properties and districts in the Region and they are listed in Figure 3-8. Numerous other structures and places in the Region may be considered historic, especially within the Region's villages and the Borough of Pottstown. But they have not been listed on the National Register and are contained in local surveys and planning documents.

Historic Districts

Several locations in the Pottstown Region have been recognized as historic districts to protect their historical settings representing the diverse history and culture of the Region. As the historic center of the Region Pottstown Borough has a concentration of these districts representing various historical themes and features.

Old Pottstown

This National Historic District includes the downtown of Pottstown Borough. It contains small and large commercial buildings; the early churches of Pottstown; the houses of Pottstown's early wealthy citizens and community leaders; the homes of ordinary persons; buildings of fraternal organizations, some industrial and warehouse structures; and government buildings. The environment is an expression of the days of great expansion and prosperity in Pottstown and western Montgomery County. The District's wide variety of architecture spans an era from 1850 to 1930 and includes late Federal, Victorian, Gothic Revival, Italianate, Richardsonian, and late Victorian.

High Street

Pottstown's first suburban neighborhood is represented by this Registered National Historic District following High Street in Pottstown Borough. The establishment of a trolley line eastward along High Street allowed growth to spill beyond the borders of the Borough's original boundaries. The large houses of industrialists, business owners and managers, professionals, and civic leaders are found along the wide, tree-lined street. There are many 2 1/2 story single homes interspersed with large, semi-detached houses and a few smaller single homes. The landmark Grubb Mansion anchors the east end of the District. The architecture generally spans from 1875 to 1935 and includes Victorian, Late Victorian, Gothic Revival, Four-Square, and Classic Revival styles.

Glasgow Village

Glasgow Village located on the edge of Pottstown Borough near West Pottsgrove is eligible but is not designated as a National Historic District. The area represents a mid-19th century working community centered on the former Glasgow Iron Works. Still to be seen are the homes of the ironmaster, workers, and managers. A stone water tower also remains. A number of the individual buildings would also quality as architectural landmarks. The architecture generally spans from 1830 to 1870 and includes Federal, Queen Anne and Victorian Period styles.

Fourth Street

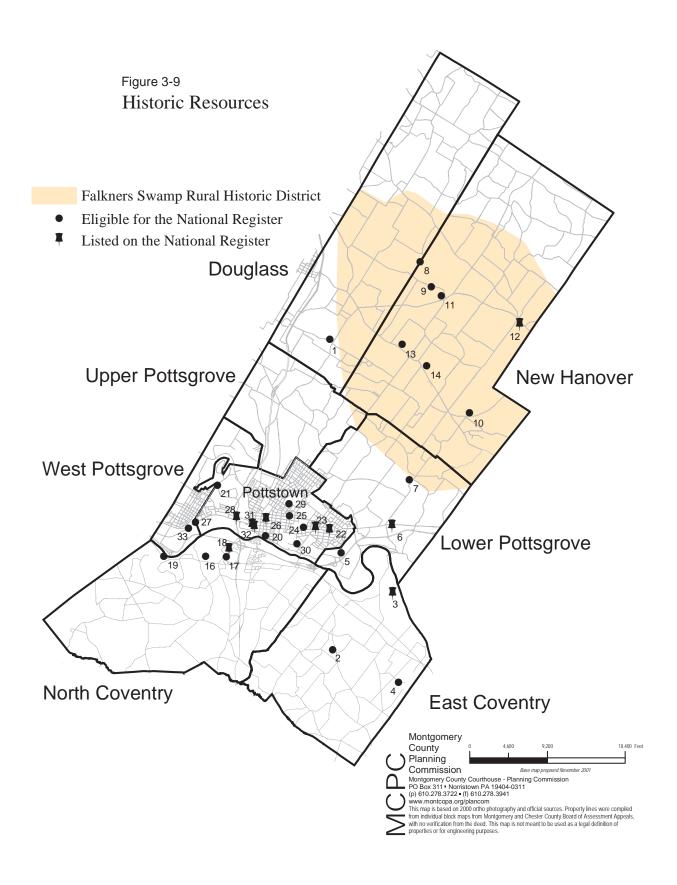
This area in Pottstown Borough is eligible but is not designated as a National Historic District. It represents one of the earliest expansions of the urban core beyond the original boundaries of the Borough. This pleasant residential area features two-story, modest-sized, semi-detached brick homes. The grid street pattern reinforces the regularity and consistent quality of its structures. The architecture generally spans from 1865 to 1910 and includes Federal, Late Federal, Gothic Revival and Four Square styles.

Charlotte Street

Pottstown's second suburban area is represented by this District, which is eligible but is not listed as a National Historic District. It is primarily a residential area. The establishment of a trolley line allowed for the development of a number of fine country homes and the Pottstown Hospital, north of the original Borough. Development was in the form of 2-1/2-story and 2-story semi-detached and single homes. A scattering of corner stores and the Jefferson Hotel were also developed. There are several large homes of landmark quality located along Charlotte Street, and the former four-story factory of the Merkle Light Motorcycle Company is located on Hanover Street. The architecture generally spans from 1865 to 1925 and includes Late Federal, Late Queen Anne, Mansard, Gothic Revival, Italianate, Four-Square, Victorian Period, and Commercial styles.

Figure 3-8: National register listed and eligible resources

Municipality	Historic Resource	Address		
Douglass	Gilbert Farm	1447 Grosser Road		
East Coventry	Elliswoods Cemetary	Elliswoods and Buckwalter Roa		
East Coventry	Fricks Locks Historic District	Fricks Locks Road End, 1/4 Mile East of Sanatoga Road		
East Coventry	John Mattis Farm	250 Kolb Road		
Lower Pottsgrove	Jacobs Aircraft Engine Company Property	351-375 Armand Hammer Boulevard		
Lower Pottsgrove	Sanatoga Union Sunday School	2341 East High Street		
Lower Pottsgrove	Saylor Property	1559 North Pleasant View Road		
Multiple Twps	Falkner's Swamp Rural Historic District	Multiple Twps.		
New Hanover	(name not available)	Ludwig Road		
New Hanover	Elliott Farm	North side of Fagley sville Road/Wagner Road		
New Hanover	Lay field Mill Complex	Ludwig and Layfield Roads		
New Hanover	Long Meadow Farm - Plank House Barn	Route 73, 1/2 mile Northwest of Frederick		
New Hanover	McGee Tract House and Outbuilding	Wassmer Street West Side		
New Hanover	Parsonage, Falkner Swamp Reformed Church	117 Cross Road		
North Coventry	(name not available)	Schuylkill Road PA 724		
North Coventry	Laurel Locks Farm	PA 724 North and South of PA 724		
North Coventry	Pottstown Landing Historic District	Main Street Pottstown Landing		
North Coventry	Shaner's Bakery	482 Laurelwood Road		
North Coventry	Walters Tract Subdivision	1338 West Schuylkill Road, PA 724		
Pottstown	Charlotte Street Historic District	220-878 Charlotte Street		
Pottstown	Glasgow Village	1300 Glasgow Street		
Pottstown	William Grubb Mansion	1304 East High Street		
Pottstown	High Street Historic District	631-1329 High Street		
Pottstown		High Street		
Pottstown	Jefferson School	Warren Street, Lincoln Street, Hale Street, Beech Street		
Pottstown	Old Pottstown Historic District	Manatawny Creek, Beech Street, Adams Street, Apple Street, Hanover Street (expanded to High and South Hanover Streets		
Pottstown	Henry Potts House	720 High Street		
Pottstown	Pottsgrove Mansion	High Street, West side of Pottstown		
Pottstown	Pottstown Conservation District			
Pottstown	Pottstown Industrial Historic District	Queen Street, Moser Road, Schuylkill River		
Pottstown	Pottstown Railroad Station	High Street between Hanover and York Streets		
Pottstown	Pottstown Roller Mill	South and Hanover Streets		
West Pottsgrove	Gudebrod Brothers Silk Company	Old Reading Pike		
•	Douglass East Coventry East Coventry Lower Pottsgrove Lower Pottsgrove Lower Pottsgrove Multiple Twps New Hanover New Hanover New Hanover New Hanover New Hanover North Coventry North Coventry North Coventry North Coventry Pottstown	Douglass Gilbert Farm East Coventry Elliswoods Cemetary East Coventry Fricks Locks Historic District East Coventry John Mattis Farm Lower Pottsgrove Jacobs Aircraft Engine Company Property Lower Pottsgrove Saylor Property Multiple Twps Falkner's Swamp Rural Historic District New Hanover (name not available) New Hanover Elliott Farm New Hanover Lay field Mill Complex New Hanover Long Meadow Farm - Plank House Barn New Hanover McGee Tract House and Outbuilding New Hanover Parsonage, Falkner Swamp Reformed Church North Coventry (name not available) North Coventry Laurel Locks Farm North Coventry Walters Tract Subdivision Pottstown Glasgow Village Pottstown William Grubb Mansion Pottstown High Street Historic District Pottstown Jefferson School Pottstown Henry Potts House Pottstown Pottstown Historic District Pottstown Pottstown Henry Potts House Pottstown Pottstown Conservation District Pottstown Pottstown Pottstown Lindustrial Historic District Pottstown Pottstown Pottstown Lindustrial Historic District Pottstown Pottstown Pottstown Railroad Station Pottstown Pottstown Railroad Station Pottstown Pottstown Railroad Station Pottstown Pottstown Roller Mill		



Lincoln Avenue

This historic district is a hillside community with a mix of 2 and 2-1/2-story, semi-detached, attached, and detached homes nestled around the Jefferson Elementary School and several churches in Pottstown Borough. It is eligible, but is not designated as a National Historic District. Both frame and brick masonry structures are found here. There are no landmark structures, but the overall level of architectural integrity is good. The architecture generally spans from 1870 to 1910, and styles include Late Federal and Late Queen Anne.

The Hill School

The campus of the Hill School in Pottstown Borough has a number of outstanding edifices that represent the development of this private educational institution. Buildings range from one-story cottages to four-story dormitories. Buildings are of brick, stone, and stucco. The majority of buildings would be eligible for landmark status. The architecture generally ranges from 1850 to 1940, and styles include Gothic Revival, Queen Anne, Collegiate Gothic, and Medieval Revival. There are also several modern-style structures of note. This district is eligible but is not designated as a National Historic District.

East End

This area of Pottstown Borough is primarily residential and represents a suburb of the 1920's. It is eligible but not designated as a National Historic District. Nearly all the houses are semi-detached, uniform in style, size, and color, and laid out in a regular pattern. The regularity of the architecture is reinforced by the rhythmic spacing of street trees. The uniformity of the environment makes it sensitive to even the slightest of irregularities. The architecture generally spans from 1910 to the late 1920's and its styles include Bungaloid and Four Square.

Iron Works

This district in Pottstown Borough is eligible but is not designated as a National Historic District. It is primarily a

residential area, this area also contains a foundry and several small industries. The neighborhood developed along with the foundry and the nearby iron works. The semi-detached houses and row homes provided shelter for those who worked at the steel mill on the other side of the tracks or at the foundry. The foundry complex provides an interesting architectural focus for the area. The architecture generally spans from 1875 to 1920 and includes Victorian and Late Victorian styles.

South Side

This location with an interesting mix of architecture embodies much of the industrial history of Pottstown. Early industry along the river and later industrial development along the railroad provide the basis for this residential area. The semi-detached houses and row homes provided shelter for the mill and railroad workers. As an early ethnic neighborhood of German craftsmen, the area later evolved into homes for Eastern Europeans. A variety of industrial buildings, churches, and modest homes provide interest. Company-owned housing can still be seen. Landmarks include churches and mill buildings. The architecture generally spans a period from 1870 to 1900 and styles includes Late Federal, Victorian, and an Eastern European church. This area is eligible but not designated as a National Historic District.

Falkners Swamp Rural Historic District

This district covers a large rural area in western Montgomery County, including parts of Douglass, Limerick, Lower and Upper Pottsgrove, New Hanover, and Upper and Lower Frederick Townships. This recognized cultural landscape is based on its agrarian heritage, with numerous contributing vistas and vernacular buildings from colonial times through to modern structures.

Fricks Locks

The name Fricks comes from John Frick who owned the land that became Fricks Village. In 1815 the Schuylkill

Navigation System was chartered. In 1820 a group of men from the navigation company spoke with John Frick about buying land from him for the new waterway. He did not live to see the first barge travel the canal. Fricks Locks Village became a center for commerce and transportation along the canal. It was an active village until 1968 when it was taken over as part of the development of PECO's Limerick Nuclear Power Plant. Today, the village is part of the National Register of Historic Places.

Pottstown Landing

The Village of Pottstown Landing located in North Coventry Township is a Registered National Historic District. Pottstown Landing developed along Laurelwood Road on the north side of Schuylkill Road (now Route 724). The older homes are found on the east side of Laurelwood with the oldest homes located at the north end of the road near the river. Pottstown Landing was believed to be the location of one of the first trading posts in the Region. The community developed further as a result of the opening of the Schuylkill Canal. A landing was built to supply the boats on the canal with coal, lumber, and iron products produced in Pottstown. The community also included a feed mill, tavern, and general store. The oldest homes in the village are in the English Colonial and Federal styles, while later homes (those constructed during the Victorian era) exhibit Gothic Revival and Queen Anne architectural features. Several bungalows dating from the early 1900's can also be found. An adaptive reuse of a barn (into an ice cream shop) anchors the southern end of the village.

Conclusion

The natural and historic features of the Region are plentiful and diverse. As suburban growth expands in the Region it will be increasingly important to protect these resources. Directing this growth into designated growth areas will conserve important natural resources, promote reinvestment in the Region's historic places, and provide

a balance of growth and preservation in the Region.

Concentrations of valuable natural resources are located around the Region's Diabase ridgelines. The terrain of these areas contains many of the Region's steep slopes, which are covered with significant portions of the Region's woodlands. The thinner soil layers and Diabase geology in these areas also make building and installation of infrastructure more difficult. These places should be a high priority for preservation in the Region through restrictive land development regulations and preservation ordinances. Public infrastructure should also not be extended into these areas in order to limit the intensity of development and on-site sewer and water facilities can maintain the balance of the local water supply.

The parts of the Region underlain by the Brunswick formation also include some of the best farmland in the Region. The characteristics of quality farmland: gently sloped, well-drained, and cleared of mature vegetation make these lands valuable for other land uses. With the Region directly located within the path of growth it is important for its communities to strategically plan for how these agricultural lands will be used in the future. It is critical that municipal comprehensive plans, zoning ordinances, and 537 plans be consistent so that development follows the vision for the Region and the individual municipality in these highly developable farming areas.

The Region's water resources are a closed loop system. Impacts to one part of the water system will affect other parts of the system. Planning and development activities which do not appreciate this connectedness will likely have negative long term effects within the Region or elsewhere in the watershed.

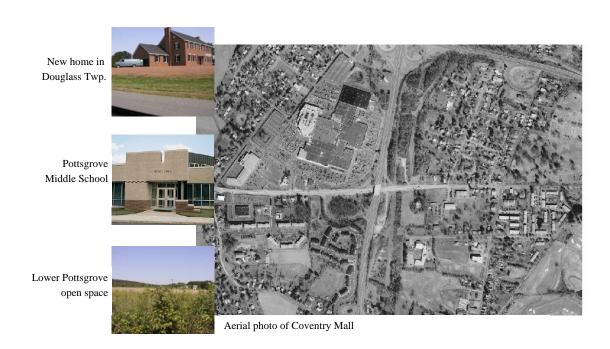
Limiting the amount of imperious cover and better managing stormwater through improved development methods will help protect the Region's groundwater supplies and prevent damage to the Region's waterways. Acquifer recharge areas in one community often supply groundwater to another community. Therefore, regional cooperation and management of development is needed to preserve the Region's aquifers and other water resources.

The Region's stream corridors are another strategic resource for preservation. These riparian corridors influence groundwater recharge, maintain water quality and provide recreation connections in the Region. One priority example of this is the Schuylkill River Greenway initiative.

Preservation of the Pottstown Region's natural and historic resources can be done together with new development. Up-to-date land development regulations and preservation ordinances are a vital part of achieving both goals. areas such as steep slopes, floodplains, and woodlands. Historic resources can also often be saved and sometimes adaptively reused. It is often a set of regulatory and non-regulatory tools that communities have to combine to preserve valuable natural and historic environments.

Chapter

4 Existing Land Use



Any planning for the Pottstown Metropolitan Region must incorporate the existing landscape as a major factor for the future. This Chapter will focus on the existing characteristics of land uses within the Region through an "overview" of its general land uses. From highly developed, urban neighborhoods to open, rolling farmlands, the landscape of this Region is very diverse. These land use patterns have been developing in the Pottstown Metropolitan Region for centuries, and while the landscape is constantly changing, there is a development pattern of existing structures that influences change.

Categories of Existing Land Use

Land use can be broken down into four main categories, residential, non-residential, agriculture/open space/ undeveloped, and roads. (The Schuylkill River's 380 acres, for the purpose of this Plan, have been included into the Region's roads total.) After this, there are as many ways to

classify land as there are types of uses to put onto the land. However, for use in this Plan, there are 18 sub-categories.

Six categories involve non-residential uses, six categories involve different types of residential development, four categories represent those that can be classified as open space, and the remaining two are roads and water bodies. See Figure 4-7 end of this chapter for a map depicting the Region's existing land use.

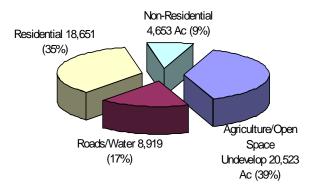
The designations given to each property were based initially on land use classifications used by the Montgomery County Board of Assessment Appeals (BOA) and the Chester County Board of Assessment Appeals; agencies that are responsible to assign categories for taxing purposes. For the purposes of land use planning, the Montgomery County Planning Commission (MCPC) has modified these categories. For example, private golf courses are categorized as commercial land for taxing purposes, but are considered private open space for land use planning. Roads and water bodies (the Schuylkill River being the largest) are not classified by either County's BOA. Acreage for these two categories has been calculated using Geographic Information System (GIS) software.

Summary of Land Use

The percentage of land that falls within each of the four main land use categories is shown in Figure 4-1. A slight majority at 39% is in the agriculture/open space/undeveloped category. The next highest at 35% is Residential.

Figure 4-2 shows the 18 land use sub-categories established by MCPC and the corresponding acreage percentage for each in the Pottstown Region. This breakdown presents a more detailed picture of the agriculture/open space/undeveloped lands category

FIGURE: 4-1
GENERAL CATEGORIES OF EXISTING LAND USE



shown in Figure 4-1. This category includes agriculture at 22%, undeveloped at 12%, private open space at 1.6% and public open space at 2.2%.

Of the land that is categorized agriculture, a significant portion is permanently protected through the purchase of development rights, however, there still remains a great deal of "unprotected" farm land that can potentially be used for future development.

The single family detached land use sub-category, the one most commonly associated with suburban development, contains approximately 23% of the Region's land. Country Residence, or those single family detached parcels with 5 acres of land or more come next, at 10.36%. This breakdown shows that the amount of land available for potential development is significant.

Residential Categories

The chart in Figure 4-3 shows the 18,651 acres of residential land in the Region divided into the 6 land use categories. These categories are defined according to the number and arrangement of dwelling units.

A dwelling unit is defined as one or more rooms intended to be occupied as separate living quarters with individual cooking, sleeping and bathroom facilities in the unit. These categories include all lots that have been developed solely for the purpose of residential occupancy. Lots with both residential and nonresidential uses are counted in the Mixed Use category.

- Country Residence A lot 5 acres or greater in size designed for and occupied exclusively as a residence for one family only and not attached to any other building or dwelling unit.
- Single Family Detached (SFD) A lot under 5 acres in size containing a building designed for and occupied exclusively as a residence for one family only and not attached to any other building or dwelling units.

FIGURE: 4-2
SPECIFIC CATEGORIES OF EXISTING LAND USE

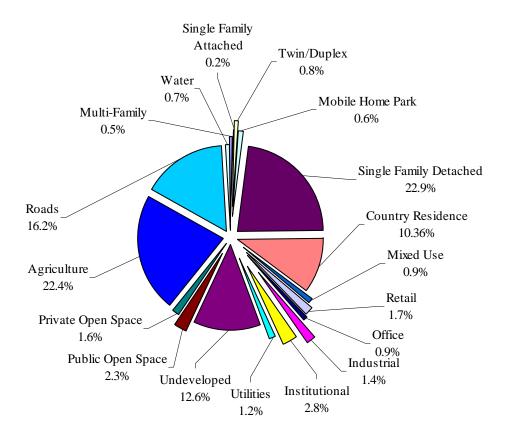
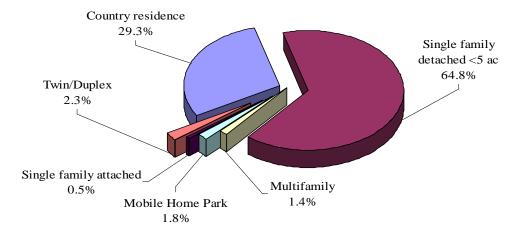


FIGURE: 4-3
EXISTING RESIDENTIAL USES

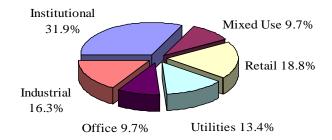


- Twin/Duplex Two dwelling units located in one building that is not attached to any other building. Twins have two dwelling units placed side-by-side and joined to each other by a vertical common wall. Duplexes have one dwelling unit placed above the other and share a common horizontal partition (floor/ceiling).
- Single-Family Attached (SFA) A dwelling unit
 with independent outside access with no other
 dwelling units located directly and totally above or
 below it. SFA units have party walls in common.
 Examples of SFA townhomes, row homes,
 triplexes and quadruplexes.
- Multi-Family Dwelling units located in a detached residential building containing three or more dwelling units, usually apartments. They are usually multiple units in one building on one lot and the units are stacked on multiple floors having shared indoor or outdoor access and some common facilities, such as a swimming pool. Multi-family development is usually run under one owner or operating unit, as a rental or condominum property. Examples of Multi-Family: garden apartments, flats and multi-family conversions from single family homes.
- Mobile Home Park A parcel of land that
 contains lots rented under one owner/operator,
 used for the placement of mobile homes. A
 mobile home park is a distinct classification
 identified by the Municipalities Planning Code.
 When mobile homes are placed on lots owned by
 the mobile home owners, they are considered
 single-family detached dwellings.

Mixed Use and Non-Residential Categories

The chart in Figure 4-4 divides the 4,653 acres of existing non-residential and mixed use lands of the Region among 6 categories.

FIGURE: 4-4
MIXED-USE AND NON-RESIDENTIAL CATEGORIES



- Mixed Use This land use category includes properties with more than one land use on them.
 Each parcel has one or more nonresidential uses and may include a residential component. These mixed uses are often combinations of stores and dwellings or stores and offices.
- Retail Stores, restaurants, repair shops and garages, and a variety of other commercial uses frequented by the general public are included in this category. Among the largest and most recognizable retail developments are shopping centers and malls. Many retail businesses in Pottstown Borough are included in the mixed-use category because they share a building with offices or dwelling units.
- Office Properties that are developed exclusively
 for office purposes as well as some miscellaneous
 uses, including animal hospitals, funeral homes, and
 banks are part of this category. Many office
 businesses in Pottstown Borough are included in the
 mixed-use category because they share a building
 with retail uses or dwelling units.
- Industrial This category includes large industrial uses and a variety of smaller uses which are scattered throughout the Townships and Borough. "Heavy commercial" uses and junkyards, are categorized industrial.
- Institutional This includes uses from public and private schools to cemeteries, government uses, hospitals and other not-for-profit organizations, and local club meeting places.

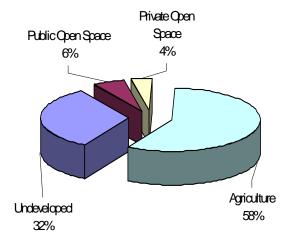
 Utilities - This category includes uses that contain public utilities such as water and electricity.
 Examples of Utility uses are: electric transmission lines, water and sewer lines, and sewer plants. Rail lines can also be considered utilities. Note: not all utilities, such as electricity transmission lines are separated into the utility category, some are categorized as easements through properties classified according to the main use of the property.

Agriculture, Open Space and Undeveloped

The agriculture, open space and undeveloped land use categories account for a significant portion of the Region's total land area (39%). The chart in Figure 4-5 divides the 20,523 acres of these categories into the following 4 categories.

 Undeveloped - Many of these parcels are vacant land. The larger parcels are easily discernable as vacant, however there are many smaller vacant parcels that appear to be part of an adjoining developed parcel. All of these parcels have individual tax parcel numbers and are capable of

FIGURE: 4-5
OPEN SPACE, AGRICULTURE, WATER AND UNDEVELOPED



- being transferred to new owners as vacant lots, although some of the smaller parcels may not be large enough for independent development.
- Agriculture These are parcels that are mainly used for agricultural practices. This category can include lands under Act 319, lands where development rights have been purchased by Montgomery or Chester Counties Farmland Preservation Programs or other organizations, farmland identified from aerial photography and input from municipal officials. Most of the parcels contain a farmstead, but agriculture is the dominant use of the land.
- Public Open Space Public open space is considered to be permanently preserved open space.
 This category can include parks, recreation areas, and open space owned by a public agency.
- Private Open Space This category contains land owned by private owners who can still develop their property according to what is permitted by zoning. This category includes golf courses, and not for profit organizations with sizable land holdings such as the Girl Scout camp in New Hanover.

Purposes of Data and Mapping

The following table, Figure 4-6, summarizes the existing land uses in all 18 categories for each of the Region's eight municipalities, and for the Region as a whole. The numbers document the amounts of land occupied by each use as of the latest Board of Assessment Appeals information collected from Montgomery and Chester Counties. The Region's land use is depicted by these 18 categories in the map in Figure 4-7.

The numbers for each municipality are contained only in Figure 4-6. The numbers for the Region as a whole were used to create the charts in this chapter. The charts depict the makeup of existing land use in the Region.

FIGURE: 4-6
ACRES BY LAND USE

Land Use Category	Douglass	East Coventry	Lower Pottsgrove	New Hanover	North Coventry	Pottstown	Upper Pottsgrove	West Pottsgrove	SUM
Multi-Family	38	55	25	3	51	98	8	4	282
Single Family Attached	0	0	20	0	9	48	1	17	95
Twin/Duplex	36	53	32	63	32	180	28	35	459
Mobile Home Park	0	27	35	6	0	0	0	266	307
Single Family Detached	1,909	2,592	1,663	2,613	3,250	620	1,010	67	13,751
Country Residence	1,076	0	328	1,949	0	0	458	2	3,813
Mixed Use	79	16	96	147	6	56	31	25	456
Retail	193	59	127	56	214	181	35	10	875
Office	5	16	33	1	2	44	2	349	452
Industrial	105	87	181	6	19	307	9	44	758
Institutional	104	103	310	351	221	317	71	17	1,494
Utilities	20	141	83	91	18	107	0	166	626
Undeveloped	899	907	458	1554	2191	231	448	39	6,727
Public Open Space	69	284	126	164	358	93	45	1	1,140
Private Open Space	118	0	140	252	165	70	29	48	822
Agriculture	3145	2324	369	3753	1560	1	611	7	11,770
Roads/Water*	0	0	0	0	0	0	0	0	8,919
Totals	7,796	6,664	4,026	11,010	8,096	2,355	2,787	1,097	52,746

^{*}Water bodies and roads were calculated for the Region only.

Conclusion

The Borough of Pottstown and its surrounding villages formed as centers of commerce during the Pottstown Metropolitan Region's agrarian and industrial eras. In more recent times, suburbanization has led to approximately 23% of the Region's land being developed for lower density housing. Today, approximately 39% of the Region's land area remains as agriculture/open space/ undeveloped. Some of these lands are permanently preserved for agriculture or parkland, but large areas of prime developable land exist in the Region.

The Region's past has created a diverse land use pattern that meets the variety of economic and social needs of the Region: from urban neighborhoods to rural farms, corner stores to the Coventry Mall, Route 422 to the Pottstown Airport, and small garages to large manufacturing facilities.

A fundamental planning consideration for the Region is how will it's remaining open, undeveloped land be used in the future. This decision has major consequences for all of the Region's environmental, transportation, and other community systems. It also affects whether underutilized properties and revitalization initiatives in the Region's older communities will be successful.

Chapter

5 Future Land Use



New housing in Upper Pottsgrove Township



Abandoned building in Pottstown Region.



Farmland in North Coventry Township

The Pottstown Metropolitan Region is located directly within the path of growth expanding outward from the the City of Philadelphia and its suburbs. This trend is the reason the municipalities in the Pottstown Region have joined together in their planning efforts. The municipalities recognize that they are interconnected. They understand that how the Region's future growth is managed will determine the preservation and quality of their natural resources, the cost of infrastructure, and ultimately its economic success and quality of life. The future land use component of this regional plan is the key for guiding growth for the next 20 years. The policies and maps contained in this section will help guide future growth within the Region, creating a more efficient land use pattern, more effectively preserving the natural environment, and promoting revitalization of the Region's older neighborhoods in and around the Borough of

The Region's Growth & Rural Resource Areas

Designated regional growth and rural resource areas shown in Figure 5-1 provide a framework for the growth management approach of the Region's Future Land Use Plan. The designated growth areas provide sufficient, but not excessive, land area for new growth in order to encourage reinvestment in the existing developed centers. Outside of the designated growth areas, the primary objective is to preserve the rural landscape and natural resources thereby sustaining the environment and enhancing livability.

Growth Areas

With the amenities that most new residents desire being prevalent within the Pottstown Metropolitan Region—open space, easy access to major roads and good schools to name a few—new growth is not only inevitable, it is already here. Properly managed it can provide many positive benefits by adding new jobs, improving the local tax base, and enhancing the Region's overall economy.

Growth, however, must not come at the expense of the community's well being. Negative impacts of unmanaged development such as suburban sprawl must be minimized. The aim of this Plan is to strike a balance between



Vibrant, redeveloped downtown in Bethesda, MD.

When residents of the Pottstown Metropolitan Region were asked*, "Where should new development be encouraged?" They ranked their preferences in the following order:

- In/around existing villages/Pottstown
- In/around existing suburban areas
- In new small towns
- In rural townships

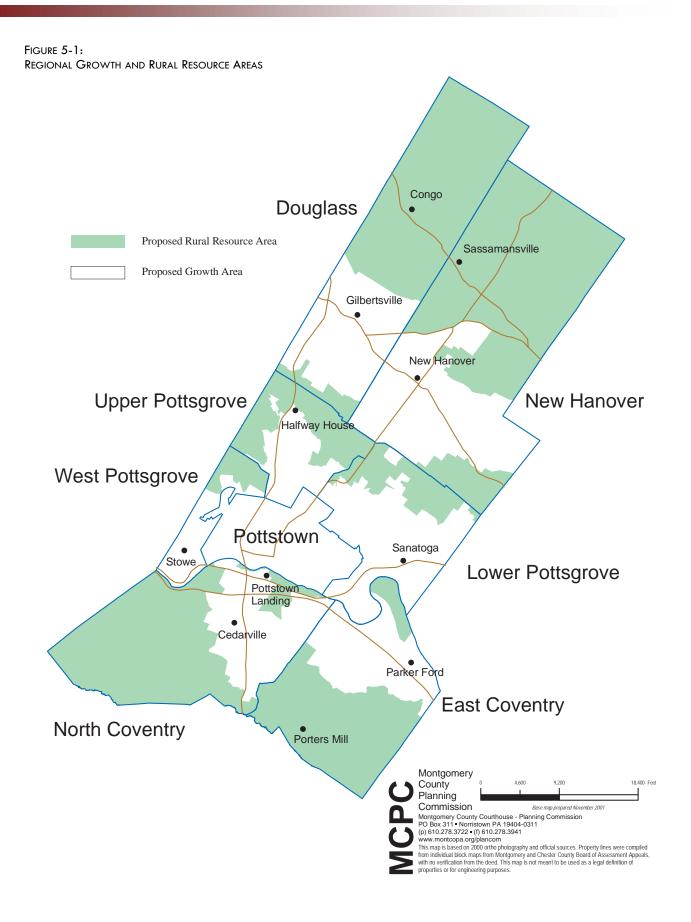
*2002 Pottstown Metropolitan Region Resident Survey

strong economic growth and growth management.

In order to maximize the positive aspects of growth, this Plan calls for directing new residential and nonresidential development into designated growth areas. Within the designated growth areas the Plan encourages the redevelopment and infill of the underutilized and vacant parcels situated in and around the Borough of Pottstown. Wherever, and whenever possible, the redevelopment of "brownfield" sites should take precedence over the development of "greenfield" lands. Analysis shows that the Region's designated growth areas can easily accommodate projected residential and nonresidential development for the next 20 years.

Rural Resource Areas

By directing the majority of new development into the designated growth areas, the natural and cultural resources of the Region's areas will be more easily protected. Although development within the rural resource areas should be limited, this Plan does not call for no growth. Some development is inevitable. Uses permitted include: agriculture, light manufacturing and small scale commercial. Residential development may also occur but only at a density of one unit per two acres. Development that does happen will not be served by public sewer and water. Public sewer and water will only be allowed into the rural resource areas when they are needed to



serve existing villages or to solve existing problems with failing on-lot systems. (Exceptions are noted in the Future Land Use Table at the end of this chapter.) This is not an anti-growth policy but a policy intended to reduce the pressure for development. Historically, intensive development tends to follow public sewer and water expansion. By limiting its expansion in the rural resource areas, new development will gravitate to the designated

Villages within the Region's Rural Resource Area Eligible for Public Infrastructure:

- Congo
- Sassamansville
- Frederick
- Niantic
- · Parkers Ford

growth areas thereby accomplishing the two principal goals of this Plan, to preserve valuable open space and to encourage redevelopment and revitalization. Development that does occur in the rural areas will be predominantly low density residential and will utilize open space preservation techniques such as cluster zoning

Preserving the open spaces, farmland, woodlands and geology within these rural resource areas is very important to sustaining the natural environment, agricultural economy, and overall quality of life. The rural resource areas are shown in Figures 5-1 & 5-2 and include the northern section of Douglass and New Hanover Townships, the northern parts of Lower Pottsgrove, Upper Pottsgrove and West Pottsgrove, the southwestern section of North Coventry, and all of East Coventry south of the Pigeon Creek and Bickles Run.

Future Land Use Plan

The Future Land Use Plan for the Pottstown Metropolitan Region uses a different approach than is typical in many municipal comprehensive plans. The scope of this plan focuses more on the intensity and location of future growth within broad land use categories. These land use categories direct growth into designated growth areas and focus growth around walkable development centers. This structure is meant to manage the impact of growth in order to maintain the vitality of the Region's towns and villages. This will be accomplished by strategically connecting land uses with existing infrastructure. This Plan also strives to maintain flexibility for the design and development of more specific land uses at the local level.

Future Land Use Map

The Future Land Use Map divides the Pottstown Metropolitan Region into seven different land use categories. The generalized future land use categories are as follows: Metropolitan Center, Community Mixed Use Center, Village Center, Regional Retail, Regional Commerce, Suburban Residential, and Rural Resource Area. Please refer to the Future Land Use Map in Figure 5-2 for the boundaries of these categories. Specific uses and policies for each category are detailed in the Future Land Use Table at the end of this chapter. The Future Land Use Map and Table together form the future land use plan for the Region. These documents are the framework for the type and character of development that the eight municipalities are authorized to permit. Implementation of the Future Land Use Plan will be achieved via local zoning ordinances, subdivision and land development ordinances, and 537 plans.

Municipalities need only comply with the policies of those land use categories that fall within their boundaries. In addition, it is only required that the municipality provide zoning that is generally consistent with the standards discussed in this plan. Municipalities, therefore, are not required to allow for every possible use at the highest density or greatest intensity described in a particular future land use category. This Plan recognizes that the policies associated with each future land use category will likely be implemented differently in each municipality. This is intended, and allows for each participating municipality to apply land use regulations as they see fit so long as they stay within the general framework of uses set down in the Future Land Use Tables.

Future Land Use Table

In an effort to aid the municipalities in achieving general consistency with this portion of the Regional Plan, a Future Land Use Table has been developed for each land use category shown on the Future Land Use Map. (See Future Land Use Table at the end of this chapter.)

When determining general consistency between local ordinances and the Future Land Use Plan, individual municipalities shall reference the corresponding set of regulations in the Future Land Use Table. It is directly linked with the Future Land Use Map and is essential to realizing the permitted uses and desired outcome from this regional planning effort.

There are five elements of the Future Land Use Table for each of the seven Future Land Use Map categories. They are briefly explained below:

Land Use Objective

This element describes the overall goal of the land use category. It is a general statement of the intent of the future land use category.

Use Options

The uses that are permitted within each Future Land Use category are listed here. These are the general uses that can be incorporated into the local zoning ordinances. The municipalities of the Region are authorized to permit uses fitting within these general use options, but are not required to permit all of the uses listed. Neither are they required to permit them at the highest residential density

or intensity for a nonresidential use. The few exceptions to the above are noted in the Intergovernmental Cooperative Implementation Agreement which should be referenced for the specific uses, and residential densities required for each municipality.

Density/Intensity Standards

This element describes the permitted density, building sizes, lot sizes and general site development potential. These standards serve as regional limits. Exact densities/intensities shall be determined by each municipality, and it is not assured that the stated density/intensity standards within the Future Land Use Table are an entitlement to landowners. Standards not addressed within the Table are at the discretion of each municipality.

Required Policies

Requirements for infrastructure, vehicular accessibility, and development character are described by this element.

Optional Recommendations

Techniques and strategies that support the land use objective are included in this element. They are optional for each municipality to use according to their local context and goals.

Diversity of Land Uses

One of the substantial benefits of regional planning is that each participating municipality will no longer have to provide for the full range of land uses mandated by the courts and the Municipalities Planning Code, so long as the Region provides for these uses in sufficient quantity. This the Region does, and will do so for the foreseeable future. Effective growth management could never be achieved as long as each and every single municipality has to provide for all possible land uses. With this requirement removed, the Region can now practice rationale, and effective, growth management. The following

sections describe how diverse opportunities for development are provided by the Region's Future Land Use Plan.

Residential Uses & Fair Share Housing Requirements

The Pottstown Metropolitan Region will need to add approximately 8,336 new housing units over the next 20 years if the population increases by the projected 20,000. The Region's Future Land Use Plan provides for this projected growth within the designated growth areas. This growth management effort will maximize the use of existing infrastructure and promote reinvestment in the older neighborhoods and villages.



Town center housing development in New Jersey

An important aspect of planning for housing in Pennsylvania involves analyzing and discussing "fair share" housing types and the affect that it has on planning. In Pennsylvania, municipalities are required to permit, through zoning, a wide variety of "fair share" housing types. These housing types consist of single-family attached units such as twins and duplexes, multifamily units such as townhouses and apartments, and mobile homes in mobile home parks. These housing types are considered by the courts to be more affordable

and, therefore, are required to be provided for in almost all municipalities zoning codes. If a municipality does allow this type of housing in their zoning code, or does not have enough land set aside for it, it runs the risk of having its zoning successfully challenged through a 'curative amendment'. A significant benefit to municipalities involved in regional planning is that they do not have to provide for these "fair share" housing types individually. Under regional planning as long as the Region as a whole adequately provides for these housing types, then each individual municipality need not.

To satisfy its "fair share" requirement, a single municipality, or region, must set aside from between 2.7% and 3.5% of its total land area for higher density housing. (These percentages were deemed acceptable in a series of curative amendments brought before the courts over the years.) The fair share analysis completed for this Plan concluded that the Pottstown Region has 5,013 acres or 9.5% of its total land area set aside for "fair share" housing. If 3.5%, the higher of the two number is chosen, then the Region would only need 1,846 acres zoned for high density. The participating municipalities may, therefore, reclassify some of their excess acreage to other land use categories consistent with the Regional Future Land Use Plan. However, in order to ensure that the Region continues to meet its residential fair share needs for the next 20 years, and to allow for market flexibility, the participating municipalities have agreed to maintain a minimum of 2,685 acres or 5% of the total land area in zoning for "fair share" housing. This percentage will easily satisfy projected housing demand.

As a growth management policy of the Plan, it is intended that developers look first to the Region's walkable towns and villages when building higher density housing (See Metropolitan Center, Community Mixed Use Centers, and Village Centers on the Regional Future Land Use Map). The advantages are clear, the infrastructure is already in place to accommodate it, and the services are already nearby to support it.

Nonresidential Land Uses

Commercial, industrial and other nonresidential uses balance the tax base of the Region's communities and provide needed jobs and services. Two studies were conducted to help identify appropriate quantities and locations for nonresidential land uses within the Pottstown Metropolitan Region. These were a nonresidential use assessment and a commercial needs analysis. The results of both these studies are described below.

Nonresidential Uses Assessment

To verify that the Pottstown Metropolitan Region was fulfilling its obligation to provide reasonable opportunities for nonresidential land uses, a review was completed of each municipality's regulations. Under regional planning, it is the region that must provide for a variety of land uses, not each participating municipality. It was determined by this assessment that the Pottstown Region currently met this criteria, and the Regional Future Land Use Plan ensures that it will continue to be met for the foreseeable future.

Commercial Needs Analysis

Commercial needs are a function of several factors, including population changes, income, existing commercial uses, and planning goals. A study was completed analyzing the supply and demand sides of the commercial market in the Pottstown Metropolitan Region in order to determine whether the market supply is meeting present and future demand.

The total number of households in the Region and average household expenditures were used to derive the demand data, while Chester and Montgomery County Board of Assessment information and sales per square foot market research provided estimates of the supply of commercial space within the Region.

The analysis projected, for planning and zoning purposes, that the Region's retail centers, not including downtown Pottstown, will supply almost double the store square footage needed to meet residential demand to the year 2015. This data did not quantify business-to-business sales activity or commercial demand from outside the Region. But these findings support the Region's goal of restricting new retail space. This goal is reflected in the Region's Future Land Use Plan by limiting the locations designated for Regional Retail and directing more of these uses into the Region's Metropolitan Center, Community Mixed Use Centers, Village Centers, and Regional Commerce Centers. These policies seek to prevent the development of too many new retail centers in order to maintain the viability of existing centers and revitalize downtown Pottstown and the Region's villages.

Mixed-Use Development

At the heart of the Pottstown Metropolitan Region is Pottstown Borough, a mixed use traditional town center. The Future Land Use Plan designates Pottstown Borough as the Region's "Metropolitan Center" and creates a hierarchy of other Community Mixed-Use Centers and Village Centers surrounding the Borough to reinforce the importance of these unique places. There are many underutilized properties within these centers that are ripe for redevelopment, particularly along the Route 422 Corridor and Schuylkill River. Revitalizing and preserving them is a critical component in maintaining and enhancing the Region's economic wellbeing.

It is important to note that this Plan does not limit non-residential development to the Borough of Pottstown and its immediate surroundings, but identifies areas within the townships where new nonresidential should logically occur. This new development is intended to serve their growing populations with convenient access to shopping and jobs. The location of this new nonresidential development has been planned for to also take advantage of existing infrastructure, good road access, and compatible land uses. (See the Regional Future Land Use Map and the Economic Development portion of the Regional Plan

in Chapter 6 for more information.) It is intended that these new centers serve the nearby residential population and not to compete with the existing commercial centers or to hinder their revitalization.

Conclusion

The Pottstown Metropolitan Region is at a defining point in its development. Its municipal officials have determined that they need to more effectively manage growth and development. Designated growth areas have been established to accomplish this goal. Directing growth into these designated growth areas will help to preserve important natural and cultural resources, limit suburban sprawl, and generally improve the quality of life for everyone who lives, works, shops or simply visits the Pottstown Region.

Within this growth management framework the Region's Future Land Use Plan focuses growth around walkable development centers that already have the necessary infrastructure in place to support it. This objective is meant to manage the impact of growth, maintain the vitality of the Region's towns and villages, and strategically connect land use with the Region's infrastructure.

By joining together and combining their land uses, each of the participating municipalities gains by being a part of the whole. As a result, rationale growth management can be achieved for the betterment of all.



Metropolitan Center

The Metropolitan Center covers all of the Borough of Pottstown and a portion of West Pottsgrove between the airport and Borough Line. The Borough is the "center" of the Region and used to be the economic hub for the area. This area has a traditional town character with a diverse mix of housing types and nonresidential land uses, public sewer and water, and a walkable grid road system supported by several major regional roadways and two highways. New development will primarily be infill for residential uses and redevelopment of existing, underutilized nonresidential uses.



Excellent example of a metropolitan downtown in Bethesda, MD.



Pottstown's town hall and plaza provide important identity and character.



New housing using traditional neighborhood design in New Jersey.

This center is intended to encourage the revitalization of the Borough of Pottstown as the historic, urban, mixed use core of the Region.

Use Options (see footnote 1)

Residential Institutional Utilities Commerical Shopping Centers Airport

Office Recreational Other Similar uses

Industrial

Density/Intensity (see footnote 2)

Any mix of densities and uses shall be permitted that are compatible with and enhance the Borough of Pottstown's historic, urban environment.

Additional Development Standards

Required Policies

- All development shall be consistent with the surrounding character of the neighborhood.
- This area is intended to be served by public sewer and water.

- Utilize traditional neighborhood design standards for new development to conserve the Pottstown's historic architecture, streetscapes and pedestrian-oriented development pattern..
- Create more flexible development regulations, mixed use and adaptive re-use options, and development incen tives to encourage preservation and redevelopment in older neighborhoods.
- Promote "urban style" residential units in the downtown, such as loft apartments, condominiums, live-work units and townhouses to create 24-hour vitality.
- Encourage niche retailing, specialty restaurants and entertainment with a regional focus in the downtown.
- Industrial development should adhere to strong performance standards: especially buffering and light, noise, odor and other pollution requirements. Truck and vehicular access should also be carefully considered.
- Parking should be provided on-street and to the side and/or rear of buildings. In some cases structured parking facilities and shared parking should be considered.
- Enforce maintenance and building code requirements.
- Maintenance and improvements to the pedestrian network should be mandatory and maximized.
- Open space and recreation areas should be created and maintained to enhance neighborhood character and quality of life.
- Street trees and other urban landscaping should be mandatory.

^{1.} Municipalities are authorized to permit specific uses within the Metropolitan Center consistent with the use options listed above. The use options are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance.

^{2.} The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Community Mixed Use Center

There are five Community Mixed Use Centers in the Pottstown Metropolitan Region. The five centers are: Gilbertsville Center, Coventry Center, Sanatoga Village Center, North End Center, and the New Hanover Center. These centers ring the Region's Metropolitan Center of Pottstown Borough and are focal points providing a unique sense of place for their respective communities. They are located along major roads and are served by public sewer and water. These centers are proposed to have office, community shopping, and high density residential units, all designed as a walkable pedestrian friendly area. Some of these centers contain an existing village, while others are new centers for the Region.



Offices in Sanatoga Village that complement its village setting. (above)



Main Street at Exton is a retail center designed to encourage walking and entertainment. (above)

Town center, mixed use housing in New Jersey

These centers are intended to be community-level focal points for the Pottstown Metropolitan Region; with shopping, services, and residential uses combined in a mixed use and pedestrian-oriented design.

Use Options (see footnote 1)

Residential Uses Shopping Centers Utilities

Commercial Uses Institutional Uses Other Similar Uses

Office Uses Recreational Uses

Density/Intensity (see footnote 2)

Residential Uses: Residential uses shall have a maximum density of 12 du/acre.

Individual Commercial & Office Uses: Individual Commercial and Office buildings shall be no greater than 30,000 s.f. in size, unless architectural features that allow them to blend in with the surrounding Community Center's character are utilized.

Community Shopping Centers: Shopping centers up to 150,000 s.f. in size are permitted, with no individual use being greater than 80,000 s.f. in size. It is understood that under certain circumstances larger scale shopping centers up to 300,000 s.f. in size, with individual uses up to 150,000 s.f., may be appropriate to serve a wider population. Any shopping center that is greater than 150,000 s.f. or individual use that is greater then 80,000 s.f., may only occur, however, if it is part of a municipally prepared and adopted Specific Plan that has also been reviewed and approved by a majority vote of the Regional Planning Committee.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- This area is intended to be served by public sewer and water.
- All future uses should be designed, sized and located in a manner that is pedestrian-oriented and promotes a town center character.
- Interconnections of uses within and adjacent to the Community Mixed Use Center should be maximized to the greatest extent possible for pedestrian and vehicular circulation.

- These centers should mix retail uses with other non-retail uses, such as, office and institutional uses. Where appropriate residential uses should also be considered.
- Architectural designs that move away from the "typical" box look are encouraged to help create a sense of place.
- Buildings should be located at the front of a property or at least have an open area in front of the building. Parking should be located on street or along the side or rear of buildings.
- Transportation improvements such as road widenings, intersection improvements and new roads are encouraged using context sensitive design to help permit traffic flow.
- Streetscape design elements such as gateways, streetlights, street trees and sidewalks are important and should be coordinated in this area.
- Trail connections and other recreation facilities are important elements for these centers.
- Landscaping and buffering to enhance the center should be mandatory.
- Lighting designed to prevent light pollution is important.
- Municipalities are authorized to permit specific uses within Community Mixed Use Centers consistent with the use options listed above. The use options
 are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall
 ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance.
- 2. The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Village Center

There are four Village Centers in the Pottstown Metropolitan Region: Fagleysville Village Center, Halfway House Village Center, Parker Ford Village Center, and Kenilworth Village Center. These centers are known as a "place", are located along major roads, are served by public sewer and water, and are intended to preserve their village setting and mix of uses. It should be noted that other villages exist throughout the Region that are not designated in this category. They were not selected because they are not strategically located along major roadways that both creates development opportunities and threatens their character.



Reuse of residential building for offices in Sanatoga Village. (above)



Front porches, village streetscape, and traditional architecture make this village in Chester County unique.



Landmark building in Halfway House, Upper Pottsgove Township. (above)

These centers are existing villages along major roadways throughout the Pottstown Metropolitan Region that are intended to promote a mix of uses while preserving their unique village setting for the Region.

Use Options (see footnote 1)

Residential Uses Institutional Uses Other Similar Uses

Commercial Uses Recreational Uses

Office Uses Utilities

Density/Intensity (see footnote 2)

Residential Uses: Residential uses shall have a maximum density of 8 du/acre.

Commercial Uses: Commercial uses shall not exceed 15,000 square feet in size.

Office Uses: Office uses shall not exceed 15,000 square feet in size.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- This area is intended to be served by public water and sewer.
- All uses within these village centers should be designed, sized, and located in a manner that preserves their village character.

- Utilize traditional neighborhood design standards for new development to conserve the village's historic architecture, streetscapes and pedestrian-oriented development pattern.
- Create more flexible development regulations, mixed use and adaptive re-use options, and development incentives to encourage preservation and redevelopment of the village.
- Promote mixed use structures in the village, preferably retail and commercial uses on the first floor, and office or residential uses on the upper floors.
- Maintain adequate automobile accessibility as well as a connected pedestrian system using context sensitive design solutions.
- No parking should be located in front of buildings. Parking should be on street or located to the side or rear of buildings.
- Streetscape design elements such as gateways, streetlights, street trees and sidewalks are all important in giving these areas a strong sense of place.
- Trail connections and other recreation facilities are important elements for these villages.

^{1.} Municipalities are authorized to permit specific uses within Village Centers consistent with the use options listed above. The use options are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance.

^{2.} The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Regional Retail

Locations designated on the Regional Future Land Use Plan as Regional Retail are either currently or are intended to serve as a site for a regional level shopping center. These areas are served by public sewer and water and are located along major roadways, so the necessary infrastructure to operate and access these facilities is available. Municipalities where these retail areas are located are strongly encouraged to make these shopping centers as pedestrian-oriented as feasible, require design standards that minimizes the "big box" appearance, and include substantial land-scaping to improve the shoppers experience and community character of these important places in the Region.



A plaza adds appeal to Suburban Square Shopping Center in Ardmore, PA



Varying rooflines and stone distinguish this Center Point center.



Pedestrian connections, landscaping and architecture improve this New Jersey chain grocery store.

These areas are intended to provide the Pottstown Metropolitan Region with large-scale regional destination shopping areas.

Use Options (see footnote 1)

Shopping Centers Recreational Uses Other Similar Uses

Individual Commercial Uses Utilities

Density/Intensity (see footnote 2)

Shopping Centers: Shopping Centers up to 450,000 square feet in size are permitted.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- This area is intended to be served by public sewer and water.
- Interconnections of uses within the Regional Retail area should be maximized to the greatest extent possible for pedestrian and vehicular circulation.

- Transportation improvements such as road widenings, intersection improvements and new roads are encouraged to minimize congestion in these regional destinations.
- Architectural designs that move away from the "typical" box look are encouraged to provide greater physical appeal for these shopping areas.
- All uses should be connected by a pedestrian system that links buildings with sidewalks along streets, parking, common areas, and other buildings. Other pedestrian amenities also add substantial appeal to these shopping centers.
- Street trees, plantings in parking areas, and other landscaping to enhance shopping areas are strongly recommended.
- Adequate lighting that minimizes light pollution should be installed.

[.] Municipalities are authorized to permit specific uses within the Regional Retail area consistent with the use options listed above. The use options are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance

^{2.} The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Regional Commerce

The Regional Commerce category on the Regional Future Land Use Map represents those areas that will provide large concentrations of employment, manufacturing, and distribution. Other uses that would provide needed services in these employment centers, such as food establishments, drycleaners, etc. are also encouraged. Larger-scale retail and residential land uses may also be developed but only if they are part of a Master Plan, and in the case of non-residential, a Specific Plan that has been prepared by and adopted by the municipality proposing such development, and only after review and/or approval by the Regional Planning Committee. The location of these land uses is based not only on the existing conditions within the eight municipalities, but very much because of their proximity to the major roadways and other infrastructure of the Region. Municipalities where these areas are located are strongly encouraged to utilize strong performance standards, design criteria, landscaping requirements, and ensure that developments are designed walkable and pedestrian friendly.



Montgomery County office building with good building and a site design that enhances the streetscape and allows for various modes of transportation. (above)



An attractive and walkable flex space building in Lansdale Borough

These areas are intended to provide larger-scale regional employment, manufacturing, distribution, and larger-scale retail and residential uses provided they are part of Master Plan or Specific Plan for the Pottstown Metropolitan Region.

Use Options (see footnote 1)

Office Uses Agriculture Other Similar Uses
Commercial Uses Residential Uses Recreational Uses
Industrial Uses Utilities Shopping Centers

Density/Intensity (see footnote 2)

Office Uses: These uses will be determined by each municipality.

Commercial Uses: Commercial uses are intended to provide local services primarilyfor employees within the Regional Commerce area. Therefore, no individual commercial/retail use shall exceed 15,000 s.f. in size. It is understood, however, that under certain circumstances larger scale shopping centers up to 300,000 s.f. in size, with individual uses up to 150,000 square feet, may be appropriate to serve a wider population. Any retail development that is greater than 15,000 square feet, however, may only occur if it is part of a municipally prepared and adopted Specific Plan that has also been reviewed and approved by a majority vote of the Regional Planning Committee.

Industrial Uses: These uses will be determined by each municipality.

Residential Uses: Residential uses shall only be permitted if they are part of a municipally adopted Master Plan and or Specific Plan, and shall have a maximum density of 8 du/acre.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- This area is intended to be served by public sewer and water.
- Development shall conform to strong standards for landscaping, buffering, setbacks, light and noise, pollution control, and odor to ensure that adjacent uses of a lower intensity, especially residential uses, are protected. In addition, industrial uses should have specific performance standards for operation.

- Transportation improvements such as road widenings, intersection improvements and new roads are encouraged to minimize congestion during peak commuting times and to serve truck traffic.
- Promote adaptive reuse of vacant industrial facilities that is compatible with adjacent uses.
- A limited amount of retail uses are intended for the Regional Commerce category to provide services to employees.
- The design and scale of new commercial uses should be compatible with the surrounding area and uses.
- Sidewalks or other pedestrian connections should be provided where feasible to allow for various transportation
 options for employees.
- Municipalities are authorized to permit specific uses within the Regional Commerce area consistent with the use options listed above. The use options
 are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall
 ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance.
- 2. The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Suburban Residential

Every township in the Pottstown Metropolitan Region has some amount of the Suburban Residential category on the Regional Future Land Use Plan located within their borders. This area is where most of the new suburban residential growth in the Region will be located. Within this category, the plan envisions that most areas will be served by public sewer and water. The density of development is recommended to decrease as the distance from a Village or Community Mixed Use Center increases and approaches the Region's Rural Resource Areas. Small-scale, nonresidential uses compatible with residential neighborhoods are included within this category to serve resident's local needs.



A seating area and boulevard in the center of this New Jersey neighborhood adds a sense of community. (above)

Front porches, a mix of architecture and central greenspace add value and a sense of open space to this suburban housing development in Chester County. (above)

New suburban home with traditional design.

These areas are intended to provide locations for new residential growth and nonresidential services for these new neighborhoods in the Pottstown Metropolitan Region.

Use Options (see footnote 1)

Residential Uses Office Uses Utilities

Agriculture Institutional Uses Other Similar Uses

Commercial Uses Recreational Uses

Density/Intensity (see footnote 2)

Residential Uses: Residential uses shall have a maximum density of 5 du/acre.

Commercial Uses: Commercial uses shall not exceed 15,000 square feet in size.

Office Uses: Office uses shall not exceed 20,000 square feet in size.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- This area is intended to be served by public sewer and water.
- All future development should support and enhance the residential character of the Suburban Residential area in its architecture, site design, and other development impacts to the surrounding neighborhood.

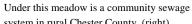
- Higher suburban densities (5 DU/acre) should be located near the mixed use centers and lower densities (1 DU/acre or 1 DU/2 acres) should be located along the areas that border the Rural Resource Areas.
- Design methods such as traditional neighborhood development and conservation subdivisions should be promoted to enhance the character and quality of life of these neighborhoods.
- A pedestrian system of sidewalks and trails connecting neighborhoods with community destinations is strongly recommended.
- Opportunities to link open spaces areas for preservation of natural systems and recreation should be pursued.

Municipalities are authorized to permit specific uses within the Suburban Residential area consistent with the use options listed above. The use options
are not required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall
ultimately determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinarce.

^{2.} The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Rural Resource Area

The Rural Resource Areas of the Regional Future Land Use Plan are intended to preserve important natural and cultural resources throughout the Region. Development and installation of public infrastructure is limited in these areas in order to prevent significant amounts of development and protect the Region's natural systems. Most of the Region's preserved farmland, woodlands, and geologically sensitive areas of the Region are located within the Rural Resource Areas. The primary land uses anticipated in the Rural Resource Areas are agriculture and rural residential uses. The Municipalities Planning Code also requires that forestry, quarrying and other extractive industries be permitted within these areas. Villages within the Rural Resources Areas may have land use regulations and public infrastructure to maintain their village settings as part of the rural landscape.





rolling farmland and wooded hills. (above)

A rural home constructed minimizing tree removal.

These designated areas are intended to protect the rural and agricultural nature of these parts of the Pottstown Metropolitan Region.

Use Options (see footnote 1)

Agriculture Institutional Uses Large-lot Industrial Uses (Including Quarry & Landfills)

Residential Uses Recreational Uses Utilities

Rural Village Commercial Animal Facilities Other Similar Uses

Density/Intensity (see footnote 2)

Residential Uses: Residential uses shall have a maximum density of 1 dwelling unit per 2 acres, except within the existing villages (as identified in the plan) of the Rural Resource Area.

Rural Village Commercial: Commercial uses in the existing villages (as identified in the plan) of the Rural Resource Area shall be no greater than 5,000 s.f. in size.

Large-lot Industrial: Industrial uses typically found in rural areas, including quarrying and landfills, are permitted on lots of 5 acres or greater in size.

Other Uses: Uses not specifically detailed above will be determined by each municipality.

Additional Development Standards

Required Policies

- New developments in the Rural Resource Area shall not be served by public sewer or water, except for:
 - Existing rural villages (as identified in the plan)
 - Locations requiring service to protect public health.
 - Conservation Subdivisions within 1/4 mile of the identified regional growth area.
- All future development shall be designed, sized, and located in a manner which preserves the rural and village settings of the Rural Resource Area.
- Municipalities shall examine regulations and codes on an annual basis to determine their effectiveness in achieving the preservation of agricultural land, natural resources, open space and historic landscapes.

- Transfer of development rights programs, purchase of development rights, and fee simple acquisition of important preservation sites should all be considered in the Rural Resources Areas of the Region.
- Flexible subdivision and land development techniques such as conservation subdivisions to conserve natural resources and preserve the rural landscape are important options for preservation.
- Resource protection ordinances such as greenway or riparian corridor overlays are strategic land use tools to
 conserve these natural resources.
- Minimal road widenings and intersection improvements except those necessary for improved safety of a roadway are encouraged.
- Development that is designed as a logical extension of an existing village can preserve the rural setting and promote walkability, and that help maintain the existing character of an area, such as through the use of setbacks.
- Landscaping, buffering, setbacks, light, noise, and pollution controls should be paid particular attention to in order to ensure preservation of the rural environment.
- Municipalities are authorized to permit specific uses within the Rural Resource Area consistent with the use options listed above. The use options are not
 required to be permitted, except as identified within the Intergovernmental Cooperative Implementation Agreement. Each municipality shall ultimately
 determine the specific uses to be permitted from the authorized use options and the locations where they are permitted via the municipal zoning ordinance.
- 2. The densities/intensities listed above serve as regional limits. While densities/intensities must not be inconsistent with the above limits, exact densities/intensities shall ultimately be defined by local zoning ordinances. It is not assured that the stated density/intensity limits of these land use options will be an entitlement to landowners, but is intended to recognize existing development patterns and provide flexibility for individual municipalities.

Chapter **6**

6 Economic Development



COVENTRY SQUARE

SUPER FIELD

BARRYT SORT

BARRYT SORT

CVS / Poburmacy

CVS / Poburmacy

Square (above) Shopping Centers,

Downtown Pottstown

Coventry Mall (below) and Coventry





Industrial Site, Pottstown

This chapter will analyze the status and character of the Pottstown Metropolitan Region's economy, and recommend strategies for economic development. This Plan recognizes the critical role the economy plays in people's quality of life, and places a high priority on economic development. This chapter will review the status of the Region's economy and will formulate an economic development plan that will build economic diversity, encourage revitalization and growth management, and address workforce issues.

Economic Development Goals

General Goals

- Promote new economic opportunities and jobs.
- Implement growth management techniques to provide for orderly and well-planned new development.
- Promote the economic vitality and quality of life of the Region's existing communities.

Commercial/Retail Goal

 Encourage revitalization of the Region's existing retail areas and limit new commercial development to within selected growth areas.

Objectives

- Maintain and enhance existing commercial areas.
- Limit the amount of new commercial development outside of existing commercial areas to within selected growth areas.
- Promote revitalization of downtown Pottstown as a regional destination.
- Preserve and enhance village areas that support a mix of uses in a pedestrian-friendly environment.

Office Goal

 Encourage the development of office uses in locations that have the necessary transportation and public infrastructure.

Objectives

- Provide high-quality employment opportunities.
- Enhance the Region's tax base.

Industrial Goal

- Provide for industrial/light manufacturing uses that meet the needs of a range of users.
- Prioritize redevelopment of underutilized, existing industrial sites.
- Promote clean and environmentally friendly industrial/light manufacturing uses.
- Locate industrial/light manufacturing uses where adequate transportation access and necessary utilities are available and planned for.

Background: The Pottstown Metropolitan Region's Economy

Employment by Industry, 2000, Pottstown Metropolitan Region

Figures 6.1 and 6.2 show the percentage of the Pottstown Metropolitan Region's residents employed in major industry sectors. You can see residents work in a fairly well diversified group of industries. According to the 2000 Census, the service sector was the largest accounting for more than 39% of all jobs followed by manufacturing at a little over 20%.

The service sector is also the fastest growing segment of the job market gaining over 10% from between 1990 to 2000, while manufacturing was the biggest loser dropping a little over 6%.

Unemployment rates specific to the Pottstown Metropolitan Region are not available; however, unemployment rates for Montgomery and Chester Counties in June 2004 were 4.2% and 3.4%, respectively, which compare favorably with the U.S. average of 5.6%.

Largest Employers in Region

Large employers can have a strong impact on the regional economy when they expand, contract, or relocate. The largest employers in the Pottstown Metropolitan Region are listed in the table in Figure 6.7.

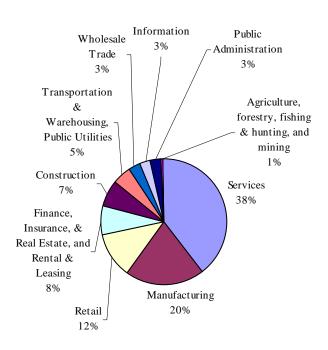
The largest employer within the Pottstown Metropolitan Region is the Pottstown Memorial Medical Center. This hospital employs more than twice as many employees as the second largest employer, the Owen J. Roberts School District. The largest manufacturing employers are Torque-Traction Manufacturing of Pottstown (automotive/vehicular), Cabot Performance Metals of Douglass, and Neapco of Pottstown (automotive, industrial, and agricultural parts). The largest retail

FIGURE 6-1
RESIDENT EMPLOYMENT BY INDUSTRY: 1990-2000; POTTSTOWN METROPOLITAN REGION

	2000		1990	
Industry	Employment	Percentage	Employment	Percentage
Services	13,279	39.4%	9,400	29.1%
Manufacturing	6,758	20.1%	8,511	26.3%
Retail	3,983	11.8%	5,321	16.5%
Finance, Insurance and Real Estate, and Rental and Leasing	2,555	7.6%	2,011	6.2%
Construction	2,311	6.9%	2,324	7.2%
Transportation and Warehousing, Public Utilities	1,709	5.1%	2,166	6.7%
Wholesale Trade	1,030	3.1%	1,261	3.9%
Information	929	2.8%	n/a	n/a
Public Administration	910	2.7%	672	2.1%
Agriculture, Forestry, Fishing and Hunting, and Mining	229	0.7%	669	2.1%
Total	33,693	100.0%	32,335	100.0%

Source: U.S. Census Bureau: 1990 Census STF3; Census 2000, SF 3.

FIGURE 6-2
RESIDENT EMPLOYMENT BY INDUSTRY



employers are Wal-Mart (Pottstown) and Boscov's (North Coventry). Three of the top six employers in the Region are school districts.

Office Development

More residents of the Pottstown Metropolitan Region work in the services sector than any other sector. Nearly 4,000 more residents worked in the services sector in 2000 than in 1990. The proportion of employed residents working in this industry increased from 29% in 1990 to 39% in 2000. The proportion of those employed in this sector is slightly below that of the national average (42%).

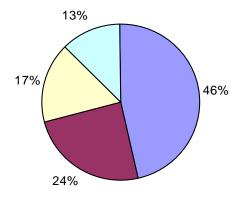
The breakdown of the proportion of those employed in office-based industries is similar to that of the nation, with a couple of exceptions: public administration jobs comprise a lower portion of jobs in the Pottstown Region (2.7%) than the national average of 4.8%. Many of the

FIGURE 6-3
RESIDENT EMPLOYMENT IN THE SERVICES SECTOR, 2000.

Services Employment	Employment	Percentage
Educational; health and social services	6,152	18.3%
Professional; scientific; management; administrative; and waste management services	3,229	9.6%
Finance; insurance; real estate and rental and leasing	2,555	7.6%
Other services (except public administration)	1,664	4.9%
Total Services	13,279	100.0%

Source: U.S. Census Bureau STF 3; Census 2000, SF 3.

FIGURE 6-4
RESIDENT EMPLOYMENT IN SERVICES SECTOR, 2000



- Educational; health and social services
- Professional; scientific; management; administrative; and waste management services
- ☐ Arts; entertainment; recreation; accommodation and food services
- Other services (except public administration)

office jobs were in the services; information; and finance, insurance, and real estate (FIRE) sectors. Jobs in the "finance, insurance, real estate and rental and leasing" subsector comprised 7.6% of jobs, which is modestly higher than the 6.9% national average.

Commuting patterns show that the Region's resident office workers are employed in office parks or small to medium-sized office buildings scattered around the area, with concentrations in King of Prussia, Plymouth Meeting and along the 422 corridor. Only a relative few commute to Philadelphia.

FIGURE 6-5
LARGEST EMPLOYMENT INCREASES BY INDUSTRY, 1990-2000

Sector	Change in Employment	% Change
Services	+3,879	+4%
Information	+929*	N/A*
Finance, Insurance, and Real Estate	+544	+27%
Public Administration	+238	+35%

Note: Data on the "Information" sector was not tabulated by the Census in 1990.

FIGURE 6-6
LARGEST EMPLOYMENT DECREASES BY INDUSTRY, 1990-2000

Sector	Change in Employment	% Change
Manufacturing	-1,753	-21%
Retail	-1,338	-25%
Transportation & Warehousing, Public Utilities	-457	-21%
Agriculture, Forestry, Fishing & Hunting, Mining	-440	-66%

FIGURE 6-7
TEN LARGEST EMPLOYERS IN THE REGION

Pottstown Memorial Medical Center, 1600 E. High St., Pottstown, PA 19464 Phone: 610.327.7000 Web: www.pmmctr.org John Buckley, President and CEO	1,120
Owen J. Roberts School District, 901 Ridge Rd., Pottstown, PA 19465 Phone: 610.469.5100 Web: http://www.ojr.k12.pa.us/ Dr. Karen Florentine, Superintendent	500
Pottstown School District, Beech & Penn Sts., Pottstown, PA 19464 Phone: 610.323.8200 Web: www.pottstownschools.com Dr. Anthony Georeno, Superintendent	498
Torque-Traction Mfg. Technologies, Inc., 125 Keim St., Pottstown, PA 19464 Phone: 610.323.4200 Web: www.dana.com Mike Kaminski, Plant Manager	460
Cabot Performance Materials, 300 Holly Rd., Boyertown (Douglass Township, Montgomery County), PA 19512 Phone: 610.367.1500 Web: www.tantalumcentral.com Thomas Odle, General Manager	450
Pottsgrove School District, 1301 Kauffman Road, Pottstown, PA 19464 Phone: 610.327.2277 Web: http://www.pgsd.org/ Dr. Sharon Richardson, Superintendent	381
Neapco, Inc., 740 Queen Street, P O Box 399, Pottstown, PA 19464 Phone: 610.323.6000 Web: www.neapco.com William Patterson, President	325
Wal-Mart #2263, 234 Shoemaker Road, Pottstown, PA 19464 Phone: 610.327.3204 Web: www.walmart.com	315
Boscov's Department Store, Coventry Mall, Routes 724 & 100, Pottstown, PA 19465 610.327.8080 Web: www.boscovs.com Albert Boscov, President and CEO	280
Occidental Chemical Corporation, PO Box 699, Pottstown, PA 19464 Phone: 610.327.6400 Web: www.oxy.com Stacey A. Morris, Plant Manager	260

Retail Development

Retail is the third-largest employment sector, however, the proportion of residents working in this sector declined during the 1990s. 1,338 fewer residents worked in retail - a 25 percent decline from 1990 to 2000. Whereas in 1990 it comprised 16.5% of the Region's employment, it now comprises only 11.8%. This proportion, though, is virtually the same as that of the national average. Figure 6.8 shows retail spending patterns on goods and services in the Pottstown Region.

Industrial Development

The Pottstown Metropolitan Region has a higher percentage of jobs in the manufacturing sector at 20%, then the national average at 14%. Manufacturing is second only to the service industry in regional

FIGURE 6-8
RETAIL SPENDING PATTERNS, BASED ON SURVEY

Survey Question: "Where Do You Shop Most Frequently for:"?	Pottstown Borough	Coventry Mall	Elsewhere in Pottstown Region
Groceries	1,074	375	1,294
Pharmacy	1,188	603	1,076
Household	669	979	1,095
Clothing	233	2,089	281
Personal Services	826	182	750
Furniture	405	532	640
Dining	372	108	900
Entertainment	191	234	478

Source: Pottstown Metropolitan Regional Plan Survey, 2002

employment, but has been in a steady decline the past twenty years. In 1990 slightly more than one in four workers (26%) were employed in manufacturing jobs. This proportion has decreased to one in five workers in 2000. The nature of the manufacturing industry has also changed, with fewer jobs employed in heavy industry to more in light manufacturing. In the other major industry employment sectors (e.g., retail, services) the Region has a similar share of employment to the national average.

Industry Clusters

The table in Figure 6.9 shows the relative concentration of jobs held in the Pottstown Metropolitan Region. The data compares the Region to that of the Nation.

The table shows the Region has relatively high concentrations of employees in:

- Production
- Transportation and material moving
- Healthcare support
- Architecture and engineering

Since the Region has a larger-than-average share of these occupations, firms in related businesses may benefit from locating here. The sizeable proportion of employees in transportation and material moving reinforces the fact that the Region is strategically located with excellent rail and highway access.

Economic Development Plan

The economic development plan focuses on the most critical aspects of the Region's future economic health. These include business attraction and retention, workforce availability and training, maintaining a diversified economy, and revitalization and growth management.

FIGURE 6-9
OCCUPATIONS WELL-REPRESEENTED IN REGION

Occupation	Share of Employment in Region	Share of Employment in Nation
Production; transportation; and material moving	17.4%	14.6%
Production	11.0%	8.5%
Transportation and Material Moving	6.4%	6.1%
Healthcare support occupations	2.4%	2.0%
Architecture and engineering	2.4%	2.1%

Source: U.S. Census Bureau: 1990 Census STF 3: Census 2000 SF 3.

Business Attraction & Retention

To have a strong economy and meet the Region's stated economic goals, it is important to attract and retain businesses, particularly those that are growing and offerhigh-paying jobs. Important factors in attracting such businesses are reviewed below:

Location

The Pottstown Metropolitan Region is located in the Philadelphia Metropolitan area, just 40 miles northwest of the city of Philadelphia. This close proximaty to such a large market and its concentration of businesses is a positive for the Region. .

Transportation

The Pottstown Metropolitan Region offers easy access to major highways, freight railroads, bus lines, and even has a small general purpose airport. Located nearby are several interstate highways, major ports and airports.

Education

The Pottstown Metropolitan Area offers a strong public and private school system. The Montgomery County Community College-West Campus is located in Pottstown Borough. The college has expressed a strong desire to shape its curriculum to meet the needs of workers in demand by area companies. Four year colleges and schools offering graduate and technical studies are located near the Region.

Housing

The Region offers a range of housing types, and sizes, located in urban, suburban, and rural settings. Pottstown Borough has the third most affordable rents in Montgomery County. In general, the Region's housing stock is very affordable when compared to rest of Montgomery and Chester Counties. Pottstown and West Pottsgrove have median home values below \$100,000; and Douglass, Upper Pottsgrove, and Lower Pottsgrove have median home values below \$150,000.

Recreation

The Region offers cultural events, sporting activities, and passive and active parks and recreation areas. Philadelphia is a major cultural center and is located within easy driving distance. The Schuylkill River is one of the Region's main recreation focal points, and will be increasingly utilized in the future.

Shopping

The Region's primary shopping areas are the Coventry Mall in North Coventry Township, Pottstown Borough's central business district. There are also several community shopping centers and small village center shopping areas scattered throughout the Region. A new medium-sized shopping center is being constructed on

Route 100 in North Coventry ("Town Square Plaza"). The largest shopping mall in the eastern U.S., the King of Prussia Mall, is accessible by a short drive, as are other major malls and outlet centers.

Workforce Issues

Existing Workforce

The Pottstown Region offers a workforce that is generally well educated. Its population 25 years and over has a higher proportion of high school graduates (83%) than that of the national average (80%). However, with regards to higher education the Region's educational attainment is modestly lower than the national average. For example, 27% have an associate's

FIGURE 6-10
MAJOR EMPLOYMENT CENTERS OF REGION'S RESIDENTS

Destination	Percent of Employed Residents Responding
Other Montgomery County	15%
King of Prussia/ Plymouth Meeting	10%
Collegeville/Phoenixville	7%
Other Chester County	7%
Berks County	6%
Exton/Downingtown/ West Chester	5%
Philadelphia	3%
Reading	3%

degree or higher, while the national average is 31%. Twenty-one percent have a bachelor's degree or higher, as compared with a national average of 24%. Nationally, 9 percent of the population 25 years and over has a master's degree whereas 7 percent have attained this level in the Region.

Workforce Availability

One barrier that can arise in a regional economy is a mismatch between jobs and housing. Many residents

(63%) work outside the Region, according to the Regional survey. Some of the major employment centers where people work can be found in Figure 6.10. When residents live far from their jobs, it is often due to a lack of affordable housing near their employer. However, there is a sizeable amount of affordable rental and owner-occupied housing in the Pottstown Metropolitan Region. Thus, the Region's employers do not appear to be burdened from such a jobs-housing mismatch.

Child Care

Since two-earner households have become more prevalent, day care has grown in importance. The municipalities in the Pottstown Metropolitan Region should promote, whenever possible, adequate day care facilities through the following techniques:

- Permit a variety of types of day care in residential and appropriate non-residential areas.
- Regulate day care through zoning.
- Encourage large employers to provide on-site day care, if practical.
- Consider allowing day care facilities to operate during more hours of the day in non-residential areas.

Workforce Training Plan

Ongoing communication and dialogue among businesses, workforce training providers, and job seekers is crucial. The Montgomery County Community College has expressed a desire to take an active role in this effort. This Plan recommends North and East Coventry residents be permitted to fully utilize Montgomery County Community College-West Campus for the same tuition rates granted residents of Montgomery County.

Montgomery County Community College West Campus is located in Pottstown and is a valuable regional resource for workforce training. One of the Community College's goals is to provide non-credit courses and training for educational enrichment, career advancement and job retraining. The West Campus offers various

workforce training and continuing education programs, including:

- Medical and dental health careers
- Computer applications/office procedures
- Real estate
- Small business; business administration, management, marketing and accounting
- Languages
- Professional development
- Criminal justice (pending distance education)
- Elementary/secondary education, early childhood education
- Liberal studies/general studies
- Social science
- Human services
- Nursing/medical assisting

Other post-secondary learning institutions nearby include:

- Ursinus College, Collegeville (4-year college; offers evening classes to members of the community)
- Albright College, Reading area (4-year college)
- West Chester University



Montgomery County Community College—West Campus

- Penn State University- satellite campuses in Great Valley/Malvern and Reading
- Antonelli Medical and Professional Institute, Pottstown (certificates)
- Alvernia College, Reading (undergraduate and graduate studies)
- Berks Technical Institute, Wyomissing (degree and diploma programs in fields including computers, electronics, nursing, administrative, paralegal and business)

For younger students, vocational technical programs are offered at Pottstown Senior High School. Students in other school districts take these courses at the Western Center for Technical Studies, Northern Chester County or Berks County Career and Technology Centers.

Two of the major types of job seekers that can be addressed by job training providers include (1) transitional workers and (2) incumbent workers. Transitional workers include those who lack basic job skills (e.g., reading, punctuality) and those who have recently been laid off from closing or down-sizing companies. Incumbent workers are currently employed but are actively seeking a new job.

The workforce training needs of transitional workers is dependent in part on the number of non-English speakers and the number of families in poverty. Non-English speakers will need language training, and families in poverty have access to fewer resources and are thus likely to need specialized training.

In the Pottstown Region, 4.6% of the population five years and over speaks a language other than English at home. This is far less than the national average of 17.9%, but considering population trends in local counties and in the nation, there is a likelihood the demand for English language training will increase.

Another indicator of the workforce training need for transitional workers is the percentage of the population in poverty. Although this indicator is relatively low in the Region, it increased from 5.3% to 6.7% from 1989 to

1999. Although the proportion of workers who do not speak English and those who are in poverty is not excessive, it is still critical to address the needs of these groups.

The Montgomery County Community College West Campus is the largest resource for workforce training in the Pottstown Region. In 2000 the Pottstown Community and Economic Development Action and Implementation Strategy recommended establishing a Workforce Development Center in downtown Pottstown. The Community College is willing and able to pursue such a role. The Strategy recommended that such a facility should match the skills of job seekers with available jobs, prepare candidates for interviews, provide technical and professional assistance to start-up companies and entrepreneurs, and offer technical training to respond to the growing demand for computer Regional leaders should work with the experts. Community College to ensure these goals are being adequately met.

Economic Diversification

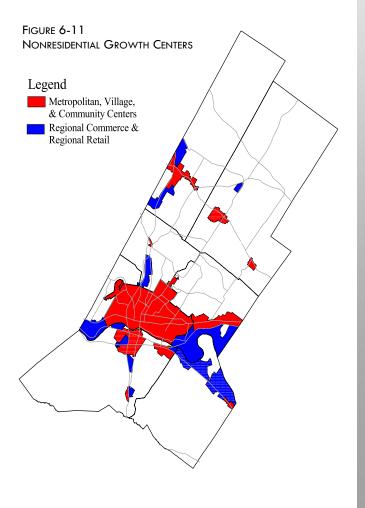
A diverse economy is important for the long-term wellbeing of any region. Generally, a more diversified economy is more stable and better able to withstand downturns affecting specific industries. Census data shows the Region's workers are employed in a broad array of industries. The Region's leaders will need to work to maintain this diverse economy, and investigate opportunities for further diversification as opportunities present themselves. Examples include:

- Work with Montgomery County Community
 College and other schools to provide necessary
 education and training targeted at industries the
 Region would like to see startup or expand.
- Facilitate expansion of local small businesses that have the potential to grow in size. This could be done by establishing an agency or partnership with existing agencies to implement this, possibly including the Tri-County Chamber of Commerce, the Chester County Economic Development

- Council, and Pottstown Downtown Improvement District Authority (PDIDA).
- Market the Region's strengths to businesses the Region would like to attract. These strengths include location, accessibility, quality of life, education, a skilled workforce, and the ongoing revitalization of Pottstown and the Village Centers.

Revitalization and Growth Management

The Borough of Pottstown and villages in the Region have interesting downtowns and main street areas. However, many of these have declined in vitality over time as jobs have shifted from urban areas to the suburbs, and the economy has shifted

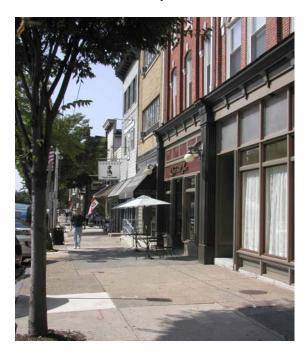


from a manufacturing to a services base. Suburban shopping centers have also suffered from disinvestment and are in need of revitalization. The Pottstown Region should promote, whenever possible, growth and development in the mixed use and non-residential growth areas, which are identified in the Regional Future Land Use Plan and in Figure 6.11.

Revitalization Recommendations for the Borough of Pottstown, Village Centers, and Regional Centers:

Economic growth and investment, whenever possible, should be directed into the Region's older developed areas to promote revitalization, take advantage of existing infrastructure, and manage growth. Much of the revitalization will naturally occur in the Region's only borough and historic center, Pottstown. Revitalization should also be directed towards the Region's other centers, including:

- Coventry Community Center
- Gilbertsville Community Center



Building Reuse in Pottstown Central Business District

- New Hanover Community Center
- Sanatoga Village Center
- North End Community Center
- Fagleysville Village Center
- Halfway House Village Center
- Parker Ford Village Center
- Kenilworth Village Center

Revitalization and Growth Management Recommendations:

- Utilize programs targeted at achieving revitalization of downtowns, such as the Main Street Program, Elm Street Program, Montgomery County Revitalization Program, Keystone Opportunity Zones, and Community Development Block Grants [see Appendix C for a comprehensive list of funding programs]
- Encourage walkable areas, with short blocks, a well-functioning street grid, and a safe and convenient pedestrian system
- Encourage the placement of new buildings close to roads, with parking to the side and/or rear of the building
- Encourage placement of retail on the ground level of mixed use buildings or parking garages, facing the street
- Create design standards to improve building appearances
- Encourage preservation of historic resources to enhance an area's identity and attraction
- Utilize tax incentives and subsidies to attract or retain businesses in downtown locations
- Land consolidation/ownership to address
 downtown areas with several small, scattered lots,
 or landowners that hold property vacant for longer
 periods without selling, municipalities can initiate a
 redevelopment process. In Montgomery County
 municipalities can work with the County
 Redevelopment Authority.

- Identifying market niches Often downtowns in boroughs and villages cannot compete with the volume and variety of stores offered in large malls. Therefore, it may be in the best interest of these boroughs and villages to focus on a market niche or niches. Based on the 2002 Pottstown Metropolitan Region Residents' Survey, some retail uses which the Region's residents feel are most needed (via new or expanded businesses) include: restaurants, bookstores, hobby stores, and hardware stores. The following new or expanded services are considered to be needed most by the Region's residents: library services, educational services, physicians, and E&A repair. Some of these uses might fill niches in Pottstown and the Region's villages. A playhouse or music center were cited as the most needed entertainment center in the Region.
- Government offices The federal government and Commonwealth of Pennsylvania give preference to central business districts for new government offices. Counties should also give preference to central business districts for their offices. Such policies would most likely benefit Pottstown.
 PDIDA already maintains an inventory of sites in the borough suitable for redevelopment; it should evaluate which might be appropriate for future government offices.
- New housing encourage new homes near downtown and main street areas to help those areas redevelop. Pennsylvania's new Elm Street program is helpful in this area.
- Small business assistance programs The Small
 Business Administration provides programs, loans,
 and grants to assist small business. PDIDA or
 future main street programs in the Region could act
 as liaisons between small businesses and these
 programs.
- Codes In some instances zoning codes can be too strict and act to discourage redevelopment.
 Flexibility should be pursued; such as allowances for shared parking, permitting a wide range of compatible uses in an area, and promoting adaptive reuse of older buildings.

 Building design - Context-sensitive building design should be encouraged to maintain the harmony and unique architectural features of the area. Local ordinances can require front doors and windows, parking to the side or rear of a building, and other

physical arrangements that create a more appropriate building design for an area. A municipality may also want to consider implementing a Historic District with a Historic Architectural Review Board (HARB), such as Pottstown has. Façade improvement programs encourage maintenance in

The Pottstown Downtown Improvement District Authority (PDIDA)

PDIDA is a municipal authority formed under the Pennsylvania Sunshine Act of 1945 for the purpose of assisting with the revitalization of Pottstown's Downtown Business District.

PDIDA is comprised of a volunteer board of directors from all areas of Pottstown businesses, property owners, and professional experience. By leveraging the combined talents and backgrounds of the board of directors and through the Executive Director, PDIDA is able to enact strategic plans and revitalization initiatives for the Downtown Business District.-PDIDA website, 2004

accordance with adopted design guidelines.

- Signs Since signs have a significant aesthetic impact, municipalities in the Region should adopt sign ordinances regulating size, location, height, and illumination of signs that are complimentary to an area. Way finding signage should also be utilized to the fullest extent possible to ensure major tourist, shopping, and other destinations and parking can easily be found. A regional way finding signage system and design is recommended.
- Open space Downtowns and main street areas should ensure they have adequate parks and open space. These amenities can improve aesthetics while providing needed recreational spaces and gathering places. Efforts to enhance the open space system can be facilitated by the Montgomery County's Open Space Program and Chester County's Open Space/

Landscapes 21st Century Conservancy and Preservation Partnerships Grants.

A more specific and detailed list of revitalization goals for Pottstown Borough are identified in the Strategic Plan of the Pottstown Downtown Improvement District Authority (PDIDA). PDIDA's 2003 Strategic Plan includes a list of goals and objectives, including the following:

- Develop a downtown revitalization plan
- Promote adaptive reuse of existing buildings
- Preserve downtown's historic character
- Require compatible in-fill design
- Inventory downtown property

Sanatoga Village is located on High Street in Lower Pottsgrove Township. Although predominantly residential in the past, the village is increasingly attracting commercial uses. These uses are attracted to the area by the increasing area population, proximity to U.S.422., and (for medical offices) proximity to the Pottstown Memorial Medical Center.

In 1994 Lower Pottsgrove received the assistance of a volunteer team of architects, planners and design professionals from the American Institute of Architects (AIA). This team made recommendations for street signage and lighting, landscaping, parking, and other design improvements. The Township hopes to retain much of the village's historic character while encouraging future improvements to be consistent with village character [Source: Lower Pottsgrove Township; www.lowerpottsgrove.org]

- Establish and promote draws to Downtown Pottstown that will generate foot traffic, public awareness, a positive image and family-friendly atmosphere
- Promote new and existing businesses
- Ensure safety
- Utilize appearance standards
- Develop strategically-located multimodal transportation center
- Improve information about parking and transit

Industrial Land Redevelopment

There are significant areas of land within the Pottstown Metropolitan Region that are "brownfield" sites. These sites are underutilized industrial areas that are contaminated or perceived to be contaminated. However, these same sites are often ideal for redevelopment, since they are strategically located in the Region's growth areas, with good access and existing infrastructure. Redevelopment in these areas has the potential to enhance both the economy and image of the Region.

One of the sites with the greatest potential for reuse is the former Mrs. Smith's Pie Property. A developer is actively looking to develop this site, strategically located on Hanover Street in downtown Pottstown. The site has excellent road and rail access, and is near High Street and the Central Business District.

The Montgomery County Brownfields Program was established to identify and remediate brownfield sites in

the county under the auspices o f t h e Pennsylvania Land Recycling Program, which was enacted in 1995. The Montgomery County Redevelopment Authority and Montgomery County Planning Commission have established an inventory of brownfield sites (see Figure 6.12).

Municipalities in the Region should consider seeking financial assistance to make industrial site redevelopment economically feasible where it otherwise would not be. In addition to federal assistance such as the Section 108 Loan

Reconnections Project

This project seeks to improve pedestrian and bike linkages between Pottstown and North Coventry. The project is currently in the plan formulation stage, but the vision of the project is to upgrade the attractiveness, safety, and efficiency of pedestrian (and bicycle) connections connecting Pottstown and North Coventry. More specifically, the project seeks to link Downtown Pottstown, the Coventry Mall, and Schuylkill Riverfront together more closely for pedestrians. Another link to consider is to the new shopping center on Route 100 in North Coventry.

FIGURE 6-12 Inventory of Brownfield Sites in Pottstown Region

Address	Municipality	Lot Size (sf)	Acres	Comments
Layfield Rd. (Rt.663)	New Hanover	25,450	0.6	Swann Oil operated Cynet Chemical Co.
250 W. High Street	Pottstown	479,160	11.0	Long history as junk yard
330 W. High Street	Pottstown	308,840	7.1	Long history as industrial site
340 W. High Street	Pottstown	187,744	4.3	Site has been used for industrial purposes
350 W. High Street	Pottstown	696,960	16.0	Long history of industrial use
426 W. High Street	Pottstown	449,975	10.3	Portion of the property is being developed
471 W. High Street	Pottstown	1,263,240	29.0	Site contains landfill. The foundry and various buildings have been recently removed. Some of the property is to be transferred to West Pottsgrove and Pottstown.
140 College Drive	Pottstown	130,680	3.0	Land extends along river to Community College. A portion of land was contaminated by old gasification plant. The site has undergone assessment or remediation by either the EPA or DEP.
175 S. Evans Street	Pottstown	47,568	1.1	Site has abandoned factory. Has undergone assessment or remediation by either the EPA or DEP. Building was demolished.
113 S. Hanover Street	Pottstown	10,275	0.2	Station is closed; monitoring wells can be seen on-site.
16 High Street	Pottstown	29,100	0.7	Former Kiwi Polish Co. Borough is concerned about the safety of this site. Various chemicals were stored in old brick mill building.
High Street	Pottstown	274,428	6.3	Proposed for an office in John Potts Park plan. Community College would like to use as parking.
381 W. High Street	Pottstown	68,302	1.6	
412 Laurel Street	Pottstown	50,486	1.2	Site contains an abandoned factory
S. Roland Street	Pottstown	196,020	4.5	Former Metal Machine Industry. Old vacant factory along Norfolk Southern Rail Line. Has undergone assessment or remediation by either EPA or DEP.
601 W. High Street	Pottstown	169,884	3.9	Former gas station cleaned up under the state-wide health standards.
Old Reading Pike	West Pottsgrove	2,270,347	52.1	The foundry and various buildings have been recently removed. Some of the property is to be transferred to West Pottsgrove and Pottstown.

Guarantee provision of the Community Development Block Grant program, state and local tax incentive programs are useful for this purpose. Programs of particular interest for industrial site or brownfield redevelopment include:

State programs:

- Keystone Opportunity Zones (KOZs)
- Local Economic Revitalization Tax Assistance Act (LERTA)
- State Enterprise Zones
- Tax Increment Financing (TIF) Guarantee Program.
- Business in Our Sites Revolving loan fund.

Pottstown is currently utilizing the KOZ program and Lower Pottsgrove is currently utilizing the LERTA program to encourage the redevelopment of industrial sites.

Local programs:

 Tax Increment Financing (TIF) - A municipality can borrow money via bonds, improve a distressed property, and repay the bonds with future tax revenue generated by the improved property.

Transportation Improvements

The Regional Comprehensive Plan supports transportation and infrastructure improvements in order to make selected industrial sites more attractive to developers. Pottstown, for example, is improving and extending Keystone Boulevard. Lower Pottsgrove has expanded sewer and water service in the LERTA area.

Land Assembly

In some cases the consolidation of various small parcels can make industrial sites more attractive to developers and facilitate redevelopment. In Montgomery County the County's Redevelopment Authority has the power to condemn and

consolidate land for redevelopment. The Region's Montgomery County municipalities may wish to consider working with the Redevelopment Authority in cases where land assembly is considered beneficial. In North and East Coventry, there is not currently a County-level entity that has the power to condemn land for redevelopment (although the Chester County Economic Development Council, a nonprofit, private organization, promotes economic growth in the County).



Industrial Opportunity Site: Mrs. Smith's Pie Property, Pottstown

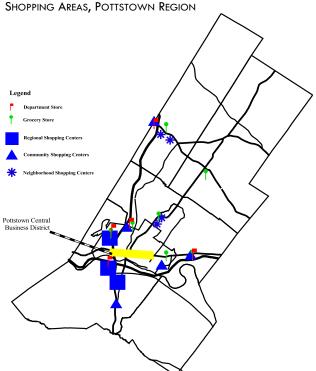
Shopping Center and Strip Commercial Redevelopment

The Coventry Mall is a regional center that is the largest shopping center in the Pottstown Metropolitan Region.

Additionally, there are also a number of smaller shopping centers scattered throughout the Region (see Figure 6.13). An important factor influencing these shopping centers is the King of Prussia Mall, located approximately 15 miles to the southeast. This mall is designated a "Super Regional Mall" and is the third largest mall in America. It draws shoppers from a large area including the Pottstown Metropolitan Region.

The Region currently meets its local shopping needs and should continue to do so for the foreseeable future. Rather than encourage new shopping centers, whenever possible the Region should concentrate on revitalizing its existing developed commercial areas. Limiting the amount of land available for new retail centers is a goal of this Plan. In addition, to help revitalize the Region's older shopping centers with their excessive vacancy rates, this Plan recommends that alternative uses be permitted in retail buildings. This will help ensure that the space is being utilized even when the market for retail is weak.

FIGURE 6-13



In order to prevent new and existing shopping centers from falling into decline, the Region's municipalities should require that all new shopping centers, and during the rehabilitation of existing shopping centers, utilize good design principles, which might include elements such as:

- Attractively design buildings which integrate the shopping center with its surrounding development.
- Provide good landscaping and plant shade trees in the parking areas.

- Limit the amount of paved parking area.
- Provide for pedestrian linkages from the shopping
 - center to the adjacent street and sidewalk system.
- Provide for convenient and safe pedestrian circulation within the shopping center parking lot.
- Provide good access for cars but limit the number of curb cuts.
- Provide interconnections to adjacent parking lots.

Office parks should also utilize these design standards.

Reinventing A Mall

The Coventry Mall, constructed in the 1960s, is anchored by Boscov's Department store and in the near future will also be anchored by Kohl's Department store. In 1999 the mall's new management group began an improvement campaign involving physical renovations and finding higher-quality tenants. These moves helped to fill vacancies in the mall. Since 1999, vacancies have dropped from 36% to 6% while sales are up from \$240 per square foot to \$330 per square foot.

Source: Wall Street Journal: Real Estate Journal, 1/26/2004].

Conclusion

The Pottstown Metropolitan Region has a diverse economy. More residents are working in services; finance, insurance, real estate, and information services; fewer residents are working in manufacturing and agriculture. This is consistent with national trends.

The Pottstown Memorial Medical Center is the Region's largest employer. Other large employers are public school districts, machinery material manufacturers, and retailers Wal-Mart and Boscov's.

Various factors affect the ability of a region to attract growing and high-paying industries. The Pottstown Metropolitan Region recognizes that the following issues are of prime importance to attracting these better paying jobs: location, transportation, education, housing, recreation, shopping, tax rates, and regional planning and revitalization. Perhaps the only negative factor is the relatively high tax rates found in much of the Region. However, this can be alleviated to some degree by revitalizing the Borough of Pottstown along with the Region's other older established areas, and by instituting this Plan's growth management strategies. Directing growth to the established centers throughout the Region's will minimize the need for building and maintaining new roads, sewers, etc. which are expensive and pose a drain on municipal coffers.

Promoting a diverse, strategic set of industries for the Region is important for its long term economic health. Currently the Region has a greater-than average (compared to the U.S. average) share of jobs related to health care; manufacturing; transportation and materials moving; architecture and engineering; and finance,



Pottstown Center is located near the intersection of U.S.422 and PA100 in Pottstown Borough

insurance, real estate. Most of these industries are grouped in the services sector, which has grown dramatically in recent decades; manufacturing, however, is a declining industry.

The Region's Workforce is generally well-educated. Numerous educational institutions are located in and near the Region. They include the Community College, and close by colleges, graduate schools, and technical institutes. To maintain a high-quality workforce, an ongoing communication network among the Region's businesses, workforce training providers, and job seekers is required. The Montgomery County



Design and landscaping can greatly enhance the attractiveness of shopping centers

Community College West Campus in Pottstown has expressed its desire to shape its curriculum based on the needs of employers in the Region.

Maintaining and revitalizing the older, more developed areas of the Region, particularly the Borough of Pottstown, is critical to its long-term economic success and quality. Commercial and industrial enterprises should be directed into the Region's existing retail centers and underutilized brownfield sites. Villages need to redesign themselves as convenience and specialty commercial districts that also preserve their unique sense of place. The historic center of the Region, downtown Pottstown may again become the cultural, entertainment, and destination shopping center as it once was years ago.

The strong growth management measures recommended by this Plan will help promote economic development and revitalization. This effort is not only worthwhile but of critical importance if the Region is to successfully compete in the new global economy. By cooperating together the initiatives proposed in this Plan will produce even greater results for the

Pottstown Metropolitan Regional Comprehensive Plan Economic Developmen

Chapter 7 Housing



Homes in the Village of Gilbertsville

An important factor in the social and economic success of the Pottstown Metropolitan Region is an adequate supply of housing of all types. There is a diverse supply of housing currently available, from rowhomes and small-lot singles, to large-lot single-family dwellings and farmhouses on agricultural tracts. However, as the Region grows and the population increases, new homes will need to be added to the existing supply to meet the future demand.

Some of the very things that brought people to the Region decades ago, farmland, open space and small town character, still bring people today. These settings that provide the quality of life that people seek could be lost in the future to mounting growth pressure. New development must be provided for in the Pottstown Metropolitan Region, but it should be done in a way that complements and reinforces the amenities that Pottstown Borough, existing suburban areas and rural environments already provide. Above all, suburban sprawl and unmanaged growth need to be discouraged.

Housing Goals

The municipalities of the Pottstown Metropolitan Region intend to manage housing growth by acting on the housing objectives stated in the Goals and Objectives Chapter of this Plan (See Chapter 2, Goals and Objectives).

These housing objectives will guide the comprehensive plan in the effort to:

- Meet the residential "fair share" requirements as a region.
- Maintain and promote revitalization of existing residential neighborhoods and villages
- Concentrate new housing where infrastructure is currently located and in designated growth areas.
- Encourage pedestrian-oriented, residential neighborhoods that foster a sense of community.
- Accommodate housing opportunities for a range of income levels and age groups.

Background

The housing stock of the Pottstown Metropolitan Region reflects its diversity. There are rowhomes, multi-family complexes, townhomes, mobile homes, and single-family homes on small and large lots. This mixture of housing types is located in urban places, various suburban neighborhoods, and in rural villages and farmsteads.

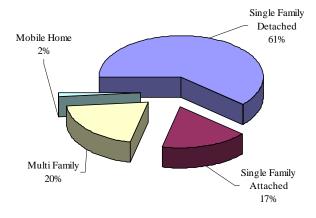
U.S. Census data for the year 2000, shown in Figure 7-1, found that single-family detached housing types

Fact—One out of every ten housing units built in Pennsylvania in the 1990's was built in Montgomery County, PA.

a c c o u n t e d f o r approximately 61% of the existing homes. The remainder was higher density, "fair

share" housing units such as mobile homes in mobile home parks, single-family attached, and multi-family units. This percentage of single-family dwellings was higher than Montgomery County at 56%, and lower than

FIGURE: 7-1 HOUSING TYPES FOR THE REGION, 2000



Chester County at 62%.

Although the Region has a well balanced housing inventory, a significant amount of the land area is rural. Single-family detached dwellings on larger lots are the predominant housing type in these rural areas. Some of the township's have had 2 acre minimum lot size zoning, or larger, implemented for years due to geological limitations for development, farmland preservation efforts or the preservation of natural resources.

Despite these larger lot requirements, the northernmost rural communities (Douglass and New Hanover) account for approximately 28% of the existing single-family detached homes, while the

FIGURE: 7-2 HOUSING UNIT TYPE BY MUNICIPALITY, 2000

Municipality	SFD	SFA	MF	МН
Douglass	2,467	274	505	29
East Coventry	1,427	21	94	142
Lower Pottsgrove	2,659	960	296	189
New Hanover	2,357	109	112	55
North Coventry	2,152	238	711	13
Pottstown	3,828	2,716	3,445	7
Upper Pottsgrove	1,399	23	25	12
West Pottsgrove	840	477	276	13

southernmost rural communities, East Coventry and North Coventry, account for approximately 21%. Admittedly, these areas encompass a significant land area, but almost 50% of the single-family homes are in the more rural communities.

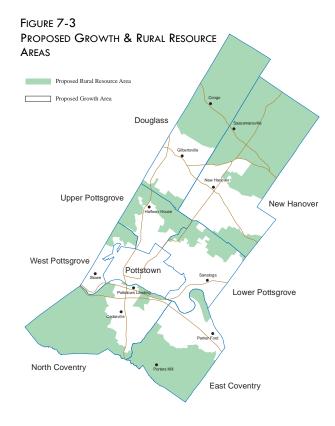
With its high density zoning, Pottstown Borough contains approximately 63% of the Region's multi-family units and approximately 56% of the single-family attached units. High-density uses that are common in the Borough average around 6 to 8 dwelling units per acre. These densities can also be found in the townships in some of their more densely concentrated villages.

The higher density areas of Pottstown, and to some extent the more heavily developed suburban areas in the surrounding townships, provide much of the affordable housing in the Region. In theory, higher densities translate into more affordable housing or lower housing costs. The concept that higher density equals more affordable housing units is the rationale of the fair share housing unit analysis that is discussed in detail later in this chapter.

Locating Future Housing

With the population of the Pottstown Metropolitan Region expected to increase by approximately 21,091 people by 2025, this Plan must ensure that any future land use scenario will be able accommodate these future residents. Using the DVRPC housing demand model, it is projected that the Region will need 8,310 housing units to accommodate the population growth over the next 20 years. This is a 30 percent increase in the Region's housing units from 2000.

Without effective growth management much of this development would have taken place in Douglass, New Hanover, East Coventry and North Coventry where there are large tracts of open land that are either farmed or otherwise undeveloped. While market forces dictate if and when development will be occur, as well as the type of development to be built, an objective of this Regional



Plan is to direct new development into designated growth areas where public utilities and infrastructure exists or is planned for.

This growth management effort will promote two other objectives of the Plan as well. First, to encourage reinvestment in existing older neighborhoods and villages, particularly in the Borough of Pottstown, and second, but equally important, protect the Region's rural areas by limiting the amount of new development through various planning and regulatory techniques. Together, these two objectives form the basis for growth management and rural resource preservation in the Pottstown Metropolitan Region.

Low Density Residential

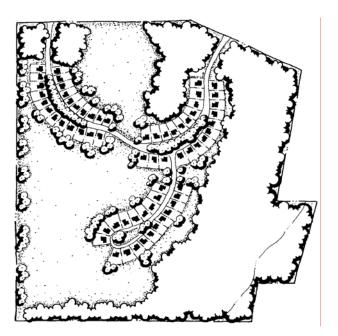
Limiting development in the Rural Resource Areas of the Region to predominately low-density residential zoning should help reduce conflicts between farms and homes as well as help preserve its unique environmental and natural features. (See Chapter 5, Future Land Use.) Preservation of the rural landscape is a goal shared by

many of the Region's residents and was made very clear in the 2002 Pottstown Metropolitan Region Resident Survey results. According to the survey, the Region's rural setting and natural environment was stated to be one of the most important reasons for living where they do. The survey results also suggested that respondents feel resource protection is one of the most important issues that this Plan should address.

Preservation will be accomplished by limiting the amount of residential development that can be constructed in the Region's Rural Resource Areas to 1 dwelling unit per 2 acres. Even larger lot sizes may be deemed appropriate in areas with viable farming activity, environmental constraints, or significant natural resources.

In addition to density changes in the Rural Resource Areas, a significant number of other regulatory tools are available to the municipalities including, but not limited to: conservation subdivision design, farmland zoning, environmental performance zoning and transfer of development rights. Also, to reinforce these land use tools for controlling development, public sewer and water extensions will be discouraged within the Rural Resource

FIGURE: 7-4
CONSERVATION SUBDIVISION WITH WOODLAND PRESERVATION



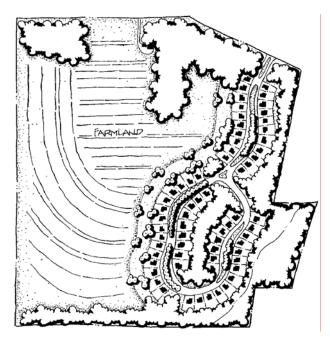
Areas.

Examples of conservation subdivision design are shown in Figures 7-4 and 7-5. These figures illustrate how the goal of open space and natural resource preservation can be successfully accomplished with new residential development. The two sites in these figures are considered fully developed with 65 homes on 130 acres. Yet, more than 75% of each tract has been permanently preserved as open space. In Figure 7-4, all of the woodlands are saved. In Figure 7-5, where farming is considered a viable and desired activity, the homes have been placed in the wooded areas to preserve the farm fields. In either case, because of the large amount of required open space, developers have a great deal of flexibility in siteing the homes.

Medium-Density Residential

Medium-density housing up to 5 units to the acre will be permitted in the Suburban Residential portions of the

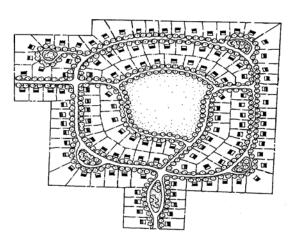
FIGURE: 7-5
CONSERVATION SUBDIVISION WITH FARMLAND PRESERVATION



Region's designated growth areas. It is likely that most of the new homes that are constructed over the next 20 years will be in this residential category.

To preserve the rural countryside as much as possible, infill in the Borough of Pottstown and the Region's older suburbs is strongly encouraged, and new large-scale development will be directed to the designated growth areas within each Township. These growth areas are situated near the existing built areas where the road network, community facilities and commercial and retail centers already exist. In addition, some of the growth areas that are not currently served and are not currently proposed to be served by public sewer and water may be rezoned to promote the appropriate development density.

FIGURE: 7-6
PREFERRED MEDIUM-DENSITY RESIDENTIAL SITE PLAN



Typical suburban medium-density development often appears dull and uniform due to rigid quarter-acre and one-acre tract housing guidelines. Although appropriate for many of the more developed areas of Montgomery and Chester Counties, suburban-style development does not fit into the rural landscape that encompasses much of the Pottstown Metropolitan Region. Therefore, medium density development with a village-style appearance, including:

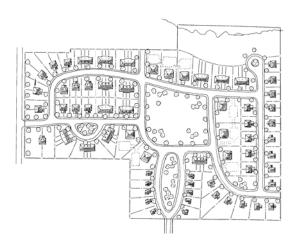
central greens, landscaped cul-de-sacs, sidewalks, and other pedestrian-oriented design features, is highly encouraged.

The medium density layout example shown above in Figure 7-6 incorporates many of these design features. Street trees are planted in front of each house, sidewalks are on both sides of the street, and lot widths are varied for visual interest. In the center of the development is a large central green, which serves as the focal point of the neighborhood and serves as a common play area.

High-Density Residential

High-density housing opportunities are available within the designated growth areas of the Region, including

FIGURE: 7-7
PREFERRED HIGH-DENSITY RESIDENTIAL SITE PLAN



townhomes, apartments, twins, duplexes, and mobile homes.

Most of the Region's high-density housing is located in the Borough of Pottstown and neighboring municipalities. With the necessary infrastructure already in place, the Borough along with the Region's other community centers are best suited to accommodate new high density infill housing or mixed use projects on scattered, underutilized sites. The Borough has already begun studying this possibility near the core downtown area. Projects that are designed to be complimentary to the surrounding area, usually a traditional town or village character, will be encouraged. See Figure 7-7 for an example of a preferred, high-density residential site plan.

Mobile Home Parks

The Region currently has a number of mobile home parks. Mobile Home Parks are specifically required by Pennsylvania Law, Act 247, to be provided for on 1% of the land within a municipality (in this case, we are doing it for a region). The Region currently has approximately 2.4% of its total land area zoned for mobile home parks.

Residential "Fair Share"

An important aspect of planning for housing in Pennsylvania involves analyzing and discussing "fair share" housing types and its affect on regional planning. In Pennsylvania, municipalities are required to permit, through zoning, a wide variety of "fair share" housing types. These housing types consist of single-family attached units such as twins and duplexes, multi-family units such as townhouses and apartments, and mobile homes in mobile home parks. These housing types are considered to be more affordable according to the courts. If a municipality does not have enough land set aside for all of these uses, it runs the risk of having its zoning successfully challenged in the courts for not meeting its "fair

PA state law does not require a specific amount of land to be zoned to allow single family detached housing types.

share" of these uses. An important benefit of regional planning is that municipalities will no longer need to provide

for their "fair share" of these uses so long as the region as a whole does. The following analysis clearly demonstrates that the Pottstown Metropolitan Region, in its entirety, clearly meets this requirement.

The Analysis

The courts in Pennsylvania have applied two methodologies in determining whether a municipality satisfies its fair share needs. Test #1 requires calculations of the amount of land zoned to permit the "fair share" housing types. Test #2, used in conjunction with test #1, requires a calculation of the ratio of single-family detached housing units to the number of "fair share" housing types that would exist at buildout. If the current stock of low-density housing far exceeds that of high-density, the courts will look to see if the ratio improves at buildout.

Both Test #1 and Test #2 only apply to those municipalities, or region, that lie directly within the path

Buildout— is a term that describes the total number of housing units that would exist, if all of the developable land in the region was developed at the maximum density allowed in each zoning district.

of growth. A conclusion of this Plan is that the Pottstown Metropolitan Region does in fact lie in the path of growth that is extending outward

from the city of Philadelphia westward along the Route 422 corridor.

Test #1

For municipal level "fair share" tests, the courts have stated in three separate rulings (see Appendix B) that municipalities that have set aside from between 2.7% and 3.5% of their total land area for "fair share" higher density zoning. To not do so could potentially invite a landowner "curative amendment". If successful, the "cure" is site specific which may, or may not, conform to sound planning practice or municipal land use goals. As noted earlier, municipalities that participate in regional planning would no longer have to meet this fair share requirement individually provided that together, the region does.

Presently, the Pottstown Metropolitan Region has 9.5% (5,013 acres) of its total land area zoned to permit fair share housing types at higher densities. This number significantly exceeds the upper most percentage (3.5%)

currently mandated by the courts. The participating municipalities, therefore, could potentially reduce their acreage zoned for fair share housing by a total of 6%. However, they have chosen not to do this but instead have agreed to maintain a minimum of 5% of their total land area for fair share housing. They have agreed to do this in order to allow for greater market flexibility or to meet any unanticipated shift in housing demand.

"Test #2

The second test requires that a municipality, or region, analyze the ratio of its single-family detached housing category to the "fair share" housing category at buildout. This test is used to determine if the ratio of the two categories is substantially unequal, with the knowledge that the number of single-family detached housing units will be substantially higher in a more suburban or rural community.

In the Pottstown Metropolitan Region, the ratio of "fair share" housing types to single-family housing types is very well balanced according to the completed test. Approximately 38.5% of all existing housing units are of the "fair share" housing type. At buildout, under current zoning, the percentage of fair share housing units drops only slightly to 36.4%, still well within acceptable limits.

Conclusion

The Pottstown Metropolitan Region is in the path of growth and may require approximately 8,310 new housing units in the next 20 years to meet its projected future growth. The Future Land Use Plan exceeds this

FIGURE: 7-8

COMPARISON OF EXISTING HOUSING UNIT TYPES VERSUS BUILDOUT

Housing Types	2000	Percentage of total Units	At Buildout	Buildout percentage of Total Units
Single -Family Detached	17,129	61.5%	32,407	63.6%
Multi-Family + Mobile Home Parks + Twins/Duplexes	10,742	38.5%	18,548	36.4%
Total	27,871	100%	50,955	100%

number and establishes regional growth areas for locating new development. This growth management effort will maximize existing infrastructure, promote reinvestment in older neighborhoods and villages, and protect rural areas by limiting the amount of new development through various planning and regulatory techniques.

The housing stock of the Region is a well balanced mixture of styles and densities in a variety of neighborhood settings. This Plan will help to ensure that this balance is maintained for the foreseeable future by providing for a wide variety of housing types at densities sufficient to meet the most optimistic of population growth projections. This Plan also ensures that the Region will continue to meet its Pennsylvania "fair share" housing requirements.

Chapter

8 Transportation





Pottstown Urban Transit (PUT) Bus and Bike Lane

U.S. 422



The Region Supports the Schuylkill Valley Metro



Pottstown Municipal Airport

The Transportation chapter of the Pottstown Regional Comprehensive Plan discusses existing conditions and planning for the Region's highways, public transit, bike and pedestrian mobility, freight transport, and air travel. Transportation systems affect mobility, accessibility, safety, economic development and quality of life; therefore transportation is a critical element of this Regional Plan.

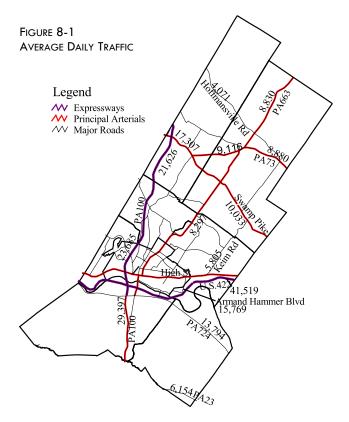
Highways

A survey of the Region's residents [Pottstown Regional Survey, 2002] showed that the improvement of traffic and road conditions is considered fourth most important among top priorities (behind only: increasing jobs, open space preservation, and agricultural preservation).

The highway section addresses the condition and capacity of the Region's roads and bridges. It discusses existing highway conditions and problems, including:

- Statistics
- Trends
- Major Transportation Corridors
- Functional Classification of Roads
- Environmental and Design Guidelines
- Safety
- ITS, TDM, TMAs
- · Highway Funding

The goals are to make the highway system more efficient; and manage, limit, and potentially reduce traffic congestion.



Existing Conditions

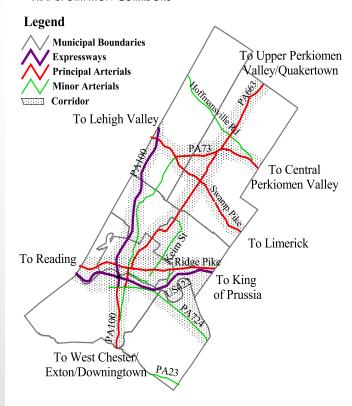
The primary challenges affecting the Region's highway system include traffic congestion, deteriorating roads and bridges, and problems caused by narrow rural roads with sharp curves and unaligned intersections. These issues in turn lead to an increasing amount of safety issues. The top three transportation issues as selected by regional survey respondents [Pottstown Regional Survey, 2002] were road maintenance, traffic congestion, and parking; however, it is likely the high number of "parking" responses reflect concerns over parking in the borough of Pottstown.

Traffic congestion is a problem common to many areas experiencing growth like the Pottstown Region (see Figure 8.1). Traffic congestion has caused some corridors to become especially congested, such as U.S. 422, and PA100 north of High Street in Pottstown. Congestion has led to the formation of bottlenecks at certain intersections, such as the intersection of Farmington Road, Gilbertsville Road, and Maugers Mill Road in Upper Pottsgrove; and the intersection of High Street and Pleasant View Road in Lower Pottsgrove. In some areas increased traffic has led to a need for additional through, turn, or breakdown lanes. For example, a new left turn lane is needed on PA724 at South Hanover Street in North Coventry. Increased traffic contributes to the need for more highway maintenance, and greater potential for conflicts arising between motor vehicles and pedestrians or bikers.

These problems have generally been defined as major concerns of the participating municipalities, and more specifically in studies such as those currently underway for the PA100, Swamp Pike, and PA724 corridors.

As greater demands are placed on the Region's highway system, traffic problems in one municipality often effect traffic flow in an adjacent municipality. Consequently, there is an obvious need to consider drafting a comprehensive regional highway plan and to then implement measures to improve the transportation system. Roadway improvements that should be considered include:

FIGURE 8-2
TRANSPORTATION CORRIDORS



- Road widenings (e.g., for the addition of travel, turn, or breakdown lanes)
- Road reconstruction or repairs
- Intersection and interchange improvements
- Road alignments or curve straightenings
- Studies to better understand where problem areas are and where critical improvements are needed

A comprehensive list of recommended highway projects can be found in Figure 8.8.

Transportation Corridors in the Pottstown Metropolitan Region

Five major, inter-county transportation corridors serve the Pottstown Metropolitan Region. These corridors serve a regional market, provide access to major shopping and employment areas, and carry high volumes and mixed types of traffic. The corridors are comprised of an interconnected network of highways, often with multiple roads connecting one end of a corridor to the other. Any evaluation of existing highway conditions and specific highway problems and improvements should consider these corridors.

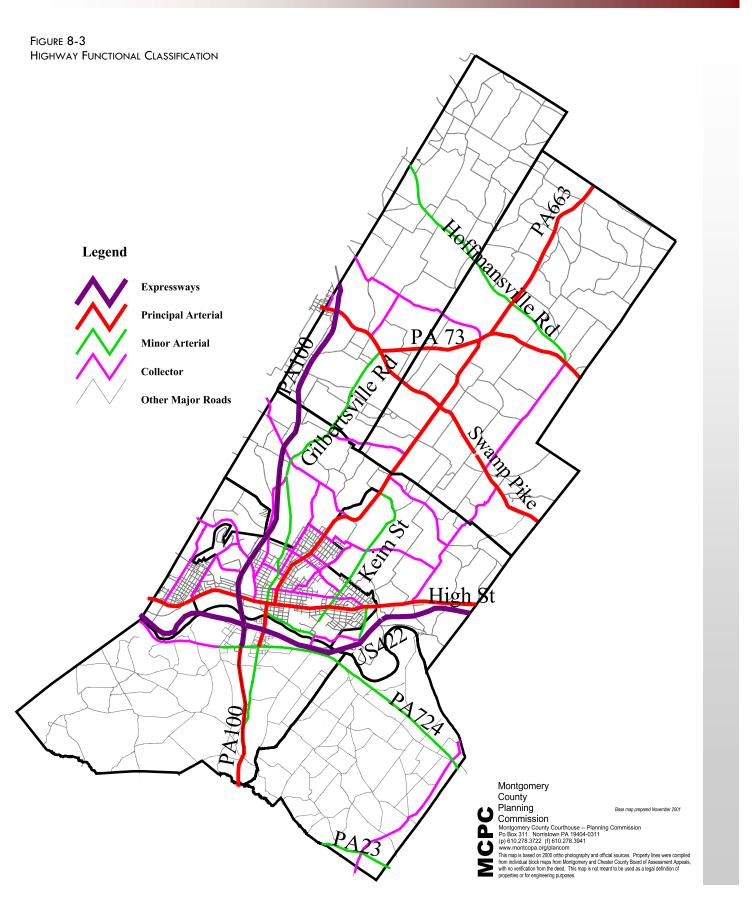
Studies have been conducted or are being conducted by DVRPC that focus on three key regional corridors: PA100, PA724, and Swamp Pike. The Route 100 Corridor Study's preliminary findings showed the major issues to be traffic congestion, safety, inconsistent interchanges (signalized, non-signalized, and grade separated), transition zones at each end of the corridor, and increasing development pressures.

The Swamp Pike Traffic Circulation Plan found upgrades are needed throughout the corridor. Potential improvements include additional turn-lanes, road widenings, intersection improvements, a Gilbertsville bypass, and a more direct connection from Swamp Pike to U.S.422. This Plan also supports the construction of additional turn-lanes to improve the Swamp Pike Corridor.

The PA724 Corridor Study inventoried proposed land developments, problem intersections, and problem areas . The Draft Report (2002) identified the following segments of PA724 as "problem areas":

- Keim Street to the East Coventry-North Coventry boundary, and
- Anderson Road to the East-Coventry-East Vincent boundary

Although not currently being studied, the PA663 corridor would benefit from improvements to intersections and sight distance. The 422 corridor would benefit from improvements to interchanges, ramp modifications for safety and capacity, and deck rehabilitation. The PA73 corridor would benefit from road widening, improvements to intersections and sight distance, modifications to Jackson Road to allow more direct access to PA100, and a prohibition on left turns.



Functional Classification, Dimensional Design Guidelines, Highway Ownership

Highway Functional Classification

The Highway Functional Classification System is a hierarchical grouping of roads based on a road's function, service and traffic capacity level in the Region. This system is created from standards established by the American Association of State Highway and Transportation Officials (AASHTO) and is used by PENNDOT. This classification system can help governments prioritize roadway maintenance and improvement projects. The Classification system defines roads by the following terms:

Expressways

Expressways are any divided multi-lane limitedaccess highway. They are designed for mobility rather than accessibility. Expressways include the following roads in the Region:

- U.S. 422 Pottstown Expressway
- PA 100 (certain segments)

The primary function of "arterial" roads is to move traffic efficiently, with a minimal level of access from lower level streets and driveways. These roads are divided into two classes: "principal arterials" and "secondary arterials".

Arterials

Principal arterials are major highways that are not expressways. These roads generally have two to four through-lanes, serve major centers, and carry a high proportion of cross-county traffic. They include the following roads in the Region:

- PA 100 (certain segments)
- PA 663 (North Charlotte Street)
- High Street
- Ridge Pike
- Swamp Pike
- Route 73 (East Philadelphia Avenue/Big Road)

Hanover Street/South Hanover Street

Minor Arterials interconnect with and augment Principal Arterials. They typically accommodate a vehicle trip of between three and five miles. Minor Arterials include the following roads in the Region:

- Route 724
- Route 23
- South Hanover Street
- Hoffmansville Road
- Gilbertsville Road
- Farmington Avenue
- Industrial Highway (in certain areas)
- Armand Hammer Boulevard
- Keim Street

Other roads in the Region include the following:

Collector roads

These provide a mix of mobility (the ability to travel through an area quickly) and accessibility (road interconnectivity). They typically serve trips up to four miles. Examples include Sanatoga Road in New Hanover, Bleim Road in Lower Pottsgrove, Jackson Street in Pottstown, and Temple Road in North Coventry.

Local Roads

These roads have relatively short lengths generally not exceeding one mile. Their primary function is property access, and as a result their posted speed limit is 20 to 30 miles per hour. They have two categories: urban and rural.

Design Guidelines

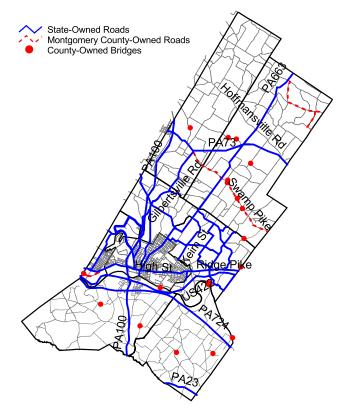
Guidelines for design of roadways by classification were derived from the 1990 edition of "A Policy on Geometric Design of Highways and Streets by the American Association of State Highway and Transportation Officials (AASHTO); the Pennsylvania Department of Transportation Design Manual, Part 2, Highway Design

(Publication 13) (1990); and the Guide for the Development of Bicycle Facilities, published by AASHTO (1991).

These guidelines make recommendations for dimensions of different components of a roadway based on its functional classification, and whether it is located in an urban or rural locale. Components of a roadway addressed by the guidelines include:

- Right-of-way
- Number of lanes
- Travel lane width
- Left turn width
- Paved shoulder width
- Parking lane width
- · Bicycle lane width

FIGURE 8-4 HIGHWAY OWNERSHIP



Border Area: Curbing, Grass, Sidewalks/Paths

Another important planning concept for good roadway design is to promote road interconnectivity. Road networks should generally be designed to provide as many route options as possible for motorists. Roads should be designed to maximize accessibility. Road interconnectivity reduces traffic congestion by allowing drivers to modify their trips if their original route becomes blocked with traffic congestion, a traffic accident, or delays due to construction.

Highway and Bridge Ownership

Ownership of highway and bridges determines which jurisdiction is responsible for funding improvements and maintenance. Confusion over which entity owns a road or bridge in need of repair can delay needed improvements or maintenance. Roads in the Pottstown Metropolitan Region are owned by PENNDOT, Montgomery County, or local municipalities (Chester County owns no roads). Bridges in the Region are owned by any of these entities, or even a private company such as a railroad. Montgomery County is one of only three counties in the Commonwealth that owns and maintains roads in addition to bridges. Bridge maintenance issues often become a problem when a bridge owned by Montgomery County is located on a road not owned by the County.

Montgomery County may wish to consider the benefits of either expanding its road ownership in order to develop a logical coordinated system, or relinquish all of its roads and bridges. If the County chooses to retain ownership of its roads and bridges, then it may wish to consider relinquishing control of those bridges on roads it does not own. Chester County may wish to do the same for the Bridges it owns. Ownership of roads and bridges may also be transferred to PENNDOT or to the municipality in which the road or bridge is located. This Plan acknowledges that the issue associated with the cost of roadway and bridge maintenance may prevent this recommendation from being implemented. However, it is nonetheless an idea worth pursuing.

FIGURE 8-5
HIGHWAY FUNCTIONAL CLASSIFICATION AND DESIGN GUIDELINES

		Travel Left Paved Parking Bicycle			Border Area ₇				
Functional Classification	Right-of-Wayı	Number of Lanes ₂	Lane Width ₃	Turn Width3	Shoulder Width ₄	Lane Widths	Lane Width	Grass Strip	Sidewalk/ Paths _{8,9}
EXPRESSWAYS	300'								
Urban		4-6	12'	N/A	10'-12'	N/A	N/A	N/A	12'
Rural		4-6	12'	N/A	10' N/A	N/A	N/A	12'	
ARTERIALS									
Principal	80'-100'								
Urban		2-5	12'-14'	11'-12'	8'-10'	8'-10'	5'-6'	5'	5'-8'
Rural		2	12'-14'	11'-12'	8'-10'	N/A	5'-6'	5'	5'-8'
Minor	80'-100'								
Urban		2-5	11'-14'	11'-12'	8'-10'	8'-10'	5'-6'	5'	5'-8'
Rural		2-3	11'-14'	11'-12'	4'-10'	N/A	5'-6'	5'	5'-8'
COLLECTORS									
Urban	60'-80'	2-3	11'-14'	10'-12'	6'-10'	8'-10'	5'-6'	4'	5'-8'
Rural Major	60'-80'	2	11'-13'	10'-12'	6'-10'	GNA	5'	GNA	GNA
Rural Minor	60'	2	10'-12'	N/A	2'-8'	GNA	5'	GNA	GNA
LOCAL ROADS	50'								
Urban		[Total Cartway Width 26 to 30 Feet]				4'	4'-8'		
Rural		[Total Cartway Width 20 to 30 Feet]				GNA	GNA		

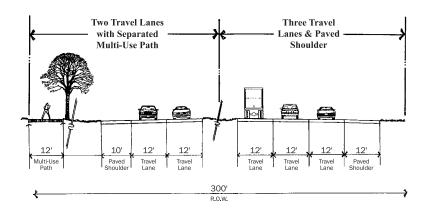
NOTES:

- 1. **Right-of-Way:** The right-of-way can be variable in order to accommodate highly urbanized and laterally restricted areas as well as unrestricted areas.
- 2. **Number of Lanes:** The number of lanes vary in order to accommodate the traffic volume, turning movements, and land capacity demand for selected level of service. This number does not include right-turn lanes where needed.
- 3. Range of Lane Width: Lane width is based upon minimum and desirable standards as well as other conditions such as being adjacent to a curb or the anticipation of heavy truck traffic. When feasible, a 14 foot lane should be located next to a curb.
- 4. **Shoulder:** Shoulder width is based upon minimum and desirable standards as well as other conditions such as highly urbanized and laterally restricted areas, or the anticipation of heavy truck traffic. Wide shoulders may function as bike lanes.
- 5. **Parking Lane:** Parking lane width is based upon minimum and desirable standards as well as other conditions such as lot size, intensity of development, or potential for use as a traffic lane where required by future demand. For principal arterials, parking lanes are only recommended in highly developed areas.
- 6. **Bicycle Lane:** A portion of a roadway that has been designated by striping, signing, or pavement markings for the preferential or exclusive use of bicyclists. Width specifications must be in accordance with FHWA/ AASHTO standards. Refer also to Chapter 4 of this plan, Bicycle Mobility. Wide shoulders may function as bike lanes.
- 7. **Border Area:** The presence of curbing, grass planter strips and sidewalks will depend upon adjacent land uses and site conditions. Otherwise, the border area would consist of a drainage swale and slope.
- 8. **Sidewalks:** Sidewalk width is based upon minimum desirable standards for use along each particular roadway. Under certain circumstances, the location, feasibility, and other site specific conditions may require deviations from these guidelines.
- 9. **Paths:** Paths for multi-use purposes, pedestrians or bicyclists may be desirable in lieu of sidewalks in rural areas or parallel to an expressway. Refer to Chapter 3, Pedestrian Mobility, for additional information.
- 10. Cartway Width: For local roads, the total cartway width generally includes travel lanes, parking lanes, and/or shoulders.
- 11. **Definitions: GNA** Generally Not Applicable. **N/A** Not Applicable.

Source: AASHTO, PENNDOT, and other manuals with specified design ranges.

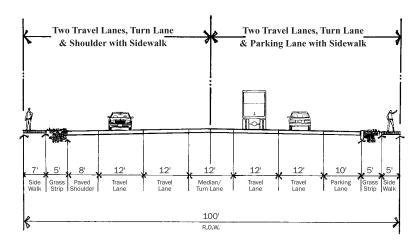
EXPRESSWAY -URBAN

FIGURE 8-6 (TWO POSSIBLE ALTERNATIVES ARE ILLUSTRATED, ONE ON EACH SIDE OF THE ROAD.)



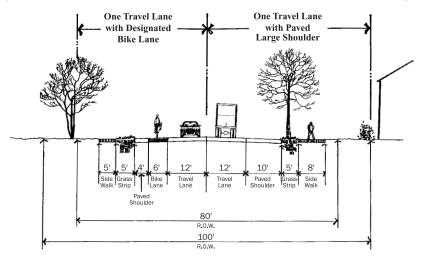
ARTERIAL - PRINCIPAL

(TWO POSSIBLE ALTERNATIVES ARE ILLUSTRATED, ONE ON EACH SIDE OF THE ROAD.)



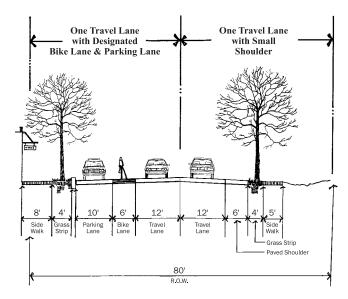
ARTERIAL - MINOR - URBAN

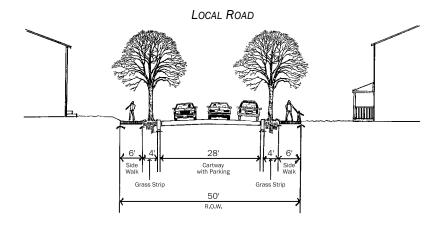
(Two possible alternatives are illustrated, one on each side of the road.)



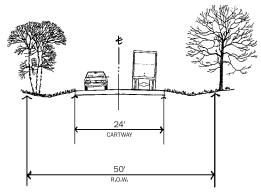
COLLECTOR - URBAN

FIGURE 8-7 (TWO POSSIBLE ALTERNATIVES ARE ILLUSTRATED, ONE ON EACH SIDE OF THE ROAD.)





LOCAL ROAD - URBAN



Note: These functional classification and design guidelines may not be suitable for some parts of the Region due to constraints of the natural and built environment. For more information on how to modify road design to suit the natural and built environment, see the Context Sensitive Design Section.

If a bridge is owned by a private company, a clear assignment of responsibility for maintenance should be made, or a system of sharing maintenance developed.

Safety Issues

Safety issues are an important consideration of the Plan. Improving highways to increase the safety of motorists, bicyclists and pedestrians is vital as the Region grows.

Following are some of the highway safety issues in the Region:

- Expressways PA 100 and U.S. 422 have safety
 hazards. One such hazard is inadequate
 acceleration and deceleration lanes at interchanges.
 To address this issue, future roadwork should
 increase the length of acceleration and deceleration
 lanes. Route 100 should also undergo realignments
 designed to enhance safety particularly along the
 portion of the expressway in West Pottsgrove.
- Off-set intersections and intersections that meet at unusual angles are a common problem and need to be alleviated, either through intersection reconstruction or traffic signals.
- Roads with sharp curves, grade changes, or
 obstructed sight lines are problems in various parts
 of the Region. Road re-alignments, skid-proof
 pavement, safe guardrails, rumblestrips, and sharpcurve warning signs might be used to address this.
- Roadways in the Region are often not safe for pedestrians. Some intersections are unsafe for pedestrians to cross. Roads that have high levels of pedestrian traffic, such as those in village centers and residential areas, should not be so wide that they encourage speeding.
- Techniques such as traffic calming might be utilized to slow traffic and reduce conflicts between vehicles and pedestrians. Traffic calming uses techniques such as decorative paving to enhance the visibility of

- crosswalks, speed humps, establishing bulb-outs to protect pedestrians crossing a street, allowing onstreet parking which narrows the driving area, or using environmental or aesthetic enhancements. All of these tactics help alert a driver that the road serves pedestrians as well as motor vehicles, and can also create the sense the roadway is narrower than it is, which slows traffic to a safer speed. Roads improved for pedestrians and bikes are generally safer for automobiles too.
- Narrow roads that are classified as arterials and function as arterials because of high traffic volumes may need to be improved to accommodate the traffic. Consideration should be given to adding traffic, turn, or breakdown lanes. If the road is widened, consideration should be given to what corresponding pedestrian safety improvements should be undertaken.
- Some heavily traveled roads have an excessive number of access points. This problem could be alleviated by reducing the number of access points and/or connecting adjacent parking areas whenever development or redevelopment occurs.

Highway Improvements and Recommendations

The Chester County and Montgomery County Planning Commissions maintain lists of proposed transportation projects that are used along with municipal suggestions to make recommendations for future highway improvements. Projects with top priority are passed onto DVRPC and PENNDOT. These agencies will include the projects in their official programs to the extent allowed by fiscal constraints. The Region's municipalities should work together to identify these high priority projects.

Committed Projects

The "TIP" (Transportation Improvement Program) is

the regionally agreed upon list of priority projects, as required by federal law (ISTEA and TEA-21). The TIP document must list all projects that intend to use federal funds, along with non-federally funded projects that are regionally significant. These include projects that are in the TIP for a specified phase (preliminary design, final design, right-of-way acquisition, or construction) or have funding committed for that phase through some other source, such as private development. By definition, these projects are ranked high as they are already funded for at least one phase of the project development process.

Recommended Projects

Montgomery County prioritizes projects not currently on the TIP as First-Priority Projects (the group from which the next TIP projects would be nominated), Second-Priority Projects, and Third-Priority Projects. Chester County prioritizes projects by recommending they go on the TIP in different time periods (e.g., 2000-2003, 2004-2007, 2008-2011).

Travel Demand Management (TDM):

Travel Demand Management (TDM) is a strategy that seeks to reduce the number of motor vehicles on a road, particularly at peak travel hours. TDM might involve encouraging the use of telecommuting, flex time, and alternative work schedules, such as compressed work weeks. It might also involve encouraging commuters to ride a bike or walk to work. Other TDM techniques attempt to reduce the number of motor vehicles on the roads by grouping commuters together in carpools. An even stronger TDM strategy includes high-occupancy vehicle (HOV) lanes and congestion pricing.

The Pottstown Metropolitan Region does not currently have a significant TDM program. A comprehensive TDM strategy should be considered. The specific steps that seem most feasible at this time include:

Carpooling and vanpooling

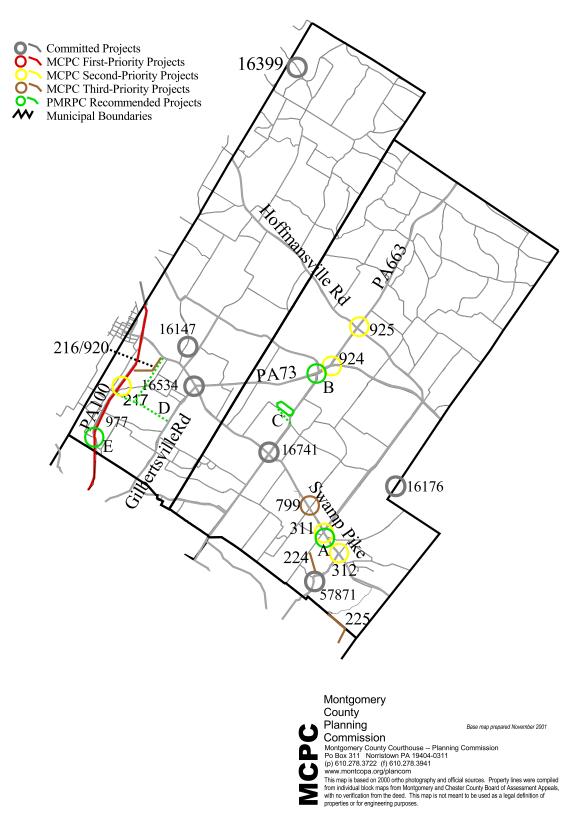
- Encouraging employers to allow telecommuting, flex time, and alternative work schedules, such as compressed work weeks
- Park and ride lots (for use with public transit and carpools/vanpools). Currently there is a park and ride lot at the Linfield interchange in Limerick Township that was constructed by PENNDOT. Drivers may drive to the lot and then carpool into their workplaces. More park and ride lots should be encouraged along the U.S. 422 and Route 100 corridors. Parking for such lots may consist of a new parking area, or may be shared with other parking users as part of an existing lot (i.e., at underutilized parking lots at shopping centers, municipal facilities, etc.)
- Increased bicycle and pedestrian transportation.
 Encouraging bicycling and walking as an alternative to commuting in an automobile is another way of managing traffic volume. Bicycling and pedestrian connections that parallel major commuting roads and connect to major employment centers would be most helpful. Pedestrian alternatives will be greatly facilitated by a network of interconnected sidewalks and trails. Planning for bicycle and pedestrian access is important to undertake whenever roads are reconstructed.

Recommendation

The Pottstown Metropolitan Region should utilize existing Transportation Management Associations (TMAs) where possible to facilitate Travel Demand Management programs. TMAs are public-partnerships that help governments plan and work on transportation projects and policies. The Greater Valley Forge TMA works with an area that includes the lower and central part of the Pottstown Metropolitan Region. The Greater Valley Forge TMA currently has traffic management programs, including:

- Working with businesses to establish commuter ridesharing programs
- Working with both public and private organizations to develop park-and-ride lots.

FIGURE 8-8
NORTHERN SUBREGION HIGHWAY PROJECTS



Transportation Pottstown Metropolitan Regional Comprehensive Plan

Figure 8-9

Status	Number	Description			
MCPC					
Committed	16147	Swamp Creek Rd. Bridge (Bridge replacement over Swamp Creek)			
	16176	On border with Upper Fred Colonial Rd. Bridge (Bridge replacement over Swamp Creek)			
	16399	Himmelwright Rd. Bridge (Bridge rehabilitation over West Branch of Perkiomen Creek)			
	16534	PA 73 Big Rd. at Swamp Pike (Intersection improvement)			
	16741	Swamp Pike at PA 663 (Left turn lanes on PA 663, extend culvert, and upgrade signals).			
	57871	Sanatoga Rd. Bridge (Replacement over branch of Swamp Creek)			
1st Priority	977	PA 100 - PA 724 to Boyertown (Study upgrading roadway to expressway standards).			
2nd Priority	311	Swamp Pike at New Hanover Square Rd. (Widen intersection).			
	312	Swamp Pike at Sanatoga Rd. (Widen for additional lanes).			
	924	PA 663 at PA 73: (Improve intersection).			
	925	PA 663 at PA 73 (Re-grade to improve vertical alignment/sight distance).			
3rd Priority	216	Jackson Rd. from PA 100 to PA 73 (Align Jackson Rd. to provide a more direct connection).			
	224	Sanatoga Rd Cross Rd. to New Hanover Square Rd. (Align Sanatoga Rd. to connect to New Hanover Square Rd. north of Cross Rd.)			
	225	in upper and central subregions - Rupert Rd. Extension - Rupert Rd. to Schaffer Rd. (Acquire the right-of-way to extend Rupert Rd. to connect to Shaffer Rd.)			
	799	Rosenberry Rd Swamp Pike to Roming Rd. (Upgrade and provide shoulders)			

PMRPC

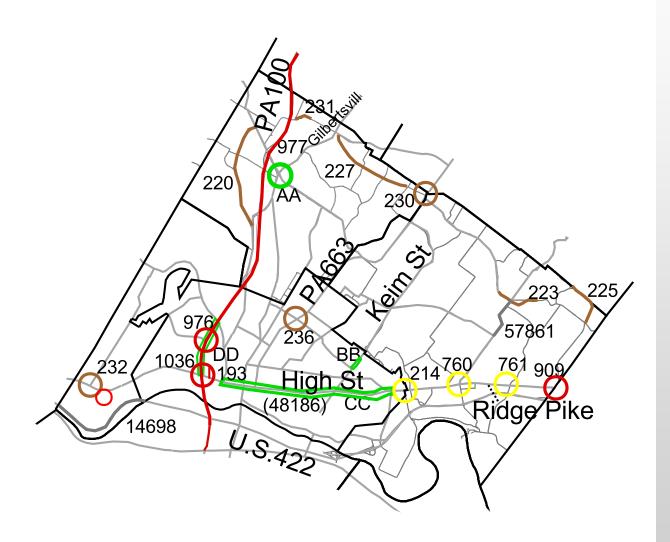
Recommended Projects/Concerns

- A New signal
- B Widen Route 73, prohibit left turns off of Route 73
- C Road to be abandoned, proposed YMCA
- D New road alignments
- E No more cross traffic; median will be closed off; only right-out will be allowed

FIGURE 8-10 CENTRAL SUBREGION HIGHWAY PROJECTS

Legend







Planning Commission

Base map prepared November 2001

COTHTNISSION

Montgomery County Courthouse -- Planning Commission
Po Box 311 Norristown PA 19404-0311
(p) 610.278.3722 (f) 610.278.3941
www.montcopa.org/plancom
This map is based on 2000 ortho photography and official sources. Property lines were compiled from individual block maps from Montgomery and Chester County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.

Figure 8-11

Status	Number	Description
MCPC		
Committed	14698	Reconstruction and Interchange Upgrades, U.S.422 - Berks County to Schuylkill River
	48186	Pottstown Area Signal System (Upgrade signals at 39 intersections to closed loop system
	57861	Pleasant View Rd Buchert to Sanatoga Rd. (Align road and widen to soften "S" curve; add curbs, sidewalks, drainage, and left turn lanes [0.3 miles])
1st Priority	193	College Dr. Extension (Extend College Dr. from High St. to King St.)
	909	On border with Limerick - US 422 at Sanatoga Interchange. Construct 2nd westbound off-ramp lane. Construct new service road between Evergreen and Ridge Pike [through lane continuing from 2nd off-ramp]. Continued off-ramp service road - 2 lanes northbound. Widen eastbound High St. approach to 3 lanes, for turn lanes. Provide right deceleration lane westbound Ridge Pike beyond intersection.
	976	PA 100 at Shoemaker Rd. (Create double left turns from northbound PA 100 to Shoemaker Rd.)
	977	PA 100 - PA 724 to Boyertown (Study upgrading roadway to expressway standards).
	1036	PA 100 at King St. and High St. (Eliminating northbound off-ramp cloverleaf to High St. College Dr. extension [#193] will facilitate access to westbound High St. from northbound 100)
2nd Priority 214		High St. at Armand Hammer Blvd. (Provide a right-turn lane from eastbound High St. and a left-turn lane from westbound High St.)
	760	Pleasant View Road at Ridge Pike (Widen approaches to intersection)
	761	Ridge Pike at Sanatoga Rd. (Improve intersection)
3rd Priority	220	North State Rd./Farmington Rd. Connection (Provide a connection from North State Rd. to Farmington Rd. west of PA 100 (0.5 miles
	223	Pleasant View Rd. at Bleim and Pruss Hill Rds. (Align intersections of Bleim Rd. and Pruss Hill Rd.)
	225	Rupert Rd. Extension - Rupert Rd. to Schaffer Rd. (Acquire the right-of-way to extend Rupert Rd. to connect to Shaffer Rd.)
	227	Moyer Rd. to Mock Rd. (Acquire the right-of-way to connect and improve Moyer and Mock Rds. in the vicinity of Detwiler and Yarnal Rds. [1 mile])
	230	Mock Rd. at Bleim Rd. (Align Mock Rd. to intersect North Charlotte Rd. at Bleim Rd. and provide signal)
	231	West Moyer Rd. from Cross Rd. to Ming Dr. (Improve alignment)
	232	High St. at South Grosstown Rd. (Provide a left-turn lane on westbound High St. onto South Grosstown Rd. to accommodate traffic flow to the US 422 ramps)
	236	Charlotte St. at Wilson St. (Make improvements to the right-turn radii at each corner of intersection)

PMRPC

Recommended Projects/Concerns

- AA New signal/traffic backup problem
- BB Divert Keim Street traffic down to High Street
- CC Traffic calming needed
- DD Bad congestion

FIGURE 8-12
SOUTHERN SUBREGION HIGHWAY PROJECTS

Committed Projects
 MCPC First-Priority Projects
 PMRPC Recommended Projects
 N.Coventry/E.Coventry Recommended Projects
 Municipal Boundaries
 Major Roads

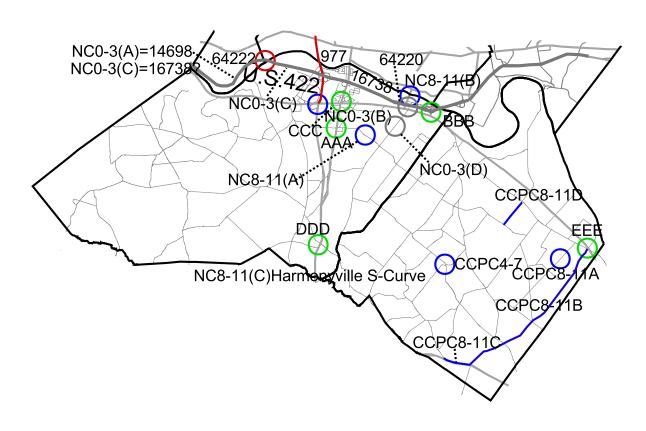




Figure 8-13

Status	Number	Description		
MCPC				
Committed 16738		US 422 Pottstown Expressway - Berks County to Park Rd. (Restoration, interchange improvements; modify ramps for safety and capacity)		
	61709	Pedestrian/Bike Promenade (Land acquisition and construction of promenade connecting business district, waterfront and Community College)		
	64220	422: Keim Street Interchange - Schuylkill River to Norfolk Southern RR; Reconstruct Interchange (N. Coventry, Lower Pottsgrove		
1st Priority (this project extends into Chester County):	977	PA 100 - PA 724 to Boyertown. (Study upgrading roadway to expressway standards). This involves interchange improvements.		
Chester Coun	ty			
Projects in East C	oventry from t	he East Coventry Comprehensive Plan/CCPC, 2003;		
Recommended for 2004-2007:		Halteman Rd. over Pigeon Creek (Bridge replacement)		
Recommended for		Baptist Church Rd. over Pigeon Creek (Bridge replacement)		
2008-2011:		Bethel Church Rd.: PA 724/PA23 (Safety improvements)		
		PA 23: Bethel Church/Fulmer (Safety improvements)		
		Sanatoga Rd: Cedarville/Old Schuylkill (Safety improvements)		
Projects in North	Coventry, fron	n the North Coventry Comprehensive Plan:		
Recommended for		(A) U.S. 422: Berks County to Schuylkill River (Restoration)		
2000-2003:		(B) PA 100 Ramp at PA 724 (New ramp) PENNDOT recommends for 2004-2007		
		(C) U.S. 422 (Deck rehabilitation)		
		(D) S. Keim over Small Run (Bridge replacement)		
Recommended for		(A) Cedarville over Ecker Run (Bridge replacement)		
2008-2011		(B) Keim over Schuylkill River (Bridge replacement)		
		(C) Harmonyville S-Curve (Realignment-drainage)		
	l			

PMRPC

Recommended Projects/Concerns

Signalization, South Hanover Street and Cedarville Road

Turning issues to reach East Coventry, PA 724 at U.S. 422

Need left-turn lane from 724 to North Hanover Street

Dangerous intersection on PA 100 at Hoffecker Road. Intersection has poor sight lines; new Clemens will make problem worse

Bad intersection; 724 becoming highly developed. Close Old Schuylkill Road; prevent east-bound traffic onto 724

The Greater Valley Forge TMA should be involved more closely with improving the functioning of the Pottstown Metropolitan Region's highway system. The TMA could also work to develop park-and-ride lots along the U.S. 422 and PA 100 corridors. The Council of Governments and Tri-County Chamber of Commerce might advocate alternative work schedules and offer telecommuting education programs.

Context-Sensitive Design

Often standard design of roads and bridges creates projects that do not blend into their surroundings or disrupt the environment. For example, if an old stone historic bridge is replaced with a steel structure, the design is not context-sensitive. When a highway is constructed or widened through an historic town, and the existing built and natural environment is radically altered as a result. There is a growing set of engineering practices that are being used in new highway projects to better match the improvement of the roadway with the community surrounding it. These practices are referred to as "context sensitive design".

Recommendation

The Pottstown Metropolitan Region may wish to utilize context sensitive design in a future highway plan. Roads and bridges should blend into their environment, even if this affects the size of the road or bridge, or adds to its cost. New or improved roads or bridges should respect the surrounding landscape, particularly existing historic and natural areas. For places like Gilbertsville and Kenilworth, these context sensitive design solutions will be very important and should be followed.

Intelligent Transportation Systems (ITS) - Solutions

Currently the Pottstown Metropolitan Region does not

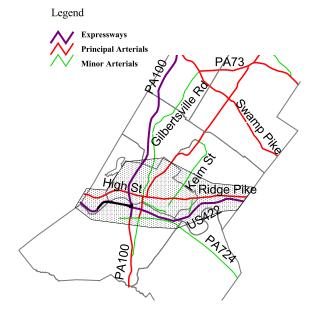
utilize ITS systems, although the establishment of a closed loop traffic light system in Pottstown Borough is a committed project on the Transportation Improvement Program (TIP) - see Proposed Highway Projects at the end of the Highway Section.

Recommendation

The Pottstown Metropolitan Region may wish to introduce other ITS systems where practical. ITS systems that might facilitate efficient movement of traffic in the Region include:

 Traffic light timing and signal preemption, to coordinate traffic signals on busy arterials and allow emergency vehicles to change lights so they can get through an intersection faster and more safely. Plans involve 52 intersections in three municipalities (Lower Pottsgrove, Pottstown,

FIGURE 8-14
POTENTIAL FUTURE ITS SERVICE AREA



and North Coventry). This is a committed project on the Transportation Improvement Program (TIP).

- Video cameras along highways to better monitor traffic congestion and accidents
- Traffic centers that monitor the Region's roadways
- A highway advisory radio station
- Emergency call boxes
- Ramp metering
- Real-time travel information that is broadcast online and on TV or radio

Specific ITS systems being considered in the Region include variable message signs on U.S. 422 to warn motorists of delays and suggest alternative routes, an emergency traffic signal preemption system in North Coventry (which would allow emergency vehicles to change traffic lights to get through intersections faster while avoiding conflicts with other vehicles), and the installation of a closed-loop system on PA 724 to coordinate traffic signals and make the movement of traffic along that road more efficient.

ITS projects should have a regional focus, since detours and re-routed traffic are likely to involve more than one municipality. ITS technology should be standardized across the Region for better coordination.

As with Travel Demand Management efforts, the Pottstown Metropolitan Region should work with TMAs where possible to create better traveler information systems. The Greater Valley Forge TMA, for example, is currently working with SmarTraveler to develop better Travel Information Systems.

Reducing Noise Impacts

As traffic increases on the more heavily traveled roads, particularly along highways, noise levels become more annoying to residents of areas abutting the roadway, and concerns grow about potential negative impacts on property values. The Region should recognize the high level of noise being generated along certain roadways. Municipalities may wish to encourage builders to incorporate noise reducing materials into their buildings or to construct berms, landscaping buffers, or walls. These measures should be fully evaluated to consider the cost, potential noise reduction, aesthetic and other community impacts such actions would have. If sound walls are installed, attention should be given to ensure the barrier is buffered or improved with landscaping or other aesthetic enhancements.

Funding

Careful planning of highway project funding is critical, and often involves a package of funds from multiple sources. The majority of funding for highway projects comes from federal tax revenue funneled through the Federal Highway Administration (FHWA). A typical highway project will be funded with 80 percent federal funding and 20 percent state and local funding via PENNDOT, the county, and local municipalities.

The Pottstown Metropolitan Region will have to be assertive and resourceful in planning for its highway needs. It should seriously consider utilizing TE funds, CMAQ funds, and traffic impact fees to pay for area roadway projects.

Municipalities may collect traffic impact fees from developers to help fund their portion of a transportation project. These fees are collected to offset the cost of traffic generated by a new development. Within the Pottstown Metropolitan Region, New Hanover, North Coventry, and East Coventry Townships collect Traffic Impact Fees. A Regional Transportation Impact Fee program is recommended. This would enable the Region to shift resources to alleviate transportation impacts that cross municipal boundaries. In addition, the municipalities should require developers to construct adequate improvements along the frontage of new

development.

Congestion Mitigation and Air Quality (CMAQ) funds -This program is funded by the Federal Transit Administration (FTA) and the FHWA. Its funds can be spent on roadway projects that reduce congestion and, as a result, improve air quality.

Transportation Enhancement (TE) Funds - These funds were authorized by the Transportation Equity Act for the 21st Century (TEA-21). Funds can be used for projects related to any form of surface transportation that may or may not be directly related to roadway improvements. Examples of projects eligible for TE funds include:

- Scenic highways
- Preservation of scenic views and highway landscaping and beautification projects
- Main Street improvements
- Historic preservation projects related to surface transportation

Summary - Future Highway Issues

The principal challenges to the Pottstown Metropolitan Region's highway system are traffic congestion, deteriorating roads and bridges, unaligned intersections, sharp curves, and basic transportation safety. These factors can negatively impact both residents and businesses. It leads to a decreased quality of life through time wasted sitting in traffic, negative economic impacts from shipping and other delays, accelerated burdens on infrastructure, and increasing safety issues via conflicts between motor vehicles and pedestrians or bicyclists.

The Region's goals related to highways include managing vehicular traffic congestion, improving transportation safety, and maintain/enhance the road hierarchy and connectivity (accessibility). Recommended improvements to the highway system include road reconstructions, repairs, widenings,

alignments or straightenings; intersection and interchange improvements; and road studies to better understand where problem areas are and where critical improvements are needed.

However, conventional road improvements should be only part of a comprehensive highway plan. Other techniques to improve the efficiency of the highway system should be investigated as well. These techniques might include: transportation demand management (TDM), use of intelligent transportation systems (ITS), regional traffic impact fees, and better design of land development to promote an interconnected street grid and alleviate traffic and noise impacts. These techniques are the tools that together can form a comprehensive plan to facilitate enhanced movement of people and goods through the highway network.

A transportation funding challenge exists for the Pottstown Region. Obtaining funding for transportation improvements from private development and the strategic spending of transportation monies will be critical for the Region's highway system to function effectively.

Public Transit

Public transit in the Pottstown Metropolitan Region could help reduce traffic congestion by providing an alternative to driving, help connect workers with jobs, and give people who cannot drive (including the young, the elderly, and those with visual or other physical disabilities) a means of mobility. Utilization of public transit can help reduce pollution and save energy by reducing the number of vehicles on the roads.

A recommendation of this Plan is to foster the development of transportation choices, such as public transit, for better mobility in and throughout the Region. This section of the Plan discusses the role public transit plays, and the opportunities for expanding it in the future.

Existing Conditions

Existing Transit Systems in the Region

The Southeastern Pennsylvania Transportation Authority's (SEPTA's) Route 93 bus serves the Pottstown Metropolitan Region, connecting Pottstown to Norristown via Collegeville along the Ridge Pike/High Street corridor. The bus runs seven days a week, at approximately one-hour intervals.

The Borough of Pottstown owns the largest municipally-owned transit system in Montgomery County. Daily operation of the fleet of buses, through a contract with the Borough, is the responsibility of Pottstown Urban Transit, Inc. (PUT). Bus service is available from PUT six days a week during the day and on a limited schedule at night. There are five bus lines operated by PUT running through Pottstown Borough, Lower Pottsgrove Township, West Pottsgrove Township, and North Coventry Township, including the Coventry Mall (see Figure 8.16).

Both SEPTA and PUT are required by the Americans with Disabilities Act to provide services to people with disabilities who live within 3/4 mile of a fixed bus route.

SEPTA's Customized Community Transportation (CCT) provides the required paratransit, on-demand, curb-to-curb service for eligible disabled persons. This service covers all of Pottstown and portions of Lower Pottsgrove, and North Coventry. PUT's paratransit service also provides curb-to-curb service to disabled people in the Pottstown Region. The Suburban Transit Network, Inc. ("TransNet") provides shared rides for senior citizens throughout the Pottstown Region via contract with Tri-County Transit. TransNet is a private, nonprofit transit company founded in 1994 as the "Montgomery County Paratransit Assocation, Inc."

Private Intercity Bus Service is available from Greyhound and Capitol Trailways in Pottstown, with service to King of Prussia, Philadelphia, Reading, and Harrisburg.

Change in Public Transit Usage, 1990-2000

Public transit use for commuting to work has changed

significantly over the past decade. Transit use in West Pottsgrove, Douglass, and New Hanover has declined, while transit use in the other municipalities has increased. In fact, transit use in Douglass and New Hanover for trips to work has completely ceased according to 2000 Census data. By contrast, transit use in Pottstown has more than doubled in the last decade.

Transit Needs Analysis

The need for public transit is driven by various factors. Transit use is needed by the elderly, many of whom do not drive; housing density, since public transit can serve more people who walk shorter distances to transit stops in areas of high-density housing; and vehicle ownership rates, since people who own fewer vehicles are more likely to take transit to get around.

Aging Population

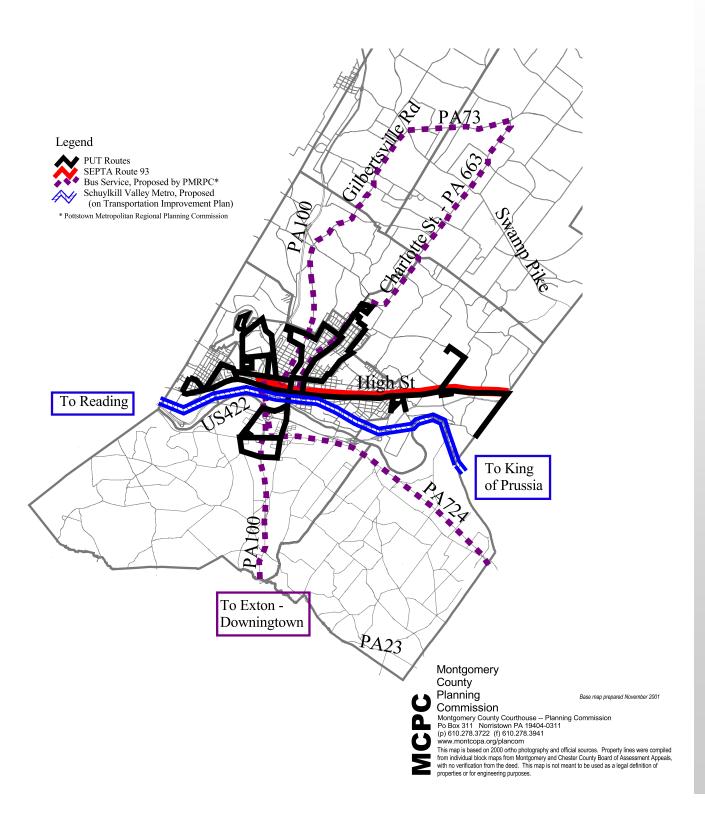
As the population of the Region ages, the need for transit services to serve those members of the population who are no longer able to drive will grow. Areas with large numbers of people over 65 in the Region include East Coventry, Pottstown, North Coventry, and some parts of West Pottsgrove and Lower Pottsgrove. Particularly important is the need

Figure 8-15 Change in Commuting to Work via Public Transit, $1990\ {\rm to}\ 2000$

	1990	2000	% Change
Douglass	15	0	-100%
E.Coventry	18	23	+27%
L.Pottsgrove	29	34	+17%
N.Hanover	30	0	-100%
N.Coventry	26	37	+42%
Pottstown	91	245	+169%
U.Pottsgrove	7	13	+86%
W.Pottsgrove	34	27	-21%

Source: U.S. Census Bureau, 2000, 1990

FIGURE 8-16
TRANSIT ROUTES (EXISTING & PROPOSED)



to connect age-restricted housing developments, personal care facilities, and continuing care facilities with grocery stores, pharmacies, and medical offices.

Housing Density

Another factor that increases the need for transit is areas of high density housing, particularly that of five or more dwelling units per acre. Areas of the Region that have housing densities this high are Pottstown, West Pottsgrove, and to a lesser extent, Lower Pottsgrove and North Coventry. The high-density residential portions of Lower Pottsgrove are located near High Street; in North Coventry the high-density residential areas are located in the northern part of the Township, clustered around PA 100 and PA 724.

Vehicle Ownership Rates

Areas with low vehicle ownership rates are often areas where public transit demand is high. Areas of the Region with low vehicle ownership rates include Pottstown and West Pottsgrove and to a more moderate extent the southern half of Lower Pottsgrove. The other municipalities in the Region are generally less densely developed and have higher vehicle ownership rates. In North Coventry 4.5% of households own no vehicle; in East Coventry 4.2% of households have no vehicle.

Transit Demand Summary

High housing density, older residents, and low vehicle ownership rates are all concentrated in Pottstown Borough and West Pottsgrove. More moderate concentrations exist in Lower Pottsgrove (all factors), North Coventry (aging population and housing density), and East Coventry (aging population). This indicates that these areas are most appropriately served by transit. As the Region's population grows, the need may arise to consider an expansion of public transit service to cover more village centers, community centers, and regional retail areas.

Transit Plan Bus Transit

Expansions/Improvements

SEPTA's Route 93 Bus, which connects Pottstown to Norristown via Collegeville, is run at a schedule of one bus per hour for most of the day, with limited service of one bus every 35-45 minutes between 5:00 and 7:00am. This scheduling is substandard and should to be improved if possible. This route serves the Pottstown - King of Prussia corridor, one of the major transportation corridors identified in this Plan, and is an area experiencing significant suburban population and employment growth. Improved service on the Route 93 bus could help reduce traffic congestion on roads such as U.S.422 and Ridge Pike, serve employment centers, and boost transit ridership along that corridor.

In the past, SEPTA's Route 99 connected King of Prussia and Norristown to Pottstown via Phoenixville. The Region should closely monitor traffic along this former route, and may wish to request that SEPTA re-establish the route in the future. Re-establishing this bus route could help reduce traffic congestion along Route 724.

In the future it might be viable to expand PUT's service area as well. One recommendation is to consider adding a bus loop north of Pottstown, along Charlotte Street, PA 73, Gilbertsville Road, and Farmington Avenue. This route could include service to the planned New Hanover Town Center. Other potential connections along this loop include Gilbertsville/Boyertown and a future assisted living facility in New Hanover. However, if private shuttle service is provided by the assisted living facility it would likely eliminate the need for PUT service.

Other areas that might be served by PUT include Manatawny Manor in East Coventry on Route 724. The bus line might also be expanded along Route 724 to Royersford to help reduce traffic congestion on that road, particularly if SEPTA's Route 93 is not reconnected with the Region. Another recommendation is to consider the advantages of

adding bus service from Pottstown south to the Exton/Downingtown.

The proposed routes are generalized recommendations and would need further detailed planning for implementation. If the Schuylkill Valley Metro or additional park-and-ride lots are constructed, PUT and/or SEPTA routes could be expanded to provide convenient connections with them.

Bus Transit Recommendations and Summary

In summary, potential future S E P T A service improvements should reduce the interval time between buses on the Route 93 bus. It should also provide for a linkage with the Schuylkill Valley Metro if it ever were constructed, and might involve re-establishing the SEPTA 93 bus connection a mong Pottstown,

Phoenixville, and King of Prussia.

PUT expansion should be focused on a loop to the north of Pottstown with a possible connection to Gilbertsville-Boyertown and the future assisted-living facility in New Hanover, a possible connection south to the Exton/Downingtown area, and the Lutheran Topton Manor House in East Coventry. PUT should also consider a route down PA Route 724 to Royersford if SEPTA restores service.

Bus Transit: Keys to Success

- Publicity Communication between a transit operator and potential riders helps riders know where and when a bus will travel. A web site should be used to fully inform riders of bus stop locations, fares, scheduled detours, etc.
- Intelligent Transportation Systems (ITS) ITS
 can make it easier for people to ride buses. For
 example, an ITS system may allow bus drivers
 to change traffic signals at certain locations to
 reduce time spent waiting at red lights. ITS
 might consist of an electronic message board at
 busy bus stops, telling riders when the next bus
 is due and whether it has been delayed.
- Frequent Service When bus service is frequent (every half hour or less), it is much more useful for riders and becomes a viable transportation option for more people.
- Express Buses These buses should be used
 where it is possible to collect a large number of
 riders at one place before traveling a significant
 distance. Express buses reduce travel time on
 long trips since they don't have a large number
 of stops, and often can take less congested,
 higher-speed roads.
- Dedicated Lanes Lanes at major intersections or in congested areas that are dedicated to buses at peak travel hours help prevent buses from getting snagged in traffic jams.

Rail Transit - Schuylkill Valley Metro

The proposed Schuylkill Valley Metro line should be constructed to serve the Pottstown Metropolitan Region. In the Pottstown Regional survey [2002], this ranked as the second (to road improvements) most important transportation improvement. This proposed passenger rail system could pottentially utilize existing track to connect Philadelphia to Reading, with proposed stations including (among others) King of Prussia, Phoenixville, Royersford, Pottstown, and Douglassville (Berks County).

The Schuylkill Valley Metro would serve two of the major transportation corridors in the Pottstown Metropolitan Region. One is the Pottstown/King of Prussia corridor, an area experiencing rapid suburban

population and employment growth. Improved transit service along this corridor via the Schuylkill Valley Metro could help reduce traffic congestion on roads such as U.S. 422, Ridge Pike, PA Route 724; and serve employment centers. The Schuylkill Valley Metro would also serve the Pottstown/Reading corridor. This corridor is also experiencing growth (the Reading MSA grew by 11 percent from 1990 to 2000). The construction of the Schuylkill Valley Metro could help reduce traffic congestion in this corridor as well.

PUT and SEPTA connections with the future Pottstown rail station would provide a link with major employment, residential, and shopping destinations in the Region. In order to fully reap the benefits of a new rail line, adequate parking would need to be constructed to accommodate Schuylkill Valley Metro riders who wish to park and ride. This additional parking might serve other development opportunities in downtown Pottstown with a shared parking facility.

Rail Recommendations and Conclusion

The Schuylkill Valley Metro should be constructed to serve the Pottstown Metropolitan Region. Adequate parking should also be constructed for passengers to park and ride, possibly through a shared parking facility. The Metro could help reduce traffic congestion in the rapidly developing King of Prussia-to-Pottstown corridor, and tie Pottstown more closely with employment and shopping destinations in King of Prussia, Norristown, Phoenixville, and greater Philadelphia. Stations should be multimodal, with connections to SEPTA, PUT, Greyhound, and Capital Trailway buses and the Regional trail and sidewalk network.

Technological Improvements to Public Transit

Public transit can be made quicker, more convenient, and user-friendly when transit systems implement new technology on their buses.

Intelligent Transportation Systems (ITS) for Transit

- Traffic signal preemption devices may be installed on all SEPTA and PUT buses. These devices allow buses to change signal lights to facilitate their efficient movement along roadways.
- Global positioning systems could be installed on all SEPTA and PUT vehicles and computerized information centers could be installed at major mass transit stops. The information centers would provide up-to-the-minute locations and estimated times of arrival for transit vehicles. Information on location

of vehicles and estimated times of arrival should also be made available on the SEPTA web site and to wireless communication users as well.

Bus Rapid Transit and Express Bus Service

Bus Rapid Transit (BRT) is a system that often uses dedicated bus lanes on expressways, facilitated by ITS technology. It allows buses to bypass congested traffic while providing a fast alternative for commuters..

Another option for utilizing Bus Rapid Transit is to incorporate it into existing bus routes on selected arterial roads by dedicating bus lanes. ITS technology could be used to preempt traffic lights; the combined effect would be to make bus trips much faster and more viable for riders.

Express buses make a minimal number of stops to make the entire trip faster. In effect, they limit accessibility to improve mobility. This system works well when there are a few, defined points where a large number of riders alight or disembark from the bus. An express bus might operate in conjunction with park and ride lots, which may be used to collect the express bus riders who drive short distances from various locations. Express buses often take advantage of expressways for part of the trip.

These transit measures should be considered for the SEPTA route to Norristown or a future route to King of Prussia. It should also be considered for any future PUT route that travels relatively long distances, such as a potential connection to Exton/Downingtown. These service enhancements combined with advanced technology could greatly improve public transit usage and effectiveness in the Region.

Economic Incentives for Using Public Transit

The Pottstown Metropolitan Region may wish to

FIGURE 8-17
PROPOSED SCHUYLKILL VALLEY METRO



Source: Schuylkill Valley Metro Coalition

promote and publicize existing economic incentives for using mass transit. The following programs offer incentives for the use of mass transit and for transit-oriented development:

Smart Commute Program

The Smart Commute program provides larger mortgages for people living near SEPTA stops. Participants are required to live within one half-mile of a rail station, or one-quarter mile of a bus stop. In return, they may receive mortgages 8 percent higher than they would otherwise be eligible for. This program could be particularly valuable to Pottstown Borough's revitalization efforts.

TransitChek

TransitChek is a benefit program that employers can offer to their employees who use transit. The program provides tax-free vouchers that can be used to purchase passes, tokens, and tickets.

Municipalities can derive economic benefits from transit as well, particularly if they focus on transit-oriented development in addition to directing most new development into designated growth areas. Transit does not pay for itself through fares, but the Region and/or its residents may experience economic benefits by better connecting workers with jobs, and by reducing traffic congestion and time and gas wasted sitting in traffic.

Funding Public Transit

Funding public transit involves federal, state, county, and sometimes private sector dollars. The benefits of public transit particularly in terms of energy savings and traffic reduction over time can often outweigh the cost. Additional money spent on public transit should be directed towards increasing ridership by making public transit more attractive, efficient, and accessible.

Conclusion

Public transit can be used as a tool to reduce traffic congestion, provide enhanced mobility to the young and elderly, for those with physical disabilities who cannot drive, and for those without access to automobiles. Greater use of public transit can conserve energy and improve air quality.

An expanded public transit network can better connect workers and jobs, and consumers and commercial centers, thus enhancing economic development.

In the Pottstown Metropolitan Region public transit could potentially be expanded. This includes expansion of SEPTA and PUT bus routes and the construction of the Schuylkill Valley Metro. These improvements should be targeted to achieve maximum reduction of vehicle traffic; provide accessibility for those in need of public transit; serve major employment centers, high-density housing areas, shopping areas, and park-and-ride lots; and facilitate easy connections between bus and the future Schuylkill Valley Metro.

For expanded transit services to be most beneficial for the Region, transit-oriented land use regulations and site planning should be highly encouraged. The Borough of Pottstown and its surrounding villages are already walkable and transit-oriented. New development needs to reinforce this pattern and this is further considered in the Regional Future Land Use Plan. Excellent examples of potential transit-oriented opportunities in the Region are Mrs. Smith's tract, North Coventry's Town Center-Mixed Use and Town Center-Residential Zoning Districts around the Coventry Mall, and the proposed

Town Center development in New Hanover.

Pedestrian Mobility

Pedestrian circulation is a vital part of a regional transportation network. Sidewalks, trails, paths, and crosswalks are all part of this network. Pedestrian travel can be an effective alternate means of transportation to the automobile for short-distance trips. This is particularly true for Pottstown and villages in the Region. They serve longer trips too, such as people walking to work or school from home, or those walking or jogging on trails for exercise.

Well-designed pedestrian networks are important to provide safe, efficient transportation for walkers. It can also improve the perceived attractiveness of an area for residents. Crosswalks and sidewalks that minimize conflicts with automobiles are crucial for pedestrian safety. A well-connected pedestrian network is necessary to provide mobility, allowing travelers to use the system to walk medium and long walking distances without interruption.

It is a goal of this Plan to create walkable villages and communities, and to develop transportation choices for better mobility. A well-designed and connected pedestrian network will help do this.

Existing Conditions

Some areas in the Pottstown Metropolitan Region have good pedestrian networks, such as Pottstown Borough, other areas do not have many pedestrian connections. Many places do not have sidewalks, or sidewalks have interruptions, and in some cases sidewalks are poorly maintained, or are built so close to a busy street that pedestrians do not feel safe walking on them. These conditions make it difficult and unsafe for people to get from their origin to destination by any means other than driving. The lack of sidewalks or other

connections (such as trails) also prevents people from walking or jogging for exercise or enjoyment.

Only a small proportion of the Region's workers walk to work. Typically a greater proportion of people walk to work where there are more intense land uses such as in the Borough of Pottstown. For example, in Pottstown 6.1% of workers walk to work and in West Pottsgrove 3.3% of workers walk to work, but in the other municipalities the proportion walking to work ranges from 0.6% to 1.5%.

This Plan recommends pedestrian-friendly development in Pottstown Borough and the Region's village centers. The walkability of these centers and their mix of uses are intended to complement each other, and enhance their appeal..

Pedestrian safety requires that the interconnectedness and safe design of the pedestrian system be closely evaluated. In 2000, 11.3% of people killed in traffic accidents in Pennsylvania were pedestrians. This chapter provides a range of methods for improving pedestrian safety.

Pedestrian Plan

Pedestrian paths in the Pottstown Metropolitan Region include sidewalks, trails, crosswalks, and pathways. These should be as interconnected as much as possible to form an integrated pedestrian network.

Sidewalk Location

Sidewalks should be considered in areas where there is a high amount of potential pedestrian activity. These areas include the metropolitan center, community mixed use centers, and village centers (see Figure 8.13). It is also important for sidewalks to provide connections to popular destinations no matter where they are located, such as:

- Schools
- Stores
- Offices
- Libraries
- Bus stops

- Parks
- Shopping centers
- High-density residential development

It is important to have sidewalks on busier, high-volume roads in developing suburban areas of the Region. However, these sidewalks should have a context-sensitive design. Examples would be sidewalks that weave around trees and other natural features, or are constructed of materials that match the landscape and do not damage tree roots. Sidewalks are often not built because municipalities think they will dead-end and not lead anywhere. However, if sidewalks are consistently required of developers by growing municipalities, missing links in the system will eventually fill in.

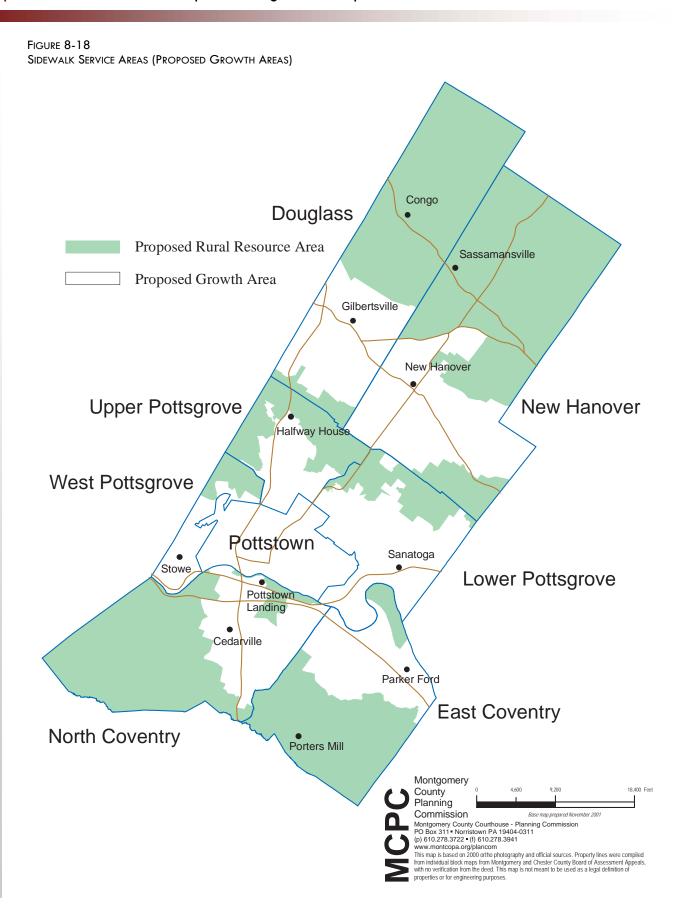
Sidewalk Design

Sidewalks must be designed in such a way as to encourage comfortable, safe, and frequent use by all potential walkers, including people with disabilities. Most sidewalks should be at least 5 feet wide. This width allows two people to pass comfortably or walk side-by side; it also better accommodates the physically challenged.

Sidewalks in downtown areas and village business districts are unique and need to be designed carefully. These areas typically need wider sidewalks to accommodate higher pedestrian volumes.

Sidewalks should be considered for both sides of the street in more intensely-developed areas. In rural areas or areas of low-density development it might be more appropriate to construct a sidewalk on only one side of the street, or provide wide shoulders in place of sidewalks.

Generally, central business district sidewalks should have at least an 8-foot area for pedestrians that is free of any obstructions, such as street trees, mailboxes, benches, light poles, signs, people window shopping, or doors swinging open. In reality, the distance from the curb to the building wall will usually be 12 feet or more.



Street Crossing Design

Street crossing design is extremely important for creating safe and usable sidewalk networks. Often these networks break down at street crossings, which, if they contain a crosswalk at all, are often difficult to cross. The location, visibility, and length of crosswalks are all important design considerations.

Trails

Another significant component of any pedestrian system is trails. A trail system can provide a new way to connect the Region for transportation and recreation. They have also been shown to enhance the quality of life in communities. Sidewalks and trails should interconnect whenever possible. Sometimes they can provide short cuts, or more direct routes for pedestrians than existing sidewalks on roadways. Trails can also connect various destinations around the Region that are too far apart for

FIGURE 8-19
RECOMMENDED LOCATIONS FOR SIDEWALKS

sidewalks to link. However, the creation of trails should be considered as supplementary to the sidewalk system and should not be considered a replacement for a comprehensive sidewalk network along roads.

There are currently plans to expand the Montgomery County and Chester County regional trail network. One proposed trail is the Schuylkill River Trail that enters Lower Pottsgrove from Limerick Township, and traverses Pottstown and West Pottsgrove before entering Douglass Township in Berks County. The West County Trail in Montgomery County extends north from Pottstown and West Pottsgrove into Upper Pottsgrove, Douglass, and New Hanover. From there it crosses into Upper Frederick Township, and then splits into trails connecting to Green Lane and Schwenksville, respectively. These regional trails serve pedestrians as well as other users and should be connected to local trails and sidewalks when possible.

Reconnections Project

The Reconnections Project seeks to improve pedestrian and bike linkages between Pottstown and North Coventry, thus reestablishing historic links between these communities and the Schuylkill River. The two municipalities have

Type of Development	Sidewalk Location for New Development	Sidewalk Location for Existing Development
Commercial, Office, and Industrial (along all types of streets)	Both sides of streets	Both sides of streets. Every effort should be made to add sidewalks where they do not exist and complete missing links.
Residential (along arterials).	Both sides of streets.	Both sides of streets.
Residential (along collectors).	Both sides of streets.	Apartments, townhouses, or twins: both sides of streets Single-family detached homes: prefer both sides of street, require at least one side.
Residential (along local streets) More than 4 units per acre	Both sides of street	Prefer both sides of streets; require at least one side.
1 to 4 units per acre	Prefer both sides of street; require at least one side	Prefer both sides of streets*; howeversidewalk on one side of street or 6-foot shoulders* on both sides are acceptable.
Less than 1 unit per acre	One side of street preferred; shoulder on both sides required	One side of street preferred; at least 6-foot shoulders* on both sides.

Adapted from guidelines in the Institute of Transportation Engineers' Design and Safety of Pedestrian Facilities.

^{*} Changes made from guidelines to reflect Pottstown Regional conditions are noted with an asterisk (based on Montgomery County Transportation Plan's adjustments).

FIGURE 8-20 SIDEWALK WIDTH GUIDELINES BY AREA

Area	Minimum Sidewalk and Planting Strip Width
Central Business District	Minimum width of 8 feet, but wider widths when significant numbers of pedestrians are expected
Commercial, office, industrial area outside of the central business district	Minimum 5-foot width with a preferred planting strip width of 4 to 8 feet*. However a 7-foot sidewalk width with no grass strip or a 5-foot width with a 2-foot grass strip are acceptable.
Residential areas located along arterial or collector streets	Minimum 5-foot width with a preferred planting strip width of 4 to 8 feet*. However, grass strips of 2 feet are acceptable.
Residential areas along local streets with densities greater than 4 homes per acre.	Minimum 5-foot width with minimum 2-foot grass strip.
Residential areas along local streets with densities of 4 homes per acre or less	Minimum 4-foot width with minimum 2-foot grass strip.

Important Note: All sidewalk widths are exclusive of any obstacle. Sidewalk areas containing street lights, trees, benches, doors, trash cans, mailboxes, newspaper boxes, etc. must be added to the minimum width. In addition, in central business districts, two feet should be added to the width wherever pedestrians may be window shopping or doors may be opening into the sidewalk area.

Note: Adapted from guidelines in the Institute of Transportation Engineers' Design and Safety of Pedestrian Facilities. * Changes made from guidelines to reflect Pottstown Regional conditions are noted with an asterisk (based on Montgomery County Transportation Plan's adjustments).

formed a joint committee, contributed funding, and obtained state funding (from the Department of Conservation and Natural Resources– DCNR) to facilitate this effort.

Major recommendations of the study, completed in July 2004, include:

- Enhancements to the Hanover Street Bridge
- Establishment of the River Road Trail from the Hanover Street Bridge to River Park in North Coventry
- Other improvements along Hanover Street,
 Laurelwood Road and Rt. 724 to create more attractive and walkable links between the Borough and the Coventry Mall
- Conversion of the existing unused railroad trestle into a pedestrian bridge across the Schuylkill River to connect River Park and Riverfront Park;
- Creation of additional pathways along the south bank

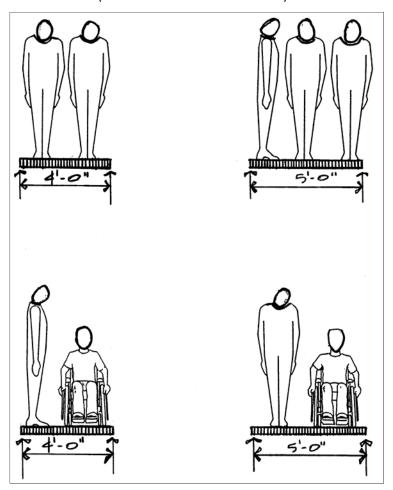
- of the Schuylkill River; and
- Plan for and advocate the replacement and realignment of the Keim Street Bridge.

The Reconnections Project is an important opportunity to create a regional recreation, cultural, and economic destination for everyone to enjoy.

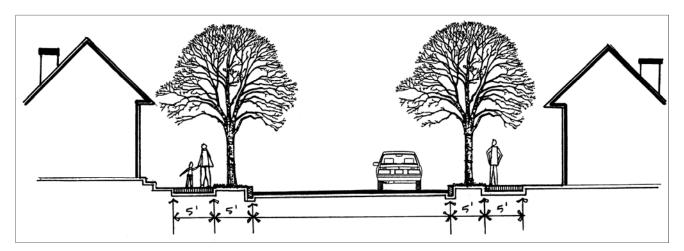
Design of New Development

New development in the Pottstown Region can and should be designed to encourage walking. This may be done by developing a mix of smaller-scale land uses, and concentrating development in growth areas. This keeps walking trips short and interesting, and allows a range of uses to be accessible via a short walk. The Region's future land use plan promotes these pedestrian-oriented places in Pottstown, the Village Centers of Fagleysville, Halfway House, Parker Ford, and Kenilworth; and the Community

Figure 8-21 Sidewalk Design (General Width Recommendations)

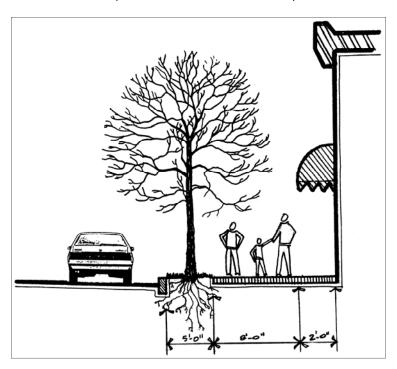


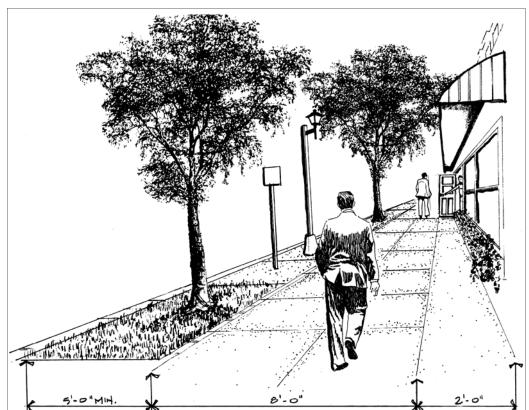
A five-foot wide sidewalk allows two people on foot or a person on foot and a person in a wheelchair to pass.



Most sidewalks should be at least 5 feet wide and set back from the street.

FIGURE 8-22 SIDEWALK DESIGN (DOWNTOWN SIDEWALK STANDARDS)





In central business districts, wide sidewalks are needed for larger numbers of pedestrians moving from destination to destination.

New Street Design

The design of streets also affects the degree to which sidewalks are utilized. The following street design factors encourage pedestrian activity:

- Short blocks. By limiting the length of blocks, pedestrian movement around a neighborhood is facilitated. Ideally, blocks should be 600 feet or less. When blocks are longer than 600 feet a pedestrian cut-through should be provided in the middle of the block, particularly if a destination such as a school, park, or shopping center exists behind the block.
- Interconnected streets. Streets should be interconnected, possibly in a grid or modified grid pattern, to improve pedestrian movement through a neighborhood. Where cul-de-sacs are used, pedestrian cut-throughs should be used to connect the cul-de-sac to a nearby street.
- Low speeds. It is safer and more comfortable for pedestrians to walk along or cross streets that have lower traffic speeds. The speed limit on local streets should be 25 miles per hour or less.
- Traffic calming. Traffic calming is a technique which encourages drivers to slow down, through such design modifications as narrow streets, speed humps or speed tables, rumble strips, textured paving materials, bulb-outs (curb extensions), roundabouts, and minitraffic circles. Other ways traffic calming in Pottstown and the villages can also be achieved is by utilizing on-street parking, painted bike lanes or road shoulders. The streetscape could be made more interesting with shade trees, landscaping, and pedestrian elements (e.g, pedestrian benches, stylized street lamps, waste receptacles, bollards, etc.), and building façade design improvements. Many of these elements also help separate pedestrians from moving vehicles.

Mixed Use Centers of Gilbertsville, Coventry, North End Center, Sanatoga Village, and New Hanover Town Center.

Building and Parking Design and Orientation

The design, layout, and orientation of buildings and parking lots affect walking and how many people use nearby sidewalks. The following design techniques may be utilized, where possible, to make development more walkable:

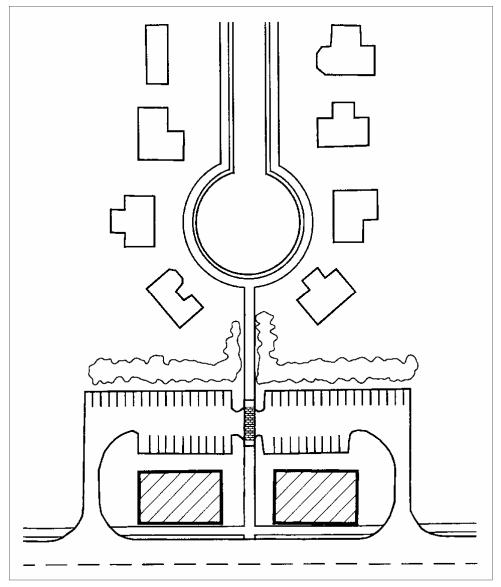
- Putting buildings close to roads, with parking behind or to the side of buildings. This is especially important in central business districts and villages.
- Placing front doors and windows in walls of buildings facing sidewalks.
- Shortening the distance pedestrians must walk to reach buildings, either by having shallow parking lots or by placing buildings close to each other, side by side.
- Breaking up the mass of large buildings by using windows, arcades, façade variations, roof variations, awnings, canopies, peaked roofs, defined entrances, clock towers, and other major features.
- Placing retail on the ground level of parking garages facing the street.
- Providing sidewalks through parking lots, with visible crosswalks across internal driveways and appropriate landscaping and lighting.
- Creating short, appealing sidewalk connections to bus stops and train stations.

Conclusion

Pedestrian circulation, including sidewalks and trails, are an important part of the Pottstown Metropolitan Region's transportation system. However, there are areas that do not have adequate pedestrian connections. This inadequacy may consist of a lack of sidewalks or crosswalks, interruptions in the pedestrian path system, or substandard design that does not provide adequate safety or enough room for pedestrians.

A wide variety of options exist for improving the pedestrian

FIGURE 8-23
SKETCH: CUL-DE-SAC CONNECTION



Pedestrian connections should be made from the end of cul-de-sacs.

system. Sidewalks could be targeted for areas where they will be most useful; interruptions in the pedestrian system can be removed; and land developments, sidewalks, streets, and street crossings can be designed to better accommodate pedestrians. Trails are another asset of the pedestrian system. They can provide short cuts connecting to the greater sidewalk system, and can provide transportation and recreation opportunities allowing a walker or jogger to travel through the natural environment and between neighborhoods

and destinations throughout the Region.

How the Region's municipalities regulate new land development in the Region's growth areas and promote pedestrian-oriented design will greatly impact the effectiveness of walking, biking, or using public transit as viable transportation choices for the Region. This will also affect the efficiency of the Region's roadways and quality of life.

Crosswalk Design Guidelines

The following design practices should be considered when implementing a crosswalk:

Crosswalks should be located in logical places where drivers would expect pedestrians; this is primarily at street intersections. For higher traffic volume roads, crosswalks may need to be at traffic signals. Where many pedestrians are expected, these traffic signals should be equipped with pedestrian-activated signals.

Mid-block crosswalks must be done judiciously and carefully, with the safety of pedestrians the most important factor. These are only appropriate on particularly long blocks where destinations are on each side of a road. Pedestrian bridges or well-lit underpasses can serve as an alternative for crossing heavily-traveled roads, such as expressways.

Crosswalks should be as visible as possible to drivers. Implementing the following design elements will help improve visibility and driver's awareness of pedestrian crossings:

- Painted crosswalk lines in a prominent style, such as zebra or ladder styles;
- Crosswalks made of materials with different textures and colors, such as pressed concrete or pressed asphalt (brick pavers should only be used on lower volume local streets);
- Good street lighting:
- Signs or flashing lights that warn vehicles of an upcoming crosswalk;
- Raised crosswalks or raised intersections;
- Proper sight distance for vehicles at corners;
- Movable signs or cones in the street highlighting the crosswalk.

Shorter crosswalks are easier and more comfortable for pedestrians than longer ones. The following techniques shorten the distance pedestri-

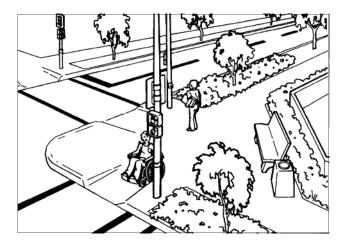
ans must walk:

- Narrower streets;
- Curb extensions or bulb-outs at corners;
- Tighter curb radii at corners rather than a wide radius that allows cars to swoop around the corner at relatively high speeds;
- Refuge islands if a tight curb radius is not feasible; ideally with a width of 8 feet or more; and,
- Medians 8 feet or larger on wide roads

Crosswalks at traffic signals should provide adequate time to cross the street, and pedestrians shouldn't have to wait too long to cross. All pushbutton mechanisms for crosswalks should be fastacting, so pedestrians don't try to cross before they should.

All crosswalks must be ADA-accessible with ramps leading from the sidewalk to the crosswalk. Ideally, two separate curb cuts should be provided for these ramps at each corner (see figure 8.16 Handicapped Accessible Sidewalks & Crosswalks)

FIGURE 8-24
HANDICAPPED ACCESSIBLE SIDEWALKS AND CROSSWALKS



Sidewalks and crosswalks must be handicapped accessible.

Bike Transportation

Biking can be both a popular means of recreation and a viable way to run errands or commute to work. When used in place of trips that would otherwise be taken by automobile, travel by bike could help reduce traffic congestion, thereby helping reduce pollution and save energy by reducing the number of vehicles on roads. Biking can provide people who cannot drive, such as the young and elderly persons in the community, a means of mobility. Upgrading roads for bikers provides benefits to various groups, bike commuters, recreational bikers, and even motorists by potentially reducing the total number of cars on the roads.

Goals related to bike transportation include:

- Developing transportation choices for better mobility .
- Maintaining and improving recreation options.

The encouragement and facilitation of biking can help meet both these goals. This section discusses the role biking plays, and opportunities for its expansion in the future.

Existing Conditions

Only 0.3% of workers residing in the Pottstown Metropolitan Region over the age of 16 biked to work, according to the 2000 Census. Although this proportion is very low, it is actually higher than the proportion biking to work for both Montgomery County (0.2%), and Chester County (0.1%). The municipalities in the Region that had employees who stated they biked to work were Pottstown (where 73 people biked to work) and North Coventry (37 biked to work).

Some parts of the Region, such as Pottstown Borough, have bike lanes on roads that make it easier and safer for bicyclists to travel. However, in many other parts of the Region conditions are not as suitable for travel by bike.

In more rural areas it may be possible for bicyclists to share a road shoulder, but in others bicyclists need to share the travel lane with cars and trucks. In various parts of Chester and Montgomery Counties off-road trails exist that were designed for bike use. There are trails being planned for the Pottstown Region which will also provide additional options for bicyclists.

Bike Mobility Plan

The Federal Highway Administration (FHWA) divides bicyclists into three broad categories: Advanced (A), Basic (B), and Child (C). These groups require different levels of protection from vehicular traffic.

Road Improvements for Bicyclists

The FHWA prescribes four basic types of road improvements to accommodate bicyclists).

Shared Lane

- Under certain conditions, Groups A (advanced) bicyclists can simply ride on roads without special provisions for bicycle travel.
- Bicyclists and motorists share operating space in the outer travel lane.
- Signage is optional

Wide Curb Lane

- Group A (advanced) and Group B/C (basic/child) bicyclists both need shoulders under certain conditions
- Bicyclists and motorists do need not need to share operating space because bicyclists are able to ride outside of the outer travel lane, beyond the "fog line" stripe.
- Signage is optional.

Bike Lane

 Bike lanes are needed to serve Group B/C (basic/ child) bicyclists under certain conditions.

- Bicyclists are provided with a special, dedicated riding area separate from motorists' operating space.
- The riding area set aside exclusively for bicyclists is designated using "bike lane" signs and painted stripes and symbols.

These guidelines have been adopted by PENNDOT as "recommended standards" for making roads in Pennsylvania bikeable. The guidelines for road improvements to accommodate bicyclists depend on:

- Which group or groups of bicyclists are trying to be accommodated.
- The speed of vehicular traffic.
- Whether the road is urban or rural.
- Average traffic speed.
- Whether the road provides parking.
- Site distance.

Generally, wider lanes are required to accommodate less advanced (Group B or C) bicyclists, when vehicular speeds are higher, and when site distance is worse.

Other Recommended Bike Safety Improvements

The following are suggested methods for improving roadways for bicycle safety and mobility.

- Drainage grates and manhole/utility covers should be aligned flush with the road surface, preferably along the curb where bicyclists can avoid them. If drainage grates and manhole/utility covers lie in the path of bicyclists, they should have openings that do not allow bike wheels to fall into them. Where grates and covers cannot be made flush with the road, the road surface should be made to taper into them.
- Railroad Crossings should be smooth, and the gap between rails and the road should be wide enough to avoid catching bike wheels. If the angle between the tracks and roads is not 90 degrees, additional paving

- should be added to the road shoulder for bicyclists to cross the tracks at a right angle.
- Transition Areas where the roadway narrows, signage and pavement markings should be added to warn drivers and bicyclists to help them avoid bike-automobile conflicts.
- General signing and marking could be implemented to alert drivers to bike paths, bike crossings, etc.
- Bike paths and shoulders used by bikers should be kept clear of debris, gravel, dirt, etc.
- Driveways should be paved smoothly where they meet the road and cleared of loose gravel to avoid presenting hazards to bicyclists.
- Roadways should be kept as smooth as possible to minimize hazards to bicyclists. Potholes, cracks, rough pavement, etc. should be repaired. If a road is repaved, it should extend from curb-to-curb to avoid presenting sharp edges for bicyclists. Utility cuts should be adjusted where possible to provide as smooth a road as possible for bicyclists.
- Vegetation along roads should be pruned to provide for adequate clearance and site distance for bicyclists. It also keeps roots from damaging the shoulder, bike lane, or road surface.
- Drainage improvements should be made where necessary to eliminate puddles and sediment deposit from the section of the road used by bicyclists.
- Lane Reflectors could be installed on the motorists' side of the travel line stripe.
- Rumble Strips could be added along the side of roads but should not unnecessarily encroach into the area used by bicyclists.
- Traffic control devices could be adjusted to make biking easier at controlled intersections. This could include making signal loop detectors more sensitive to bicycles, adding push buttons to request a signal change.

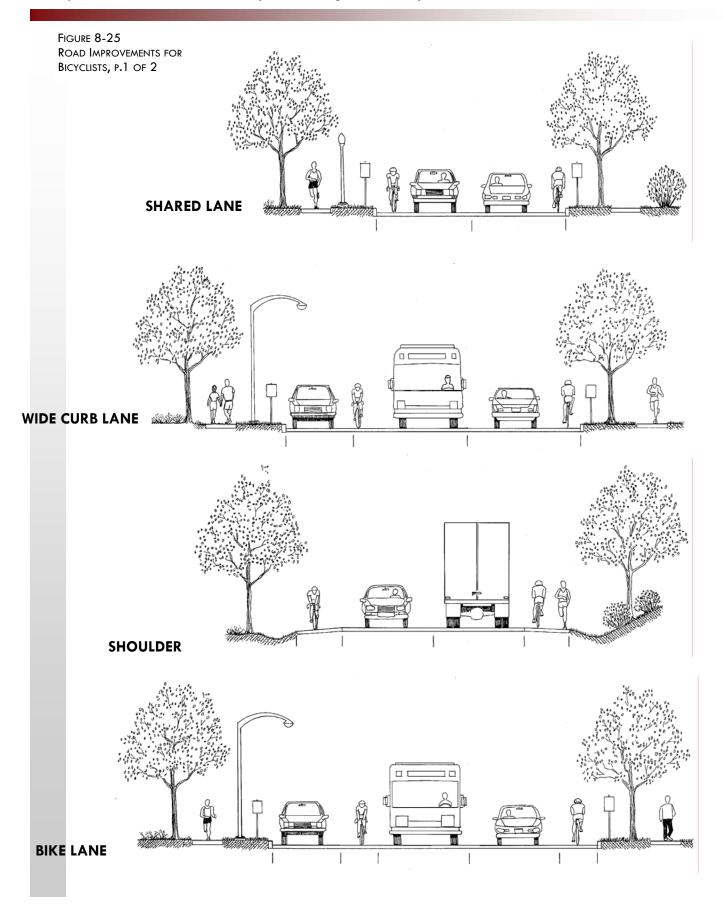


FIGURE 8-26
ROAD IMPROVEMENTS FOR BICYCLISTS, P.2 OF 2

Shared Lane

- Under certain conditions, Group A (*advanced*) bicyclists can simply ride on roads without special provisions for bicycle travel.
- Bicyclists and motorists share operating space in the outer travel lane.
- Signage is optional.

Wide Curb Lane

- Group A (*advanced*) and Group B/C (*basic/child*) bicyclists both need wide curb lanes under certain conditions.
- The extra width of the outer travel lane accommodates both bicyclists and motorists.
- Bicyclists and motorists share operating space.
- Signage is optional.

Shoulder

- Group A (*advanced*) and Group B/C (*basic/child*) bicyclists both need shoulders under certain conditions.
- Bicyclists and motorists need not share operating space because bicyclists are able to ride outside of the outer travel lane, beyond the "fog line" stripe.
- Signage is optional.

Bike Lane

- Bike lanes are needed to serve Group B/C (basic/child) bicyclists under certain conditions.
- Bicyclists are provided with a special, dedicated riding area separate from motorists' operating space.
- The riding area set aside exclusively for bicyclists is designated using "bike lane" signs and painted stripes and symbols.

- Intersections could be improved to provide convenient and safe paths for bicyclists.
- Snow should be cleared from bike paths where possible.

Bike Route Recommendations

Proposed bicycle routes for the Pottstown Metropolitan Region fall into two categories; primary bicycle routes and secondary bicycle routes. Primary bicycle routes are most vital to an interconnected network linking major destinations. Often arterial roads are designated as primary bicycle routes. Secondary Bicycle Routes are often located on collector roads.

Generally new arterial roads should be designed as primary bicycle routes and new collector roads should be designed as secondary bicycle routes. If a new limited-access highway is built, a bike path separated from the road should be constructed at the same time the road is built/upgraded.

Bicycle routes' classification may change over time if usage patterns change, thereby necessitating upgrades to accommodate a broader range of bicyclist types.

Retrofitting a Road for Bicyclists

Roads may be retrofitted for bicyclists when the roads undergo maintenance or improvement projects. For this reason it is important that provisions for bicyclists be considered during the planning, design, funding, and construction phases of roadway projects.

There are three basic ways to retrofit a road for bicyclists:

- Widen a road. This can be done to provide a wide curb lane, shoulder, or bike lane of adequate width where the roadway is not wide enough to meet the guidelines for bicyclists. This is the most expensive of the three options.
- Restripe the road. This can be done where bicyclists can be accommodated without widening the road. The width of travel or turn

lanes or on-street parking areas might be reduced, or on-street parking eliminated. In special circumstances, where the goal also includes traffic calming, a vehicular travel lane might be eliminated to provide more room for bicyclists. This should only be done after extensive study of the ramifications of elimination of the travel lane. An excellent example of this is along High Street in downtown Pottstown.

- Install pavement markings (lines and symbols)
 or signage. Where roads are wide enough to
 accommodate bicyclists but have no bike lanes
 marked, lines and symbols may be added to
 denote the bicyclist lane. On roads where the
 standard minimum guidelines for bicyclists
 cannot be met, signs should be installed to alert
 motorists to the presence of bicyclists.
- Prior to implementing a new bike route, municipalities should assess roadway conditions to ensure it is safe for bicyclists.

In addition, bicycle routes in the Pottstown Region should be identified with attractively-designed signage.

Connections to Trails and other Transportation Modes

Trails are usually not as efficient as roads in connecting bicyclists to most destinations. However, connections to trails would enhance the bicycling network. Also, not all portions of the trail network will be paved and suitable for all bicyclists. Trails may be used by bicyclists as a supplement to the road network, providing bicyclists with an alternative to riding on roads in some cases. Where trails serve both pedestrians and bicyclists the trails should be designed accordingly and connections to trails should facilitate the greater bicycling network.

A major function of trails and greenways is to provide recreational options for bikers. Trails and greenways can provide places to ride with limited street crossings or other interruptions. They also allow bikers the opportunity to

FIGURE 8-27
STANDARDS FOR BIKEABLE ROADS

Bicyclist Type, Average Motor Vehicle Operating Speed (AMVOS), and Road Profile	<2,000 AADT Volume Adequate Inadequate Sight Distance Sight Distance			2,000-10,000 AADT Volume Adequate Inadequate Sight Distance Sight Distance			>10,000 AADT Volume Adequate Inadequate Sight Distance Sight Distance					
GROUP A BICYCLIST:	Truck, Bus, RV			Truck, Bus, RV					Truck, Bus, RV			
<30 mph AMVOS: Urban, no parking (Note 1)	13 sl	13 sl	15 wc	15 wc	13 sl	13 sl	15 wc	15 wc	13 sl	13 sl	15 wc	15 wc
Urban, with parking (Note 2)	14 wc	14 wc	14 wc	14 wc	14 wc	14 wc	14 wc	14 wc	14 wc	15 wc	15 wc	14 wc
Rural (Notes 3 & 4)	12 sl	12 sl	14 wc	14 wc	12 sl	14 wc	14 wc	14 wc	14 wc	14 wc	4 sh	4 sh
30-40 mph AMVOS:	12 51	12 51	14 WC	14 WC	12 51	14 WC	14 WC	14 WC	14 WC	14 WC	7 511	7 511
Urban, no parking (Note 1)	15 wc	15 wc	16 wc	16 wc	15 wc	16 wc	16 wc	16 wc	15 wc	16 wc	16 wc	16 wc
Urban, with parking (Note 1)	14 wc	14 wc	15 wc	15 wc	14 wc	15 wc	15 wc	15 wc	14 wc	15 wc	15 wc	15 wc
Rural (Notes 3 & 4)	14 wc	14 wc	4 sh	4 sh	14 wc	15 wc	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh
	14 WC	14 WC	4 811	4 811	14 WC	13 WC	4 811	4 811	4 811	4 811	4 811	4 811
41-50 mph AMVOS:	16 wc	16	16 wc	16 wc	16 wc	16 wc	6 sh	6 sh	16 wc	16 wc	6 sh	6 ah
Urban, no parking (Note 1)		16 wc		15 wc	15 wc					15 wc		6 sh
Urban, with parking (Note 2)	15 wc 4 sh	15 wc 4 sh	15 wc 4 sh	1	15 wc 6 sh	16 wc	16 wc	16 wc 6 sh	15 wc 6 sh	6 sh	16 wc	16 wc
Rural (Note 4)	4 sn	4 sn	4 Sn	4 sh	o sn	o sn	6 sh	o sn	o sn	o sn	6 sh	6 sh
>50 mph AMVOS:			()	(1	(1		()		()		<i>c</i> 1	<i>c</i> 1
Urban, no parking	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh
Urban, with parking	na	na	na	na	na	na	na	na	na	na	na	na
Rural (Note 4)	4 sh	6 sh	6 sh	4 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh
GROUP B/C BICYCLIST:	Т	ruck, Bu	ıs, RV		Truck, Bus, RV				Truck, Bus, RV			
<30 mph AMVOS:												
Urban, no parking (Notes 1 & 5)	15 wc	15wc	15 wc	15 wc	15 wc	15 wc	15 wc	15 wc	5 bl	5 bl	5 bl	5 bl
Urban, with parking (Notes 2 & 5)		14wc	14 wc	14 wc	14 wc	14 wc	14 wc	14 wc	5 bl	5 bl	5 bl	5 bl
Rural (Note 4)	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh	4 sh
30-40 mph AMVOS:												
Urban, no parking (Note 5)	5 bl	5 bl	5 bl	5bl	5 bl	6 bl	6 bl	5 bl	5 bl	6 bl	6 bl	5 bl
Urban, with parking (Note 5)	5 bl	5 bl	5 bl	5bl	5 bl	6 bl	6 bl	5 bl	6 bl	6 bl	6 bl	6 bl
Rural (Note 4)	4 sh	4 sh	4 sh	4 sh	4 sh	6 sh	6 sh	4 sh	6 sh	6 sh	6 sh	6 sh
41-50 mph AMVOS:												
Urban, no parking (Note 5)	5 bl	5 bl	5 bl	5 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl
Urban, with parking (Note 5)	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl
Rural (Note 4)	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh	6 sh
>50 mph AMVOS:												
Urban, no parking (Note 5)	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl	6 bl
Urban, with parking	na	na	na	na	na	na	na	na	na	na	na	na
Rural (Note 4)	6 sh	6 sh	6 sh	6 sh	8 sh	8 sh	8 sh	8 sh	8 sh	8 sh	8 sh	8 sh

LEGEND:

sl = shared lane (12 to 13 foot)

wc = wide curb lane (14 to 16 foot)

sh = shoulder (4 to 8 foot)

bl = bike lane (5 to 6 foot)

NOTES:

- 1. The wc or sl number represents the "usable width" of the outer travel lane, measured from the left stripe of the travel lane to the face of the curb.
- 2. The wc number represents the "usable width" of the outer travel lane, measured from the left edge of the parking space (8 to 10 feet minimum from the face of the curb) to the left stripe of the travel lane.
- 3. The wc or sl number represents the "usable width" of the outer travel lane, measured from the left stripe of the travel lane to the edge of the pavement if a smooth, firm and level shoulder is adjacent. If a soft shoulder exists or there are rough or dropped seams at the edge of the pavement, then the width should be increased by a minimum of 1 foot.
- 4. For a sh, a minimum 2-foot separation is desirable between the edge of the pavement and the edge of the roadside ditch, if any.
- 5. The bl number indicates the recommended standard width measured from the bike lane stripe to the face of the curb. The minimum allowable width for a bl is 4 feet. If a curb is not provided, a minimum 2-foot separation is desirable between the edge of the pavement and the edge of the roadside ditch, if any.
- 6. It is uncommon for roadways in Montgomery County to be designed and constructed with gutter pans. However, if a gutter, pan exists or is provided as part of a retrofitting project, the standards cited in Tables 1 and 4 from FHWA's publication entitled "Selecting Roadway Design Treatments to Accommodate Bicycles, 1994" should be used.

experience the natural environment. The existing Perkiomen Trail lies less than 1/2 mile from the northern end of New Hanover. Future Montgomery County trails planned include the completion of the Schuylkill River Trail; and the construction of the Sunrise, Cross County, and Manatawny Trails.

Facilities

Bicycling can be made a more viable commuting option if employers, schools, etc. provide bicycle parking racks, showers, and clothes-changing facilities for riders. Bike racks could be provided at major transit stops or hubs in the Region to make a bike to transit transfer more feasible. For example, the Community College bus stop turn-around and bus stops on High Street in Pottstown would be useful locations to place bike racks. Other useful locations for bike racks are public buildings, such as municipal buildings and libraries. Bicycle parking racks are most useful where they are easily accessible, yet sufficiently protected from theft and damage.

The provision of showers and changing facilities would make it more likely (based on surveys) that employees would bike to work. These facilities are especially helpful to bicyclists during periods of inclement weather, and make year-round commuting more feasible.

Funding Opportunities

Funding for biking facilities and accommodations are typically included in regular funding programs and schedules for roads. Federal money is available for bike facilities at the same financial match ratio as other roadwork. Although special funding will likely not be required to retrofit roads for bicyclists, transportation funds can be approved exclusively for bicycle facilities.

The following are major programs related to bicyclist project funding:

 Transportation Improvement Program (TIP), prioritized listing of projects for southeastern Pennsylvania adopted by DVRPC.

- Statewide Transportation Improvement Program (STIP), statewide list of projects; incorporates projects proposed by DVRPC in the TIP.
- Twelve-Year Transportation Program (TYP), adopted by the State Transportation Commission
- CMAQ Funding, Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)
- Green Infrastructure, Montgomery County Open Space Program

A bicycle project must be included on the LRP to qualify for the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP). This is prepared and adopted by DVRPC. The Southeastern Pennsylvania Bicycle and Pedestrian Mobility Plan is the official LRP for the southeastern Pennsylvania Region.

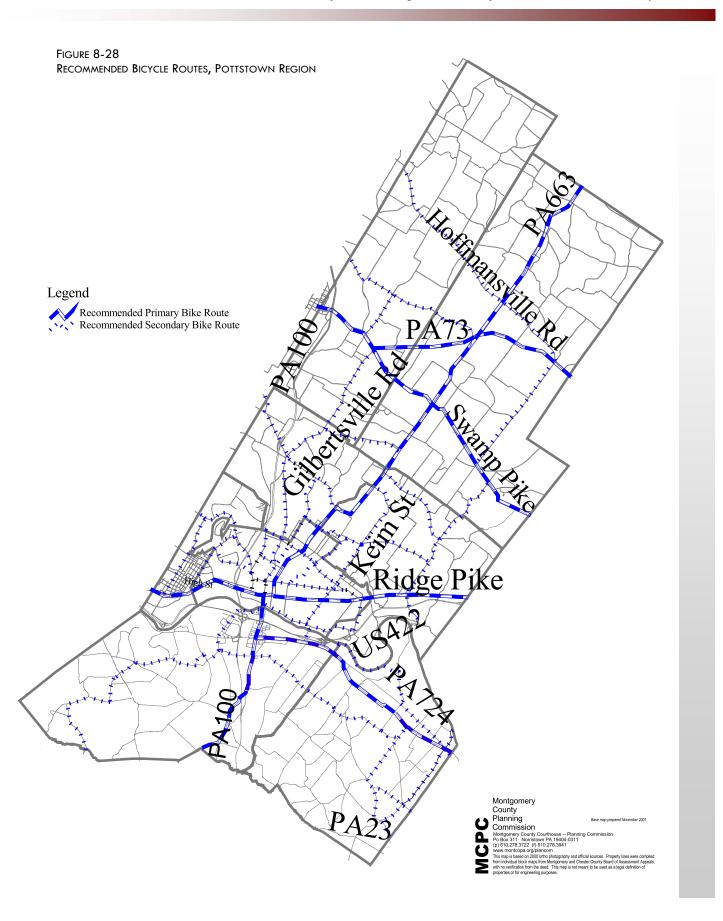
Impact fees may not be used to fund bike lanes, according to state law.

Conclusion

Biking serves as a form of recreation and as an alternative means of transportation to the automobile. However, very few people currently bike to work. Recommendations in this section are intended to improve bicycle conditions in the Region and promote ridership.

Different types of bicyclists need to be accommodated in different ways, with less advanced and child bikers requiring additional safeguards. The construction of a new road or improvement of an existing road is an excellent time to provide accommodations for bicyclists. This usually includes widening or re-striping a road, or installing pavement markings or signage. Accommodations can be made for the type of bikers the road is intended to serve (advanced, basic, or child).

Smaller projects intended to improve roads and paths for bicyclists' safety, mobility, and convenience might be undertaken without waiting for road construction or a major highway improvement project. These upgrades



include improvements such as upgrading drainage grates, filling potholes, installing signage, painting road markings, and cleaning debris from the bike travel lanes.

Generally arterial roads should be designed to accommodate primary bike routes and new collector roads should be designed to accommodate secondary bike routes. Bikes paths on roads should be interconnected with offroad bike trails and greenways to enhance the overall bicycling network.

The provision of facilities such as bike racks, showers, and changing facilities make commuting to work or school a more viable option.

Funding for bicycling projects are typically included in regular funding programs and schedules for roads. A bicycle project must be included on the Long-range Transportation Plan (LRP) to qualify for the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP). The Twelve-Year Transportation Program (TYP) adopted by the State Transportation Commission, CMAQ funds provided by the FHWA and FTA, and the Green Infrastructure component of the Montgomery County Open Space Program are also important funding sources.

Freight Transport

Freight transportation, including trucking, rail, and air transport, plays an important role in the national economy and can play an important role in a region's economic development. Trucking companies and freight railroads employ workers directly; they also indirectly affect employment when firms are attracted to an area where it is easy and relatively inexpensive to ship their products. The goal is to plan for the efficient movement of goods via highway and railroads while mitigating the environmental impact of freight shipping.

Existing Conditions

The freight transportation system in the Pottstown Metropolitan Region includes major highways, railroads, and airports, but no ports or intermodal transfer facilities (intermodal transfer facilities are locations where freight is transferred between trucks and railroads). However, the freight transportation system in the Region provides easy access to ports relatively nearby such as those along the Delaware River, and there are eight intermodal transfer facilities in the greater Philadelphia region.

The Region benefits from its proximity to various interstates. They include I-76, I-276, I-476, and U.S.202. Major airport hubs are also nearby including the Philadelphia International airport, the Lehigh Valley International airport, and the Reading Regional airport.

Trucking

Trucks are the predominant method of shipping in the Region. According to the U.S. Census Bureau, trucking accounts for 78.2% of all freight originating in Pennsylvania, and 68.4% of freight originating in the Philadelphia Metro Area .

In recent years an increasing amount of shipping has resulted to fill orders placed by internet, catalog, or mail order. Some businesses have turned to "just-in-time" delivery, or an increased reliance on shipping to replenish merchandise, rather than storing extra merchandise on-site. The result has been an increased demand for freight shipping and an added burden on the highway system.

The most important roads for shipping in the Region are those that are part of the National Highway System (NHS). These roads connect the most important commercial centers and get high priority for federal funding. On the Pottstown Metropolitan Region Future Land Use map, Regional Commerce centers cluster around these important roadways. For example, on the map there is a Regional Commerce center along PA 100 in Douglass and Upper Pottsgrove, and along

U.S.422 in Lower Pottsgrove. The following roads are designated part of the NHS in the Region: U.S. 422, PA 100, PA 73, and the section of PA 663 north of PA 73.

Some parts of the regional highway system create problems for trucks. For example, the bend in U.S.422 at Stowe, West Pottsgrove is difficult for trucks to negotiate at full speed. The change in character of Route 100 from a limited-access highway to an arterial road with intersections slows traffic and may be a safety hazard for truckers unfamiliar with the area. In Douglass, increasing traffic volume on Philadelphia Avenue has led to traffic congestion which slows trucks. Furthermore, this heavily traveled route brings many trucks which are not compatible with a village center for reasons including safety and noise. For this reason a highway project that would divert some of the through traffic away from the village center has been proposed.

Another important group of roads for freight shipping are those where PENNDOT permits wide and twin-trailers. These include all the roads in the Region that are part of the NHS, in addition to the section of PA 663 south of PA 73.

Railroads

Railroads have historically been an important shipping method in the Pottstown Metropolitan Region. Railroads are classified as "Class I", "Regional", or "Short Line". Class I are major railroads with multi-state operations. In the Pottstown Metropolitan Region, Norfolk Southern owns the Harrisburg Line, a Class I railroad along the Schuylkill River. Canadian Pacific (CP Rail) has operating rights on the Harrisburg Line. That rail line travels through Lower Pottsgrove, Pottstown, and West Pottsgrove. There is a Short Line railroad from Pottstown to Boyertown that travels through West Pottsgrove; it intersects with the Harrisburg Line at Colebrookdale Junction in Pottstown. Norfolk Southern also operates a rail yard (Stowe Yard) in Pottstown.

A practice that has become common in the railroad freight industry is "double-stacking", or placing intermodal containers on top of each other.

Railroads that accommodate such stacked cars need to have relatively high bridges and tunnel clearances and strong bridge supports. The Harrisburg Line is a double-stack route and can accommodate such stacked train cars with no difficulty.

Freight Plan

Trucks

Maintaining and increasing the efficiency of the Region's highways will help increase the efficiency of the truck freight system. Transportation projects designed to improve the efficiency of the National Highway System (NHS) roads of U.S. 422, PA 100, PA 663 and PA 73 are particularly important for truck freight in the Region.

Regional committed projects involving National Highway System roads include a group of highway reconstructions, interchange improvements, and ramp modifications along U.S. 422. One of the most helpful of these improvements for trucks is straightening of the sharp bend near the Berks County border. The ramp modifications would make merging and exiting U.S. 422 safer for all vehicles, including trucks. The Keim Street interchange is also scheduled to be reconstructed.

A project that does not yet have funds committed to it but is rated "first-priority" is the highway improvement scheduled for PA 100 at Shoemaker Road. This would create double left-turn lanes from northbound PA 100 into the Tri-County Business Campus.

Projects affecting truck traffic for which funding has not yet been committed but which are priorities include:

- A study to consider the upgrading of PA 100 from Boyertown to PA 724.
- The addition of a new ramp from PA 100 to PA 724.
- Improvements at the intersections of PA 100 with King and High Streets that will facilitate access to westbound High Street from northbound PA 100 (in Pottstown).
- Extend College Drive to King Street.

- Expand the capacity of the Sanatoga interchange on U.S. 422.
- The Keystone Boulevard project in West Pottsgrove and Pottstown would improve access to the Keystone Opportunity Zone in Pottstown and could lead to increased economic development.
- Armand Hammer intersection improvements which could include the conversion of the intersection to a diamond interchange.
- Converting the Stowe interchange of PA 100 to a diamond interchange. If the short-line rail service is ever discontinued then this improvement could be possible.

Another goal of this Plan is to reduce the environmental impact of trucks. These impacts include trucks moving through residential neighborhoods (and resulting safety, noise, and air quality issues). The following are potential techniques to achieve these goals:

- New technological improvements and tools, such as accident and incident alerting systems, Intelligent
 Transportation Systems (ITS), traffic management systems, and geographic information systems can be utilized. For example, if a truck overturns on U.S.
 422, ITS systems could be used to recommend detour routes for motorists.
- The highway infrastructure in the Region should be maintained and upgraded as needed to accommodate the increasing size of trucks.
- Truck facilities should be located as close to highway interchanges as possible to avoid the need for trucks to travel on smaller roads not designed for heavy truck traffic and avoid residential neighborhoods.
- Loading docks for trucks should have set-backs and buffering so as to reduce the visual, noise, and air quality impact on nearby residential neighborhoods. Loading docks should also have adequate space for trucks to idle or turnaround without blocking local
- In built-up areas (e.g., boroughs, towns, villages),
 trucks should utilize alley-accessed rear-loading docks

- or specially-designated loading zones on the street.
- Intersection design of roads built to accommodate trucks should have an adequate turning radius for trucks. This should include setting the stop bar for cars back far enough for trucks to turn.
- Municipalities may designate roads in residential areas that prohibit trucks, except for local deliveries.
- In areas where trucks contribute to noise and air pollution, sound barriers, berms, setbacks for buildings and mandatory noise-reducing construction standards for buildings may be considered.

Railroad

The proposed Schuylkill Valley Metro passenger train service supported by this plan would create the need for careful planning to prevent conflicts between passenger and freight trains that use the same tracks or group of tracks. Through careful planning, safety and congestion issues relating to the railroads could be There are several at-grade railroad improved. crossings of roads in Pottstown that could be separated so as to avoid conflicts between motor vehicles and trains, thereby improving safety and the efficiency of both highway and railroad systems. Use of freight railroad rights-of-way may be utilized for the Schuylkill Valley Metro where the timing of passenger and freight trains is carefully planned; otherwise new tracks may be built to serve the Metro along existing freight tracks, or freight trains might utilize existing parallel underutilized tracks and allow the Schuylkill Valley Metro to use the existing freight tracks.

Sound barriers may be used to reduce noise and provide a safety barrier along train tracks in residential areas. Berms, vegetative buffers, development setbacks, and noise reduction technology built into buildings will help reduce noise caused by trains in developed areas.

The short-line railroad from Pottstown to Boyertown (the Enola Branch) along the Manatawney Creek currently serves a business in and is owned by Berks County. In the event that this railroad ceases to

FIGURE 8-29
REGIONAL FREIGHT FACILITIES

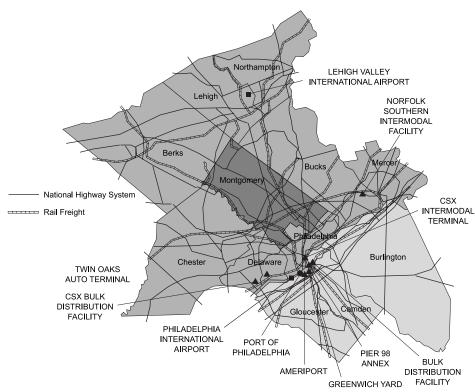
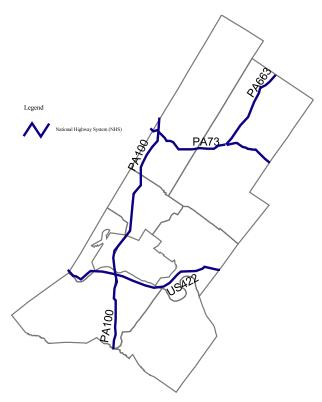


FIGURE 8-30 NATIONAL HIGHWAY SYSTEM (NHS)



operate, its conversion to a rails-to-trails greenway should be considered. In addition, portions of the

vacated right-of-way could be utilized for roadway improvements within Pottstown that would provide better access to PA 100. Finally, there are other portions of the short-line line that could be used to link the Community College and Riverfront Park to John Potts Park.

Conclusion

The Region is fortunate to have a well developed freight system. The Region is well positioned to take full advantage of its close proximity to Philadelphia with its extensive road, rail, airport and port facilities.

Trucking is vital to the economic wellbeing of the Region. Crucial to this industry are the highways of the Region; U.S. 422, PA 100, PA 73, and PA 663

Projects that will improve the efficiency of trucking include the Keystone Boulevard Project and proposed highway projects involving roads that comprise the National Highway System.

Safety, noise and air quality impacts of trucks should be mitigated, where and when possible, by noise reduction measures, aesthetic buffers, and land use planning which reduces the contact between facilities generating truck traffic and residential neighborhoods. This is especially important in the Regional Commerce areas along U.S. 422 and Route 100.

Planning for railroad freight in the Region should focus on safely using railroad tracks along the Schuylkill River for both freight shipping and the future Schuylkill Valley Metro. Opportunities to convert some or all of these rights-of-ways to trails should also be considered if service is ever halted and the line abandoned.

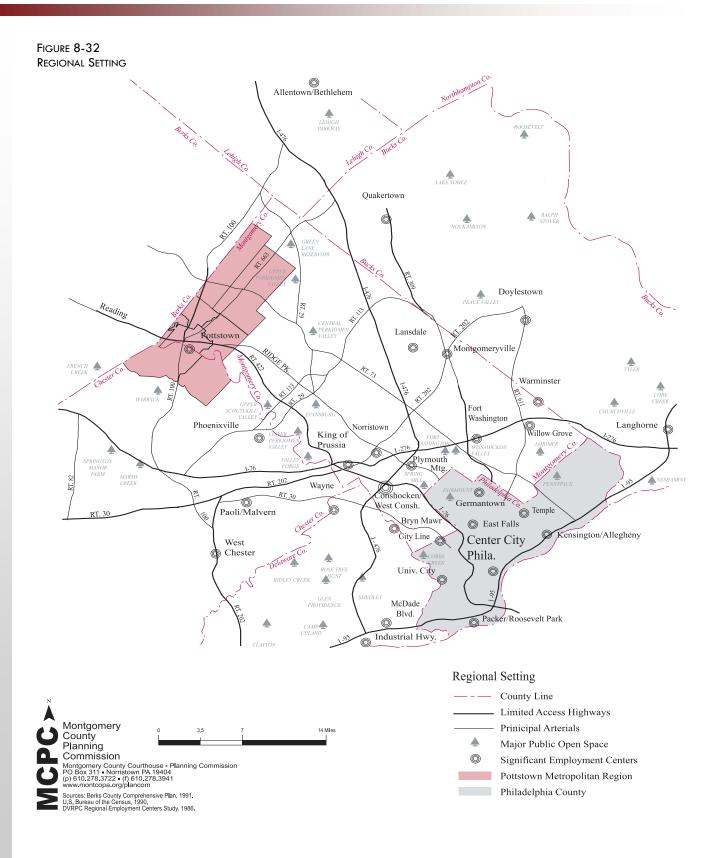
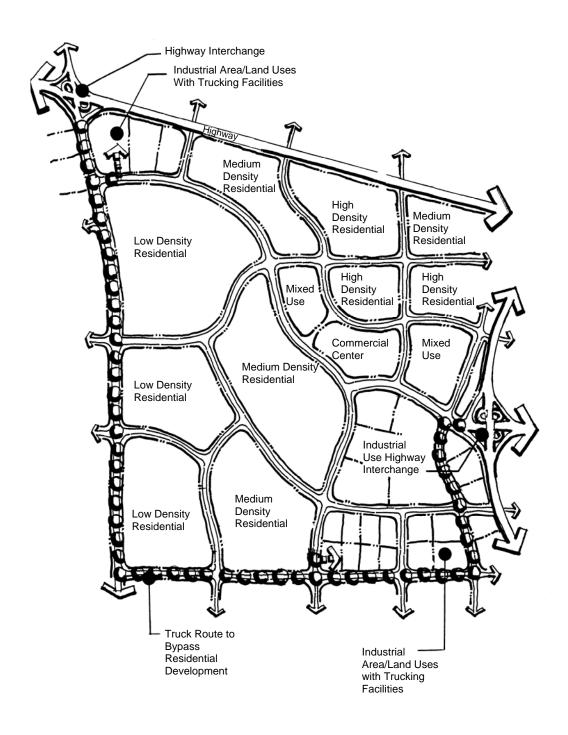
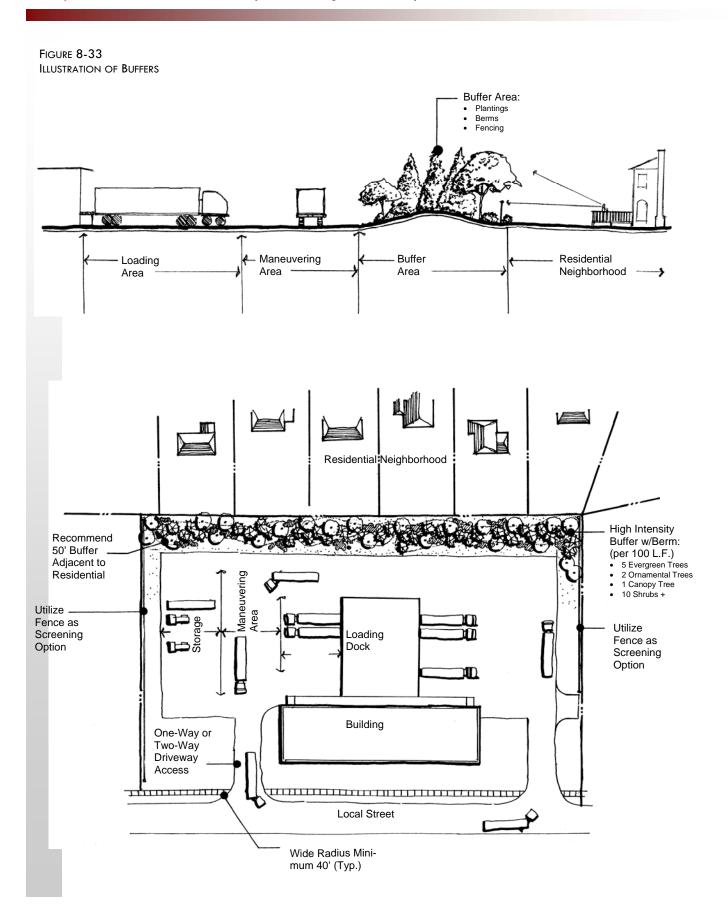


FIGURE 8-32 ILLUSTRATION SHOWING INDUSTRIAL LAND USES NEAR INTERCHANGES





DESIGNING ROADS TO ACCOMMODATE TRUCKS **Designated Loading** Provide Wide Turning Radius for Ease of Truck Maneuvering Tight Radius-Pedestrian Friendly, Provide: Safe Distance to Stop Bar for Truck to Maneuver Corner 2) Set back On-Street Parking to Avoid Truck/

Aviation Plan

FIGURE 8-34

The Pottstown Region is adequately served by various types of airports. Passenger services, shipping, and general aviation services are provided by the three major commercial airports located within 30 miles in addition to a reliever airport located in nearby Limerick, and a general aviation airport in Pottstown Borough.

The Pottstown Region should look to the long-term viability of the Pottstown Municipal Airport because of its critical importance to the local economy.

Existing Conditions

Pottstown Municipal Airport

This is the only licensed, public-use airport located in the Pottstown Metropolitan Region. Pottstown Municipal Airport was built in 1952, is open to the public and is government-owned. A general aviation airport, it provides limited corporate and charter service, and emphasizes personal service to recreational pilots. Its paved runway is 2,704 feet long and 75 feet wide. It employs 9 workers at a payroll of \$198,400; the total economic impact of the airport has been estimated at \$881,000.

Between 1995 and 2000 Pottstown Municipal Airport experienced a decline in use. Operations decreased by 72.1 percent; this can be partially explained by an interruption in air services when the airport was without a fixed-base operator. According to AirNav Systems LLC (2004), an aviation information software developer, Pottstown Municipal Airport now averages 59 flights per day.

Pottstown-Limerick Airport

Pottstown-Limerick Airport is a private facility that was built in 1929. Its runway is 3,371 feet long; the airport employs 73 workers, has a total payroll of \$1.2 million, and has an estimated total economic impact of \$4.2 million. Categorized as a "reliever" airport, Pottstown-Limerick is significant regionally because it helps to reduce corporate and general aviation air traffic at Philadelphia International Airport. More importantly, it's easily accessible, and therefore more often used, by the larger national and international employers in the Region.

Other Airports

There are three major commercial airports in close proximity to the Pottstown Metropolitan Region: Reading Regional, Philadelphia International, and Lehigh Valley International. These airports serve high volumes of passenger and freight.

Aviation Plan

Regional Policies

The Pottstown Metropolitan Region may wish to consider the following aviation policies:

• Though municipalities do not directly regulate airports, they can regulate land use and the height of obstructions around airports via zoning. This is especially important for the municipalities lying in local airport hazard zones in the Region (including Lower Pottsgrove, New Hanover, Pottstown, Upper Pottsgrove, and West Pottsgrove). Pottstown Municipal Airport's hazard area includes areas in

- Pottstown, Upper Pottsgrove and West Pottsgrove; Pottstown-Limerick's hazard area extends into Lower Pottsgrove and New Hanover.
- Municipalities affected by airport hazard areas may want to pass ordinances that control land uses and heights of obstructions as recommended by Act 164 if they have not already done so.
- Consider controlling land uses that might interfere with aircraft, including land uses that attract birds, cause light to be directed upward, produce smoke or glare, or generate electronic transmissions.
- Consider controlling Land uses that attract large numbers of people and noise sensitive uses should be restricted from airport hazard areas.
- Consider making improvements to the Pottstown Municipal Airport by increasing its level of operations in order to enhance the economic benefit it brings to the Region.

DVRPC Recommendations

In 2001 the Delaware Valley Regional Planning Commission (DVRPC) recommended the following improvements to airports in its publication "2025 Regional Airport System Plan for the Delaware Valley Region".

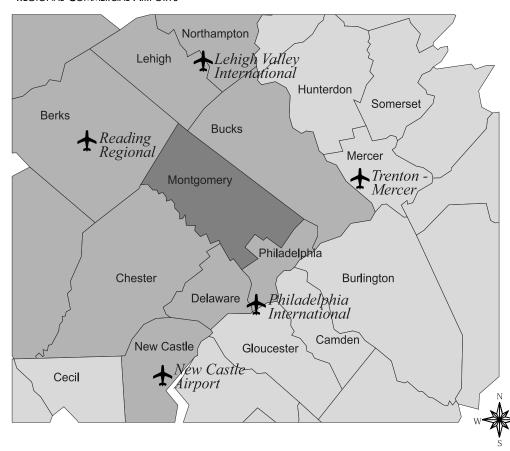
- Pottstown-Limerick: A runway extension to 4,400 feet and provision of 30 hangar spaces.
- Pottstown Municipal: Construction of 20 T-hangars, an apron extension, and corporate hangars.

Act 164 Recommendations

In 1984 the Pennsylvania legislature passed Act 164, which includes the Airport Zoning Act. In addition to airport zoning regulations that are required to be adopted by municipalities, the Act includes other recommendations. Among these are:

 Municipalities near airports that have not already done so should adopt Airport Land Use
 Compatibility Guidelines, issued in 1996 by

FIGURE 8-35
REGIONAL COMMERCIAL AIRPORTS



Impacts on Existing Development Soundproofing homes,

Noise

Reducing

Soundproofing constructing sound barriers, controlling the timing of aircraft operations, a n d controlling specific aircraft engine operations can reduce noise in surrounding areas. These a r e measures municipalities may wish to consider.

Improved Navigation Systems

The Region may wish to investigate the need to upgrade the navigation system at Pottstown-Limerick Airport.

Improvment via an Instrument Landing System (ILS) would further enhance the value of the airport, since it would allow for all-weather use. Currently, the Pottstown VOR (the navigation system presently in use at Pottstown-Limerick) permits flying into or out of the airport only in good weather conditions.

PENNDOT's Bureau of Aviation.

- Municipalities with airport hazard areas should ensure, via zoning, that unmarked obstructions do not exceed the heights established by Federal Aviation Regulations (FAR) Part 77.
- Municipalities should adopt a policy requiring developers of tall structures to provide evidence that the proposed structure complies with FAA regulations.
- Municipalities considering the approval of a communications tower should request the developer provide evidence the antenna on the communications tower meets FCC standards and will not interfere with aviation communications and navigation equipment.

Summary

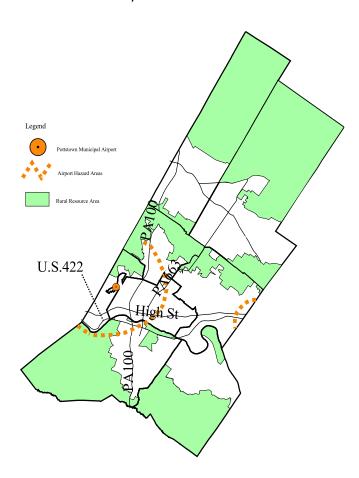
The Pottstown Metropolitan Region has one general aviation airport—Pottstown Municipal. This airport averages 59 flights per day, provides limited corporate service and charter service, and is utilized for recreational and personal aviation. The Region lies in the hazard area of the Pottstown-Limerick Airport, although the airport itself lies just outside the Region. Pottstown-Limerick is a "reliever" airport. There are three major commercial airports located within 30 miles

of the Pottstown Region.

The Pottstown Metropolitan Regional Comprehensive Plan supports airport improvements at Pottstown Municipal Airport due to the importance it plays in the overall vitality of the Region's economy.

The Delaware Valley Regional Planning Commission (DVRPC) recommended an apron extension and construction of hangars at Pottstown Municipal Airport, and a runway extension and construction of hangars at Pottstown-Limerick.

FIGURE 8-36
AIRPORT HAZARD AREA, POTTSTOWN MUNICIPAL AIRPORT



Chapter Open Space



Transit Park, Pottstown



Schuylkill River, East Coventry



Lutz Farm, Douglass

Preservation of open space is an essential component of the Pottstown Metropolitan Regional Comprehensive Plan. The communities of the Pottstown Region feel strongly about natural resource protection, recreation facilities, preservation of open space, and the Region's rural resources. This Plan establishes growth and preservation areas that provide a framework for local municipalities to create more detailed park and open space plans. These plans should balance each municipality's growth and recreation need with protecting the Region's natural systems. The Pottstown Region has the opportunity to create a rich open space network from downtown Pottstown to outlying rural areas. This chapter identifies and describes the open space, parkland, and other preserved lands of the Pottstown Region, how they relate to one another, and recommendations for increasing the acreage, function, and value of open space. As open space is protected, these parcels should be integrated into a green infrastructure system that provides a variety of opportunities for every segment of the community.

Goals & Objectives

The general goals of the regional planning effort include several that pertain directly to open space. In addition to these, four focused goals and their specific objectives are listed below. The following sections will describe general policies for attaining these goals.

General Goals

- Protect the unique historical, cultural, and natural resources of the Region.
- Preserve open space and agriculture in the Region.
- Maintain and improve recreation options.

Parks and Recreation Goal

Recreation facilities add to the quality of life of a community. The Regional Plan will provide recreational opportunities to meet the needs of present and future residents.



Borough Hall Park

Objectives:

- Coordinate park and recreational opportunities among the Region's eight municipalities.
- Implement the park and recreation goals of municipal open space plans.
- Maintain and enhance existing park and recreation

facilities.

- Encourage parks and open space be provided with new development.
- Create active and passive recreation opportunities.
- Emphasize park and recreation opportunities that preserve natural linkages, environmental resources and viewsheds.
- Expand recreational opportunities along the Schuylkill River.
- Develop a regional trail network to connect communities and recreation areas.
- Work with private organizations to provide recreational options.

Open Space Goal

Open space provides many natural, aesthetic and economic benefits and the Pottstown Metropolitan Regional Comprehensive Plan intends to preserve open space for present and future residents.

Objectives:

- Implement the open space goals of municipal open space plans.
- Designate growth and rural resource areas within the Region to ensure preservation of open space areas.
- Promote design options for new development that preserve open space.
- Encourage coordination and connection of open space areas between municipalities.
- Actively pursue strategies and resources to preserve open space in the Region.
- Emphasize open space opportunities that preserve natural linkages, environmental resources and viewsheds, especially along the Schuylkill River.

Natural Resource Protection Goal

Natural resources are the foundation on which communities are built. The Plan will preserve and protect the Region's natural resources to sustain present and future residents.

Objectives:

- Protect existing groundwater resources and encourage groundwater recharge in the designs of new development.
- Preserve sensitive natural resources areas, including woodlands, stream systems, wetlands, steep slopes, and wildlife, especially along the Schuylkill River.
- Promote and protect street trees and other vegetation in developed areas.
- Protect all municipalities within the same watershed from impacts of improper development.
- Implement the natural resource preservation goals of municipal open space plans.

Agriculture Goal

Farming has a long history in the Pottstown Metropolitan Region and the Plan will promote the preservation of agricultural land and encourage maintaining agriculture as a viable industry in the Region.

Objectives:

- Encourage farmland preservation through participation in government and private preservation programs at the local, state, and national level.
- Designate growth areas and rural resource areas within the Region to ensure preservation of agriculture.
- Emphasize that new development in designated agricultural areas be limited and maximize agricultural preservation.

Public Benefits That May be Realized from Park & Recreational Opportunities

Economic Development:

- Attracting Tourists
- Enhancing Real Estate Values
- Attracting Business
- Attracting Retirees

Alleviating Social Problems:

- Preventing Youth Crime
- Healthy Lifestyles
- Environmental Stress
- · Unemployment and Underemployment

Environmental Stewardship:

- Historical Preservation
- The Natural Environment

Source: PAS 502. Parks and Economic Development. John L. Crompton. November 2001.



Memorial Park, Pottstown

Existing Open Space

A key component of this open space chapter is a review of existing protected land. An inventory of existing conditions, along with an assessment of future needs, is

necessary for discussion of the plan's open space recommendations. Existing protected land refers to land preserved for active or passive recreation use and/or for environmental conservation purposes. In addition to municipally-owned areas, preserved land can include sites protected by conservation groups, through residential or non-residential development, as farmland, or in private ownership.

Overall, the open space network in the Pottstown Region includes a large variety of uses, landscapes, and partners. It can be defined in many ways. To begin the discussion, open space is separated into two categories of protection permanently and temporarily protected land.



Schuylkill River

FIGURE 9-1
EXISTING OPEN SPACE ACREAGE IN POTTSTOWN METROPOLITAN REGION

	Douglass	East Coventry	Lower Pottsgrove	New Hanover	North Coventry	Pottstown	Upper Pottsgrove	West Pottsgrove	Regional Total
Total Acres	7,796	6,664	4,026	11,010	8,096	2,355	2,787	1,097	52,746
Developed	6,897	5,757	3,568	9,456	5,905	2,124	2,339	1,058	46,019
Undeveloped	899	907	458	1,554	2,191	231	448	39	6,727
Existing Open Space	2,018	525	266	1,603	935	163	74	49	5,633
Preserved Farms	1,831	241	0	1,187	412	0	0	0	3,671
Public Open Space	69	284	126	164	358	93	45	1	1,140
Private Open Space *	118	0	140	252	165	70	29	48	822
Preferentially Assessed	2,357	3,146	677	3,621	2,069	61	735	121	12,787
Act 319 Land **	2,253	2,596	598	3,266	1,867	0	735	121	11,436
Act 515 Land	104	550	79	355	202	61	0	0	1,351

 $[\]ensuremath{^{*}}$ Does not include private lands with conservation easements

^{**} Does not include permanently preserved farms

Permanently protected lands are created using a variety of methods, but the results ensure the lasting protection of a portion of the community's character and values. Temporarily protected land can make an important contribution to the overall recreation base and aesthetic of a community while requiring minimal municipal involvement in maintenance. However, temporarily protected land can easily be lost. In evaluating open space needs, this distinction is important. To better understand how open space functions within the Pottstown Metropolitan Region, Figure 9-1 describes some of the attributes and statistics of existing open space Currently, 9% of the Region is in the Region. permanently preserved as either public open space or preserved farmland. Another 24% of the Region's area is open space held in private hands as preferentially assessed parcels.

By percentage of acreage, the Pottstown Region surpasses both Montgomery and Chester Counties in the amount of land that is permanently preserved. However, a disproportionate amount of this acreage lies as preserved agricultural land as shown in Figures 9-2 and 9-3. Although preserved farmland is protected using public funds, public access is usually not allowed. Therefore, even though preserved farms have great value to the Region, they do little to serve any recreational needs. As a



North Coventry Park

function of acreage per population, the Pottstown Region has significantly less public, non-agricultural open space than its two counties as shown in Figure 9-4. The magnitude of this discrepancy is due in part to the presence of significant areas of agriculture still active and the fact that the geographical scale of the Region is not large enough to entirely include the largest of park sites (i.e. Valley Forge, Evansburg, French Creek).



Schuylkill River under Route 100

Open Space Inventory Discussion

The Pottstown Region covers an area of over 82 square miles. Of this, nearly 29 square miles are currently open space in some form. Although the Region has permanently protected a large amount of open space, it lags behind both Montgomery and Chester Counties for land that is publicly accessible. Its open space system does not provide residents of the Region with the same level of service found in other parts of southeast Pennsylvania.

Of all the open space, approximately 70% is protected only temporarily or not at all. Large open spaces residents enjoy for their aesthetic qualities will be increasingly threatened as development pressure continues. Not only will development create an aesthetic change in the community, but a loss of opportunity for recreation and natural resource protection.

FIGURE 9-2 EXISTING PUBLICLY-OWNED OPEN SPACE

	Acres	Square Miles	Percent of Total	Acreage/ 1000 Population
Pottstown Regional Area	52,746	82.4	100.0%	
Permanent Open Space	4,811	7.5	9.1%	69
Permanent Agricultural Open Space	3,671	5.7	7.0%	
Permanent Non-Agricultural Open Space	1,140	1.8	2.2%	16
Montgomery County	308,992	481.2	100.0%	
Permanent Open Space	27,715	43.3	9.0%	37
Permanent Agricultural Open Space	6,211	9.7	2.0%	
Permanent Non-Agricultural Open Space	21,504	33.6	7.0%	30
Chester County	483,776	755.9	100.0%	
Permanent Open Space	37,124	58.0	7.6%	88
Permanent Agricultural Open Space	18,062	28.2	3.7%	
Permanent Non-Agricultural Open Space	19,062	29.8	3.9%	45

FIGURE 9-3
PERMANENTLY PRESERVED LANDS

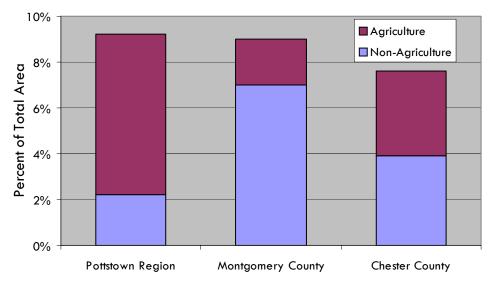
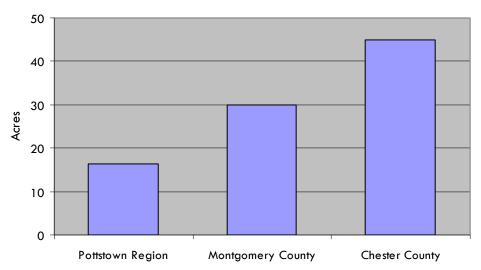


Figure 9-5 gives a geographical display of public and private open space and permanently preserved farmland. Not shown here are various parcels in private ownership with conservation easements held by private lands trusts or those only protected by preferential tax assessment methods.

Public Open Space

The diversity of the Region is apparent when considering the publicly-owned open space network. From French Creek State Park with dense woodlands to acres of playing fields at Pottstown's Memorial Park to well-

FIGURE 9-4
PUBLICLY-OWNED NON-AGRICULTURE ACREAGE PER 1000 POPULATION



placed pocket parks, the Region's open space has amenities to serve everyone. Expanded greatly in the past ten years by over 400 acres, there is a need now to integrate these new parcels as a system. However, as the regional population grows, large areas of natural resources are still in need of protection and many residents do not have access to nearby parks. Both expansion and enhancement of the open space system is suggested.

Trails & Green Infrastructure

A trail network can be created linking an open space network out of individual open space parcels in the Pottstown Metropolitan Region. This network of both regional and local trails will facilitate the open space planning process and growth of the network into the future.

The Schuylkill River is an obvious corridor that can both divide and connect the communities that make up the Pottstown Region. This area of the Region holds great potential to improve quality of life by providing community linkages, recreational opportunities, and

aesthetic appeal. The first trail segment completed in the Region leads park users for approximately one mile along the river in Pottstown Borough. Proposed trails will bring that total to over 15 miles of trails on both sides of the river to make the Region's contribution to the Schuylkill River Greenway. Just outside the Region, the completed 22-mile Perkiomen Trail connects Green Lane and Valley Forge. Other trails in the network include two county trails that will traverse the Region, adding to the larger backbone to which local and regional trails can affix.

Green infrastructure is a term used to describe not just the trail system and greenways, but also all the amenities and green spaces in more developed areas. Green infrastructure helps give identity to a place. It exists throughout the Region and adds aesthetic value and functions to manage stormwater, reduce heat islands, and protect natural resources. Some examples of existing green infrastructure in the Region include street trees that line High Street, the riparian buffer in New Hanover's Deep Creek Park, and the green areas at Transit Park.

Private Open Space

Sports clubs, golf courses, and business-owned playing fields are types of open space that are not permanently protected, but still give value to a community. Some of these lands have come to be relied upon by areas residents for recreational opportunities or for their aesthetic value. Strong consideration should be given to the means available to protect these parcels. Also included here are farms that help maintain the pastoral character of parts of the Pottstown Region. Some lands are privately-owned, but permanently protected thanks to private conservation organizations that purchase development rights from landowners.

Institutional

Schools, churches, fire companies, and other institutions offer varying degrees of access to open space for the Region's residents. These community organizations, their programs, and their facilities, add value to a community. However, as discussed before, this open space is not secure and agreements are scarce that protect the lands in perpetuity.

Agriculture

For centuries, agriculture has played an important role in the Pottstown Region. However, the decreasing profitability of the family farm and pressures from suburban sprawl have led to the decline of the industry locally. Since the industry's dramatic decline beginning in the 1940s, local, county, and state initiatives, have worked to ensure the preservation of the agriculture industry. In total, over 3,600 acres, or 7% of the Region, are permanently preserved for agriculture. The majority of this preserved land lies in Douglass Township with significant clusters in New Hanover. The steeper topography in areas directly draining to the Schuylkill River are not as conducive to large farm tracts, and therefore, less preserved agricultural land exists there. In 2004, seven new applications totaling 250 acres were submitted to Montgomery County's program, showing there is continuing interest in preserving farmland. In

North Coventry, Laurelocks Farm was recently purchased under Chester County's program.

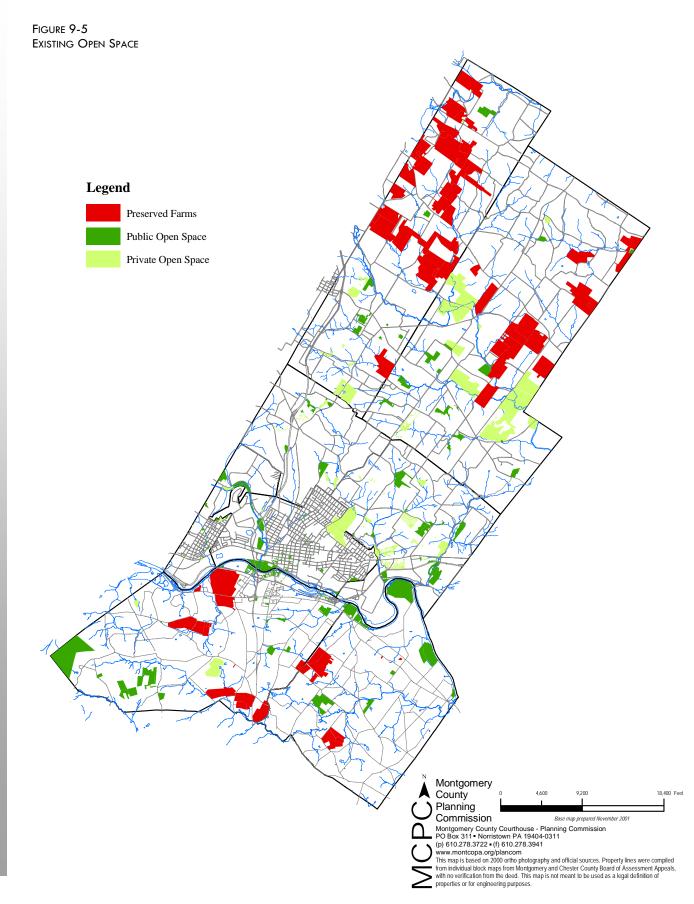
Preferentially Assessed Lands

Requiring some discussion here are those privately owned parcels given Preferential Tax Assessments. In Pennsylvania, two pieces of legislation exist (Acts 319 and 515) that help preserve agricultural land and stabilize open areas as a resource. These tools give landowners a small incentive to keep their parcel intact. The parcel must meet specific requirements to qualify for a lower taxable value. If the parcel is developed, penalties and back taxes must be paid to the state. Again, this is a small incentive to landowners, as the value of the land often outgains the cost of any penalty. Act 319 and 515 parcels not otherwise permanently protected make up nearly 13,000 acres within the Region.

Because of the amount of acreage with preferential tax assessment, these lands play a large role in making up the character of the community. Municipalities should identify large blocks of these lands to best understand if action should be taken towards permanent preservation.



Keller Woods, Douglass



Open Space Plan

With the ability of regional planning to define growth and non-growth areas as shown in Figure 9-6, the Pottstown Metropolitan Region will be better equipped to preserve open space. Municipalities working under a regional plan have a greater ability to guide growth into specific locations. The end product will be a landscape that is more economically efficient and environmentally sustainable.

As described in the Existing Open Space section, open space can be categorized as either permanent or temporary. However, there are other classifications to be considered when determining the level of service the open space network provides the community. A full open space analysis is described below to better understand the function of the Pottstown Region's open space, assess open space needs, and determine recommendations to improve the Region's system..

Future Needs Analysis

As a region, the Pottstown area will continue to grow in population as development expands into the designated future growth areas. Given these demographic trends, this needs analysis includes several open space guides that the Region can use as it assesses open space and parkland needs. This section describes future needs of open space necessary to maintain or improve the local standard of living. These are meant to be used only as a starting point for the Region and its municipalities in developing recommendations for open space.

Establishing Usage Needs

Open space can provide either active or passive recreational opportunities. As demographics change within a community, so do the needs of the population. A younger population may utilize active open space in the form of playing fields, while a population with less children may be better served with less intense open space uses such as walking trails. Active recreation facilities should be placed where significant residential density exists or is proposed.

No definitive standards exist that measure the proportion of active and passive open space a Region should support. However, based on the demographic trends of the Region, there are several generalizations that can be made. Currently, 26% of the existing non-agriculture, permanently-protected open space is used for active recreation while the remaining acreage is primarily naturalized or used for passive open space. As the populace of the Region ages and decentralizes, the demand for active recreation may diminish. Based on the survey of regional residents in 2002, a greater need was expressed for passive forms of recreation.

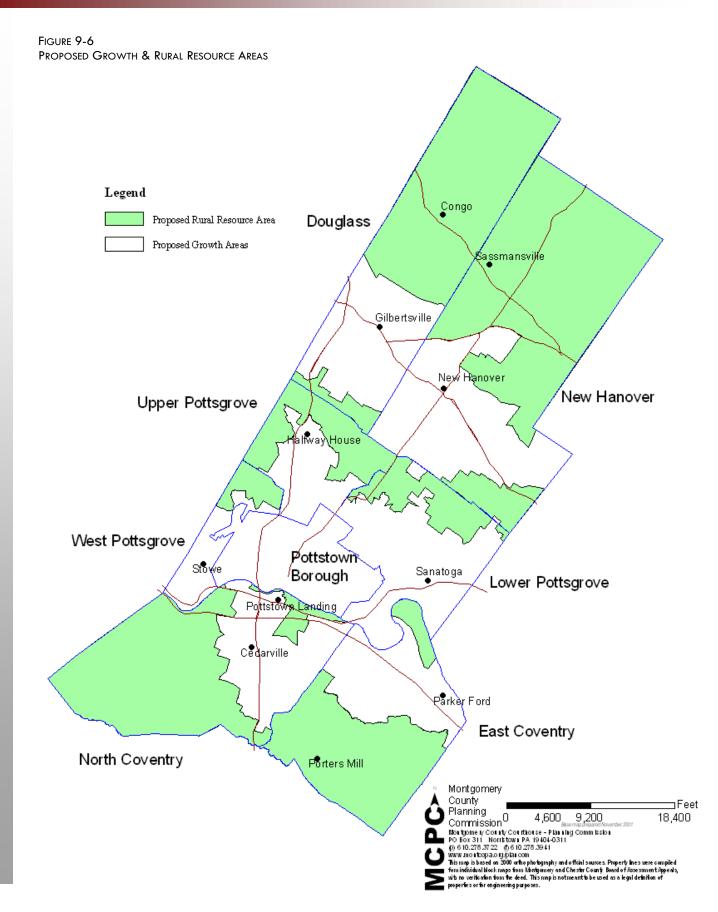
Although still important, active recreational facilities such as basketball courts and playing fields may lose popularity in some parts of the Region. However, future growth areas may see an increase in the demand for active recreational facilities. Evaluating if existing recreation facilities accommodate local need will help decide how best to focus open space acquisition and development efforts.

Establishing Setting/Locational Needs

Where population densities are high and land is highly valued, activity on open spaces may need to be intensified on less space. Parks may need to provide for playing fields for an active community, leaving little room remaining for resource protection areas. In other settings, the development of an urban plaza inserts green spaces into highly developed districts. Conversely, in less developed areas, the protection of large blocks of natural resources may be a high priority, allowing for a use of the land that requires less maintenance.

Three corners of a triangle emerge as the far extremes of potential open space settings as shown in Figure 9-7. Every parcel within an open space system will have varying proportions of each of these setting types. Some will line up near a vertex, while other open spaces will have mixed uses.

 Resource Protection—Open space in this setting would include streams, wetlands, and steep slopes. Special



flora or fauna species may exist in these protected areas. If amenities exist at all, they may include only a small parking lot and walking path. These settings may be used by schools or summer camps for habitat studies, fishermen, or nature enthusiasts.

- Recreational Facility—Various forms of fields and courts exist here to serve an active population throughout the year. This type of site requires a good deal of maintenance and should expect intense use during sports seasons.
- Community Gathering Places & Connections —
 These areas can serve as gathering areas or play areas for a community. Main Streets can benefit from the green space provided by these places. Also include here are the trail systems that link different uses and pavilions at parks.

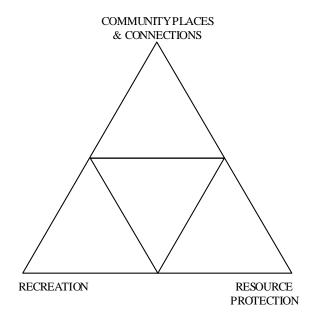
This triangle applies more to a region than an individual municipality. The range of land use at the Regional level creates a diverse open space system for a more diverse population. A well-rounded regional open space network will function to serve all the needs of the local residents.

Establishing Acreage Needs

The size of open space is another factor to consider when analyzing the Region's open space. This measure breaks open space into four size categories to give a rough estimation of each open space parcel's area of service.

- Mini-park—Classified as between 2,500 square feet and three acres in size, a mini-park serves residential developments within ¼ mile. Mini-parks serve more densely developed areas, generally providing playground opportunities that cannot be provided for on resident's individual lots. This is important especially within Pottstown Borough, but also in villages such as of Gilbertsville and Parkerford.
- Neighborhood Parks —Defined as those lands between 3 and 20 acres, this type of open space has a maximum service area of ½ mile. These parks may provide playground equipment, or tot lots, but also

FIGURE 9-7
OPEN SPACE SETTING



contain larger areas for athletic fields to allow for both informal and organized recreation.

- Community Parks This classification contains lands 20 acres or more in size that serve multiple neighborhoods as far as one mile from the park. Community parks generally contain numerous athletic fields or hard courts for a variety of sports, serving as a center of recreational activity within the community, and provide a central gathering place for special events.
- Regional Parks—Regional parks are those that serve large geographical areas. For instance, Green Lane Park can accommodate large festivals and Valley Forge Park can maintain a five-mile loop. The camping facilities at French Creek State Park are an amenity that serves the Pottstown Region and beyond.

1983 NRPA Method

A 1983 guide by the National Recreation and Park Association (NRPA), *Recreation, Park and Open Space Standards and Guidelines*, groups the four above divisions into two, neighborhood and larger, community

parks. It provided strategies for calculating the acreage needs of municipal park systems. The 1983 guidelines suggested a municipal park system include 6.25 to 10.5 acres of land per 1,000 people. These standards were used to calculate park needs for a majority of the Open Space Plans completed by the municipalities of the Pottstown Region. The results of this calculation in Figure 9-8 show the Region as a whole meets the minimum requirements as defined by this method. However, a closer look at each individual municipality shows that all acreage needs are not met across the Region as shown in Figure 9-9.

As the role of parks and open space expands in local communities, these standards have become a smaller part of the open space needs equation. Satisfactory acreage does not equate to a complete open space system. Many times municipally-owned lands contain areas preserved

to protect natural resources that may provide little recreational use to the community. Some areas may be underserved by open spaces or have amenities that are not useful to the population. Therefore, the optimal acreage amount for the Region and each municipality should include all of the various community needs discussed in this chapter and be determined based on the goals of the Region.

Open Space Accessibility

The newest publication by NRPA titled *Park, Recreation, Open Space and Greenway Guidelines* was published in 1996. The new title replacing the word "standards" from the 1983 NRPA title with "guidelines" is indicative in the shift of looking at open space, ultimately allowing the amount of park, recreation, and open space to be defined by individual communities. The 1996 publication emphasizes a systems approach to park, recreation, open

FIGURE 9-8
MINIMUM OPEN SPACE NEEDS—REGION

	20	000	20	10	2025	
Projected Population	(59,409	7	78,090	9	00,500
Acreage Range	From	То	From	То	From	То
]	Recommend	ed Acreage*		
Community Park	347	555	390	625	453	724
Neighborhood Park	87	174	98	195	113	226
TOTAL	434	729	488	820	566	950
	Existing Acreage					
TOTAL	1,140					

Sources: U.S. Census Bureau; MCPC; NRPA

^{*} Recommended Acreage - Range per 1000 persons as follows: Community Level = 5.0 - 8.0 acres; Neighborhood Level = 1.25 - 2.5 acres

FIGURE 9-9
MINIMUM OPEN SPACE NEEDS—LOCAL

	Douglass	East C	East Coventry	Lower Pottsgrov	Lower Pottsgrove	New H	New Hanover	North	North Coven- try	Potts	Pottstown	Upper Pottsgrov	Upper Pottsgrove	West Pottsgrove	est grove
2010 Projected Population	11,300	5,	5,570	13,	13,880	9,230	:30	8,2	8,240	21,	21,150	4,5	4,900	3,820	20
Acreage Range	To From	То	From	То	From	То	From	То	From	То	From	То	From	То	From
						Reco	Recommended Acreage *	ed Acre	* age						
Community Park	06 25	28	45	69	111	46	74	41	99	106	691	25	39	19	31
Neighborhood Park	14 28	7	14	17	35	12	23	10	21	26	53	9	12	5	10
TOTAL	71 119	35	59	87	146	58	76	52	87	132	222	31	51	24	40
						I	Existing Acreage	Acreage	d)						
TOTAL	69	2	284	12	126	16	164	3;	358	3,	93	7	45		1

Sources: U.S. Census Bureau; MCPC; NRPA * Recommended Acreage - Range per 1000 persons as follows: Community Level = 5.0 - 8.0 acres; Neighborhood Level = 1.25 - 2.5 acres

space, and greenway planning that focuses on local values and needs rather than strict formulas. This new systems approach looks at the level of service provided to the users of the facilities rather than the size of the facilities based upon population. This method reflects, in part, the multiple functions of municipal parkland: providing recreation opportunities (passive and active), maintaining community character, and protecting important natural features.

Establishing Green Infrastructure Needs

Green infrastructure is a set of physical attributes that provide a service to the community just as street and sewer infrastructure do. As most commonly defined, green infrastructure is a region's hub and spoke system of greenways, varied habitat areas, parks, and resource protection areas. It should act as the backyard of developed areas for recreation. It should link together communities as an area for recreation. It should also be well-planned to protect vulnerable resources. Most importantly, a community's green infrastructure needs to be accessible to everyone. A well-planned green infrastructure system will create synergy between trail networks, parks, urban plazas, natural features, residential areas, and community destinations.

The idea behind green infrastructure is often linked to a statement by Frederick Law Olmstead, Sr., the designer of New York's Central Park. "No single park, would provide people with all the beneficial influences of nature." Green infrastructure links a region together, provides recreational areas, preserves ecosystems, and increases the aesthetic appeal of communities. This network needs to be linked together to form a critical mass so that interactions between sites can be maintained, either social, agricultural, or environmental.

The systems approach recognizes the need to provide open space within a uniform proximity of all residents. While there are many factors to consider when acquiring land for open space, identifying those areas of the Region outside the basic service area of existing open space lands may help to further prioritize potential acquisitions. Figure 9-10 analyzes the service areas for

each public open space. Those areas left unshaded identify areas that are underserved because open space is greater than ½ mile away. Local access is

"No single park, would provide people with all the beneficial influences of nature."

Frederick Law Olmstead, Sr.

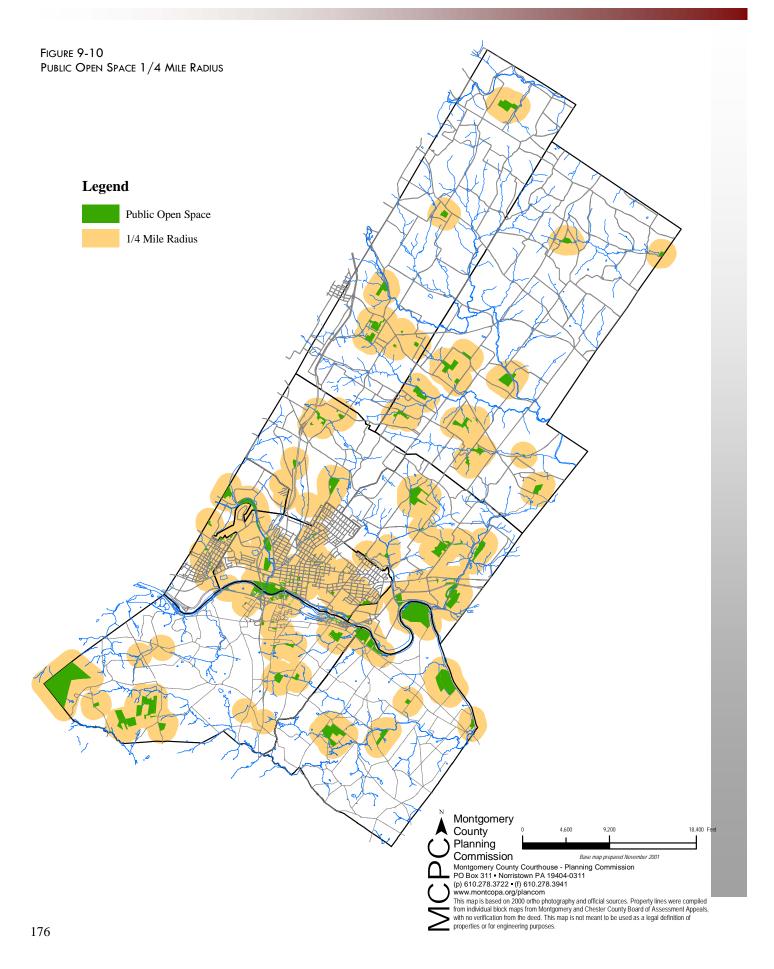
particularly important for active recreation.

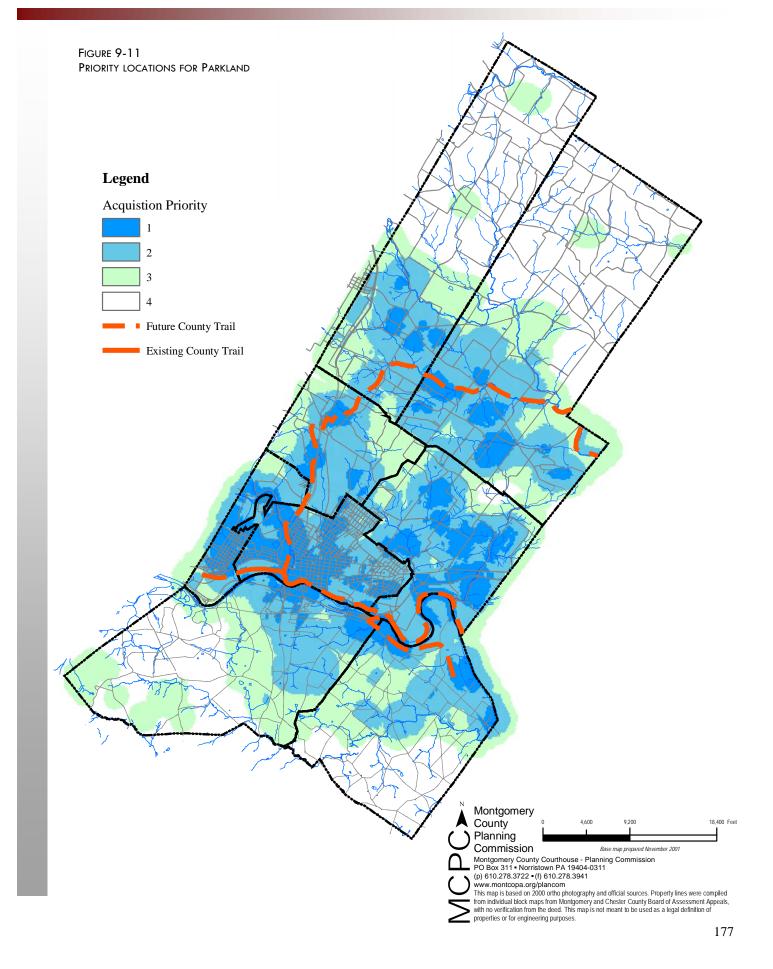
However, further analysis reveals that those areas that are underserved have relatively low population densities. Therefore, an investment in open space in these areas to serve local residents may be unwarranted unless to protect important resources or create linkages. An analysis that considers population density, both existing and projected, as shown in Figure 9-11, may better serve the community when locating new facilities. As Figure 9-10 shows geographical areas that are currently underserved, Figure 9-11 presents where new open space may be located to give maximum benefit to the greatest underserved population, both current and projected. This analysis uses the following attributes in descending priority in determining locations for new open space in the Region.

- Proximity to future growth areas
- Current population densities
- Proximity to existing open space
- Proximity to existing and future trails

Establishing Trail Needs

When regional residents were asked how to best expand recreational opportunities, they responded by requesting better hiking and walking trails as their first priority. It is important to connect different residential neighborhoods and land uses in the Region. The creation of a trail system will provide alternate transportation routes and recreation opportunities. Connecting trails develop a synergy within a region that improves the functionality of open space and





resident's accessibility to a variety of destinations.

In the future, two county trails will cross the Region to compliment the Schuylkill River Greenway and the Perkiomen Trail. The West County Trail will connect West Pottsgrove to Green Lane. The Sunrise Trail will travel from New Hanover along the Swamp Creek to Schwenksville. These two trails add over ten miles to the system within the Region and will become an anchor for local and regional trail network extensions. The Montgomery County Trail Network is shown in Figure 9-12. The Chester County Regional Priority Trail Corridors are shown in Figure 13.

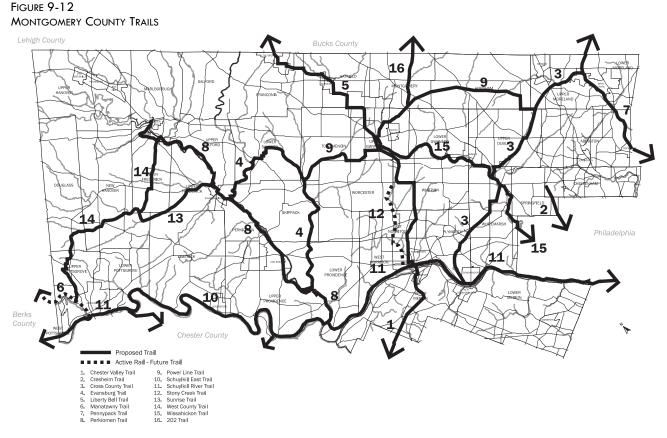
Local and regional trails are an important compliment for these county trails. In fact, every municipality in the Region has proposed a trail or linkage system. These networks include existing sidewalks and pathways and propose routes of new trails. However, as these proposed linkages exit each municipality, they rarely connect with the trail plan of the neighboring community. Therefore, a connections plan to be implemented at the local level, but conceptualized from a regional perspective is needed to guide these efforts.

One example of these efforts is the Reconnections Plan that will improve pedestrian and bike linkages across the Schuylkill River between North Coventry Township and Pottstown Borough.

Establishing Resource Protection Needs

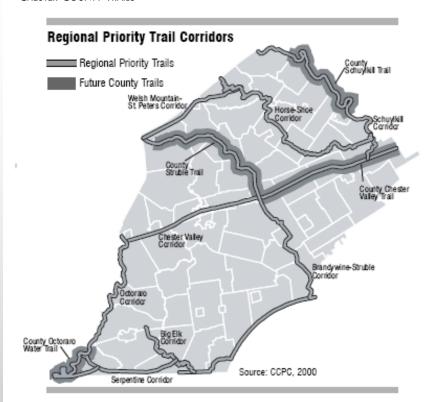
All natural systems are interrelated. The clearing of a local plant community can cause a reduction in soil stability. Greater soil erosion can lower water quality. As natural systems fall out of equilibrium due to land use change, care should be taken to buffer vulnerable features and reduce negative impacts. Below is a brief description of the importance of local resources.

Soil—All soil types have different measures of fertility, depth to bedrock and groundwater, texture, erodibility, and slope. Soils have different capabilities for on-lot septic, agriculture, construction and grading,



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FIGURE 9-13
CHESTER COUNTY TRAILS



and water recharge. Important benefits of preserving parcels with high quality soils is that the future of the agriculture industry is supported and recharge areas are preserved.

Water—Water has both constructive and destructive properties. It exists as a vital nutrient to plant communities and to human development. However, its ability to erode and flood can have damaging effects on both the natural and man-made environments. A shift in the water balance due to drought, flood, development, or groundwater pumping could affect the entire community.

Vegetation—Woodlands and hedgerows serve many purposes, both functional and aesthetic. Woodlands prevent erosion, contribute to energy conservation, provide habitat for wildlife, filter the air, and offer recreational opportunities for residents.

As more development is proposed in areas with environmental constraints, logically the environment will suffer. This is where the Region's rural resource area helps focus efforts to protect natural features and vulnerable resources. number of areas within the Region should given close consideration permanent protection because of the presence of high-value natural resources discussed in detail in local open space and comprehensive plans. These include large areas of contiguous woodlands, areas listed in the Montgomery County Natural Areas Inventory, water recharge riparian buffers. areas, and preserving natural features, problems caused by a shift in natural equilibriums can be averted.

Scenic—People realize that scenic beauty is a tangible community resource that has value and its loss could have a negative impact economically as well as in the quality of life that residents and visitors experience. These features are difficult

to measure but are very important for a growing region. Although the process of identifying a scenic resource is largely dependent on the observer's own opinions and preferences, information collected from a community group can provide a relatively broad inventory. Wherever possible, these areas should be preserved and linked to the community's open space and recreation system.

Scenic resources include features of either the natural or built environment that stand out among all the attributes of a community. They tend to be the most pleasant and interesting places, such as historic sites, natural features like lakes or creeks, and recreation areas. Scenic features deserving protection can vary from a downtown streetscape to a pastoral view of the countryside. Roadways with scenic attributes contribute to a community's open space system because they provide a way to view its scenic resources and in some cases also serve as recreation routes for walkers, bicyclists, and joggers. Scenic resources of the Region are described by local open space and comprehensive plans.

Historic—The Pottstown Region includes an older, developed borough, containing many historic resources located within its borders. In addition to these, the areas of the Region with pastoral roots hold on to their heritage by valuing their historic villages and farmsteads. Many of these historic structures are owned and maintained privately. The historic resources include sites on the National Register of Historic Places as well as other noteworthy homes, commercial buildings, and churches of local significance. Descriptions of the location and styles of important structures are found in individual community's open space and comprehensive plans.

Establishing Agriculture Needs

Traffic congestion, fewer open spaces, and loss of rural character are some of the concerns in the Pottstown Region. Among other things, the diversity of its economy has made the Region a desirable place in which to live and work. The result is growth in both population and land development. While it is a reflection of economic strength, this development has a heavy impact on the land and the natural features found on it. Farmland is often seen as very desirable for development. Because of this, the Region has seen a great deal of its farmland sold for development or taken out of production. This represents the loss of a productive resource, which cannot be replaced.

Pennsylvania places a high priority on preserving agriculture, the state's largest industry. For agriculture to be successful, a critical mass of acreage needs to be achieved on soils that are conducive to farming. Local municipalities need to be flexible in order to accommodate the changing face of the industry. Clustered agricultural parcels allow for a more sustainable environment for the industry. Although agriculture is more important to some of the Region's municipalities than others, the agricultural economy and the benefits it gives to everyone's quality of life are well worth preserving. It may be impossible to preserve agricultural lands at the same pace as they are being developed, but purchasing development rights and flexible zoning as de-

scribed at the end of this chapter should be methods considered by many of the Region's municipalities. The Region's rural resource area helps define where agriculture preservation efforts should be focused.

Establishing Water Resource Management Needs

A reliable supply of clean water is second only to air among a list of essential human needs. Communities need both a sufficient supply of water and sufficient quality of water. The entirety of the Region lies within the Southeast Pennsylvania Groundwater Protected Area as defined by the Delaware River Basin Commission partly because of local geology and demands for potable water. Therefore, this area and its water resources has more extensive groundwater monitoring and more stringent withdrawal permitting than the rest of the Delaware



Pleasant Run Park, New Hanover

River watershed.

Southeast Pennsylvania averages over 40 inches of precipitation each year. However, annual precipitation can vary from the average by as much as ten inches. As development increases and land use changes, these natural variations in precipitation have magnified affects. Large storm events falling on paved, surfaces can cause large runoff events with large amounts of pollutants. The potential for drought is amplified when recharge areas are compacted or paved while a greater demand for water develops. The importance of open space and changing land use is substantial as it relates to our water resources.

Best Management Practices (BMPs) are continually being improved to maximize both water quality and water availability when land use is changed. Stormwater management should focus on reducing or eliminating the stormwater runoff flowing off a site. These BMPs, when well-designed add aesthetic appeal, habitat value, and visual interest to a development project. They can reduce clearing necessary on site, cut back on maintenance costs, and blend stormwater management features into the land-scape. However, the benefits available through these BMPs are not all being offered by developers to local municipalities. Therefore, costs, both environmental and economic, are accrued by local municipalities as effective water resource management practices are not implemented.



Hillside Athletics, Upper Pottsgrove

Open Space Needs Summary

An analysis of open space needs at a regional level is quite different from a municipal-level analysis. From a regional perspective broader open space networking issues can be addressed. However, a local municipal body with a focused view of a smaller area has a finer understanding of more specific community needs. Therefore, this analysis does not recommend the specific open space improvements, but instead is an opportunity to take a look at the larger open space system and its interactions for the larger region.

Analysis shows that the Region meets minimum requirements for total acreage. Local governments are upholding their responsibility to protect open space resources to maintain the quality of life residents of the

Region already enjoy. Many acres of the current open space system exist mainly to protect natural resources, of which the Region is rich. With the support of various organizations, over 400 acres have been purchased by local municipalities in the last ten years.

However, this acreage indicator may mislead some to conclude that the existing open space system is more than adequate to serve the Region. With the growth projected, a need still exists on the landscape to expand the open space system to protect natural resources, maintain local character, and serve local residents with recreation opportunities.

This needs analysis points out several areas where the existing open space system should be improved and expanded.

- The large acreages of open space purchased in the last decade are not yet integrated into an interdependent open space system.
- Local trail plans are disjointed from neighboring municipalities.
- Different types of open space are not accessible to all segments of the population.
- Valuable natural, cultural, and agricultural resources are vulnerable to development pressures.
- Many acres in the Region carry only temporary protection.
- Open space for active recreation is insufficient in some of the designated growth areas.
- Demographics shifts are changing active and passive recreation needs at the community level.
- Insufficient water resource management, both past and present, has degraded natural environments.

The following sections will give recommendations and methods for addressing these needs.

Open Space Recommendations

This section describes specific recommendations to guide and encourage municipalities as they work to enhance the open space system both in their communities and across the Region. Based on the Open Space Needs Analysis, these recommended policies will be useful when implementing the Regional Comprehensive Plan.

Utilize Defined Growth and Rural Resource Areas within the Region to Ensure Preservation of Natural Resources and Agriculture

Open space must not just serve the existing population, but also serve new residents. When enhancing the open space system, methods of protection will differ between designated growth and rural resource areas.

The open space within the proposed growth areas as shown in Figure 9-6 should be developed to accommodate the need expected from these developing communities, be it aesthetic, recreational, networking, or environmental. Natural resources may best be preserved using local ordinances applied to new development.

In addition, agricultural lands should be supported in clusters in the proposed rural resource area. Currently, over 3,600 acres are preserved as farmland in the Region. The farming economy in the Region has historically been, and still is, strong and visible. The dynamic population of the Delaware Valley provides opportunities for farming to thrive. As the face of the industry changes, newer types of farming will have growing significance in the Region. However, a critical mass of agricultural lands must be preserved to sustain a profitable environment for the industry.

Outside the growth areas, the surrounding rural resource area's primary function is preservation of their natural features. Strong regulations regarding land use, natural resource protection and retaining viewsheds should be implemented by each municipality. Extension of public infrastructure is also restricted from these areas to prevent substantial development.

This recommendation is consistent with the GreenSpace Alliance of Southeastern Pennsylvania's Regional Open Space Priorities Report of 2004. This report's first recommendation is to use a "two-pronged approach" to preserve open space. Regional protection efforts should focus on either Open Space Priority Lands or Suburban/Urban Priority Lands.

Identify Vulnerable Resources and Prioritize Features for Protection at the Local Level

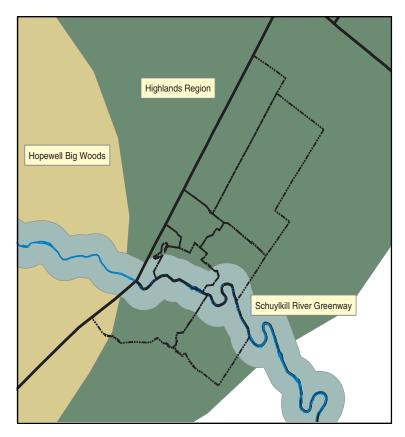
In recent years, our relationship to the environment has become the focus of much concern. Changing land use can have a negative effect when it disregards natural constraints. Before development occurs, sensitive resources and features should be identified and ordinances should be revised to help protect those areas.

Locally important features, including important agriculture areas, riparian corridors, floodplains, and existing stands of woodlands overflow municipal borders. These features deserve protection through coordinated efforts between individual municipalities. Especially when these features are located within future growth areas, protection should be considered as part of the development process. This can be done by developing ordinances that minimize the impact on sensitive features and that create linkages, while not affecting the economic vitality of the parcel. See methods for various techniques in the Methods for Open Space Preservation section at the end of this chapter.

Encourage Coordination and Connection of Open Space Areas Between Municipalities to Preserve Important Natural Resource Systems

Working together, meaningful preservation opportunities exist at the regional level that could not occur on a smaller municipal scale. Regional features as shown on Figure 9-14 include the Schuylkill River, the Hopewell Big Woods Conservation Area, and the greater Highlands Region. These three areas appear in the preservation goals of many of the Region's municipalities. Other re-

FIGURE 9-14
REGIONAL FEATURES



sources such as scenic areas, recharge areas, and the Manatawny, Pigeon, and Swamp Creeks, are features deserving coordinated protection and planning. Therefore, to maximize the protection potential of these features, municipalities should work together to appropriately protect these areas.

Manage and Protect Water Resources to Maintain Water Quality and Ensure Future Supplies

The Region's water resources are an important asset to be

maintained to ensure a high standard of living and an attractive business environment. Southeast Pennsylvania is blessed with a climate that usually has enough precipitation to maintain both human activities and environmental needs. However, as development occurs, water resources may be stressed. This is apparent in that the entire Region lies in the Southeast Pennsylvania Ground Water Protected Area.

Municipalities may wish to adopt ordinances that require features on the landscape to keep water quality and supply protected and well-managed. Growth should be guided to where the natural features on the land can best accommodate it. The following list are some of the recommended BMPs and actions that are vital in a developing area for water resource protection. In addition, public education is also a vital part of all water resource management actions.

Develop a Regional Green Infrastructure Network to Connect Communities and Recreation Areas

Parks and open space do not stand alone, but should be part of a larger park, recreation, and open space network for the Region. Wellplanned communities can stitch together commercial downtowns, residential villages, and business parks through a system of links. Utilization and sustainability of different types

Stormwater Management

- Stormwater basin naturalization
- Infiltration basins
- Bioretention swales
- Storm sewer infrastructure assessment
- Tree preservation

• Impervious surface regulations

Surface Water Protection

- Riparian buffer setbacks
- Green roof incentives
- Steep slope conservation areas
- Erosion and sediment controls

- Wetland preservation & buffering
- Storm drain labeling

Groundwater Protection

- Water conservation techniques
- Well monitoring quality & quantity
- Wellhead protection areas

of open space will increase if linkages are well thought out and implemented.

The following describes several types of linkages that may be integrated into the open space system.

- Greenways—Links that can weave natural resource protection areas together. This provides greater continuity, and therefore viability, of habitat corridors.
- Sidewalks—A strong sidewalk system will promote

- neighborhood interaction and accessibility.
- Trails & Pathways—Useful as both a transportation alternative and for recreation, this type of linkage is seeing great success nationally.
- Bike routes—As designated lanes along arterial roads, bike routes can help connect trail systems and provide for alternate transportation choices. In some cases road widening may be necessary.
- Contiguous open space—Open space clustered to-

Schuylkill River Greenway

Large remaining tracts of open land await the hand of both the conservationist and the developer. River-town infrastructure serves fewer people than it did twenty or thirty years ago. Benign neglect of industrial relics such as foundry sites, railroad corridors, and coal desilting basins has ironically preserved these forgotten treasures, and some incredible opportunities now exist to rehabilitate these sites and reveal some of the secrets of the "hidden river." These trends present growing opportunities for a greenway along the portion of the Schuylkill River in the Pottstown Region. Changes are occurring rapidly, and since the 1960's, many changes have taken place. Time is of the essence for weaving these opportunities into a multi-use greenway corridor – a connected Greenway Community where diverse Greenway Partners can come together with a common purpose.

The Schuylkill's hidden beauty is waiting to be rediscovered – for recreation, inspiration, nature study, or historic interpretation. Gone are the days of the Schuylkill River as a disposal system for industrial wastes. Today, the river's natural features are our most valued environmental resources. Cleaner water, scenic views, and the historic character of our older communities are bringing people back to live, work, and play near the river.

The Schuylkill River is a valuable piece of the Pottstown community. It is a source of local history, natural resource protection, and recreation. It deserves protection with an emphasis on wise use. Specific objectives to

promote and protect the Schuylkill River in the Region

include:

- Develop increased access to the river for recreational purposes.
- Continue progress on the Schuylkill Trail and Reconnections Plan.
- Protect the ecological interdependencies that lie within the river corridor.
- *Implement the Reconnections Project.*
- Use the river as an anchor for heritage tourism





gether allows for path loops and accessibility from several origins. Also, preservation of important woodlands and farmland in a concentrated cluster increases ecosystem viability.

As new transportation projects progress, greater emphasis should be placed on pedestrian and bicycle mobility. Also, new development creates an important opportunity to upgrade and connect sidewalk networks and trail systems.

Schuylkill River Greenway

The creation of the backbone for a regional trail system has begun through the Schuylkill River Greenway. The river flows through a green corridor of forested lands as it makes its way through the Pottstown Metropolitan Region and on to the Delaware Bay. A National and State Heritage Area, this greenway holds great value for the Region, making it an attractive place to live and work. As the greenway is enhanced by the future Schuylkill River Trail linking Reading and Philadelphia, the Region should plan to promote the natural and cultural resources that lie here.

County Trails

The Perkiomen Trail already exists less than ½ mile outside of the Pottstown Region. The Schuylkill River

Trail has already been discussed in this chapter, and the West County, Sunrise, and Manatawny Trails are three other proposed trails that either run through the Region or in the near surroundings. Great opportunity exists. As development occurs and open space is planned, the presence of the existing and future trails should help guide design decisions.

Regional Trails

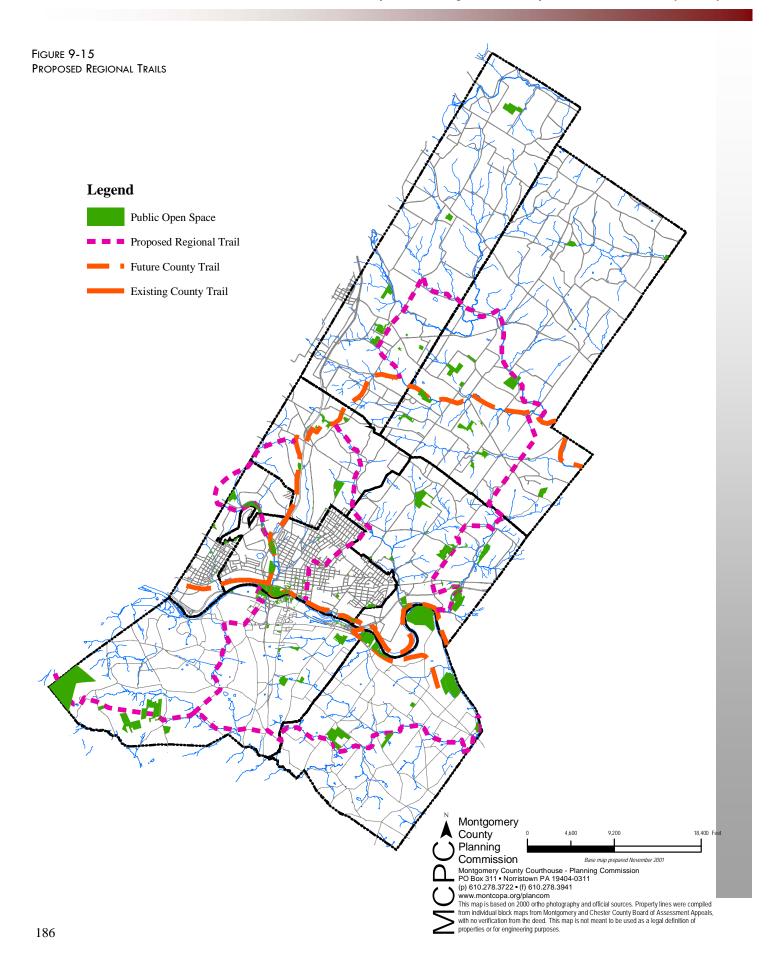
The municipalities in the Region already have local trail networks proposed in varying levels of detail. However, although many of these networks use riparian or utility corridors, efforts are not coordinated and infrequently do trails match up across municipal borders. A regional trail network would be based on the proposed trail networks of local municipalities. Create from a regional perspective this network would offer greater opportunities and be more useful. It would provide a variety of loop trails for recreation and create alternative methods of transportation for accessing the Region's parks and Main Streets. Figure 9-15 uses information found in local open space and comprehensive plans and aligns linkages described there into a regional trail plan.

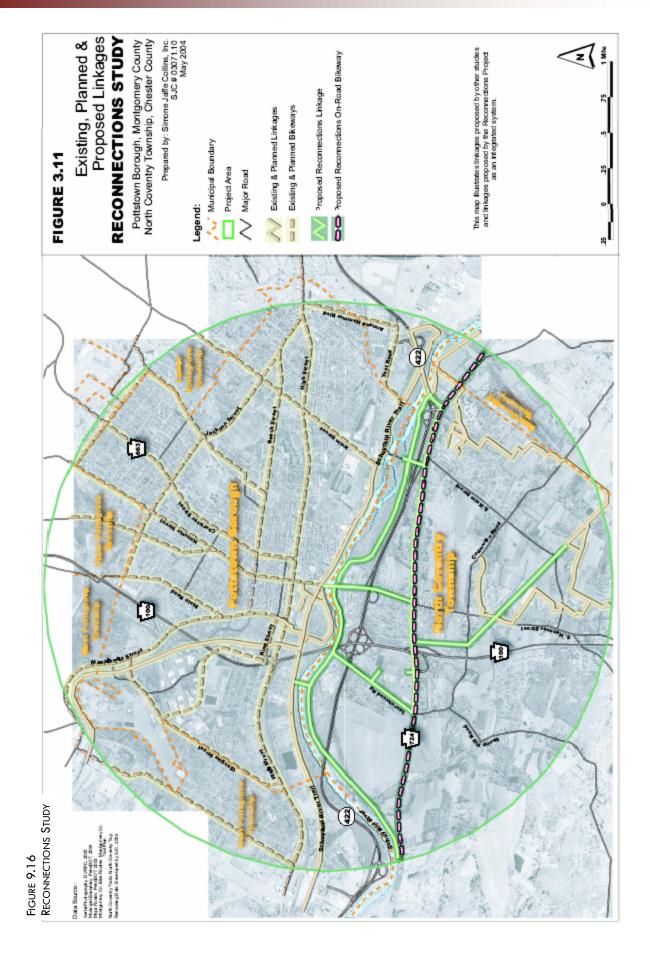
Implementation of this regional trail network and specific alignment of the trails in the network should be developed locally. The type of trail connection (on-road, off-road, sidewalk) and the method by which it is secured (purchased or via subdivision and land development process) will vary by municipality.

One effort underway is the Reconnections Plan that will enhance the ties between Pottstown Borough and North Coventry Township. This plan makes recommendations to make stronger pedestrian connections across the Schuylkill River. Recommendations from the Reconnections Plan are found in Figure 9-16.

Local Trails

Municipalities are encouraged to supplement the regional trail and linkage network at the neighborhood level. These local networks can add to the livability of communities in several ways. For areas undertaking





revitalization programs, the addition of street trees or urban plazas could add life to the urban or village landscape by increasing walkability. In other parts of the Region, local trails can be created through the development process or by using riparian corridors that protect water resources. Other projects for consideration include the beautification of road medians and triangles, wayfinding signage, and the restoration of park facilities.

Coordinate Park and Recreational Opportunities Among the Region's Municipalities

The municipalities within the Pottstown Region should identify opportunities for collaboration on a variety of open space issues. One potential avenue for collaboration would involve joint coordination of recreation programming. The benefits of such coordination will provide an all-encompassing programming network for events, day camps, athletics, and other recreational activities. Another benefit of regional coordination could be the sharing of maintenance costs at those parks that host regional activities.



Laurelocks Farm, North Coventry

Maximize Local, County, state, Non-profit, and Private Programs to Purchase Important Natural Resource Areas and Agricultural Lands in the Region.

The Farmland Preservation Programs of both Chester and Montgomery Counties are opportunities to preserve farmland by placing it in agricultural security areas and purchasing conservation easements from eligible landowners. The programs focus on the following objectives:

- Encourage a long-term commitment to agriculture.
- Protect normal farming operations.
- Conserve viable agricultural lands.
- Purchase agricultural conservation easements.

Montgomery County's Green Fields/Green Towns Program allocates nearly \$5.7 million to the six Montgomery County municipalities with which to, among other things, purchase open space and secure historic structures. The Chester County Open Space program recently supported the purchase of portions of the Hopewell Big Woods in North Coventry. Pennsylvania's Depart of Conservation and Natural Resources (DCNR), along with other state and national programs lend their support to the Schuylkill River Heritage Corridor.

Other opportunities exist to raise funds for open space purchase through a local tax, cooperation with local land-owners, or development of a recreation fee in lieu of open space. Private and nonprofit organizations that have conservation missions must not be overlooked. These organizations establish relationships with municipalities and landowners alike to find creative ways to preserve land.

Protect Scenic and Historic Resources to Maintain Visual Appeal of the Region's Communities and Landscapes

Scenic and historic resources, as described before, play a large role in creating a sense of place in a community. An inventory of specific landscape features, be they pastoral, village, or urban, as well as historic sites, can be mapped to find clusters in the Region. The comprehensive plans and open space plans of the member municipalities have developed these inventories already. Preservation ordinances can be developed that encourage landowners to preserve historic structures and minimize the effects of development on scenic areas.

Promote Non-acquisition Methods for Preserving Open space Throughout the Region

There is certainly a finite amount of funds to be tapped for open space acquisition. The following section, Methods for Open Space Preservation, describes the nonacquisition practices municipalities can use to develop a green infrastructure network, protect natural resources, and increase local quality of life.



Sanatoga Park, Lower Pottsgrove

Implement the Park and Open Space Goals of Municipal Open Space Plans

Under Montgomery County's Green Fields/Green Towns Program, municipalities are required to update their existing Open Space Plans in order to qualify for County Open Space funds. As these plans are updated by Spring 2006, neighboring municipalities should include a discussion of how their local plans fit into the regional perspective of the open space and green infrastructure network.

The Chester County municipalities have recently completed comprehensive plans that address open space (East Coventry - 2003, North Coventry - 2001). These plans should be implemented to ensure local open space needs are addressed in coordination with the region's goals and updated as applicable.

Recommendations Summary

Agriculture preservation was the second highest priority issue in the 2002 survey of the Region's residents. Open space preservation was the third highest priority. Together open space and agriculture preservation help build the Region's greater green infrastructure network. As the municipalities that make up the Pottstown Metropolitan Region move forward with their open space efforts, a regional perspective should be maintained. Green infrastructure is most effective when all open space is integrated into a regional network. Below are listed some general recommendations from this section.

- Maximize the protection of vulnerable natural features in the Region's designated Growth Area
 through land use planning, regulation, and selective
 acquisitions. Each open space piece in the growth
 area should be viewed as part of a connected green
 infrastructure system.
- Protect agriculture and natural features in the Region's Rural Resource Area through land use planning, development rights purchase, and selective acquisitions.
- Protect water resources by requiring effective BMPs during development and guiding growth away from constraining features.
- Connect communities by enhancing the green infrastructure network, including the Schuylkill River Greenway.
- Expand the regional trail network, including the Reconnections Plan, by planning jointly and increasing linkages at the neighborhood scale.
- Educate residents about the value of green infrastructure and promote its use by the community.
- Provide recreational opportunities for all residents of the Pottstown Metropolitan Region.

Through these efforts, the Region's natural systems can be sustained and the quality of life of the Region enhanced.

Methods for Open Space Preservation

Acquisition Methods

Fee Simple Acquisition

The most direct and sometimes most appropriate means of obtaining land for parks and open space is through fee simple purchase. The main advantage of this procedure is that an entire parcel of land belongs to the organization purchasing the land. However, the expense of fee simple purchase can sometimes exceed available funding sources.

Condemnation

Acquisition can occur by exercising the right of eminent domain: where public purpose is well defined, where fee simple acquisition is desired but not possible at a fair price and where the owner is reluctant to sell. It is prudent to view condemnation as a last resort when acquiring land for parks or open space preservation.

Purchase of and Lease-Back or Resale

In certain cases, it is appropriate for a municipality to purchase land in fee simple, place restrictions on the deed prohibiting certain uses (e.g. residential development) and lease it back to interested parties. One advantage of this method is that the municipality can purchase land for future use (before the price increases, perhaps prohibitively so) and, and through leasing, recoup some or all of the purchase price. In this way, land is maintained in open space and can be developed as a park when future demand warrants. Resale of some or all of the land (after placement of deed restrictions) would maintain open space while also relieving the municipality of maintenance obligations and returning the land to the tax rolls.

Conservation Easements

Conservation easements are used to preserve land as a

relatively low cost without acquiring it. With a conservation easement, the land remains privately-owned. The easement involves the property owner voluntarily agreeing to donate or sell the right to develop the land. The property owner agrees to place a restriction in the deed of the property, which then becomes binding on all future owners of the land. 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 new buildings and cutting down woodlands. Often, the granting of a conservation easement can result in federal income tax and local property tax advantages to the property owner.

Pedestrian Easements

A conservation easement can also be combined with a pedestrian easement to allow the public the right to walk, hike, and ride bicycles along a specific areas, provided users follow a careful set of rules. These easements can be particularly useful in connecting two or more greenway segments.

Mandatory Dedication

The Pennsylvania Municipalities Planning Code (Act 247, as amended) enables municipalities to require that residential developers dedicate land, or fees in lieu of land, for public recreation. Municipalities must have an adopted recreation plan and an adopted ordinance relating to the mandatory dedication before land or fees can be accepted. The amount of land required must be related to the demand for recreation land typically created by new development. The required fee should replect the fair market value of the amount of land for which the fee is being substituted.

Donations of Properties for Permanent Open Space

Land frequently is acquired through donations from private owners, organizations, and corporations. Local governments should encourage land donations by pointing out benefits of such actions, such as public relations val-

ues and federal income tax benefits. Prior to accepting a donation, a municipality should consider two things. First, it should analyze the location of the parcel and the anticipated development and maintenance costs. If the location is poor or projected costs will be excessive, the municipality should strongly consider accepting a fee rather than the land. Second, if the land is found to be suitable, the municipality should encourage the donor to provide and endowment fund along with the land to assist with development or maintenance costs.

Non-Acquisition Methods

In conjunction with open space acquisition efforts, there are a number of zoning and other techniques which communities can use to preserve vulnerable resources without actually buying land.

Agricultural Zoning

This technique substantially lowers the density in rural areas so that only agricultural lots are created or perhaps a few residential lots. The minimum lot size must be large enough to support profitable farm operations (for example, from 10 to 40 acres). Generally 10 acres is used as a minimum farm size, which is consistent with Act 319 and other state and federal criteria. Whatever size is used, it will be a very restrictive minimum lot size and, except for estate lots, will exclude almost all residential development.

A variation of this maintains a density of one home per 10 to 40 acres but allows homes to be put on smaller lots of 1 or 2 acres in size. This still limits the area to an agricultural density but allows small lots to be subdivided. As a result, farmers who need some income can subdivide off a few residential lots without changing the agricultural character of the area.

Still another variation relates the minimum lot size to the type of soil located on the property. Areas that have prime agricultural soils and soils of statewide importance would have one home per 10 to 40 acres, depending on the community's desires. Areas with other soil types could have homes on smaller lots (1 to 2 acres). This

approach directly relates the zoning to the preservation of agricultural soils.

In order to use any of these zoning techniques, a municipality should have a strong, viable agricultural community and a limited amount of rural residential development. The zoning has to be clearly related to protecting agriculture, not just rural character. In addition, relating the zoning to the preservation of agricultural soils will strengthen the ordinance.

Create or Join an Agricultural Security Area and Encourage the Sale of Farmland Development Rights

State law allows groups of farmers, with municipal approval, to create agricultural security districts. These districts must comprise at least 500 acres, although the farms do not have to be contiguous. If a municipality has farms but cannot meet the acreage requirement, it can join another municipality's district. Landowners who join one of these districts have absolutely no obligations whatsoever, but they do receive three distinct benefits.

First, farms in agricultural security areas are protected from new ordinances that would restrict normal farming operations or define farms as nuisances. However, the farm operation must use acceptable farming practices that do not threaten the public health, safety, and welfare.

Second, condemning land in agricultural security areas is more difficult. Land condemnations by the Commonwealth or local municipal authorities, school boards, and governing bodies must be reviewed and approved by a state agricultural board before any action can be taken. Third, farms in an agricultural security area can apply to sell their development rights to the county and state. When development rights are sold, farmers receive the difference between the development value of their property and the farm value of their property. In return, a conservation easement is placed on the property, permanently restricting any nonfarm development on the property. This program permanently preserves farms.

Performance Zoning

With this type of zoning, the minimum lot size in rural areas is directly related to the natural characteristics of a site. Through ratios put into the zoning ordinance, the lot size corresponds to the type and extent of natural features that present development constraints such as high water table soils, floodplain, and steep slopes. When a lot of these features are present, the minimum lot size must be increased. In contrast, where none exist, the minimum lot size will be relatively small, perhaps as small as one acre.

This type of zoning, known as performance zoning, has recently been upheld by the Pennsylvania courts as a viable way to controlling the impact of development on natural features.

The simplest performance zoning ordinances subtract certain environmental constraints, such as floodplains and wetlands, from the net lot area. The area that is not environmentally constrained must meet the zoning district's minimum lot size. For example, if the zoning district allowed 2-acre lots and an applicant proposed a plan with a 2.5-acre lot but this lot had 1 acre of floodplains, the lot would not be permitted because it only has 1.5 acres of net area after floodplains are subtracted.

More complicated performance zoning ordinances apply ratios, ranging from 1 percent to 100 percent, to a wide range of environmental constraints such as floodplains, wetlands, steep slopes, soils, geology, woodlands, etc. The ratio is multiplied by the constrained portion of the lot. This is subtracted from the lot area to derive net lot area. For example, a 5-acre lot has 1 acre of floodplains and 1.6 acres of steep slopes. The zoning ordinance uses a ratio of 100 percent for floodplains and 50 percent for steep slopes. The 1 acre of floodplain is multiplied by 100 percent, which yields 1 acre. The 1.6 acres of steep slopes are multiplied by 50 percent, which yields .8 of an acre. The floodplain and steep slope constraints are added together, which totals 1.8 acres, and then subtracted from the lot area of 5 acres to yield a net lot area of 3.2 acres.

Reduce the Visual Impact of Rural Development

Communities can reduce the visual impact of rural development that occurs by encouraging or requiring homes to be hidden from view. For example, the zoning could allow a smaller lot size if homes are located in wooded areas or behind ridgelines. On the other hand, the community could require homes that will be located on existing roads to have a larger lot size, bigger setbacks from the road, or screen buffers between the road and the home.

Often, municipalities require rural subdivisions to provide curbing and to widen the road, even though these improvements may not be necessary. It is necessary to widen streets and provide curbs in some areas. However, when these improvements are required in locations that do not need them, the historic rural character of the roadway is changed. Sometimes, special features of the landscape, such as historic bridges, tree rows, fences, and hedges, are also destroyed in the process.



East Coventry

Cluster Homes

Open space can be preserved within a proposed development by clustering the homes on one portion of the site while keeping the remainder as permanent open space. The overall density of the site remains approximately the same, but homes are put on smaller

lots. The preserved open space might contain rural views, historic landscapes, farmland, woodlands, steep slopes, floodplain, wetlands, or any other vulnerable resource. The open space also may be dedicated to the township for parkland.

When homes are clustered on a site, significant portions of the site can be preserved-sometimes as much as 75 percent or 80 percent. Some of this open space can be left in the developed portion of the site so homes face neighborhood open space. In addition to benefiting the community by preserving important natural resources, clustering also benefits the developer by lowering infrastructure cost, usually by reducing the length of roads and utility lines.

Incentive Zoning

Communities can encourage developers to provide open space, recreation facilities, trails, and parkland through incentives. The incentive, which is put into specific zoning districts, might be that the developer gets a higher density than otherwise permitted, or perhaps a smaller lot size, or a waiver from certain landscaping requirements. The ordinance must be designed so that the cost of providing the amenity does not exceed the benefit received from the incentive. Otherwise, the developer will not take advantage of the incentive.

Natural Resource Protection Ordinances

These ordinances protect specific natural features such as floodplains, stream corridors, wetlands, groundwater, steep slopes, and woodlands.

Floodplains—Floodplain ordinances, which exist in all of Montgomery County's communities, restrict or prohibit all development within floodplains, especially development within the 100-year floodplain. There are three levels of floodplain restrictions often seen in the county. Some floodplain ordinances, typically found in boroughs, allow development within the floodplain provided

buildings are floodproofed.

Many ordinances do not allow most types of development within the floodplain. This approach protects property from flood damage, protects the environment within the floodplain, and reduces the possibility of raising the flood level. Other ordinances not only restrict development within the floodplain but also require a minimum setback from the edge of the floodplain. This approach protects the floodplain and may protect, depending on its width, the unique wooded habitat, known as riparian woodlands, often located next to the floodplain.

Stream Corridors—Stream corridor protection ordinances go further than floodplain ordinances, which are primarily intended to limit property damage. The intent of stream protection ordinances is to protect the water quality of the stream as well as plant and animal habitats. Typically, these ordinances impose a minimum setback from the stream bank in which no development may occur. For example, a minimum setback of 75 feet from the stream bank will help stabilize the stream bank, control sediment, remove nutrients that would pollute the stream, moderate stream temperature, and provide wildlife habitat. The area within the buffer should be left in its natural state, which will usually be a riparian woodland.

Wetlands—Federal and state governments regulate wetlands and so can municipalities. Sometimes, development occurs on wetlands, and the state and federal governments are unaware of this development.

Municipalities that prohibit development on wetlands and require wetlands to be shown on development plans, can stop development of wetlands from slipping through the cracks. Sometimes, developers receive all of the federal and state permits they need, but they locate homes right next to wetland areas. Although this is permitted by state and federal regulations, it can lead to future problems if individual homeowners decide to fill in the wet spot behind their home to have a more usable back yard. Local municipalities can eliminate this problem by

requiring a minimum building setback from wetlands. In addition, federal and state regulations only address the filling of wetlands, not the destruction of vegetation within the wetlands. Local municipalities can require the replacement of destroyed wetlands vegetation.

Groundwater—Groundwater quality can be protected with wellhead protection ordinances or aquifer recharge ordinances. Because aquifers are so large, wellhead protection ordinances are more common. These ordinances, which only protect public wells not individual wells, regulate development in an area that could potentially contaminate the groundwater supplying a well.

This area, called a wellhead protection area, can be identified in a number of ways. The most accurate method is to conduct a hydrogeologic survey. Development within the wellhead protection area can be regulated by restricting certain uses such as gas stations, limiting the intensity of development (such as limiting the density of single-family detached homes with individual septic systems), and/or by controlling how a land use activity occurs (such as farming with specific types of pesticides, herbicides, and other chemicals). In addition, a community may impose design standards on new construction that might pollute the groundwater. This could include hazardous materials containment structures or areas, surface water runoff collection systems, and large impervious areas such as parking lots and buildings.

Steep Slopes—Steep slope ordinances restrict or prohibit development in steep slope areas, which are typically areas with slopes of 15 percent or more. Usually, on slopes of 15 percent to 25 percent, development is permitted if the minimum lot size is increased and/or the percent of the lot disturbed is limited. Some steep slope ordinances prohibit all development, although this prohibition does not normally occur until the slopes are extremely steep-25 percent or more.

Woodlands—Woodland preservation ordinances are intended to protect existing trees and woodlands. Some of these ordinances provide minimum standards, which

must be followed during construction for trees that will remain. Other ordinances allow developers to put up fewer street trees, buffers, or individual lot trees when existing trees are preserved. Some ordinances require developers to replace trees that are cut down. Other ordinances, which may face legal challenge, prohibit the destruction of any trees.

Transfer of Development Rights

This method of preserving rural land transfers development from rural areas to growth areas. With a transfer of development rights program, rural landowners can sell their development rights to developers in the township's growth areas instead of developing their rural land.

For example, a rural landowner who has 50 acres might normally be allowed to subdivide them into twenty 2-acre lots. Instead, with a TDR program, the landowner sells the right to build these 20 lots to a developer in a growth area. The developer adds those 20 units, or more as appropriate, to the number of units normally allowed to be built. The rural landowner, who has been paid for these development rights, is then required to deed restrict the land against any future development.

Encourage Donations of Properties for Permanent Open Space

Sometimes, landowners want to preserve their land by donating the full title of the property or by donating their development rights to nonprofit land conservation groups. Either of these approaches will permanently preserve land as open space.

Landowners who donate development rights will receive tax benefits, but the land must be permanently restricted from future development. There are a number of land conservation groups operating in Montgomery County that would be willing to take these donations. These groups include the Montgomery County Lands Trust, the Brandywine Conservancy, the Natural Lands Trust, the Nature Conservancy, the Conservancy of Montgomery County, and the Wissahickon Watershed Association.

Some land conservation groups can also help local landowners develop some of their land while keeping the majority open and deed-restricted. With this approach, the land is developed in a very sensitive manner. The landowner receives some money, while the most important environmental amenities on the site are preserved.



Middle Creek, New Hanover

Require Developments to Provide Open Space or Pay a Fee In Lieu of Such Open Space

Through the zoning and/or subdivision ordinance, municipalities can require developers to provide open space. If this requirement is put into the zoning ordinance, it must be located in specific zoning districts such as the high-density residential district. The zoning ordinance may specify that a certain percentage of a site, perhaps 15 percent to 20 percent, must meet a number of criteria and be maintained as common open space.

The municipality cannot require this open space to be dedicated or to be open to the public or to include specific recreational facilities. The community can, however, require the land to meet specific standards such as the open space must consist of flat, open land that is suitable for playing fields.

According to the Pennsylvania Municipalities Planning Code, the subdivision and land development ordinance can also require developers to provide open space, but it can go much further than the zoning ordinance. It can require the land to be dedicated to the township. If a

developer does not want to provide land, the ordinance can require fees in lieu of land. In order to have this type of requirement, the community must have an adopted recreation plan, and the ordinance must follow specific standards in the municipalities code. Usually, unless a development includes an area the community wants to use for parkland, it is better for municipalities to accept fees in lieu of open space. This is so large, central parks can be provided rather than a number of small, inaccessible, and limited park sites.

Generally, requiring developments to provide open space allows municipalities to meet the needs of new residents without building new municipal parks. With this technique, for instance, the developer of a large townhouse development or single-family detached development would have to provide parkland for the homeowners in these developments. If there were no land and facilities provided by the developer, these homeowners might eventually put pressure on the township to provide open space and parkland.

Historic Preservation Ordinances

Although not directly related to open space preservation, saving historic properties does add to the character of an area. There are a number of techniques communities can use for historic preservation. First, they can amend their building codes to require a review before demolition permits are issued. This approach delays demolition and allows community input but does not stop demolition or encourage preservation of the building.

Second, communities can also amend their zoning ordinance to encourage historic preservation. This could be done by creating a village ordinance which gives development bonuses for preserving buildings or restricts the uses that can go into the district. Incompatible uses, such as gas stations, are not permitted in these districts. The zoning ordinance can also encourage historic preservation by allowing historic buildings to have more uses than normally permitted in a particular district. For example, apartments, bed and breakfast establishments, or offices might be permitted in historic homes located in

a single-family detached residential district.

Third, communities can create historic districts with the approval of the Pennsylvania Museum Commission. This approach is the most restrictive. After a historic district is created, townships have stringent control over design and preservation of facades. A township architectural review board has to be created to review all proposed changes to historic buildings.

Conclusions

Open space embodies the attributes that make a region attractive as a place to live, work, or visit such as the open meadows, wooded hills, the river and stream valleys, the expansive farmland, and well-used regional and municipal parks and plazas. Open space preservation performs many functions. It can protect groundwater, enhance our supply of drinking water, preserve ecologically significant lands and habitats, provide pleasant viewscapes, prevent erosion, buffer incompatible land uses, reduce flooding, and shape the development pattern. Open space adds to the livability of neighborhoods, communities, and the Region.

Green infrastructure is the term given to trails, park improvements, street trees, and public plazas that add greenery to town centers and provide attractive places for people to gather and relax. Further, a green infrastructure system that is networked together, joins communities. Residents have increased accessibility to recreational, shopping, and transportation opportunities. These future network enhancements must be planned now to integrate yet to be preserved open space with the existing open space system.

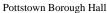
The significance of any type of preserved open space goes beyond its physical uses or functions. Perhaps the greatest benefit of open space is that it enhances the quality of life in many ways. The benefits to physical health and overall sense of well-being gained from the use of open space and trails may be difficult to measure, but without open space, the Region would have a far less livable environment.

10 Community Facilities





Owen J. Roberts High School







Sanatoga Fire Company, Lower Pottsgrove

Pottstown Memorial Medical Center

This chapter will address the community facilities needs of current and future residents of the Pottstown Region, including those in the following areas:

- Utilities
- Emergency services
- Education
- Municipal facilities
- Health care and related services
- Culture

These services greatly impact the quality of life and safety of the Region's residents. This Plan makes recommendations for providing community facilities and services to the Region's residents as efficiently as possible.

Goals:

- Encourage the coordination of municipal services/ facilities.
- Use public sewer and water facilities efficiently by extending these systems only within designated growth areas.
- Protect surface water quality and ensure sufficient water supply by directing new development toward the designated growth areas where the infrastructure is already in place to accommodate it.
- Support existing emergency services and improve their capacities to serve a growing population.
- Cooperate with the local school districts, Montgomery
 County Community College and local library systems to
 encourage appropriate locations for new or expanded
 facilities and promote pedestrian access to these
 facilities.

Existing Conditions - Community Facilities

This section will provide an overview of the status of the Pottstown Region's existing community facilities. Included in this will be a discussion of:

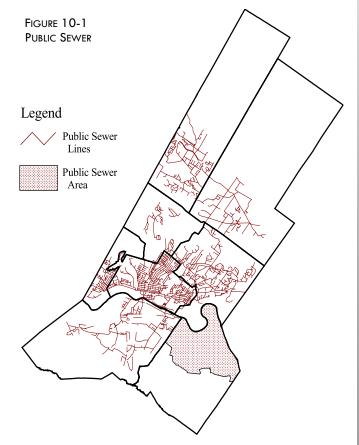
- Sewage facilities
- Water facilities
- Waste management and recycling
- · Electric and gas services
- Communications facilities
- Government facilities
- Emergency services
- Educational institutions
- Health care facilities

- Eldercare
- Health & human services
- YMCA/YWCA
- Child day care
- Libraries and cultural facilities
- Theaters and cultural events
- Religious institutions

The location of community facilities influences their accessibility. Community facilities planning can have a strong impact on the Region's health, safety, and quality of life.

Sewer & Water

The Pottstown Metropolitan Region is projected to have adequate sewer capacity to serve the Region's needs at least



Note: "Public Sewer Area" in East Coventry includes existing & proposed public sewer

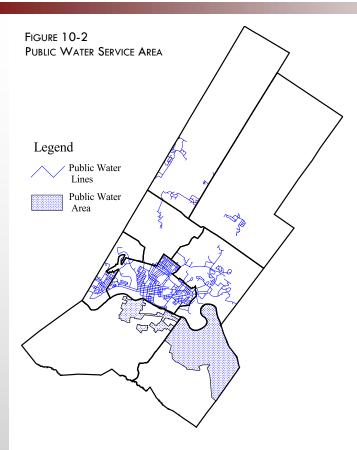


FIGURE 10-3
SEWER COMPANY SERVICE AREAS, POTTSTOWN REGION

Sewer Company	Service Area
Pottstown Sewer Authority	Pottstown & the Pottsgroves
New Hanover Sewer Authority	New Hanover
Berks-Montgomery Municipal Authority	Douglass
Douglass Township	Douglass
North Coventry Munici- pal Authority Wastewater Treatment System	North Coventry, East Coventry: western end of East Coventry adjacent to Rt. 724 (see map).

until 2025. The Montgomery County portion of the Region has a large sewer capacity surplus (nearly 11 million gallons per day), and is projected to have a large surplus in 2025 (nearly 9 million gallons per day). Much of this surplus is attributable to abandoned or underutilized industrial areas in Pottstown.

The Chester County Portion of the Pottstown Region is projected to have adequate sewage capacity also. The North Coventry Municipal Authority serves North Coventry Township and the western portion of East Coventry Township. The Authority is constructing a new sewage treatment plan which will add 1,667 EDUs (equivalent dwelling units, where 1 EDU= 300 gallons per day) to its current capacity of 5,000 EDUs.

Some portions of the Region are experiencing problems with on-lot sewage systems (see Figure 10.6). For those areas located within sewer growth areas, public sewer could be extended to those lots to alleviate the problem. However, whenever the case involves on-lot system failures located with the designated Rural Resource Areas, a public sewer solution should be carefully measured against this Plan's call for limited growth and the preservation of open space within these areas. Where the remediation of on-lot system failure is called for within the Rural Resource Areas, a public sewer solution should be considered only as a last resort.

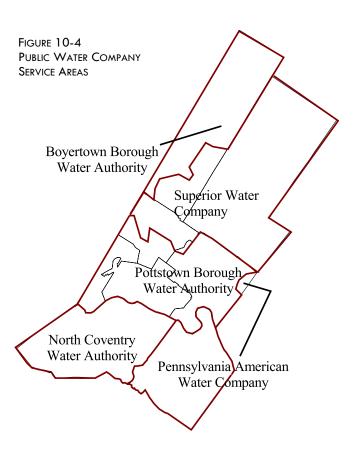


FIGURE 10-5 ON-LOT SEWER PROBLEM AREAS

Problem Area	Municipality	Description	Status/ Recommendation
Wagner Road/Faust Road	New Hanover	Identified in 2003 municipal Act 537 Plan Update	Located within proposed growth area according to 2003 Act 537 Plan Update
Sanatoga Road	New Hanover	Identified in 2003 municipal Act 537 Plan Update	
Middle Creek Road	New Hanover	Properties along Middle Creek Rd, between Big Rd and Ludwig Rd, identified in 2003 municipal Act 537 Plan Update	
Miles Road	New Hanover	Identified in 2003 Municipal Act 537 Plan Update.	Some, but not all properties lie within municipal proposed sewer growth area.
Layfield	New Hanover	Identified in 2003 Municipal Act 537 Plan Update	Approximately half the parcels (south side of Big Rd) are within a proposed sewer growth area.
Church Road	New Hanover	Church Rd properties between Big Road and Hoffmansville Rd identified in 2003 municipal Act 537 Plan Update	
New Hanover Square	New Hanover	Village area identified in both the 1972 County Act 537 Plan Update and the 2003 Municipal Act 537 Plan Update.	
Congo/Sassmanville	Douglass/New Hanover	Numerous residential units in the villages of Congo and Sassmans-ville and between the two villages along Hoffmansville Rd, identified ini the 1972 County 537 Plan Update and both New Hanover Township and Douglass Township Act 537 Plan Updates. A plan has been developed to public sewers with ultimate treat BMMA to 129 lots in these lem areas within a 20-year plan period.	
Ringing Rocks (Kiem St and PA663 to the Park)	Lower Pottsgrove	Residential area identified by sewage enforcement officers based on complaints and/or inspections	
Village of Parkerford	East Coventry	Failing systems on the lots of approximately 100 homes. A 5-10 year plan to serve the Vi with public sewer. Currently loc within the sewer growth area.	
Earl Drive/Harley Drive Area	East Coventry	Failing systems on the lots of approximately 200 homes. A 2-3 year plan to serve this with public sewer. Currently within the sewer growth area	

DEP's publication entitled "Guidelines for Design, Installation & Operation of Small Flow Treatment Facilities (1992) makes prioritized recommendations for correcting on-lot problem areas outside sewer growth area The recommendations are ranked in the following order:

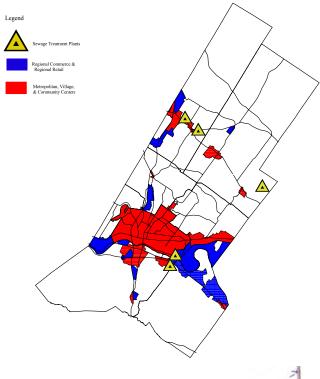
- 1. Repair/replace failing on-lot systems with newer on-lot systems such as mound systems, small flow treatment facilities and alternative systems.
- 2. Build a community lagoon system with spray or drip irrigation for effluent disposal.
- Build a mechanized community disposal system (package plant). Effluent disposal options should consider spray or drip methods over stream discharge.
- 4. Install a small diameter/low pressure piping system and connect into an existing public system.
- 5. Extend public sewers only after all other options have been exhausted, and size the system to limit further growth.

Where on-site sewage disposal systems are necessary the following actions may be implemented to promote groundwater recharge and protect public health:

- Give precedence to sewage facility alternatives that utilize land application of effluent to recharge the Region's groundwater
- Establish a program for long-term management and maintenance of existing and future on-lot disposal systems.
- Conduct ongoing monitoring of known problem areas.

There are portions of the Region in Montgomery County where there are no deficiencies of public water supply projected for off-peak hours to the

FIGURE 10-6
MUNICIPAL SEWAGE TREATMENT PLANTS





Municipal Sewage Treatment Plant, Douglass Township

year 2025. The Pottstown Municipal Authority is currently building a new water tower in Lower Pottsgrove to solve water system issues in that area. In Chester County, North Coventry has formed an ad hoc committee that is currently examining wells. This study will help the Township assess its capacity for community water

systems.

Public water sources for the Pottstown Region include the Schuylkill River, Popodicken and Trout Run Reservoirs (located in Berks County), and groundwater.

In some areas of the Region such as Upper Pottsgrove, diabase geology prevents or limits the drilling of wells. Municipalities can either provide public water or require large minimum lot sizes that increase the likelihood of finding on-lot water.

Solid Waste Services

The Region currently has adequate capacity reserved in various landfills and other solid waste facilities to meet its present and future needs.

The Pottstown Landfill is a large facility located in West Pottsgrove, Upper Pottsgrove, and Douglass Township-Berks County (the portion of the property in Upper

FIGURE 10-7
SOLID WASTE FACILITIES

Legend

Pottstown Landfill

Recycling Centers

Regional Commerce & Regional Retail

Metropolitan, Village, & Community Centers

Pottsgrove has not been utilized for landfill operations). Waste Management, Inc., the landfill's owner, has announced its intention to close the landfill in the next few years. A committee has been formed, consisting of representatives of local governments and other stakeholders, to discuss potential future land uses for the landfill.

The following recycling centers are available in the Region:

Douglass Township 108 Municipal Drive (610)367-6062 2nd and 4th Wed., 1pm-4pm (Twp. Res. Only) 2nd and 4th Wed., 9am-Noon (Twp. Res. Only) CP, Plastics #1-7, AL, JM, NP, YW (Seasonal)

North Coventry Township Recycling Services, Inc. (rsi.home-page.org) 365 Elm Street

(610)323-8545

Tues. & Sat. 9am-1pm

AL, BI, BG, CG, CP, GG, JM, MA, NP, OP, PH, ST, TX, Plastics #1-6.

West Pottsgrove Township

Waste Management, Inc.

1425 Sell Road

(610)327-2703

Mon.-Fri. 6:30-3:30

CP, NP, CG, GG, BG, AL, BI, Plastics #1 & #2, PH, JM AL=aluminum



Community Facilities Pottstown Metropolitan Regional Comprehensive Plan

BG=brown glass containers

BI=bimetal cans

CG=clear glass containers

CP=corrugated cardboard

GG=green glass containers

JM=junk mail

MA=magazines

NP= newspaper

OP=office paper

PH=phone books

ST=steel cans

TX=textiles

YW=yard waste

Plastics #1 & 2=plastic soda, milk, water, etc. bottles Plastic #3=shampoo bottles, cooking oil bottles, fast

food service items

Plastic #4=grocery bags, bread bags, shrink wrap, margarine tub tops

Plastic #5=yogurt containers, straws, pancake syrup bottles, bottle caps

Plastic #6=disposable hot cups, packaging materials (peanuts), and meat trays

Electric and Gas Services

PECO provides electric service to Pottstown, West Pottsgrove, North and East Coventry, and the southwestern parts of Lower and Upper Pottsgrove. Metropolitan Edison provides electric service to Douglass, New Hanover, and the northeastern parts of Upper and Lower Pottsgrove. Virtually the same part of the Region that is provided with electricity by PECO is served with gas by PECO. The rest of the Region is provided electric service by Metropolitan Edison and gas service by UGI Corporation.

Power generating facilities nearby includes the Limerick Nuclear Power Station on the Limerick Township-Lower Pottsgrove-East Coventry border, and the Stowe Power Production Plant in West Pottsgrove. The Limerick Nuclear Power Station is owned by Exelon and is the second-largest power plant in Pennsylvania. It contains two reactors that were placed into service in 1985 and 1989. By 2025, the two reactors will be approximately 40 years old and at the end of their projected useful life. The Stowe Power Production Plant is a turbine power plant fueled by gases from the Pottstown Landfill.

Communication Facilities

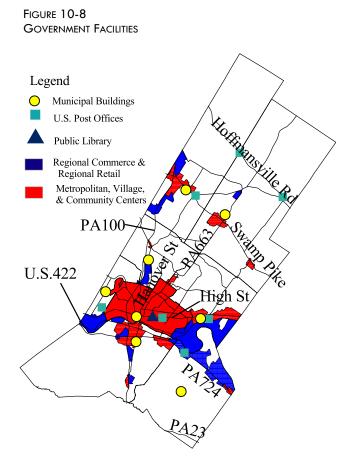
Wired telephone service is provided through most of the Region by Verizon. The northernmost third of the Region (east and northeast of Gilbertsville) is served by D&E Communications. Wireless service is provided by numerous companies throughout Montgomery and Chester Counties, and DSL service is provided in Pottstown and the central part of the region by Verizon.

Government Facilities

Government facilities serve a range of functions, including:

- Borough or township halls
- Maintenance facilities
- U.S. Post Offices
- Welfare and Social Security Offices

The Region is generally well-served by government facilities. However, some municipal buildings would benefit from modernization and expansion. Government facilities in the Region vary in nature. Some are consolidated while others are decentralized. Some are constrained for space while others are not, and some are municipal facilities while others (such as post offices) are federal facilities. Pottstown Borough, in particular, has a high concentration of government facilities. These facilities provide vital services to many people

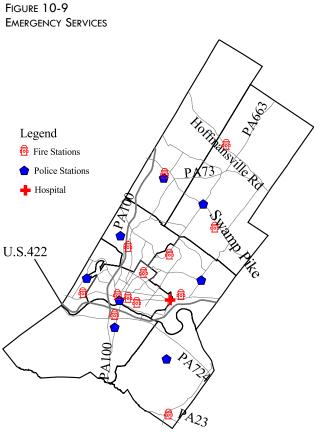


in the Region, and their central location makes it convenient for the users of these services to access them. However, as none of these uses pay either municipal or school tax, their numbers can pose a tax burden on the tax paying segment of the Borough. Pottstown Borough may wish to implement regulations that would limit their overall number, particularly within its central business district which traditionally commands the highest rents and correspondingly generates the greatest tax revenue..

Emergency Services

The Region is well served by fire, police, and emergency services.

Due to the localized nature of municipal government services in Pennsylvania, municipalities have realized mutual benefit from emergency services resource sharing.



For example, municipalities in the Region founded the Ches-Mont Emergency Response Team (C.M.E.R.T.). This team specializes in special weapons and tactics, and was developed to handle high-risk situations that normal patrol officers are not equipped to handle. In the past year the team



CMERT medics practice unloading a patient from a helicopter. Photo Credit: Good Will Steam Fire Engine Company No. 1, Pottstown web site (www.goodwillpottstown.org)



Sanatoga Fire Company

has expanded to include civilian tactical medical personnel (TEMS). The C.M.E.R.T. consists of officers from 12 different municipalities and is responsible for special operations in them. Following are municipalities in the Pottstown Metropolitan Region which participate in C.M.E.R.T.:

- Pottstown Borough
- Lower Pottsgrove Township
- Upper Pottsgrove Township
- West Pottsgrove Township
- North Coventry Township
- Douglass Township
- New Hanover Township

Educational Institutions

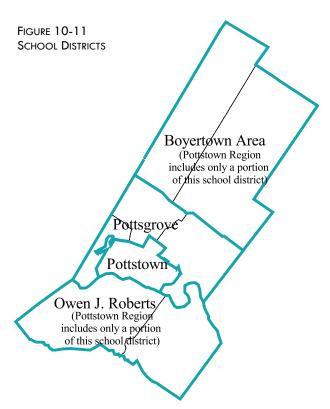
The Pottstown Region is served by four public school districts. They are Boyertown serving Douglass and new Hanover Townships, Owen J. Roberts serving East Coventry and North Coventry Townships, Pottsgrove serving the townships of West Pottsgrove, Lower Pottsgrove, and Upper Pottsgrove, and Pottstown serving the Borough of Pottstown.

There are eight private schools in the Region, five of which are located in the Borough of Pottstown (see Figure 10.15). These schools offer an alternative to public education for many. The Hill School in

FIGURE 10-10 ENROLLMENT

School District	Enrollment (2003-2004)	Projected Enrollment (2013-2014)
Boyertown (includes area outside Region)	6,934	7,235
Owen J. Roberts (includes area outside Region)	4,253	5,129
Pottsgrove	3,246	3,430
Pottstown	3,317	2,578

Source: PA Department of Education, May 2004



Source: Pennsylvania Department of Education, 2004

Pottstown is one of the most prestigious private schools in the nation. As a frequent host for the Pottstown Symphony, it is a contributor to the Region' cultural life as well.

FIGURE 10-12
ELEMENTARY SCHOOLS

School District	School
Pottsgrove	Lower Pottsgrove
	Ringing Rocks
	West Pottsgrove
Pottstown	Barth
	Edgewood
	Franklin
	Lincoln
	Rupert
Boyertown	Gilbertsville
	New Hanover- Upper Frederick
Owen J. Roberts	East Coventry
	French Creek
	North Coventry
	Vincent

FIGURE 10-13 MIDDLE AND JUNIOR HIGH

School District	School
Pottsgrove	Pottsgrove Middle
Pottstown	Pottstown Middle
Boyertown	Boyertown Area Jun- ior High East
Owen J. Roberts	Owen J. Roberts Middle

FIGURE 10-14 HIGH SCHOOLS

School District	School
Pottsgrove	Pottsgrove Senior
Pottstown	Pottstown Senior
Owen J. Roberts	Owen J. Roberts High

FIGURE 10-15
PRIVATE SCHOOLS

School	Municipality
Coventry Christian School	Lower Pottsgrove, North Coventry
Hill School	Pottstown
St. Aloysius	Pottstown
St. Peter's	Pottstown
St. Pius X High School	Pottstown
Stowe Lighthouse Christian Academy	West Pottsgrove
Westmont Christian Academy	North Coventry
Wyndcroft School	Pottstown

Vocational technical programs in the Region are offered at Pottstown Senior High School. Students in other school districts take vocational technical courses at the Western Center for Technical Studies, Northern Chester County, or Berks County Career and Technology Centers.

There is one college in the Region: the Montgomery County Community College's West Campus in Pottstown which opened in 1996. The West Campus is a valuable regional resource. It has an enrollment of approximately 2,000 full-credit students and 600 non-credit students. One of the Region's objectives is to make the Community College accessible to residents of North and East Coventry Townships. One of the community college's goals is to provide non-credit courses and training for educational enrichment, career advancement and job retraining.

Health Care and Related Facilities

There is one general hospital in the Region: the Pottstown Memorial Medical Center. This for-profit hospital in Pottstown Borough has 299 beds and a 46% occupancy rate [source: PA Department of Health Annual Hospital Questionnaire, July 1, 2000—June 30, 2001]. The low occupancy rate indicates the area has no

shortage of hospital beds and is well-served by its general hospital. Pottstown Memorial offers additional services through its affiliation with Fox Chase Cancer Center. Pottstown Memorial recently purchased the Phoenixville Hospital, located just outside the Pottstown Region. The Pottstown Memorial Medical Center is the largest employer in the Region.

There are numerous respected general hospitals and specialized health care facilities throughout the greater Philadelphia Region. These facilities are within easy driving distance.

Eldercare

Eldercare consists of three general types of facilities: (1) assisted living (personal care) facilities, (2) long-term care facilities (nursing homes), and (3) continuing care retirement communities, which may include personal care, nursing home, or independent living arrangements. Personal care facilities are licensed by the Pennsylvania Department of Public Welfare. These facilities provide housing and care for the elderly who need assistance performing everyday activities but do not need continuous nursing care. Long-term care facilities are licensed by the Pennsylvania Department of Health and provide continuous nursing care. Patients who were severely injured or seriously ill may also use such a facility as

FIGURE 10-17
POPULATION 75+

Region	Change from 1990 to 2000	% Change
Douglass	+178	71.8%
East Coventry	+109	31.6%
L.Pottsgrove	+430	157.5%
New Hanover	+120	62.8%
North Coventry	+184	72.7%
Pottstown	+120	7.0%
Upper Pottsgrove	+61	53.5%
West Pottsgrove	+58	32.6%
Total	+1,260	38.0%

Source: U.S. Census Bureau, 2000

transition between hospital and home.

In 2000, the Regional population aged 75 and above was 4,578. This was a 38 percent increase from 1990. This data and the general trend of an increasing elderly population in the nation will likely lead to an increased need for eldercare services.

Another increasingly popular private living option is age-restricted communities. Many of the age-restricted communities offer amenities targeted to seniors.

FIGURE 10-16 NURSING HOME INVENTORY

Nursing Home	Municipality	For Profit/ Nonprofit	Number of Licensed Beds	Occupancy Rate
Manorcare Health Service of Pottstown	Pottstown	For-profit	165	94.3%
Pottstown Memorial Medical Center Transitional Care Unit	Pottstown	For-profit	21	85%
Sanatoga Center	Lower Pottsgrove	For-profit	130	96.5%
Manatawny Manor	East Coventry	Nonprofit	133	Not available

YMCA/YWCA

The YMCA and YWCA each have facilities in the Pottstown Region. The YMCA offers services in Pottstown, Gilbertsville, Douglass and New Hanover. The latter two facilities are part of the Boyertown Area YMCA network. The Gilbertsville Center offers services including child care, after school programs, CPR and First Aid classes. The Hendricks Center in New Hanover has a gym, fitness center and offers child care courses.

The Pottstown YMCA offers a variety of services to the community, including sports and fitness, a supervised teen "hangout" center, and childcare facility. The Pottstown YWCA offers courses and programs in the following areas:

- Business and Professional Womens' Group
- Adult and family literacy
- Networking and mentoring
- Tutoring
- GED
- English as a Second Language
- Preschool
- Young childrens' playgroup
- Parenting Support Group

Health & Human Services

There is a full range of health and human services in the Pottstown Region. These organizations include federal government, county government, and nonprofit. Many of these services are located in the Borough of Pottstown.

The concentration of health and human service agencies draws people in need of assistance from around the area to Pottstown. These organizations are generally tax-exempt and thus do not add to Pottstown's tax base. The borough is working to

balance these services with their revitalization initiatives.

Child Day Care

The population most likely to use day care is working parents with children under the age of five. In the year 2000 there were 4,719 children under the age of five in the Pottstown Region, a decline of 2.8 percent from 1990. The population including the primary childbearing age groups (Regional population aged 20 to 44) remained relatively stagnant from 1990 to 2000. This demographic data indicates the demand for childcare will likely not dramatically increase in the short-term. However, other factors may lead to an increased demand for childcare at some time in the future such as increasing development and a concurrent population increase, changing family structure, or households with two wage-earners.

Libraries & Cultural Facilities

Libraries and cultural facilities can significantly add to the quality of life an area. They will draw people from a wide area to the Region's villages and to the Borough of Pottstown thereby adding to their vitality.

Libraries

The Pottstown Public Library, located at 500 High Street in Pottstown, is the only public library in the Region. All members of the general public can obtain a library card from the library. The primary service area of the library is Pottstown (including residents of Chester County with a Pottstown mailing address) and the Pottsgroves. However, residents of other municipalities can get a library card at the Pottstown Public Library after submitting a membership application; cards are then sent to the applicant via the applicant's "home library" (local library).

FIGURE 10-18 HEALTH & HUMAN SERVICE AGENCIES

Organization	Geographic Area Served	Ages Served	Services
ACLAMO-Pottstown	Montgomery County	-	Education, employment & training, family services, interpreters, information & referral
Addiction Counseling Services, Inc.	Western Montgomery, Southern Berks, and Eastern Chester Counties	Adolescent and adult	Drug & alcohol counseling, family/individual counseling, & support groups
Arbor Career Center	Montgomery County	18 years +	Education, employment, & training
American Cancer Society	-	-	Information & referral
American Red Cross- ChestMont Branch	Pottstown, Upper Perkioment, Boyertown, Gilbertsville, Royersford	-	-
CITE of Montgomery County	-	-	Education, employment, & training
Cluster Outreach Center Services	-	-	Food, clothing, furniture, financial assistance, HIV-STD-AIDs counseling, family services, funding & emergency housing, support groups
Creative Health Services	Western Montgomery County & Northern Chester County	-	Drug & alcohol counseling, family/individual counseling, MH/MR counseling
Fellowship Farm	-	-	Funding & emergency housing
Genesis Pregnancy Care Center	Montgomery, Chester & Berks Counties	12 years +	Food, clothing, family/individual counseling, pregnancy testing, teen pregnancy, information & referral
Goodwill Ambulance	Pottstown, Upper Pottsgrove, Lower Pottsgrove, West Potts- grove, parrts of Limerick	-	Transportation
Grief, Bereavement, Readjustment Counseling	Pottstown, Montgomery, Chester & Berks	-	Bereavement Counseling, information & referral, support groups
Montgomery County Assistance Office-Pottstown	Western Montgomery County	-	Fuel, food, financial, medical
Montgomery County Head Start	Pottstown area	3-5 years	Early intervention
Montgomery County Health Department-Pottstown	Pottstown and surrounding vicinity	All Ages	Medical, HIV-STD-AIDS counseling, home visiting, immunizations/TB, STDs (health services), unsafe living conditions
Montgomery County Legal Aid Service-Pottstown	Western Montgomery County	All Ages	Legal
Montgomery County Office of Aging & Adult Services-Pottstown	Pottstown Area	18 years +	Special needs, early intervention, MH/MR counseling, education, employment & training, family services
Montgomery Early Learning Centers	Pottstown	6 weeks to 12 years	Childcare

FIGURE 10-18 HEALTH & HUMAN SERVICE AGENCIES, (CONTINUED)

Organization	Geographic Area Served	Ages Served	Services
Planned Parenthood Southeastern PA– Pottstown	Pottstown, Western Montgomery Co., parts of Berks & Chester Counties	13 to 35 years	HIV-STD-AIDS Counseling, gynecological/OB, pregnancy testing, STDs (health services) information & referral
Pottstown Family Center	Western Montgomery County,Pottstown, Pennsburg, Upper Perkiomen, Harleysville	Families with children aged 0 to 5 years; for PAT no age limit	Food, education, employment & training, family services, home visiting, teen pregnancy, information & referral, support groups
Pottstown Family YMCA Childcare	Pottstown area		Childcare
Progressions of Pottstown			Family/Individual Counseling, MH/MR Counseling, Family Services
SAFE Project of Creative Health Services	Montgomery County	18 years +	Domestic violence
Social Security Administration - Pottstown	Western Montgomery County		Financial, medical
Visiting Nurse Association of Pottstown & Vicinity	10-County Area	0-100 years	Child health care, home visiting, immunizations/TB
Women, Infants and Children (WIC)	Montgomery County	Pregnant women, nursing women, and children under five years of age	Services, including the provision of food and breastfeeding, are offered free of charge.

The Pottstown Public Library is a member of the Montgomery County Library Information Network Consortium (MCLINC). This consortium allows users to easily search holdings of participating libraries in Montgomery County via the internet. Books can then be borrowed from those libraries via inter-library loan. Library members can also arrange to borrow books or other library resources from libraries throughout the nation. The Pottstown Public Library offers internet access to the public at approximately seven computer terminals

FIGURE 10-19 LIBRARY USAGE STATISTICS

Pottstown Public Library			
Population Served	37,783		
Registration	15,565		
Registration per Capita	0.41		
Circulation	137,762		
Circulation per Capita	3.65		
Catalogued Items	71,723		
Books per Capita	1.90		

Museums

Museums are an important part of an area's cultural life, and can be tourism-related revenue generators as well. Historic Pottsgrove Manor, a Montgomery County Historic Site, is the most significant museum in the Pottstown Metropolitan Region.

Located on a four-acre tract in Pottstown Borough, Pottsgrove Manor is a Georgian-style manor house built in 1752 for John Potts, the founder of Pottstown. In his lifetime John Potts was an ironmaster, merchant, judge, and member of the Pennsylvania General Assembly. Visitors can tour the house and see educational demonstrations; seasonal events are also held. The house has been restored to show examples of architecture, elegant interiors, and fine furnishing associated with wealthy English gentry of the mid-eighteenth century. Unfortunately, Pottsgrove Manor is isolated, surrounded by major roads and difficult to access by walking or biking.

Theaters

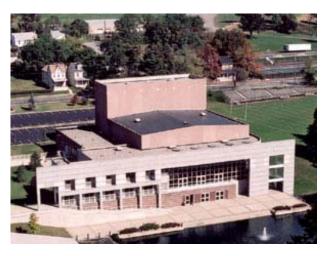
The most significant theaters in the Region include the Hill School's Center Theatre, the riverfront amphitheater in Pottstown, school auditoriums, and an eight-screen cinema across the street from the Coventry Mall in North Coventry. The Hill School's theater-like auditorium is the performance venue of choice for the Pottstown Symphony. Pottstown High School's auditorium is also used for concerts.



Pottsgrove Manor
Photo credit: Montgomery County, Department of
History and Cultural Arts

Cultural Attractions

One of the most significant cultural attractions in the Pottstown Region is the Pottstown Symphony which recently celebrated its 40th anniversary. Other attractions of note include the Pottstown Farmer's Market, Zern's Farmer's Market in Gilbertsville, and various events in downtown Pottstown, including car shows, historic tours, music, art shows at Smith Family Plaza, culinary festivals, and the soap box derby. In addition to hosting the Pottstown Symphony, the Hill School offers shows featuring touring cultural events and symphonies. In East

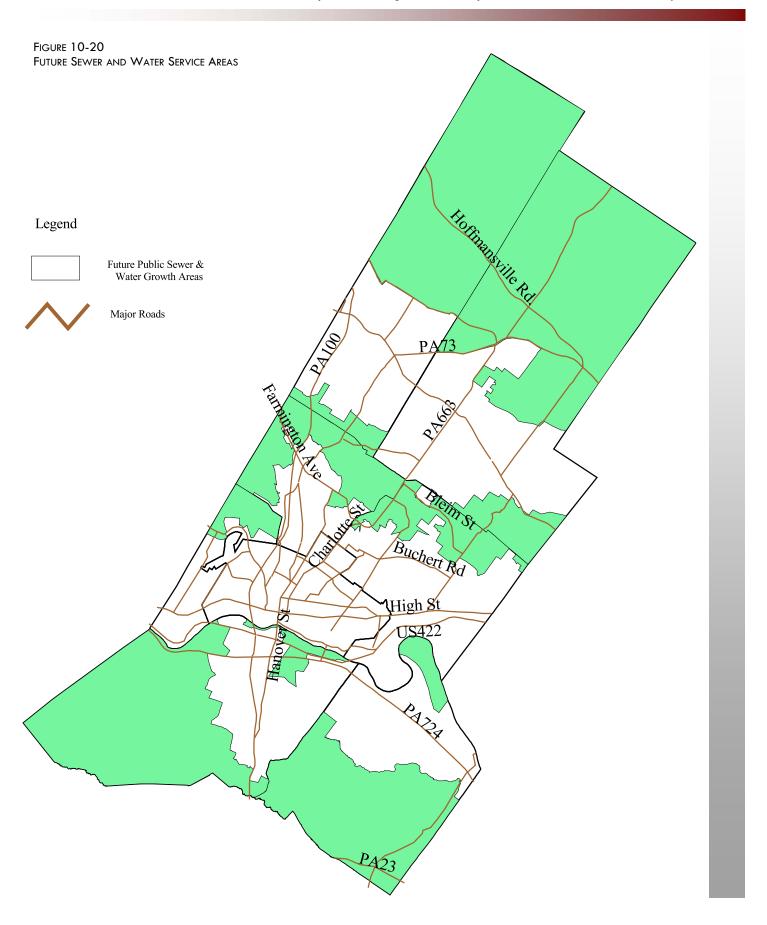


The Hill School's Center for the Arts includes the 720-seat Center Theatre, a frequent venue for the Pottstown Symphony. Photo Credit: The Hill School (www.thehill.org)

Coventry children's plays are performed at a pavilion in Towpath Park.

Religious Institutions

Religious institutions have historically played an important role in the civic and cultural life of Pottstown and the Pottstown Region. Many of the Region's historic structures are churches. The skyline of Pottstown, the Region's villages, and its country landscapes have historically been decorated with the spires and steeples of churches. Furthermore, the large concentration of churches in Pottstown draws many area residents into the Borough on weekends.

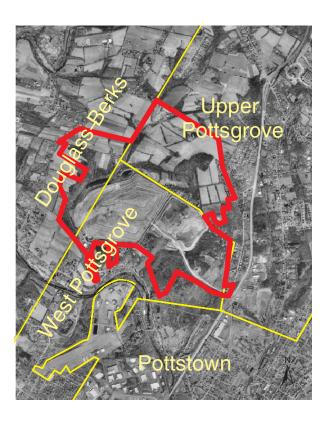


Recently demographic changes have contributed to declines in the size of congregations at some churches. Should membership decline to the point where a church closes, and if no other congregation can be found to reuse the building, then the adaptive reuse of the building should be considered in order to preserve the historic structure.

Community Facilities Plan

Community facilities (such as public sewer and water) should be limited to the Metropolitan Centers, Community Centers, Village Centers, and Regional Commerce Center land use designations as shown on the Regional Future Land Use Plan. Limiting their expansion to these areas whenever possible will help foster revitalization and limit sprawl.

FIGURE 10-21
APPROXIMATE BOUNDARIES OF POTTSTOWN LANDFILL PROPERTY



Sewer & Water

Sewer and water facility extensions should be discouraged in the rural resource areas, and should only be allowed in special circumstances such as to address problems in areas with failing on-lot systems or to serve existing villages.

Rural resource areas are not intended to for intense development. Limiting sewer extensions, and adopting regulatory tools that preserve sensitive natural features, such as performance zoning, cluster zoning, and transfer of development rights (TDR), are recommended in these areas.

Whenever public sewer is to be extended to a Rural Resource Area, it should also be accompanied by public or central water. Public sewer without public water will only contribute to depletion of the water table. The worst possible situation for groundwater recharge is a public or central sewer system and individual on-lot wells. Areas that will not be served by public sewer and water should have on-site sewer management systems.

North Coventry is currently assessing its water capacity by examining the amount of water that might be drawn from Township's wells. Depending on the results of the analysis, it might be possible in the future to establish community wells that serve homes in selected locations.

It is recommended that water companies develop interconnections and relationships with other water systems. Such connections allow the cooperating water purveyors to move water to any part of the system experiencing difficulties, thus strengthening the reliability of each cooperating purveyor. Currently the Pottstown Borough Water Authority, Boyertown Borough Water Authority, Superior Water Company and Pennsylvania American do not maintain interconnections with each other.

Solid Waste & Recycling

The following facilities receive much of the Region's solid waste. They are:

- Montenay Montgomery Limited Partnership, Conshohocken
- Pioneer Crossing Landfill, Exeter Township
- G.R.O.W.S. Landfill, Morrisville
- Tullytown Resource Recovery Facility, Tullytown
- New Morgan Landfill Co. Inc., Morgantown

The Pottstown Landfill's closing is the primary solid waste issue facing the Region. Most of the landfill property in Upper Pottsgrove lies in the Region's designated Rural Resource Area. The landfill closure committee and other interested groups are now discussing the manner and timing of the landfill's closing. Another major issue to consider is the potential future land uses for the landfill property-namely the part of the landfill property that has not been used for solid waste disposal.

It is recommended that at the appropriate time the Regional Planning Committee communicate with the landfill closure committee to help ensure its work is coordinated with the Regional Comprehensive Plan. The representatives of three municipalities in the Region— Upper Pottsgrove, West Pottsgrove, and Pottstown— have large stakes in the landfill's future. These municipalities would be likely to experience the largest impacts from the development of the landfill site (traffic, development pressure, etc). Furthermore, Pottstown and the landfill have an agreement involving Pottstown's provision of utilities in return for preferential rates for disposal of solid waste originating in Pottstown.

This Plan supports the continuation and expansion of recycling efforts. Municipalities in the Region that do not already have ordinances requiring residential and commercial recycling should consider adopting them. Recycling programs reduce the solid waste burden generated by the Region's residents and are generally beneficial for the environment. Recycling activities are handled by municipalities, contracted out to haulers, or arranged for by private residents by contract.

FIGURE 10-22
RECYCLING PROGRAM BY MUNICIPALITY

Municipality	Municipal Contract Curbside	Residential Contract Curbside	Municipal Drop-off	Nonmunicipal Drop-off
Douglass	*	*	*	
East Coventry		*		
Lower Pottsgrove	*			
New Hanover	*			
North Coventry		*		*
Pottstown	*			
Upper Pottsgrove		*		
West Pottsgrove	*			

Electricity and Natural Gas

Currently basic power needs are being met and it is anticipated that future demand will not outstrip supply.

The joint use of power line right-of-way corridors,

however, is now becoming an issue that should be looked as utility companies have begun to propose development directly on their right-of-ways. Municipal zoning ordinances may therefore need to address this growing issue. These corridors can be used for trails, parks, and parking lots. In central Montgomery County the Power Line Trail has been planned for such a utility corridor.

Communication Facilities

Communications facilities are expected to continue to serve the Region well in the future. One of the biggest communications issues the Region needs to consider and plan for is that concerning mobile communications systems. As the demand for these systems continues to grow, the demand for cellular communications towers will increase. The Pottstown Region encourages the location of these facilities in industrial areas where possible. Mobile communications antennae can also be attached to existing flag poles, smoke stacks, water towers, or buildings. Cellular communications antennae should be designed to blend into their surroundings and minimize visual clutter. Where communications towers must be constructed, care should be taken to place them in sites where they least disrupt views.

Government Facilities

Future government facilities in the Pottstown Region should preferably be located in the metropolitan center, community centers, village centers, and regional retail centers. Government facilities may also be located in existing underutilized strip malls and shopping centers to fill space that otherwise be vacant.

The location of government facilities in the Region's development centers can strengthen community identity. This is particularly true with facilities that draw a relatively large amount of visits by the public (such as municipal buildings and post offices). For example, the Pottstown Borough Hall is located on High Street, where it is easily accessible by

pedestrians and public transit. Adaptive reuse of existing buildings should be encouraged for government facilities, particularly buildings having notable historic or architectural qualities. New buildings should be designed to be complimentary to the community.

Government facilities should utilize technology when possible to make their services even more accessible. Use of web sites to allow the public to access municipal and Regional information, and to assist in transmitting announcements to the public is recommended.

Municipalities in southeastern Pennsylvania that pool resources for greater efficiency include:

Westtown East Goshen Police Department, Chester County

The Upper Perkiomen Valley
Police Department (East
Greenville and Pennsburg Boroughs, Montgomery County)

Hatfield Borough and Hatfield Township Police Departments.

New municipal buildings should, where possible, provide a combination of government offices, meeting space, emergency services, libraries, and other public services. This is referred to as co-location, and consolidates government services for the benefit of the public and the municipality itself for costs, efficiency, and ease of access.

Sharing of government facilities and technology on a regional level should also be discussed. By sharing facilities or technology, municipalities can incur cost savings or provide additional services to residents in their service area. For example, one township's police force may not have a budget large enough to provide high-tech crime-fighting equipment; however, it may be feasible for the Region's municipalities to cooperate and purchase high-tech anti-crime equipment to share.

Emergency Services

With our current international security concerns, communities across America need to conduct increased security and emergency services planning. Sharing of special emergency services equipment or technology should be investigated by the Pottstown Region's

municipalities. This can allow municipalities to have access to cutting-edge equipment or technology they might not otherwise be able to afford, reduce costs and avoid duplication of equipment and services. Services that might be obtained through sharing resources include specialists in: water rescue, hazardous materials, special weapons and tactics, explosives, tactical rescue, radiology, evacuation, and bio-terrorism.

Emergency services information, such as the location of facilities, staffing, equipment, contact information, and hazardous materials should be maintained in electronic



The Douglass Township Administration and Police Force Share a Facility in Gilbertsville

format and accessible via a geographic information system (GIS). GIS may also be used to help locate callers.

To help emergency service personnel respond to calls for help, all streets and roads should have clearly marked street signs, all houses should have a properly displayed house number, and all highways and recreational trails should have mile markers or other location reference signs. Duplication of street names or very similar street names within the same emergency services area should be avoided.

The Region may wish to investigate the installation of traffic signal preemption devices so emergency vehicles may pass through intersections faster and more safely.



U.S. Post Office, Douglass Township

The Region may wish to investigate adding global positioning system (GPS) devices to emergency services vehicles so dispatchers can easily track them.

The Region may wish to investigate adding traffic monitoring cameras at major intersection and along major roadways to help facilitate traffic flow the movement of emergency vehicles.

The Region may wish to review its evacuation alert procedure in the event of an actual emergency. This is particularly true for the 10-mile radius Emergency Planning Zone of the Limerick Nuclear Power Station, which includes virtually the entire Pottstown Metropolitan Region.

Education

When schools or colleges in the Pottstown Region expand, they should reuse existing buildings where possible, particularly if the buildings have historic qualities. When new construction, rehabilitations, or building modifications are undertaken, the project should be sensitive to the area's existing character. Schools should be located in or adjacent to the Region's development centers to promote walkability

and community identity. At a minimum these should be located in growth areas.

One of the Region's specific goals is to have the Montgomery County Community College West



Upper Pottsgrove Township Police Station

Campus play a larger role in education and job training. The College has expressed a desire to shape its curriculum to match the job training needs of the Region's employers, thus facilitating economic development. The Community College is a major component in the revitalization of downtown Pottstown. The Region would support the Community College's expansion into a more central part of downtown in the future.

Health and Human Services

Hospitals and Medical Centers

Pottstown Memorial Medical Center should be viewed as a major asset to the Region and potentially an even greater one in the future. The hospital is already the Region's largest employer. With the hospital's recent acquisition of Phoenixville Hospital its resources have only grown. As the demand for health care services continues to increase, the hospital's vital role in the Region is likely to strengthen.

Eldercare

As the elderly population continues to grow, the demand for eldercare services will also increase. Municipalities may wish to consider where such facilities would best be located. It is important for these places to be located in walkable centers for the independence and quality of life. Another aspect to consider is that eldercare facilities often can be utilized successfully as part of adaptive reuse projects such as a closed school building.

Health and Human Services Offices

Pottstown Borough is perceived to have more than its share of health and human service offices, including nonprofits, county government, and federal government assistance offices. Although these offices serve an important role in the community, its vital that they do not overwhelm the Borough of Pottstown where they traditionally have located. Consideration should be given to by these agencies to locate in areas other then Pottstown and the Pottstown Region.

Child Day Care

Child day care should be located near employment centers to make it as convenient as possible for workers to drop off and pick up their children. This Plan advocates the offering of a range of day care options to provide the widest degree of choice for parents. The Region should determine which areas are desirable for childcare facilities and adapt zoning appropriately.

Libraries & Cultural Facilities

This Plan recognizes the value theaters, museums, festivals, libraries, and other cultural facilities have as "draws" which have the potential to bring more people into Pottstown and the Region's other older developed areas. These amenities improve the quality of life for all residents. The Region should seriously consider adding to or expanding these facilities whenever possible.



Eldercare Facilities Should be Located in Growth Areas

The Pottstown Region might consider taking some of the following cultural initiatives in the future:

- Additional outdoor festivals or events
- Increased focus on historic attractions, such as historic tours, museums, and informational signage. The Schuylkill River has been designated as a National & State Heritage Area. The Heritage Area has five broad objectives: (1) resource conservation and enhancement, (2) education and interpretation, (3) recreation, (4) community revitalization, and (5) heritage tourism. This initiative includes an expansion of River Park and Pottsgrove Manor, and the creation of Memorial Park, the whole of which would create a Regional Center.
- A Regional public theater (this could be used for live drama, music performances, or for arts films).
 The Pottstown Regional Survey (2002) showed demand exists for such a facility. The Survey also found residents believe the two most needed entertainment attractions are for a playhouse and a music center.
- Market the Pottstown Library as a regional meeting place. This could be facilitated through such special events as book discussions, a guest author speaker series, and library-related outdoor activities such as book fairs.

Conclusion

The goals of the Pottstown Metropolitan Region are listed at the beginning of the chapter. These and the Regional Future Land Use map have a strong link to community facilities planning in the Region. One of the most important community facilities goals is using public sewer and water facilities efficiently by extending these systems only within designated growth areas.

The Region's community facilities are generally adequate for the present and foreseeable future. This includes utilities, such as the capacity of public water and sewer facilities. Another goal is to protect surface water quality and ensure sufficient water supply by using public and private sewer and water systems effectively, including on-site systems. To prevent on-site systems from failing, programs should be set up and creative land use and community infrastructure solutions may be needed. Electrical power, solid waste, and communications facilities are considered adequate.

Police, fire and emergency services are currently serving the area well. Over time, these services may come under increased or new demands in the area of homeland security. It is recommended that communities in the Region work jointly to supply these services.

The Region's cultural facilities could be improved and expanded. This would be useful in supplementing tourism and economic development, especially in revitalizing developed areas. It would also improve the quality of life by providing additional cultural amenities for existing residents. One recommendation is to consider the feasibility of a theater or performing arts center, for which the Regional survey indicated there is demand.

A Regional goal in education is to cooperate with the local school districts, Montgomery County Community College and local libraries to encourage appropriate locations for new or expanded facilities in pedestrian-friendly areas. The Region should work in conjunction

Community Facilities Pottstown Metropolitan Regional Comprehensive Plan

with the Montgomery County Community College - West Campus to develop a larger role for that institution in education and workforce training, as well as drawing more people into the Metropolitan Center on daily basis. The Pottstown Library is one of the Region's major cultural facilities. In the future, a Community College downtown expansion, the library, and a future theater, performing arts center, or cultural arts building could form a cultural nexus in the heart of Pottstown.

The Pottstown Memorial Hospital is a major medical services asset, and is the largest employer in the Region. It recently expanded its services by forming a partnership with Fox Chase Cancer Center.

Another of the Region's goals is to encourage the coordination of municipal services/facilities. The Region should discuss sharing specified community resources and services for the sake of efficiency, cost savings, and the ability to purchase high-tech resources.

Appendix A

Regional Survey

A survey of residents in the Pottstown Metropolitan Area Region was conducted to obtain residents' opinions regarding regional planning issues.

This survey polled residents of:

- Douglass Township
- East Coventry Township
- Lower Pottsgrove Township
- New Hanover Township
- North Coventry Township
- Pottstown Borough
- Upper Pottsgrove Township
- West Pottsgrove Township

The summary of survey results was tabulated in June 2002 and is provided in this Appendix. Information from the survey was used to help determine priorities and policies in the Regional Comprehensive Plan.

Question 1: In which municipality do you live?

Municipality	Municipal Households	% of Households
Douglass	3,211	28%
East Coventry	1,649	32%
Lower Pottsgrove	4,015	16%
New Hanover	2,532	27%
North Coventry	3,012	25%
Pottstown	9,146	9%
Upper Pottsgrove	1,417	24%
West Pottsgrove	1,524	19%
Pottstown Region	26,506	19%

MeanMedianMode26 Years20 Years2 Year

Mean is the sum of all the responses divided by **Median** splits the sample into two parts with equ **Mode** is the response that occurred most often.

PMRP Survey June 21st, 2002 n=4968

Response Rate: 100%

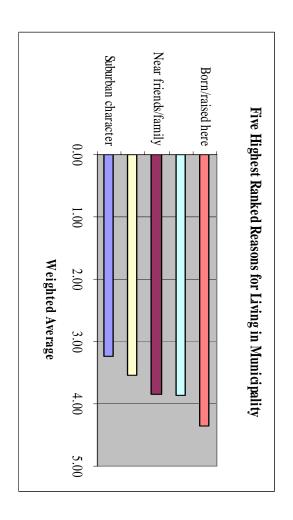
Question 2: How many years have you lived in the Pottstown Metropolitan Region?

84-95 72-83 60-71 Length of Residence in the Region Range of Years (June 21, 2002) 24-35 12-23 0-11 2000 1800 200 1600 1400 1200 1000 800 009 400 Number of Responses

Total Responses	35%	20%	15%	12%	10%	2%	3%	%0	
Responses	1,733	896	730	602	481	255	170	28	
Residence	0-11	12-23	24-35	36-47	48-59	60-71	72-83	84-95	

PMRP Survey June 21st, 2002 n= 4967

Question 3: Why do you choose to reside in your municipality?

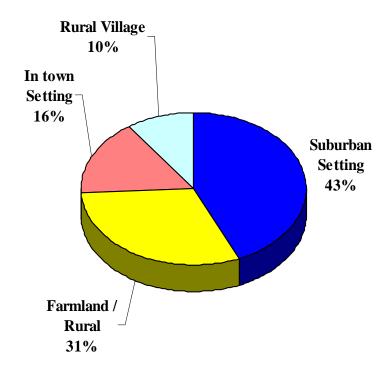


Category			Rank			Weighted	First Priority	Overall
(1	2	3	4	51	Average	Ranking •	Ranking
Born/raised here	1,101	236	100	68	94	4.36	1	1
Rural character	960	440	396	256	110	3.87	2	2
Near friends/family	824	1,054	288	201	184	3.84	3	3
Convenient to work	667	488	572	244	202	3.54	4	4
Suburban character	196	213	222	184	103	3.23	5	5
Village character	45	63	67	43	48	3.05	11	6
Job/business	95	77	97	106	70	3.05	8	6
Quality of schools	185	373	448	358	266	2.91	6	8
Variety of housing	159	122	147	159	179	2.90	7	9
Low taxes	85	187	213	202	149	2.83	9	10
In town character	30	48	48	53	51	2.80	13	11
Clean air & water	43	345	336	309	238	2.72	12	12
Able to walk work/shop	21	46	74	98	50	2.62	14	13
Public trans	5	24	44	45	48	2.36	17	14
Low crime	60	254	435	510	501	2.35	10	15
Variety of rec. choices	15	41	86	132	144	2.17	15	16
Variety of places to shop	8	55	112	202	291	1.93	16	17
Cultural amenities	0	4	18	40	44	1.83	18	18

PMRP Survey June 21st, 2002 n=4929 Response Rate: 99%

Question 4: Please indicate the character of your immediate neighborhood

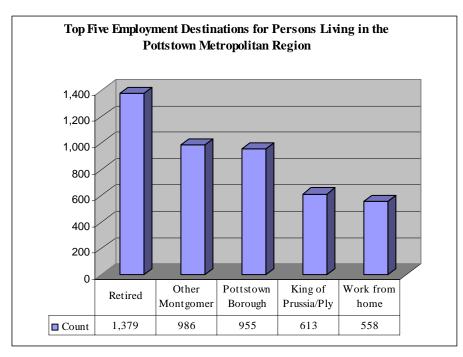
Category	Number of Responses	Percent
Suburban Setting	2,087	43%
Farmland/rural	1,493	31%
In town setting	781	16%
Rural Village	467	10%
Total Responses	4,828	100%



PMRP Survey June 21st, 2002 n= 4828 Response rate: 97%

Question 5: Where is your place of employment?

Place of Employment	Count	Rank
Retired	1,379	1
Other Montgomery County municipality	986	2
Pottstown Borough	955	3
King of Prussia/Plymouth Meeting area	613	4
Work from home	558	5
Collegeville/Phoenixville area	437	6
Other Chester County municipality	430	7
Berks County	363	8
Other	355	9
Exton/Downington/West Chester area	298	10
Lower Pottsgrove Township	208	11
Douglass Township	187	12
North Coventry Township	186	13
City of Philadelphia	178	14
Reading area	164	15
Lehigh Valley area	113	16
West Pottsgrove Township	88	17
New Hanover Township	83	18
East Coventry Township	73	19
Upper Pottsgrove Township	72	20
Bucks County	72	21



PMRP Survey June 21st, 2002 n= 4935

Question 6: Future growth will occur, but growth can be encouraged in certain areas and discouraged in others. Where should new development

Category	Number of Responses	1	Ra 2	ink 3	4	Weighted Average	Overall Ranking
In/around existing villages/Pottstown	4,120	3,272	337	179	332	3.59	1
In/around existing suburban areas	3,559	499	1,936	866	258	2.75	2
In new small towns	3,437	402	915	1,840	280	2.42	3
In rural townships	3,387	275	227	379	2,506	1.49	4

PMRP Survey June 21st, 2002 n=4923

addressed by this regional planning effort Question 7: Please rank your top five issues that you believe should be

Top Five First Priorities:

- Increase job/business opportunities.
- Open space preservation.
- Agricultural preservation
- Improve traffic & road conditions.
- 5. Improve quality of schools.

Top Five Overall Priorities:

- 1. Increase job/business opportunities
- 2. Agricultural preservation
- 3. Open space preservation
- 4. Improve sewage & water facilities.
- 5. Improve traffic & road conditions.

				;					
	Number of			Kank			Weighted	First Priority	Overall
Category	Responses	1	2	3	4	5	Average	Ranking	Ranking
Increase job/business opportunities	2057	1,026	296	238	264	233	3.79	1	1
Agricultural preservation	2360	866	642	333	284	235	3.69	3	2
Open space preservation	2874	903	863	531	328	249	3.64	2	3
Improve sewage & water facilities	1030	190	268	224	184	164	3.13	8	4
Improve traffic & road conditions	2465	435	484	636	512	398	3.02	4	5
New shopping areas & services	699	120	146	152	139	142	2.95	11	6
Improve community safety	1312	171	332	252	298	259	2.89	9	7
Expand public transportation	1031	142	194	246	237	212	2.82	10	8
Develop growth policies	1481	211	256	351	363	300	2.81	6	9
Improve quality of schools	1388	213	256	254	302	363	2.75	5	10
Improve air & water quality	1381	193	220	275	370	323	2.70	7	11
Increase variety of housing types	210	22	45	41	46	56	2.67	17	12
Historic resource preservation	1237	44	193	436	300	264	2.56	13	13
Increase community revitalization	892	72	133	191	225	271	2.45	12	14
Increase affordable housing	419	31	75	75	107	131	2.45	15	14
Add cultural amenities	549	25	83	125	139	177	2.34	16	16
Add recreational facilities	884	42	132	185	238	287	2.33	14	17

PMRP Survey June 21st, 2002

Response rate: 99%

n = 4915

Question 7 (page 2): Where do you shop

Shopping Category	Rank	Location	Shopping Category	Rank	Location
Groceries:	1	Pottstown Region (Except Mall & Borough)	Personal Services:	1	Pottstown Borough
	2	Boyertown area		2	Pottstown Region (Except Mall & Borough)
	3	Pottstown Borough		3	Boyertown area
	4	Coventry Mall		4	Trappe/Collegeville/Phoenixville area
	5	Trappe/Collegeville/Phoenixville area		5	Limerick Township/Royersford area
Pharmacy & Convenience:	1	Pottstown Borough	Furniture & Appliances:	1	Pottstown Region (Except Mall & Borough)
	2	Pottstown Region (Except Mall & Borough)		2	Coventry Mall
	3	Boyertown area		3	Pottstown Borough
	4	Coventry Mall		4	Limerick Township/Royersford area
	5	Limerick Township/Royersford area		5	King of Prussia/Plymouth Meeting area
Household Goods:	1	Pottstown Region (Except Mall & Borough)	Dining:	1	Pottstown Region (Except Mall & Borough)
	2	Coventry Mall		2	Boyertown area
	3	Pottstown Borough		3	King of Prussia/Plymouth Meeting area
	4	Boyertown area		4	Reading area
	5	King of Prussia/Plymouth Meeting area		5	Pottstown Borough
Clothing:	1	Coventry Mall	Entertainment:	1	King of Prussia/Plymouth Meeting area
	2	King of Prussia/Plymouth Meeting area		2	Pottstown Region (Except Mall & Borough)
	3	Mail Order		3	Reading area
	4	Reading area		4	Coventry Mall
	5	Pottstown Region (Except Mall & Borough)		5	Trappe/Collegeville/Phoenixville area

PMRP Survey June 21st, 2002 n= 4915

PMRP Survey June 21st, 2002 n= 4920

Question 8: Where do you shop most frequently for.....? (Continued)

Shopping Category	Rank	Location	Shopping Category	Rank	Location
Groceries:	1	Pottstown Region (Except Mall & Borough)	Personal Services:	1	Pottstown Borough
	2	Boyertown area		2	Pottstown Region (Except Mall & Borough)
	3	Pottstown Borough		3	Boyertown area
	4	Coventry Mall		4	Trappe/Collegeville/Phoenixville area
	5	Trappe/Collegeville/Phoenixville area		5	Limerick Township/Royersford area
Pharmacy & Convenience:	1	Pottstown Borough	Furniture & Appliances:	1	Pottstown Region (Except Mall & Borough)
	2	Pottstown Region (Except Mall & Borough)		2	Coventry Mall
	3	Boyertown area		3	Pottstown Borough
	4	Coventry Mall		4	Limerick Township/Royersford area
	5	Limerick Township/Royersford area		5	King of Prussia/Plymouth Meeting area
Household Goods:	1	Pottstown Region (Except Mall & Borough)	Dining:	1	Pottstown Region (Except Mall & Borough)
	2	Coventry Mall		2	Boyertown area
	3	Pottstown Borough		3	King of Prussia/Plymouth Meeting area
	4	Boyertown area		4	Reading area
	5	King of Prussia/Plymouth Meeting area		5	Pottstown Borough
Clothing:	1	Coventry Mall	Entertainment:	1	King of Prussia/Plymouth Meeting area
	2	King of Prussia/Plymouth Meeting area		2	Pottstown Region (Except Mall & Borough)
	3	Mail Order		3	Reading area
	4	Reading area		4	Coventry Mall
	5	Pottstown Region (Except Mall & Borough)		5	Trappe/Collegeville/Phoenixville area

Question 8: Where do you shop most frequently for.....? (Continued)

egory	Mail Order	Boyertown	Trappe/ Collegeville/ Phoenixville	King of Prussia	Limerick/ Royersford	Upper Perkiomen Valley	Exton/ Downington/ West Chester	Coventry Mall	Pottstown Borough	Pottstown Region Except Mall & Borough	Lancaster	Lehigh Valley	Reading
ceries	9	1,277	171	19	140	LL	17	375	1,074	1,294	37	12	70
rmacy	11	812	93	10	155	95	20	603	1,188	1,076	1	5	11
lsehold	3	272	54	222	09	30	112	626	699	1,095	27	23	147
thing	268	95	18	633	20	10	158	2,089	233	281	30	37	306
s. Services	104	455	199	149	190	63	82	182	826	750	8	39	88
niture	42	75	112	347	351	16	116	532	405	640	140	99	329
ing	5	263	191	477	127	85	163	108	372	006	19	68	396
ertainment	48	126	198	827	98	24	135	234	161	478	134	115	294

PMRP Survey June 21st, 2002

Question 9: What types of new or expanded retail stores and services are most needed in the Pottstown Metropolitan Region?

	Number of	
Retail Stores	Responses	Rank
Restaurant	2,202	1
Bookstore	976	2
Grocery	756	3
Hobby	651	4
Clothing	639	5
Discount	635	6
Sporting goods	556	7
Home	472	8
Hardware	418	9
Electronics	379	10
Furniture	379	11
Convenience	333	12
Drug	114	13
Fast Food	102	14
Business supply	86	15

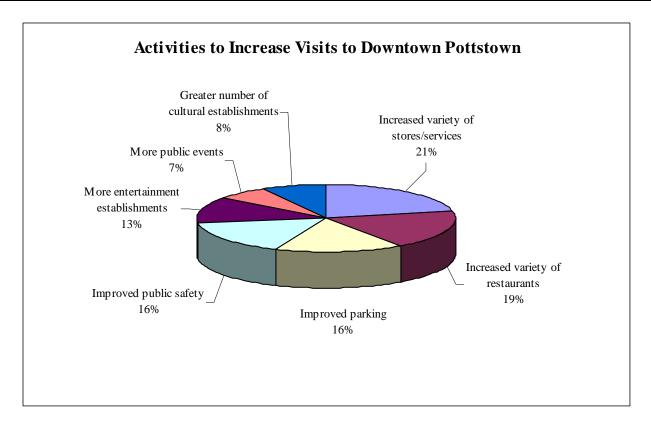
	Number of	
Services	Responses	Rank
Library	946	1
Educational services	771	2
Physician	742	3
E & A repair	600	4
Emergency services	488	5
Car repair	404	6
Dentist	369	7
Laundry/dry cleaner	368	8
Bank/Invest services	232	9
Travel agency	180	10
Hair salon	124	11
Accountant	70	12
Attorney	61	13

Entertainment	Number of Responses	Rank
Playhouse	1,526	1
Music center	1,500	2
Visual arts/Art gallery	1,189	3
Sports complex	1,039	4
Movie Theater	931	5

PMRP Survey June 21st, 2002 n=4949

Question 10: Which of the following would increase your visits to downtown Pottstown?

Category	Number of Responses	Percent of Responses
Increased variety of stores/services	3,132	21%
Increased variety of restaurants	2,751	19%
Improved parking	2,339	16%
Improved public safety	2,373	16%
More entertainment establishments	1,845	13%
More public events	990	7%
Greater number of cultural establishments	1,174	8%
Total Responses	14,604	100%



PMRP Survey June 21st, 2002 n=4922

top 3 transportation issues in your municipality? Question 11: What are the top 3 transportation issues in the Pottstown Metropolitan Region and the

Top 3 Transportation Issues

Region:

1. Road Maintenance

3. Parking 2. Traffic Congestion

Municipal:

2. Traffic Congestion 1. Road Maintenance

3. Narrow Roads

	Pottstown Region	gion	
	Number of		
Category	Responses	Percent	Rank
Road Maintenance	1,997	21%	1
Traffic Congestion	1,737	18%	2
Parking	1,450	15%	3
Public transit	1,031	11%	4
Truck Traffic	891	9%	5
Narrow roads	684	7%	6
Bicycle lanes	613	6%	7
Signalization	479	5%	8
Sidewalks/crossings	432	4%	9
Signage	293	3%	10

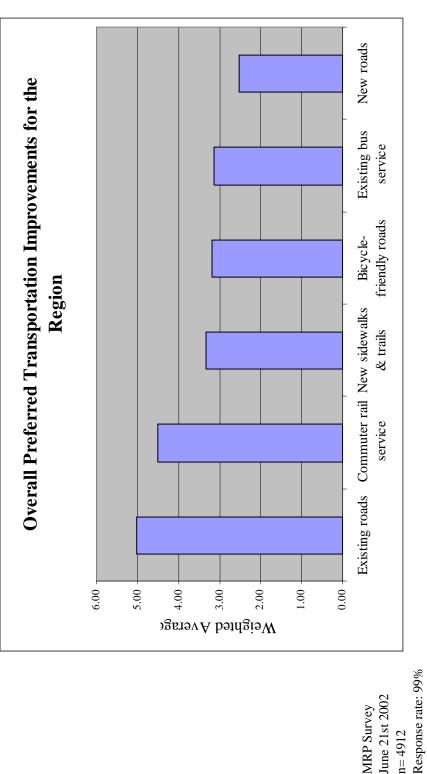
Res	Respondent's Municipality	ality	
Category	Number of Responses	Percent	Rank
Road Maintenance	1,822	20%	1
Traffic Congestion	1,424	15%	2
Narrow roads	1,271	14%	3
Truck Traffic	1,000	11%	4
Bicycle lanes	984	11%	4
Public transit	924	10%	6
Sidewalks/crossings	777	8%	7
Parking	418	5%	8
Signalization	371	4%	9
Signage	273	3%	10

n = 4921

PMRP Survey June 21st, 2002

Question 12: Please rank the following transportation improvements from 1 - 6, with 1 being the most important/needed

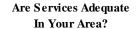
			Rank	ık			Weighted	First Priority	Overall
Category	1	2	3	4	5	9	Average	Ranking	Ranking
Existing roads	2,080	906	648	308	217	27	5.01	1	1
Existing bus service	175	649	718	725	805	615	3.14	9	5
Commuter rail service	1,650	810	929	363	342	331	4.51	2	2
New sidewalks & trails	215	612	773	920	849	276	3.34	7	3
Bicycle-friendly roads	267	643	200	829	721	869	3.18	3	4
New roads	181	465	383	200	488	1,533	2.52	5	9

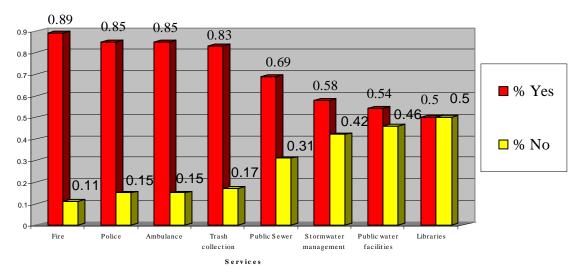


June 21st 2002 MRP Survey

Question 13: Are the following services adequate in your area?

Service	Yes	No	% Yes	% No
Fire	4,373	539	89%	11%
Police	4,190	722	85%	15%
Ambulance	4,157	755	85%	15%
Trash collection	4,056	856	83%	17%
Public Sewer	3,399	1,513	69%	31%
Stormwater management	2,866	2,046	58%	42%
Public water facilities	2,667	2,245	54%	46%
Libraries	2,433	2,479	50%	50%





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Question 14: Is your municipality adequately served by public recreation facilities?

Yes:	2,051	42%
No:	2,857	58%

If no, what types of recreational facilities would you be willing to have tax monies spent on to provide or expand in your community?

Facilities	Number of Responses	Percent	Rank
Hiking/walking trails	1,205	17%	1
Swimming pools	814	12%	2
Biking trails	794	11%	3
Passive open space	781	11%	4
Playing fields	533	8%	5
Cultural arts center	524	7%	6
Picnic areas	516	7%	7
Playing courts	467	7%	8
Fishing areas	316	4%	9
Multipurpose activity rooms	308	4%	10
Gymnasium	232	3%	11
Hunting areas	166	2%	12
Camping areas	155	2%	13
Boating facilities	142	2%	14
Equestrian trails	122	2%	15

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Appendix **B**

Residential Fair Share Analysis

Pottstown Metropolitan Region Residential Fair Share Zoning Analysis

Gross Acres						
		Residential Use				
Category	Single- Family De- tached	Fair Share Housing Types	Total	All Others	Regional Totals	
Number of Acres	41,262	5,013	46,275	6,741	52,746	
Percent of Region Gross Area	78.22%	9.5%	87.22%	12.78%	100%	
Number of Acres w/o Mobile Home Park (MHP) Zoning Districts	41,262	3,774	45,036		_	
Percent of Region Gross Area w/o MHP	81.35%	7,26%	_		_	
Percent of Region that is MHP	_	2,39%	_	—	_	

Note:

- 1) Fair Share Housing Types This includes Multifamily, Townhouses, Twin/Duplex and other housing of a similar nature and Mobile Homes in Mobile Home Parks.
- 2) Source Information: This test used GIS zoning polygons to determine acreage. These polygons cover the Entire region with no gaps.

Appendix C

Economic Development Funding Programs

State Programs	Purpose
Brownfields for Housing Initiative	Grants for affordable housing activities in previously developed areas
Communities of Opportunity	Variety of community development goals; infrastructure enhancements
Community Revitalization	Employment and job training alleviating unemployment and underemployment
Elm Street Program	Technical assistance and physical improvements to residential and mixed use areas in proximity to central business districts.
Employment and Community Conservation	For building and property improvements within state- defined Enterprise Zones
Enterprise Zone Tax Credits	Environmental studies and remediation
Enterprise Zone Program (New Communities)	Grants for financially disadvantaged communities for preparing and implementing business development strategies within municipal Enterprise Zones
Housing and Redevelopment Assistance Program	Grants for community revitalization and economic development activities that occur on a local level
Industrial Sites Reuse Program	Infrastructure improvements for development agencies in select areas
Infrastructure Development Program (IDP)	Greatly reduces or completely eliminates state and local taxes in a designated area
Keystone Innovation Zone Program (KIZ)	Grant funds to community/university to generate eco- nomic and job growth focused around campuses and property around colleges and universities.
Keystone Opportunity Zones (KOZ)	Greatly reduces or completely eliminates state and local taxes in a designated area
Local Economic Revitalization Tax Assistance Act (LERTA)	Local municipalities, school districts and counties can offer tax abatements on improvements to property for up to 10 years
Local Government Capital Projects Loan Program	Low-interest loans for construction or improvements to municipal facilities

State Programs	Purpose
Local Municipal Resources & Development Program (LMRDP)	Provides grants for variety of purposes, including: improve existing and/or develop new civic, cultural, recreational, or industrial, infrastructure or other facilities; assist in business expansion, creation, or attraction; promote the creation of jobs or employment opportunities
Main Street Program (New Communities)	Establishes local organization, provides funds for hiring full-time downtown coordinator,
New Communities Program (includes variety of programs including Main Street Program, Housing and Redevelopment Assistance Program, etc.)	Variety of assistance for business development and improvements in select areas
Pennsylvania Infrastructure Investment Authority (Penn Vest)	Low-interest loans to municipalities or authorities for infra- structure improvement programs
Supported Work Program	Jointly funded by DCED and Department of Public Welfare, program helps public assistance recipients obtain unsubsidized employment and provides work opportunities for post-24 month cash assistance recipients. Provides basic support services (i.e., transportation and child care)
Tax Increment Financing (TIF)	Capitalizes tax revenue to be generated by a development in order for the development to be financed
Tax Increment Financing Guarantee	This enhances credit for a TIF bond issue (see "Local Programs", below), allowing bonds to be sold on more favorable terms.
Urban Development Program	Urban development and improvement projects.
Federal Programs	Purpose
Brownfields Economic Development Initiative (BEDI)	Remediation costs, property acquisition and conveyance
Community Development Block Grants	Grant assistance and technical assistance to aid communities in their community and economic development efforts
Economic Development Administration Grants for Public Works and Economic Development	For economically distressed areas
Economic Development Initiative (EDI)	Can help cover interest and payments on projects paid for with CDBG and Section 108 funds
Section 108 Loan Guarantees	Large-scale projects designed to help low- and moderate-income persons eliminate blight
County Programs	Purpose
Montgomery County Revitalization Program	Provides funding for revitalization in Montgomery County.