

Marshall Township

The Future Is Here



Comprehensive Plan

August 14, 2006

COMPREHENSIVE PLAN MARSHALL TOWNSHIP

Allegheny County, PA

Adopted by the Marshall Township Board of Supervisors
on August 14, 2006 by Resolution #746.

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ACKNOWLEDGMENTS

The following are recognized for their invaluable assistance in the preparation of this Comprehensive Plan. Their input will enable this plan to better serve as a guide in the future development of Marshall Township.

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Chapter 1

Introduction

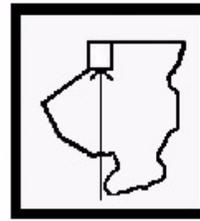
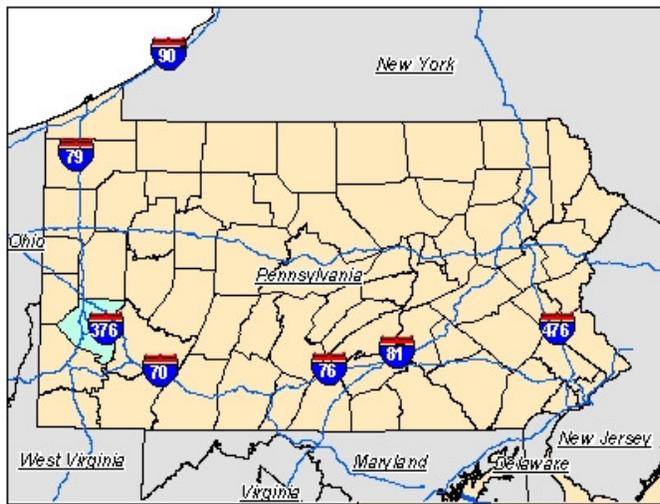
Marshall Township is a difficult community to define.

Nestled in the northwestern corner of Allegheny County, with easy access to major highways, abundant natural and recreational resources, an outstanding school district, a good deal of undeveloped land and financial strength, Marshall sits at the epicenter of one of the most affluent and fastest growing areas in western Pennsylvania.

Yet this growth is a relatively recent occurrence. Over a single generation, Marshall has transformed from a sleepy rural enclave into a dynamic community of contrasts. Within its 15.58 square miles are tree covered rural roads and interstate highways, pristine State Game Lands and growing commercial development, multimillion dollar estates and a significant number of people living below the poverty level. Through this period of growth, however, Marshall leadership has been able to maintain a unique and attractive blend of the best of both rural and suburban living that has made Marshall Township a distinctive and desirable community in which to live, work and raise families.

The challenge for the future is to continue to intelligently manage and balance the increasing pressures brought about by growth in it, and its neighboring communities, with the desire to sustain a community that effectively and efficiently meets the needs of all its residents, respects the rights of property owners and demonstrates a profound respect for the natural resources with which it is blessed.

That is the challenge of this Comprehensive Plan.

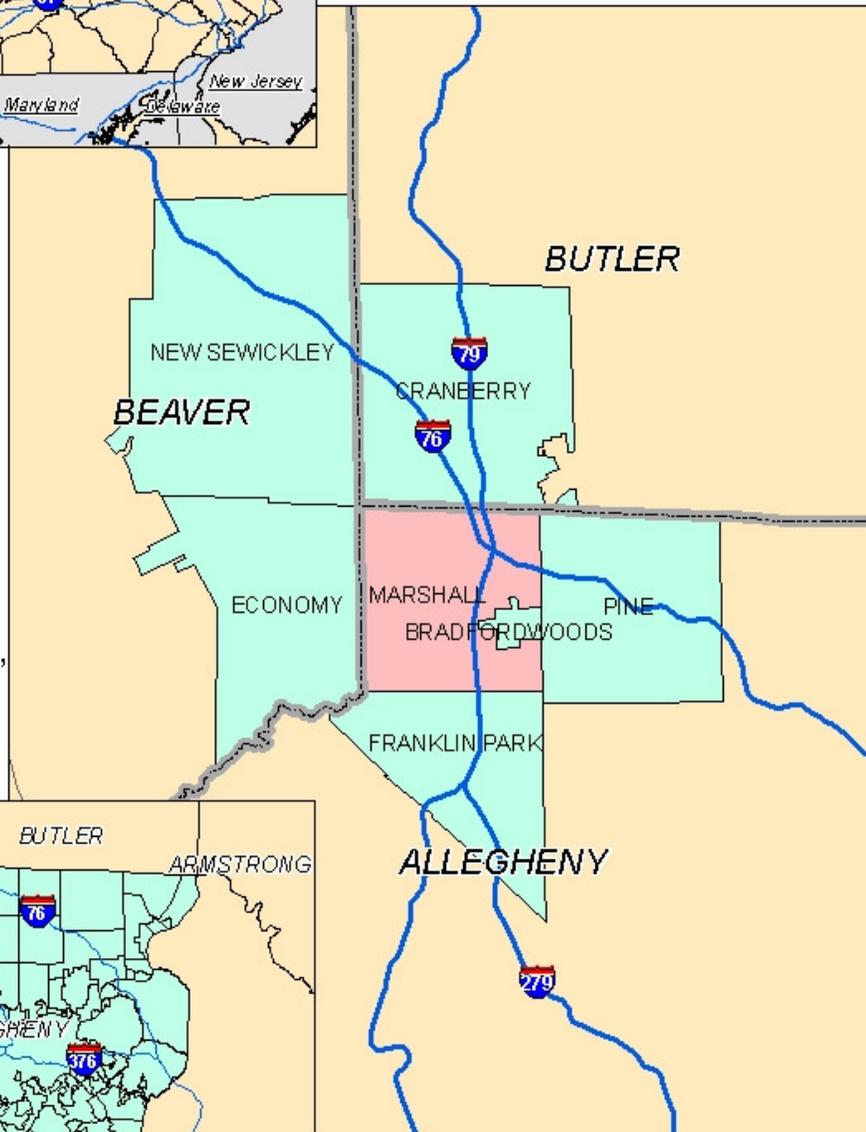


**Map 1
Marshall
Township
Location Map**



Left: Pennsylvania's 68 counties
(Allegheny County is highlighted in blue)

Right: Marshall Township (highlighted in pink) and its neighboring municipalities. Marshall Township is located at the intersection of three counties (Allegheny, Beaver and Butler) and shares borders with 5 municipalities (Cranberry Township, Pine Township, Bradford Woods Borough, Franklin Park Borough and Economy Borough).



Left: Allegheny County's
130 municipalities (Marshall Township
highlighted in pink)

Marshall Township
GIS Department
2006

The Goals of the Comprehensive Plan

Once adopted and implemented by the Township, the Marshall Township Comprehensive Plan will encourage positive growth and sound land use policies. The Comprehensive Plan was developed to:

- Provide a vision, framework, and long-term direction for land development, conservation, and economic initiatives in Marshall Township;
- Be an attractive document, easily understood by and accessible to the public;
- Tie together current plans and studies under way in the Township, such as the Transportation Impact Fee Ordinance, Facilities Planning Study, and the sewage agreement with Economy Borough;
- Focus on significant natural and man-made resources in the Township;
- Explore the interrelationship of Plan elements;
- Strive for consistency with adjacent municipalities and the Allegheny County Comprehensive Plan;
- Be approved by the Planning Commission; and
- Be adopted by the Board of Supervisors.

Only with the support and commitment from the Marshall Township Supervisors, residents, and business and civic leaders can the Marshall Township Comprehensive Plan truly be a positive and powerful tool. The plan is a framework that outlines the strategies that should be implemented by local leaders to achieve the stated community goals.

Below are the goals for each of the planning elements. Please see Chapter 11, Implementation Plan, for more information regarding the goals.

History and Community Character Goals:

1. Maintain the unique character of Marshall Township.
2. Increase awareness of the Township's unique identity.

Community Facilities and Services:

1. Provide high-quality water and sanitary sewage to all of Marshall Township.
2. Continue to work cooperatively with neighboring communities and the North Hills Council of Government to provide cost effective municipal services.
3. Be prepared to meet higher levels of demand for services (public safety, education, etc.) by Marshall Township residents.

Parks, Recreation, and Open Space:

1. Continue to provide a variety of park, recreation, and open space options to Marshall Township residents.

Transportation:

1. Improve the operation of the Marshall Township transportation network to enhance traffic circulation and safety within the Township.
2. Improve pedestrian and bicycle circulation and safety within the Township.
3. Improve public transportation access in Marshall Township in a manner consistent with the Township's character.

Housing:

1. Maintain quality housing stock to service all current and future Marshall Township residents.
2. Encourage quality and diversity of future housing stock.

Economic Development:

1. Revitalize Marshall Township's Central Business District to a thriving commercial center.
2. Promote economic development in the Township.

Natural Resources:

1. Balance the protection of Marshall Township's natural resources with demands for economic growth and development.
2. Improve areas prone to flooding.
3. Enhance the aesthetics of the Township by making waterways and natural resources accessible, attractive, enjoyable, and useful for the residents.

Land Use:

1. Ensure that future land use ordinances are flexible, thorough, and well-administered.
2. Encourage future development in a managed and thoughtful fashion.

Interrelationship Statement

It is the purpose of the Marshall Township Comprehensive Plan to ensure that the development of a community is orderly and consistent with the identified goals of the plan. To function properly, the Plan must serve as an overriding guide for future development processes. Since each element of the Comprehensive Plan is interrelated, substantial changes to any of the elements will have an effect on all other elements within the community and region.

The Plan elements were developed in accordance with the Pennsylvania Municipalities Planning Code (MPC). Recommendations for each of the elements that reflect the overall goals of the Comprehensive Plan were prepared. After an analysis and review of existing conditions within the Township, specific goals were developed to provide for new development opportunities while protecting natural resources and preserving historic and cultural areas.

Specific needs for community services were based on an analysis of demographic features and trends as well as the results from various public participation efforts. These recommendations were developed to promote and improve the available facilities and services within Marshall Township, as well as those services offered on a countywide basis. As stated in the MPC, future infrastructure improvements will be completed concurrently as new lands are planned for development.

The recommendations for the Transportation element identified specific issues and integrated regional plans to meet the goals that have been identified within the Plan. Deficiencies and future projects should be incorporated into the County's planning efforts so that they can be included in PENNDOT's planning process and the Southwestern Pennsylvania Commission's Regional Transportation Plan.

The recommendations addressing recreational needs in the Township were made with the understanding that future improvements will coincide with the existing and planned regional and county projects.

Previous planning documents and studies were thoroughly reviewed and considered when identifying existing needs and when developing recommendations. These plans include: the Marshall Township Facilities Study, the Recreation Master Plan for Marshall Township, and Marshall Township Hiking/Biking/Trail Feasibility Study.

Contiguous Municipalities Statement

As per Article III, Section 310(5) of the MPC, a statement has been prepared indicating the relationship of the existing and proposed development of Marshall Township to existing and proposed plans of adjacent municipalities and to the objectives of the region as a whole.

The Marshall Township Comprehensive Plan was developed with respect to surrounding land uses of the adjoining communities. It is the belief of Marshall Township staff and the Marshall Township Comprehensive Plan Steering Committee that the goals and objectives of this Plan are in concert with those of adjacent municipalities, the North Allegheny School District, and the Allegheny County Department of Economic Development.

Allegheny County is in the process of creating its first Comprehensive Plan, Allegheny Places. The MPC requires that County and municipal plans be in general conformance. Since Allegheny County has no comprehensive document, the Township used to existing Allegheny County plans, —such as the Park and Recreation Plan, Trail and Greenways Plan, Sewer Plan, and Water Plan—for consistency and conformance. The Marshall Township Comprehensive Plan is in general conformance with these documents.

Public Participation

A comprehensive plan is an expression of a community's desired future and one that reflects the ideas of its residents during the planning process. To achieve participation by the residents of the Township, Township staff and the Steering Committee developed a strategy that would address the unique aspects of Marshall Township. The Steering Committee was appointed by the Board of Supervisors and included a cross-section of Marshall Township residents and business owners.

The information and insights obtained from the various surveys and exercises were fundamental to the development of the Marshall Township Comprehensive Plan's goals and objectives. The proposed goals and objectives were then brought back to the public for prioritization. The following discussion provides a synopsis of the public participation methods used during plan development. Supporting documentation can be found in the appendices.

Comprehensive Plan Survey

One of the best tools for getting participation from a wide variety of residents is a survey. Township staff created a survey for the Comprehensive Plan that was available in both paper and electronic form. A paper copy of the survey was distributed to each household in the Township's June 2005 newsletter. Staff also distributed copies of the survey at Marshall Township Community Day. The Comprehensive Plan survey was also available on the Township's website. All paper surveys completed and returned to the Township were entered online for tabulation purposes. The survey was launched on June 15, 2005, and closed on September 15, 2005. More than 150 surveys were completed (0.7% of the Township's population or 2.0% of households). A copy of the survey and results can be found in Appendix 1.

Public Meetings

Three public meetings were held during the development of the Comprehensive Plan. The first was held at the beginning of the project, served to introduce the project, and conducted a brainstorming exercise to identify the strengths, weaknesses, opportunities, and threats (SWOT) of Marshall Township. Approximately 20 residents, including the Steering Committee, attended the public meeting held on July 13, 2005, at the Marshall Township Municipal Building. The results of the SWOT exercise can be found in Appendix 2.

Attendees were also asked to prioritize the strengths, weaknesses, opportunities, and threats. Each attendee was given 12 stickers (three for each of the categories) and was told to place the stickers on the statement in each category he/she felt was most important. The results of the prioritization can also be found in Appendix 2.

The second public meeting was held on September 14, 2005. There were approximately 25 residents, including the Steering Committee, in attendance. Meeting participants were asked to complete two activities. The first was a Community Imaging Exercise (CIE) designed to rank images of existing land uses and services within and outside of Marshall Township. Presented through PowerPoint, this exercise relies on the first impression evoked by a photograph. Participants were asked to rate (on a scale of 1 - 5) whether they strongly agree or disagree with statements regarding the images. To develop the presentation, staff took approximately 150 pictures of the current conditions and typical land uses present in each of the communities. The CIE utilized 80 of these images. The results from this exercise can be found in Appendix 3.

The public was also asked to participate in a goals prioritization exercise in which attendees were asked to rank the goals they thought were most important. The results of this exercise can be found in Appendix 4.

Attendees were given a presentation regarding the Township's future land use map and provided an opportunity to make comments and ask questions.

The third and final public meeting was held on December 19, 2005. Approximately 10 residents were in attendance, including the Planning Commission and the Steering Committee. This was an "open house" meeting where residents could attend several different stations to discuss the goals and objectives, the existing and future land use maps, or review the final draft of the Plan in its entirety and make comments.

Chapter 2

History

Existing Conditions

Native Americans, wild animals and dense forests once occupied the 15.58 square-mile area that now contains about 6,500 residents, more than 300 businesses, two industrial parks, about 70 miles of road, and acres of asphalt and concrete parking lots. But much of the area is still quite natural and maintains close ties to the land.

Marshall Township has many new residents, but there are also families that have lived in the Township for generations. Often people come to Marshall Township today for the same reasons many of the pioneers came 200 years ago—for the land, the majority of which is still undeveloped, open, and green.

The Formation

Marshall Township was formed in 1862 from an election precinct of Franklin Township. Thomas Mercer Marshall, for whom the Township was named, was a well-known defense attorney involved in many notorious murder trials in Pittsburgh over a period of 40 years.

The Township was mainly a farming community for many years, though today only two working farms remain. Several events contributed to Marshall Township's economic development since the late 19th century: the discovery of oil and the resulting "boom" from the late 1880s until the 1930s and 1940s, the construction of the Harmony Railroad Line beginning in 1908, and the construction of the Pennsylvania Turnpike and Interstates 79 and 279 during the second half of the 20th century.

Prior to 1940, approximately 295 housing units were built in the entire Township. Over the years, the population of Marshall Township rose steadily, but Warrendale, the only town in Marshall Township, remained small. In the decades that followed, the Township remained basically a rural, residential community. No major industry, large factory, or manufacturing plant was established.

During the oil excitement of the late 1800s and early 1900s, many farmers raised a crop of crude oil instead of corn, and the population increased, rising from 705 in 1870 to 950 in 1890. But no large boom occurred, and the population dropped to 799 in 1900 and 769 in 1910. Only in the latter half of the 20th century did the population show a dramatic increase. In 1960, the U.S. census recorded Marshall Township's population at 2,528. By 1990, the population had jumped to 4,010, and in 2000, the census reported a population of 5,996, thus changing the nature of Marshall Township from a rural farming community to its current suburban state.

Points of Interest

There are two Indian trails dating from colonial times that wind their way through the area (see Map 2). Present-day Route 19 was once the Venango Trail. The trail flowed through Marshall Township until it veered right at present-day Northgate Drive and continued, crossing Brush Creek at Warrendale. Continuing northerly, the Venango Trail traveled across midway between the boundary between Pine and Marshall townships and Perry Highway, crossing what was formerly Venango Trail Golf Course before leaving Marshall Township.



Kathryn, Patricia, Thomas, and William Steigerwald walking the Kuskusky Path through the former orchard of Earl S. Shenot, May 1982.

The Kuskusky Path passed through the entire Township proceeding south to north, winding its way through, across, and around a number of roads that are still in existence today. The path entered Marshall Township from the south and followed what is now Mingo Road, Neely School Road, and Interstate 79 northward.

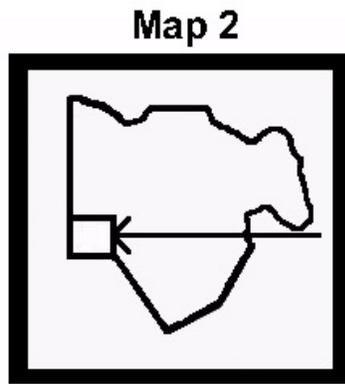
The Harmony Line passed through Marshall Township as it operated daily trolley service through the northern Pittsburgh region from 1908 to 1931. The line entered Marshall Township near Manor Road and continued northward into Bradford Woods Borough. The line reentered Marshall Township and followed Harmony Road through Warrendale westward toward the old Thorn Hill School, which was located in present-day RIDC Park. The line continued northbound along Sheraton Drive and Dutilh Road into Cranberry Township.

According to the Pennsylvania Historic and Museum Commission, only one property within Marshall Township has been evaluated and determined eligible for nomination to the National Register of historic places. This property, the former Conrad Wagner property (now or formerly owned by English) located off Pleasant Hill Road, was last evaluated in 1997. Any property can be evaluated to determine its eligibility for the National Register. To be eligible for nomination, properties are distinguished by having been documented and evaluated according to uniform standards. These criteria recognize the accomplishments of all peoples who have contributed to the history and heritage of the United States and are designed to help state and local governments, federal agencies, and others identify significant historic and archeological properties worthy of preservation and of consideration in planning and development decisions. Being listed in the National Register does not interfere with a private property owner's right to alter, manage, or dispose of property. It often changes the way communities perceive their historic resources and gives credibility to efforts to preserve these resources as irreplaceable parts of our communities.

According to *The History of Marshall Township*, Warrendale has always been the “town” in Marshall “Town”ship (see Map 2). In its earliest history, Warrendale was a crossroads on an Indian trail that later became a boomtown thanks to nearby oil deposits, later, a prosperous rural community, and now a village struggling for revitalization. Originally called Brush Creek for the stream that runs through the village, it was officially renamed Warrendale in 1907 and prospered for many years because of the fast and inexpensive transportation provided by the Pittsburgh, Harmony, Butler, and New Castle Railway Company from 1908 until 1931. Warrendale had all the amenities you would expect to find in any small town: churches, schools, fire company, restaurants, hotels, and community meeting places.

The Harmony Line ceased operations in 1931 which was the first in a series of events that altered Warrendale forever. New Perry Highway, or Route 19, was constructed, bypassing Warrendale. Old Perry Highway (Northgate Drive), once the main route through Warrendale bringing people and business from Pittsburgh and points north, became just another side road. It was still linked to Route 19 on the north and south, however. Next, the Pennsylvania Turnpike cut through the town, disrupting the close-knit community by dividing farms and replacing the peace and quiet of the country with the drone of high-speed traffic. Finally, Interstate 79 hit Warrendale, again taking more of the town and its landmarks and the northern end of Old Perry Highway as well, making the former highway a dead-end street.

The impact on Warrendale of these transportation projects was enormous and contributed to Warrendale losing its churches and schools, leaving the fire department as the only meeting and gathering place in Warrendale. Warrendale struggled for a number of years, but local businesses forged a comeback, starting the process of revitalizing Warrendale. Currently, Warrendale has a number of successful businesses, including Francis Craig and Sons Insurance Agency, The Camelot Banquet Hall, the Catanese Market, and the Brush Creek Inn. Warrendale has never fully recovered from the impact of the new highway construction but there may be an opportunity for true revitalization.

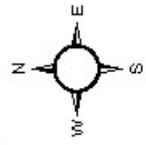


Map 2

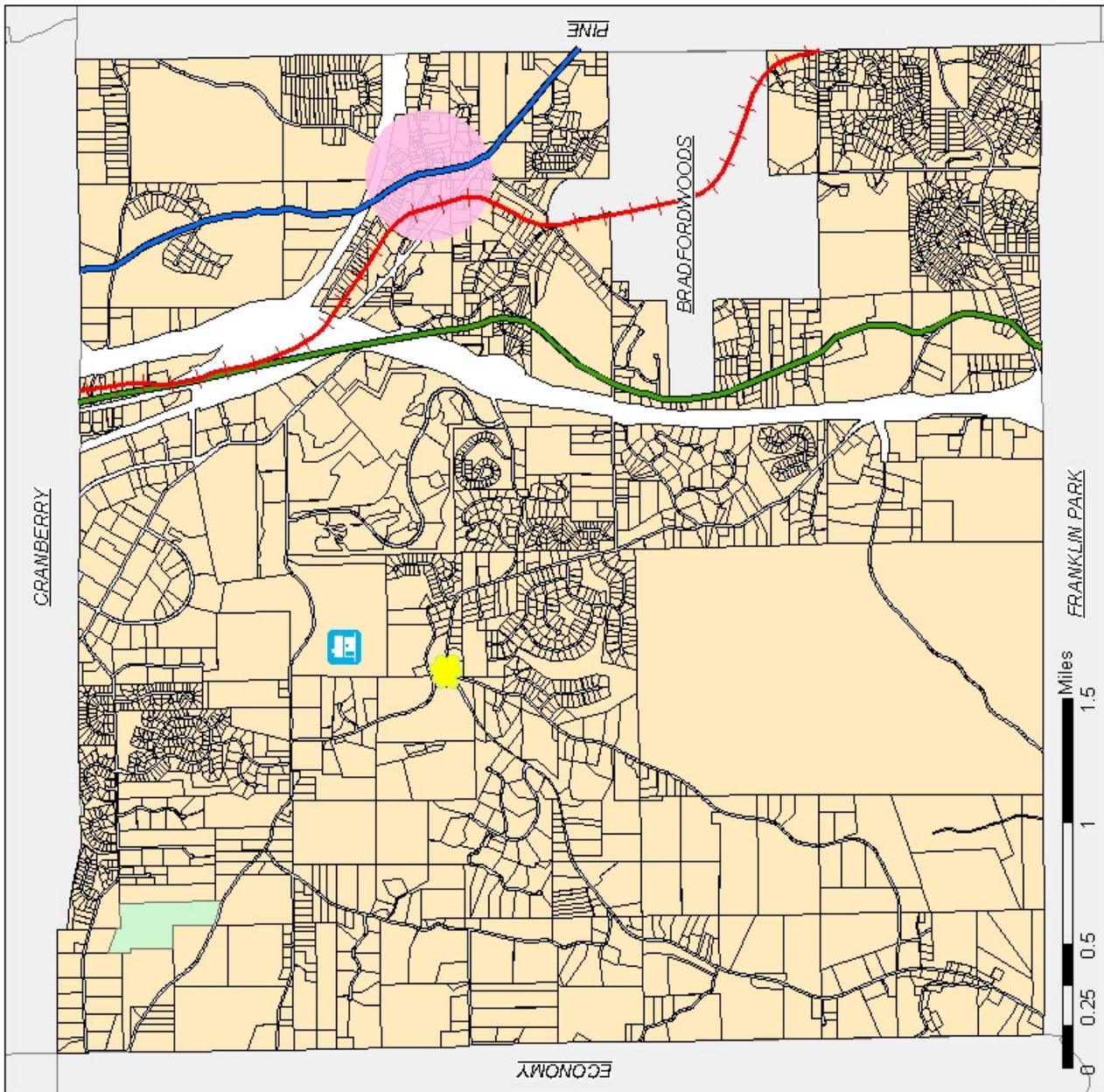
Marshall Township Areas of Historic Significance

For more information regarding Marshall Township's areas of historic significance, please refer to "A Pennsylvania Chronicle: The History of Marshall Township" (1988) by Judith Oliver.

-  Marshall Parcels
-  Neighboring Municipalities
-  Warrendale Area
-  Harmony Line
-  Kuskusky Trail
-  Venango Trail
-  Conrad Wagner Property
-  Elias Fry Barn
-  "Welcome Spring" Daffodils



Marshall Township
GIS Department
2006



The Ever-Changing Township

While the Township continues to evolve, efforts are being made to maintain some of Marshall Township's unique features. For instance:



The Elias Fry Barn was named in honor of turn-of-the-century Marshall Township resident Elias Fry, who dedicated a substantial amount of his time to building barns in Marshall Township and in surrounding communities. It was once located on what is now the Rolling Ridge III development and was donated to the Township by the Herberts. In 1992, it was taken down and reconstructed by the Amish. Now it sits at Knob Hill Community Park where residents and non-residents can rent the facility for weddings, picnics, and other such events.

The Elias Fry Barn, which contains the century-old frame of the original barn, is covered by walls and ceilings made from modern materials. It symbolizes the community spirit that has continually been present in Marshall Township for more than a century.

At least 20 years ago, John Frey planted two sets of daffodils, one in the form of a cross and another with a message that said "Welcome Spring," for all to see as they traveled the Red Belt. With a housing development slated for his former homestead, the daffodils were relocated in 2004 to a hillside at Mount Pleasant United Presbyterian Church – just down the road from where they originally grew. Jeremy Corrl undertook this relocation for his Eagle Scout project.



Only in the past few years has the future of Marshall Township's land been seriously considered. The Township developed very slowly and, as late as 1982, was thinly populated with 290 persons per square mile (after subtracting the State Game Lands and the RIDC Thorn Hill Industrial Park). In the early days of its existence, the Township was almost entirely made up of large and small farms, an occasional grist or sawmill, hotel, store, school, and church.

Now, 60 years after Marshall Township passed its first zoning ordinance, the present Planning Commissioners and Board of Supervisors continue to struggle with the same basic question: how to determine the best use of Marshall Township's land for the future.

Analysis

Marshall Township became a pioneer in managing land use when it adopted its first zoning ordinance more than 50 years ago. This respect for the environment has been one of the few consistent themes throughout the history of the Township and is evidenced by the fact that growth has been relatively slow when compared with our neighboring communities and large portions of the Township remain in a “natural” state today. Nevertheless, during the last few decades, growth pressures have increased, especially as a result of highway construction and improved access to Pittsburgh. At the same time, the Township’s numerous streams, wetlands and steep hillsides coupled with limited public sewage have acted as counterbalances to aggressive development. Maintaining this balance will be increasingly difficult with increasing development pressures within Marshall Township and its surrounding communities.

Identity is another issue that Marshall struggles with and there are several historical issues that have made it difficult for Marshall Township to create a consistent identity.

First, newcomers to the Township and those who have been long-time residents often differ in their opinions relative to protecting the environment, property rights, the need for expanded municipal services and government involvement.

Second, the Township is divided into eight separate zip codes yet there is no post office within the Township.

Third, the housing and commercial developments have been conceived and designed with little or no review or coordination with other developments in the Township. This has led to the segregation of neighborhoods connected only by automobiles and highways.

The Warrendale area may provide an opportunity to create a unique “center” with which Marshall residents can identify. Township leadership should seriously investigate the possibility that infrastructure and aesthetic improvements to the Warrendale area would foster economic development and community appeal to increase a sense of pride and identity within Marshall Township.

Chapter 3

Demographics

Existing Conditions

Population

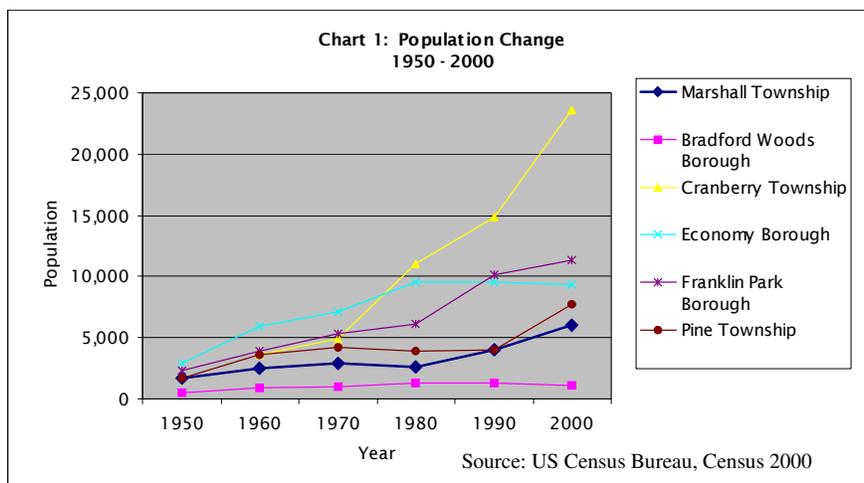
Marshall Township has been experiencing growth in population over the last several decades.

Table 1: Total Population, 1950-2000

	Marshall Township		Bradford Woods Borough		Cranberry Township		Economy Borough		Franklin Park Borough		Pine Township	
	Population	% Change	Population	% Change	Population	% Change	Population	% Change	Population	% Change	Population	% Change
1950	1,745		458				2,905		2,314		1,732	
1960	2,528	44.9%	866	89.1%	3,596		5,925	104.0%	3,935	70.1%	3,613	108.6%
1970	2,907	15.0%	970	12.0%	4,873	35.5%	7,176	21.1%	5,310	34.9%	4,259	17.9%
1980	2,594	-10.8%	1,264	30.3%	11,066	127.1%	9,538	32.9%	6,135	15.5%	3,908	-8.2%
1990	4,010	54.6%	1,329	5.1%	14,816	33.9%	9,519	-0.2%	10,109	64.8%	4,048	3.6%
2000	5,996	49.5%	1,149	-13.5%	23,625	59.5%	9,363	-1.6%	11,364	12.4%	7,683	89.8%

Source: US Census Bureau; Census 2000

As Table 1 (above) and Chart 1 (right) indicate, Marshall Township had a population of 1,745 in 1950 and has steadily increased, with the exception of 1980, to its 2000 population of 5,996. While the municipalities surrounding the Township have a similar history of growth, each of the surrounding municipalities have at least one decade where they have experienced a significant increase in population. For instance, Bradford Woods experienced an 89% increase in population between 1950 and 1960. Cranberry experienced a 127% increase in population between 1970 and 1980. Economy and Pine experienced a 104% and 108% increase in population, respectively, between 1950 and 1960. Franklin Park experienced a 70% spike in population growth between 1950 and 1960.



The Southwestern Pennsylvania Commission (SPC) prepares population, household, and employment projections for municipalities in their 10 county region. The current projections, Cycle 7, cover the years from 2000 (taken from the 2000 U.S. census) to the year 2030. Table 2 on page 22 depicts SPC’s population projections for Marshall Township and the surrounding municipalities. SPC predicted that Marshall Township’s population would peak at 8,005 in 2005 and then gradually decline to 7,237 by 2030. Despite this decrease, Marshall is predicted to experience a 20% increase in population between 2000 and 2030. In comparison, by 2030 Cranberry’s population is predicted to be more than 31,000, a 31%

increase from its 2000 population of 23,625. Pine is projected to experience a significant decrease in population between 2000 and 2030. The 2000 U.S. census states that Pine had a population of 7,683. SPC’s projections show Pine’s population decreasing until 2020 (5,500) and then experiencing a very slight increase until 2030 when it is projected to have a population of 5,772. Pine’s population is predicted to decrease by almost 25% between 2000 and 2030 (see Table 3).

The SPC Cycle 7 projections appear flawed and, therefore, their validity is questioned. The Township has contacted SPC to discuss the Cycle 7 projections and to try to obtain the assumptions they used when developing the Projections, but was unsuccessful in doing so. Because of the questions regarding the validity of the SPC population projections, the Township performed a statistical analysis and prepared our own projections. The Township’s projections and the rationale behind them can be found in the Analysis section at the end of this chapter.

Table 2: SPC Population Projections, 2000-2030

	Marshall Township	Bradford Woods Borough	Cranberry Township	Economy Borough	Franklin Park Borough	Pine Township
2000	5,996	1,149	23,625	9,363	11,364	7,683
2005	8,005	1,006	30,866	7,720	15,946	5,732
2010	7,703	967	30,305	7,667	15,639	5,551
2020	7,335	989	30,473	7,999	14,878	5,500
2025	7,267	1,030	30,848	8,305	14,707	5,609
2030	7,237	1,083	31,140	8,626	14,613	5,773

Source: Southwestern Pennsylvania Commission ; Cycle 7 Baseline Forecast of Population, Households, & Employment

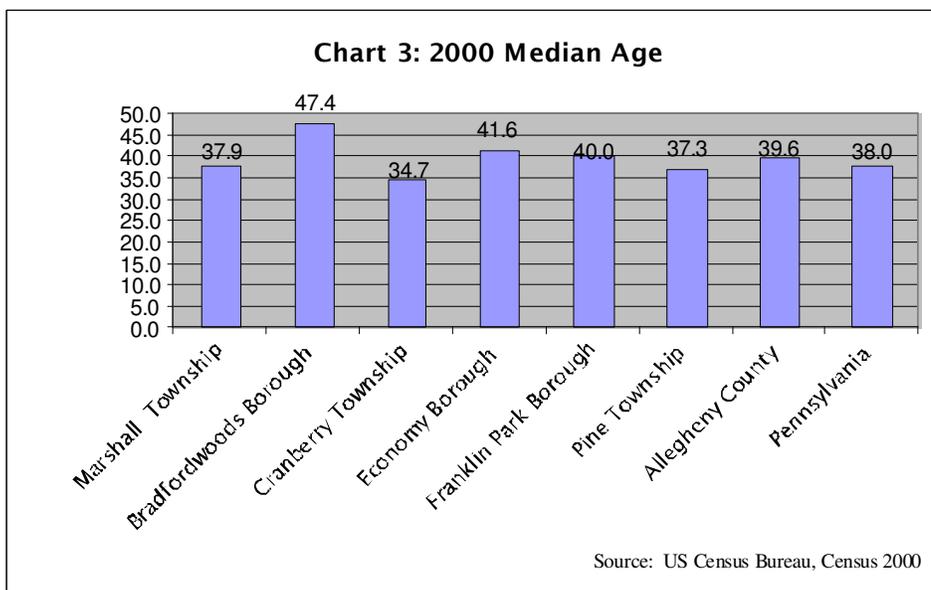
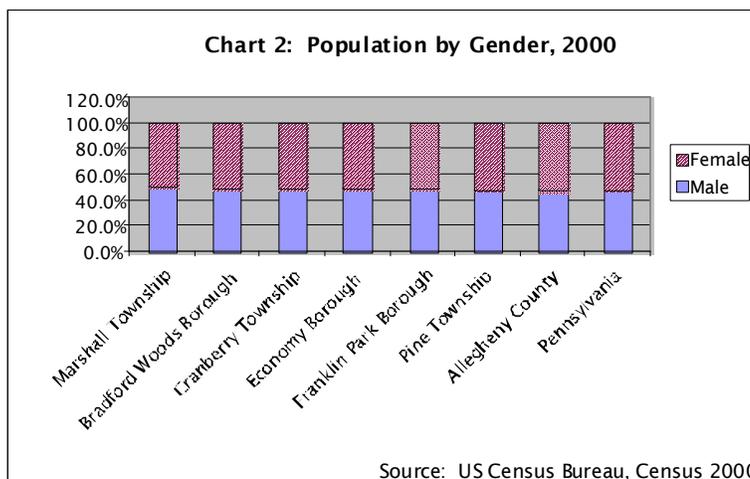
Table 3: SPC Population Projections, Percentage Change, 2000-2030

	Marshall Township	Bradford Woods Borough	Cranberry Township	Economy Borough	Franklin Park Borough	Pine Township
Number	1,241	-66	7,515	-737	3,249	-1,910
Percent	20.7%	-5.7%	31.8%	-7.9%	28.6%	-24.9%

Source: Southwestern Pennsylvania Commission ; Cycle 7 Baseline Forecast of Population, Households, & Employment

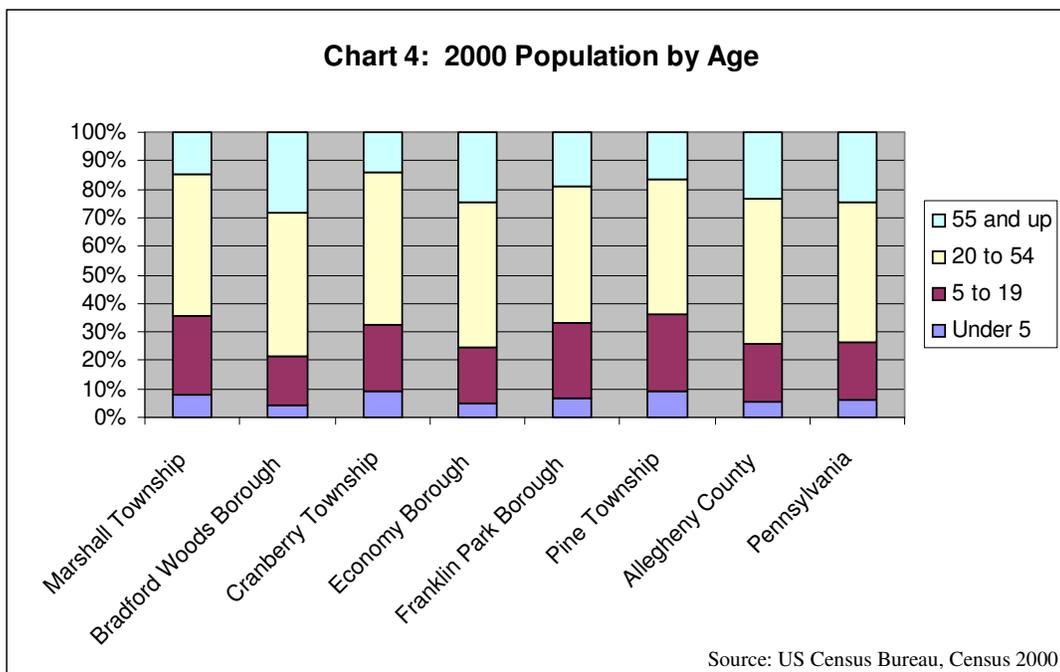
In examining the demographics of a community, it is wise to look beyond overall population numbers and examine characteristics of the community such as gender, age, and racial composition.

Marshall Township’s gender split is almost 50/50 with 50.1% males and 49.9% females. Marshall Township is the only municipality in this study that has a higher percentage of males than females. Allegheny County has the most divergent split with 47.4% males and 52.6% females. The split in Pennsylvania is 48.3% males and 51.7% females (see Chart 2).

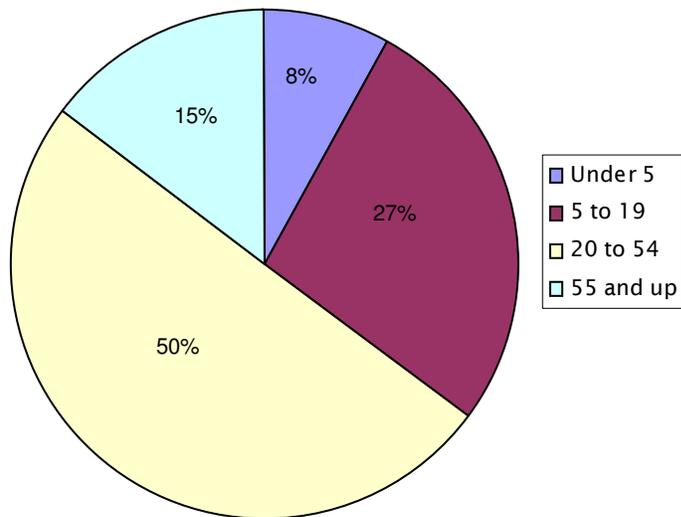


The age breakdown of a population is extremely important to a municipality as it identifies what types of facilities and services are needed to meet the needs of residents. The median age of Marshall Township residents is 37.9. Marshall Township is the third youngest municipality, behind Pine (37.3) and Cranberry, (34.7), out of those included in this comparison. The oldest population is found in Bradford Woods (47.4). Pennsylvania’s median age is 38.0 and Allegheny County’s is 39.6 (see Chart 3).

Marshall Township’s relatively youthful population is also evident when age groupings for the Township are examined. Chart 4 below indicates that 8% of Marshall Township’s population is 5 years old or younger. Only Cranberry and Pine have a larger population under the age of five with 9.2% each. Bradford Woods only has 4.3% of its population under the age of five. Allegheny County and Pennsylvania have 5.5% and 5.9%, respectively, of their populations age 5 and under. At 27.9%, Marshall Township has the highest percentage of population ages 5-19. The working age group (ages 20–54) for Marshall Township falls in the middle with 49.9%. Cranberry has the highest percentage of population in this age range with 53.3%. Bradford Woods and Pine have the smallest percentage with 47.3% each. In the final age bracket (55 and up), Marshall Township has the second lowest percentage, another indicator of the Township’s lower median age. Marshall Township has 14.7% of its population falling in the 55 and up category. Cranberry is slightly lower with 14.2%.



**Chart 5: Marshall Township
2000 Population by Age**



Source: US Census Bureau, Census 2000

Chart 5 illustrates the Marshall Township age breakdown. As mentioned earlier, 50% of the Township’s population falls in the working age (20–54) while the second highest percentage of the Township’s population (27%) falls in the school age category (ages 5–19). Fifteen percent falls into the age-55-and-up category and 8% into the under-five category.

Table 4 below details the racial composition of the municipalities included in this study. The population of these municipalities is less diverse than the State and County percentages, having 95% or greater of their population as white. Allegheny County and Pennsylvania have 84.3% and 85.4%, respectively, classified as white. One percent of Marshall Township’s

population is classified as African-American. This is relatively higher than the surrounding municipalities but significantly lower than Allegheny County (12%). Bradford Woods, Economy, and Pine all have 0.1% of their population classified as American Indian, the same as Allegheny County and Pennsylvania. The percentage of Asian population in Marshall Township and the surrounding municipalities is higher than Allegheny County and the State. Marshall Township’s Asian population is 2.2%, Bradford Woods 0.9%, Cranberry 1.0%, Economy 0.3%, Franklin Park 2.9%, and Pine 1.1%. Allegheny County and Pennsylvania have Asian populations of 1.7% and 1.8%, respectively. Franklin Park is the only municipality with Native Hawaiians (0.2%). The “Other” race category for Marshall Township and the surrounding municipalities is 0.3% and below.

Table 4: Race, 2000

	Marshall Township	Bradford Woods Borough	Cranberry Township	Economy Borough	Franklin Park Borough	Pine Township	Allegheny County	Pennsylvania
White	95.9%	98.6%	96.9%	98.3%	95.0%	97.2%	84.3%	85.4%
African American	1.1%	0.0%	0.9%	0.7%	1.0%	0.8%	12.4%	10.0%
American Indian	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
Asian	2.2%	0.9%	1.2%	0.3%	2.9%	1.1%	1.7%	1.8%
Native Hawaiian	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%
Other	0.1%	0.3%	0.3%	0.1%	0.2%	0.2%	0.3%	1.5%

Source: US Census, Census 2000

Education

Educational attainment refers to the highest level of schooling completed or highest degree obtained. Table 5 below shows a comparison between Marshall Township, Allegheny County, and Pennsylvania. Almost 95% of Marshall Township residents age 25 or older have a high school diploma or higher, compared to 86% in the County and only 82% in the State. Of Marshall Township residents who have pursued higher education, 61.8% have successfully obtained a bachelor’s degree or higher. This number is significantly higher than the percentages for Allegheny County (28.3%) and Pennsylvania (22.4%).

Table 5: Educational Attainment, 2000			
	Marshall Township	Allegheny County	Pennsylvania
Percent high school graduate or higher	94.9%	86.3%	81.9%
Percent bachelor's degree or higher	61.8%	28.3%	22.4%
Source: US Census Bureau, Census 2000			

Table 6 below shows educational attainment for the Township, County, and State in more detail.

Table 6: Detailed Educational Attainment, 2000			
	Marshall Township	Allegheny County	Pennsylvania
Population 25 years and over	100.0%	100.0%	100.0%
Less than 9th grade	1.3%	3.7%	5.5%
9th to 12th grade, no diploma	3.8%	10.0%	12.6%
High school graduate	13.9%	33.9%	38.1%
Some college, no degree	12.4%	17.0%	15.5%
Associate degree	6.8%	7.1%	5.9%
Bachelor's degree	38.0%	17.3%	14.0%
Graduate or professional degree	23.8%	11.0%	8.4%
Percent high school graduate or higher	94.9%	86.3%	81.9%
Percent bachelor's degree or higher	61.8%	28.3%	22.4%
Source: US Census Bureau, Census 2000			

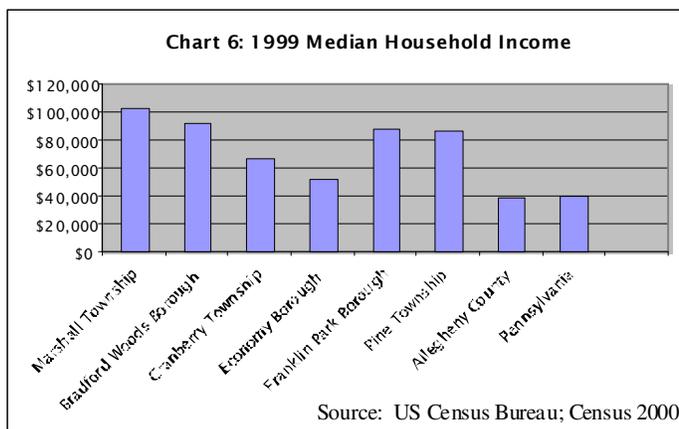
Income

Income statistics were gathered for inclusion in this study. Generally, it would be expected that Marshall Township would have high income statistics because of the higher levels of education for the population. However, although Marshall Township has high income levels, the Township also had a relatively high percentage of residents living below the poverty level.

The income statistics examined in this study include median family, median household, and per capita income, as well as the percentage of residents living below the poverty level. To avoid any confusion, the following explanations will clarify what each of the income statistics are measuring:

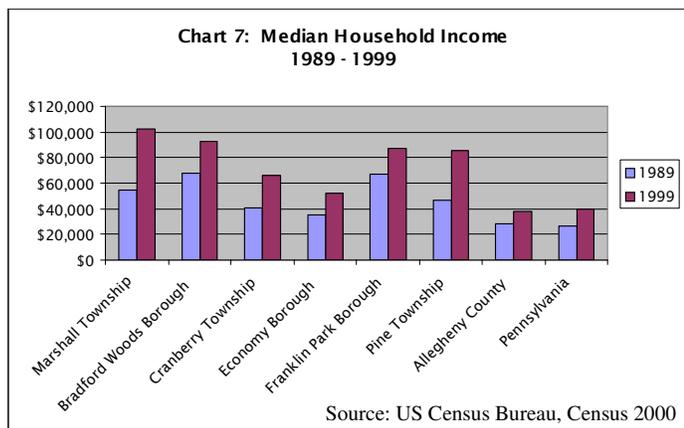
- Household income includes the total income of all members of a household (all the people who occupy a housing unit) over 15 years of age
- Family income includes the total income of all members of a family (two or more people related by birth, marriage, or adoption and residing together) over 15 years of age
- Median income is derived by dividing the total income distribution into two equal parts. The median is the middle number
- Per capita income is the average income earned by an individual in a municipality
- Poverty level is based on the U.S. Department of Agriculture’s (USDA) determination that one-third of income is spent on food. The basis for the food cost is from a USDA economy food plan. The 2000 census determined poverty level as \$8,350 annually for persons 18 years of age and older and resided in the contiguous United States. The poverty level for a family of four was \$17,603.

Median household, median family, and per capita income will be examined through a series of charts for the 1999 median, a comparison of 1989 to 1999, and percent change between 1989 and 1999.



Median Household Income:

According to 1999 statistics, Marshall Township appears to be a very wealthy community with a median household income of \$102,351, the highest among its neighbors. The second highest median household income was found in Bradford Woods with \$92,820, almost \$10,000 lower than Marshall Township. The median household income for Allegheny County and for Pennsylvania was \$38,329 and \$40,106, respectively (see Chart 6).

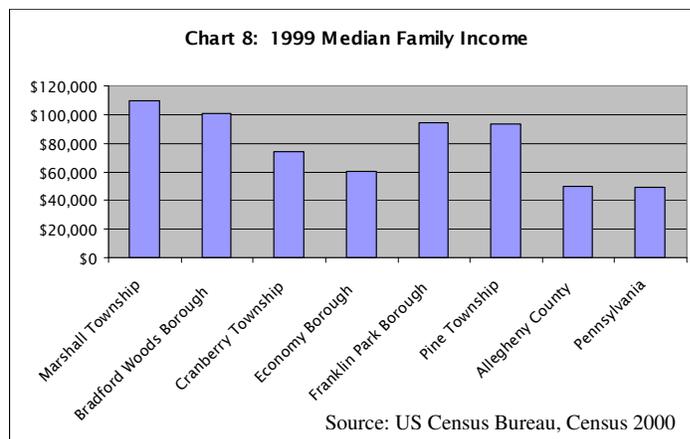


When comparing median household income from 1989 to 1999, it becomes evident that Marshall Township has experienced a significant increase in median household income (see Chart 7). In 1989, Marshall Township had the third highest median household income with \$54,400. The Township was behind Bradford Woods (\$68,254) and Franklin Park (\$66,836). Marshall Township experienced the largest increase in Median Household Income between 1989 and 1999 with 88% growth. Pine experienced an 83% growth while Cranberry experienced a 62% increase. Allegheny County and Pennsylvania experienced 36% and 53% growth, respectively.

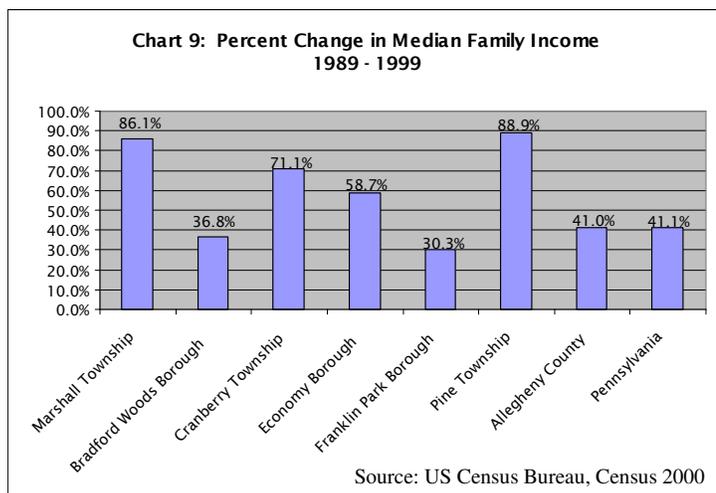
Pennsylvania experienced 36% and 53% growth, respectively.

Median Family Income:

Median family income statistics from 1999 also indicate significant growth. Marshall Township’s median family income for 1999 was \$109,376. Bradford Woods had the second highest with \$100,329. The County and the State were significantly lower with \$49,815 and \$49,184, respectively (see Chart 8).



A comparison between the 1989 and 1999 median family income also indicates that Marshall Township experienced an 86% increase from its 1989 median family income (\$58,784). While Pine’s 1989 and



1999 median family incomes were lower than Marshall Township’s, the percent by which it grew between 1989 and 1999 (88%) is greater than the increase experienced in Marshall Township. Cranberry experienced the third highest growth rate at 71%. Out of the municipalities surrounding Marshall Township, Franklin Park experienced the smallest amount of growth with 30%. Both Franklin Park (30.3%) and Bradford Woods (36.8%) had smaller rates of increase than Allegheny County and Pennsylvania at 41.0% (see Chart 9).

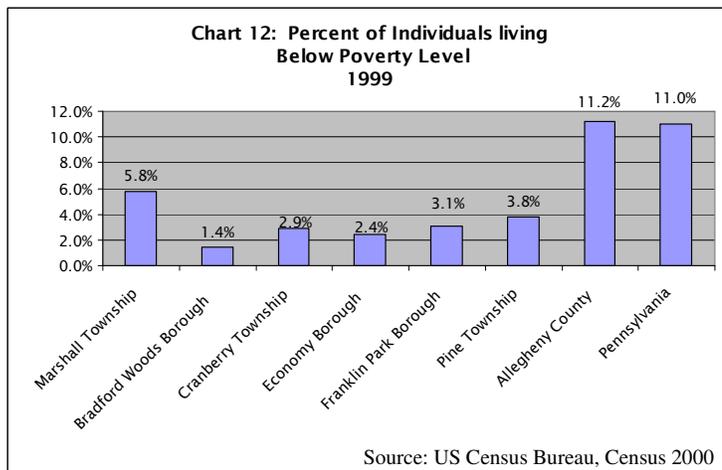
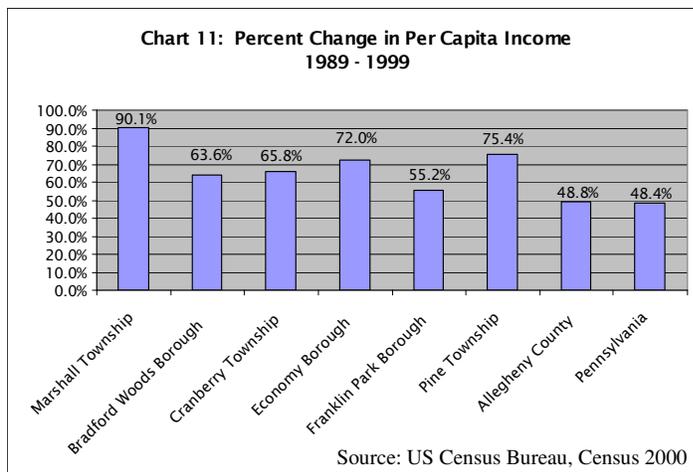
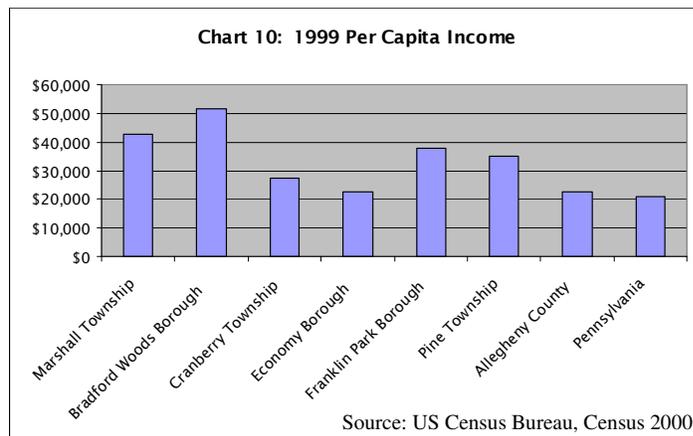
Per Capita Income:

An examination of per capita income statistics for 1999 indicates that Marshall Township (\$42,856) ranks second behind Bradford Woods (\$54,462). Economy had the lowest per capita income with \$22,453. Allegheny County's per capita income (\$22,491) was slightly higher than Pennsylvania's (\$20,880) (see Chart 10).

Although Bradford Woods' per capita income is higher than Marshall Township's, the Township's increase between 1989 and 1999 (90%) surpassed that of Bradford Woods by almost 30%. Pine experienced the second largest increase with 75%. Out of the municipalities surrounding Marshall Township, Franklin Park had the slowest increase (55.2%). All of the municipalities surrounding Marshall Township experienced a higher rate of growth than the County and the State, which both had a 48% increase (see Chart 11).

Poverty Levels:

Chart 12 below depicts the percentage of individuals living below the poverty level. As noted earlier, Marshall Township had the highest or the second-highest median household, family, and per capita income compared to the other municipalities being considered in this study. Despite having these high income numbers, Marshall Township had the highest percentage of individuals living below the poverty level. At 5.8%, Marshall Township falls well short of the 11% of individuals in the County and the State living below the poverty level.



Out of the municipalities surrounding Marshall Township, Pine had the second-highest percentage of individuals living below the poverty level (3.8%). Following Pine is Franklin Park with 3.1%, Cranberry Township with 2.9% and Economy with 2.4%. Bradford Woods had the lowest percentage with 1.4% of its population living below the poverty level.

Employment

The “types” of jobs of those employed, the industries employing the population, and commuting patterns all play important and integral roles in a region’s economic future. Employment statistics being utilized for this part of the demographic analysis were determined from the civilian labor force (16 years old and older), who provided information on occupations, employment status, and travel characteristics.

Table 7: Marshall Township Labor Force, 2000

	Number	Percent of Total
Population 16 years and over	4,189	100.0%
in labor force	2,837	67.7%
Civilian Labor Force	2,837	67.7%
Employed	2,797	99.0%
Unemployed	40	1.0%
Percent of Civilian labor force	1.4	
Armed Forces	0	0.0%
Not in Labor Force	1352	32.3%

Source: US Census Bureau; Census 2000

Employment status is calculated for the entire population 16 years old and older. Table 7 breaks down employment status into the percentage of residents in the labor force and those not in the labor force. Of those in the labor force, it further breaks down the percentage in the workforce into those in the civilian versus armed forces and then the civilian into employed and unemployed. In the year 2000, almost 68% of Marshall Township’s population 16 years old and older was in the labor force. Of those in the labor force, 100% were included in the civilian labor force. As you can see from Table 7, civilian workforce is broken down to those who are employed and those who are unemployed. Ninety-nine percent of the Township’s civilian labor force was employed, leaving 1% unemployed.

Table 8: Marshall Township Employed Civilian Population 16 Years and Older by Occupations, 2000

	Number	Percent of Total
Employed civilian population 16 years and over	2,797	100.0%
Management, professional, & related occupations	1,631	58.3%
Service occupations	224	8.0%
Sales & office occupations	590	21.1%
Farming, fishing, & forestry occupations	0	0.0%
Construction, extraction, & maintenance occupations	127	4.5%
Production, transportation, & material moving occupations	225	8.0%

Source: US Census Bureau; Census 2000

Table 8 summarizes the occupation and the percentage of the civilian population employed in each occupation category. The occupation categories include management, professional, and related occupations; service occupations; sales and office occupations; farming, fishing, and forestry occupations; construction, extraction, and maintenance occupations; and production, transportation, and material moving occupations. The largest percentage (58%) of Marshall Township’s civilian labor force was in the management, professional, and related occupations category. Sales and office occupations was second with 21% of the civilian labor force. Service occupations and production, transportation, and material moving occupations were equal with 8%, followed by construction, extraction, and maintenance occupations with 4.5%.

Table 9: Marshall Township Employed Civilian Population 16 Years and Older by Industry, 2000

	Number	Percent of Total
Employed civilian population 16 years and over	2,797	100.0%
Agriculture, forestry, fishing, and hunting, & mining	0	0.0%
Construction	111	4.0%
Manufacturing	332	11.9%
Wholesale trade	173	6.2%
Retail trade	193	6.9%
Transportation and warehousing & utilities	154	5.5%
Information	80	3.0%
Finance, insurance, real-estate, & rental and leasing	284	10.2%
Professional, scientific, management, administrative, & waste management services	465	16.6%
Educational, health & social services	681	24.3%
Arts, entertainment, recreation, accommodation & food services	187	6.7%
Other services (except public administration)	103	3.7%
Public administration	34	1.2%

Source: US Census Bureau; Census 2000

In addition to occupations, the U.S. census also collects statistics on the industry in which people work. Table 9 provides information on the industry in which Marshall Township residents work.

Educational, health, and social services was the industry in which the largest percentage (24.3%) of Marshall Township residents are employed. Professional, scientific, management, administrative, and waste management services was second with 16.6%. Next in order was manufacturing (11.9%), finance, insurance, real estate, and rental and leasing (10.2%). Retail trade, arts, entertainment, recreation, accommodation and food services, and wholesale trade all had approximately 6%.

The final group of statistics to be examined in this demographic analysis is related to the method by which residents get to work. As Table 10 indicates, more than 80% of Marshall Township residents traveled to work via car, truck, or van – driving alone. Interestingly, Table 10 indicates that there was a higher percentage of residents that worked from home (7.8%) than carpooled (6.5%) or took public transportation (1.0%). According to the 2000 census, it took a Marshall Township resident an average of 26.8 minutes to get to work.

Table 10: Marshall Township Commute to Work, 2000

	Number	Percent of Total
Workers, 16 years & over	2,774	100.0%
Car, truck, or van -- drove alone	2,292	82.6%
Car, truck, or van -- carpooled	179	6.5%
Public transportation (including taxicab)	29	1.0%
walked	58	2.1%
other means	0	0.0%
worked at home	216	7.8%

Source: US Census Bureau; Census 2000

Analysis

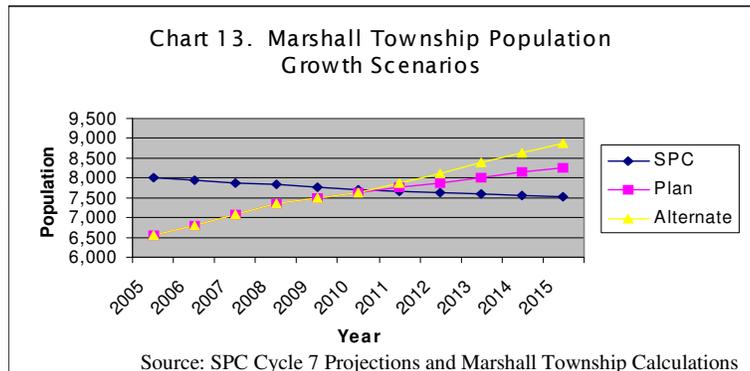
Studying the Township’s demographics gives us a sense of the development patterns that we have seen in the Township. From this, we can project population growth and development patterns over the 10-year planning horizon and in turn use that to assess the services that will be needed over the planning period. The most important demographic information needed for this are population, building permits (used to project growth), population age (used to project service types and levels), and employment, education, and median income (all used to project demand for services).

Since SPC’s projections for 2005 (8,005) are high compared to current Township actuals (6,560), and since the SPC’s growth assumptions were not available, the Steering Committee used the Township’s estimation process to project population growth for the planning period “Plan” (see Table 11 and Chart 13). Additionally, the Committee made an additional projection “Alternate” based on the high population growth period of the early 1990s to assess a range of potential growth. The Township’s population estimations were based on an average number of building permits issued over the last 10 years (38 permits is the average number of permits issued) with adjustments or increases predicted for already approved development and development currently in the approval process. The Township took the projected number of permits and multiplied them by the number of residents per household, as per the 2000 census. The Township assumed 3.1 people per household for single-family development and 1.5 persons per household for multi-family development. The Township took the projections one step further to estimate the school-age population by assuming that 1.1 persons per household for single-family development were school-aged children.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
SPC	8,005	7,945	7,844	7,824	7,763	7,703	7,669	7,635	7,601	7,567	7,533
Plan	6,560	6,812	7,063	7,339	7,481	7,623	7,752	7,881	8,011	8,140	8,269
Alternate	6,560	6,812	7,063	7,339	7,481	7,623	7,875	8,128	8,380	8,633	8,885

Source: SPC Cycle 7 Projections and Marshall Township Calculations

These estimates indicate population decline from 2005 to 2015 of 6% based on the SPC projections, but the Township projections indicate a 26% increase in population for the “Plan” and a 35% for the “Alternate.” Based on these estimates, it would not be unreasonable to expect an increase in school-age children ranging from 350 to 700 children during the planning period. This is roughly equal to the entire current student population in the Marshall Elementary School. However, it is important to note that the estimation approach counts population directly based on building permits and makes no adjustment for population aging or moving.



In addition to the effect on schools, a growing population has implications for the community as a whole. Traffic and transportation, land use, police service, recreation, and government administration will all be affected by an increase in demand.

Increase in demand for specific kinds of services occur as a population ages. While Marshall Township has one of the lowest median ages, compared to the surrounding municipalities, our population is aging. Currently, 15% of the Township's population is 55 years of age or older. Following national trends, the baby boomers are getting older, this number could increase dramatically in the next 10 to 20 years. Marshall Township, like the rest of the country, will then be faced with a population demanding new services, new types of housing and medical care.

In many ways, educational attainment and income are related. Generally, the higher the level of education an individual receives, the larger their income. In Marshall Township, 61.8% of residents over the age of 25 have a bachelors degree or higher and a per capita income over \$42,000. the implications of these statistics have potential impacts on the level of services and kind of services demanded by residents; such as

- Effective delivery of services (garbage and recycling collection, snow removal, etc.)
- Professional demeanor and appearance of staff
- Meticulously maintained Township facilities including parks and grounds

Chapter 4

Community Facilities

Existing Conditions

Municipal governments include counties, cities, boroughs, and townships. The responsibilities or duties of local governments are many and include providing for public safety, emergency services, garbage collection, sewage collection/treatment, repair and maintenance of local roads (including snow removal), code enforcement, and local planning and zoning.

Community facilities and services are the backbone of a community and are often one of the measures used to assess its quality of life. The ability of a community to provide desired facilities and services will ultimately impact its potential for growth in the future. Proper planning enables a community or region to eliminate additional and unnecessary costs that typically come from reactionary responses due to an unforeseen long-term demand or failure to improve and maintain current facilities and services.

The provision for facilities and services normally requires capital investments by the community that are funded through municipal budgets (local tax base) or through the implementation of user fees. Communities must consider whether it is more cost effective to provide the services themselves or have private providers do this on a contractual basis. Some of the advantages of utilizing public agencies are their ability to secure long-term financing for projects and their capability of planning for contingencies. Therefore, the type, quality and quantity of facilities and services being provided by the community or region are most often a compromise of the resident's ability or interest in paying for it. Once a community or region decides to provide a particular facility or service, it is important to consider where they are provided in relation to the current and future population they are intended to serve.

In order to identify the future service needs of the community, an inventory and analysis of the community facilities and services being provided was conducted and is found in this section of the Comprehensive Plan.

Marshall Township Government

Marshall Township operates under Pennsylvania's Second Class Township Code and is governed by a Board of Supervisors. The Board consists of five members elected for staggered six-year terms and meets on either the first or second Monday of the month at 7:30 PM in the municipal building. The building is located at 525 Pleasant Hill Road and is open to the public for regular business hours Monday through Friday between 8:00 A.M. and 4:00 P.M. Township staff includes a manager, secretary, treasurer, parks and recreation director and part-time assistant, planning secretary, zoning officer/GIS analyst/assistant planner, planning director, building inspector, and part-time receptionist. The Township also has a Public Works Department, which will be discussed later in this document.



Marshall Township Municipal Building Sign:
Marshall Township, 2003

The Township's 2005 Operating Budget

The Township's 2005 operating budget of \$4 million and was divided into these general categories: "general government" approximately \$544,000; "public safety" approximately \$1.4 million; "public works" approximately \$1.3 million; and Northland Library approximately \$94,000.

As in most municipalities, public safety and public works consume the majority of the yearly operating budget. Public safety accounts for 35.4% of the Township's annual budget, and public works accounts for slightly less with 33.6% of the annual budget.

Public Works

The Marshall Township Department of Public Works has eight full-time employees: one director and seven laborer/equipment operators. Each public works employee is required to hold a commercial drivers license certification.

The Public Works Department has a wide range of responsibilities that includes maintenance of all roads, parks, and Marshall Township Municipal Sanitary Authority facilities during all seasons of the year.



Five Single-Axle Trucks: Marshall Township 2004

The Department has several pieces of equipment essential for completing its duties. This equipment includes:

- 1 one-ton dump truck
- 1 550 dump truck
- 7 single-axle 40,000 16 GVW with plows and snow removal equipment
- 2 pickup trucks with plows and snow removal equipment
- 2 skid steers
- 1 backhoe
- 1 loader
- 1 road grader
- 1 brush chipper

Code Enforcement and Zoning

Marshall Township has adopted various land use controls (zoning ordinance and a subdivision and land development ordinance) to ensure that growth and development occur in an orderly manner. To enforce these ordinances, the Township has a staff consisting of a planning director, zoning officer, township engineer and building inspector.

As required by the Pennsylvania Municipalities Planning Code (MPC), the Marshall Township Board of Supervisors has appointed a three-member Zoning Hearing Board that meets on an as-needed basis to ensure that the application and administration of the zoning ordinance is fair and equitable. The Board presides over hearings involving appeals of the zoning officer's decisions and the granting of variances.

The Marshall Township Planning Commission, an advisory body, comprises nine members who are appointed by the Marshall Township Board of Supervisors. The Planning Commission provides the Board of Supervisors with a recommendation for every site plan, subdivision plan, zoning ordinance or ordinance amendment, and comprehensive plan completed in the Township.

Police

The Northern Regional Police Force, which is the largest multi-municipal police force in Pennsylvania, serves the municipalities of Bradford Woods, Marshall, Pine and Richland. The police facilities are located in the Pine Township Municipal Building at 230 Pearce Mill Road. The department's facilities consist of a reception area, squad room, three cells, file room, locker room, evidence room, a conference room, and offices for detectives and the chief of police. The former Richland Township Police Department acts as a substation.

The annual budget for the department is approximately \$2.2 million. The department consists of 28 full-time officers, and two full-time secretaries. The police department provides service to the four member municipalities 24-hours a day/seven days a week and has mutual aid agreements with all of the surrounding police departments.

In 2004, the Pine Marshall Bradford Woods Police Department (before January 1, 2006, consolidation with Richland) responded to approximately 8,500 calls. Of those calls, approximately 3,500 were in Marshall Township. Pine had a higher number of calls than Marshall; Bradford Woods had significantly less. These statistics correlate with municipal population statistics.

The consolidation of the Pine Marshall Bradford Woods Police Department with the Richland Police Department into the Northern Regional Police Force on January 1, 2006, provided the following improvements to service: 10 additional full-time officers and two part-time officers; equipment and training which has effectively been upgraded to Pine Marshall Bradford Woods standards; one accident reconstructionist; one detective, four DARE-trained Officers and one crime prevention officer; two sergeants, which will allow for a higher level of supervision and a more efficient use of the Officers in Charge on shifts; one female officer who will be used for investigations, interviews, and processing of female prisoners or suspects; one use of force and mace instructor; one Weight Master; two DANET officers to be used in drug investigations; increased pension assets and economies of scale. Several of these improvements are significant because they provide services/staff that the Pine Marshall Bradford Woods Police Department did not provide.

In addition to regular policing duties, the department has various community-oriented programs. One of these programs is a Crime Watch program. The department also has a school resource program, which is responsible for juvenile/community relations. This program for children in preschool through 12th grade includes educating children about being safe, drug and alcohol abuse, date rape, and personal safety.

Marshall Township Volunteer Fire Department

The Marshall Township Volunteer Fire Department (VFD) provides fire protection for all of Marshall Township. The fire department was established in 1952 and was located in an old gas station on Northgate Drive. Construction of the current building on Northgate Drive in Warrendale was begun in 1954 but was not officially dedicated until June 1970. Currently, the department has its main facility at the Warrendale site and a substation located next to Knob Park which they share with the Township's Public Works Department. In 2005, the department's average response time was nine minutes.

The Marshall VFD has a seven-member board and approximately 50 active volunteers. Substantially all operating, equipment, and training costs for the fire department are funded through Township taxes and a residential and business fund drive.

The Marshall Township Fire Department owns two engines, one tanker, one heavy rescue vehicle, one air/RIT truck, one squad truck, one brush truck, an incident command vehicle, and a fire prevention trailer. Department representatives have stated that one of their priorities is to acquire a truck that is capable of dispensing fire-fighting foam instead of water.

The Warrendale station has space to house three units and also houses a meeting room, administrative offices, a small recreation room that acts as the training room, and a bunkroom in the winter months. The department substation located at the Township's Public Works building houses four units and has a radio room.

According to the Township fire marshal, there is concern regarding the recruitment and retention of volunteers because of new training requirements being initiated by the State in the near future. This will likely be an issue faced by all volunteer fire departments in the State, not just Marshall Township. The department is trying to be proactive in enticing new members by offering incentives. Currently, the department offers its members discounted membership in a local gym. Other incentives for the department are being discussed.

The department has had some discussion regarding the need for a paid daylight position. This position would entail paperwork, cleaning and inspecting equipment, responding to all calls, and to be a first responder in case of medical emergency.

Ambulance Service

The McCandless-Franklin Park Ambulance Authority provides ambulance service to Marshall Township. The authority was incorporated as a nonprofit municipal authority in January 1977. McCandless and Franklin Park cooperated in this incorporation. Its board consists of seven members, five from McCandless and two from Franklin Park. The authority is located on Grubbs Road, adjacent to the McCandless Municipal Building.

In 1979, Marshall Township, Pine, and Bradford Woods contracted for service with the McCandless-Franklin Park Ambulance Authority. The authority serves approximately 50,000 residents in an area over 62 square miles. The authority responds to approximately 3,000 calls annually.

The Ambulance Authority is not supported in any way by local tax dollars. The authority's only sources of revenue are from subscriptions and donations.

While it has yet to be an issue, there is a potential problem regarding response rates for Marshall Township. As stated above, the authority is located at the McCandless Township Municipal Building, in the heart of the authority's densely populated service area. The authority has a substation located in Franklin Park that could be dispatched to handle Marshall Township calls, keeping response rates low. However, the Franklin Park substation is very often dispatched to transport patients to and from different facilities because the main station located at the McCandless Municipal Building is often out on emergency calls. This often means that an ambulance is dispatched from the main station or somewhere in McCandless instead of from the Franklin Park substation, thus increasing response time.

Refuse and Recycling

Marshall and Pine townships have entered in to a new five-year contract with Vogel Disposal, Inc. for the automated collection of waste, recycling, and yard waste. This contract represents a significant departure from the Township's past collection procedures, introducing automated curbside pickup with a strong emphasis on removing recyclable materials from the waste stream. Under this system, customers are incentivized to take an active role in placing recyclables into separate collection containers which decreases the amount of waste deposited into landfills.

Each household is required to have separate waste and recycling carts of their choice of either 95-gallon, 65-gallon, or 35-gallon sizes and has the option of choosing a yard waste cart. All carts, owned by the Township, are provided to the resident at no charge. The cost for disposal is based on the size waste cart chosen by the resident. A 35-gallon cart is \$45.00 per quarter, a 65-gallon cart is \$46.62 per quarter, and the 95-gallon cart is \$47.88 per quarter.

Sewage

The Marshall Township Municipal Sanitary Authority (MTMSA) was established in 1975. The Township does not operate a treatment facility; waste is treated by the Cranberry Township Sanitary Authority or McCandless Township Sanitary Authority (MTSA). Map 3 indicates which sanitary lines are Marshall Township's and which are McCandless's, and also indicates the service areas for McCandless and Cranberry.

The MTSA was incorporated in 1955. As population and growth increased in the North Hills, there was increasing demand for this service. In the early 1970s, Bradford Woods, Franklin Park, Marshall Township, Pine, and parts of Ross and Hampton Townships signed agreements for service from MTSA.

Marshall Township signed an agreement with Cranberry which has been accepting sewage from the Township since 1974.

In 2005, the MTMSA Board signed a service agreement with Economy which will potentially bring sewer service to the western portion of the Township. The Township has no plans in the immediate future to expand sewage service to the western portion of the Township; it will be a market-driven process.

MTMSA has also obtained a piece of property on Mingo Road for construction of a pump station that would serve the Cambridge Manor development on Mingo Road and is large enough to eventually serve all of the homes in that watershed. It is expected that the developer will start construction of the pump station early in 2006.

Water

West View Water Authority, located at 210 Perry Highway, provides Marshall Township residents with water. The authority's water is supplied by the Ohio River. The authority has permission from the Pennsylvania Department of Environmental Protection to remove up to 40 million gallons of water a day from the river. On an average day, the authority removes approximately 24 million gallons a day to serve more than 200,000 people in 29 communities. If there is an accident or a major spill on the Ohio River that required the authority's intake to be shut down, the authority has several ground water wells that can be used to continue the reliable supply of water to the authority's customers. While the authority has no written plan for the future, they do have a non-written plan. After discussions with the authority, municipalities and state agencies, the authority is planning to develop a source of supply and a new plant on the Ohio River. The new source of supply and plan would accommodate demand in northern communities like Marshall Township and Cranberry.

Map 3 shows in general terms the areas of the Township that are serviced by water. The Township attempted to get line information from West View Water; however, for homeland security reasons, they are unable to release that information. In 2005, the authority extended water service along Woodland Road from Quail Court to Woodland Road's intersection with Pleasant Hill Road. Not only will Marshall Township residents benefit from this extension, but portions of Baden Borough will also be able to receive service.

Library

While Marshall Township does not have a library located within its municipal boundaries, the Township is a member of the Northland Public Library. Marshall Township, together with Bradford Woods, Franklin Park, McCandless, and Ross, support the library. Northland Library, located at 300 Cumberland Road, operates as both a municipal authority and a nonprofit organization. The library has a seven-member Authority Board consisting of residents from the five supporting municipalities. Each board member serves a five-year term.

Northland Library’s 2005 budget was \$2,177,325. The budget is composed of municipal tax dollars (59%), Allegheny County Library Association/Regional Asset District (20%), state aid (15%), and self-generated (6%). Municipal tax support is determined based on population, circulation figures, and assessed values. In 2005, Marshall Township contributed \$16.24 per resident, approximately \$94,000, to support Northland Public Library.

The Northland Library operates a bookmobile that stops at Marshall Elementary School every Friday from 3:30 to 4:30 PM. The bookmobile carries approximately 2,500 items including books, videos, DVDs, and CDs. All items on the bookmobile can be checked out. Staff will also take requests for other items from either Northland’s collection or the Carnegie Library’s collection. Items will be delivered by the bookmobile when they are available.

North Allegheny School District

North Allegheny School District is the largest suburban school district in Allegheny County. The district serves four municipalities (Bradford Woods, Franklin Park, Marshall Township, and McCandless) for a total of 48 square miles and a population of approximately 45,000.

The school district has several facilities throughout the four municipalities, including seven elementary schools, three middle schools, one intermediate high school, and one senior high school. For the 2004-2005 school year, the 12 schools that comprise the North Allegheny School District had 1,600,000 square feet of interior space, one 7,500-seat stadium, 27 playing fields, 14 tennis courts, and more than 90 acres of ground, 25 acres of roofs, 8.5 miles of roads, and 12 acres of paved parking lots to maintain. The school district also operates the Baierl Center located on the senior high school campus which is available to students, residents, and community groups.

Marshall Township is home to North Allegheny’s Marshall Campus – Marshall Elementary and Marshall Middle schools. The Marshall Campus is a 93-acre site of not only the two schools but several tennis courts, and softball, football, and soccer fields.



Marshall Elementary School: School District Website

With more than 1,000 employees, the North Allegheny School district is one of the largest employers in the North Hills. The District’s 2004-2005 budget was \$100,517,683, which works out to a cost per student of \$12,246.

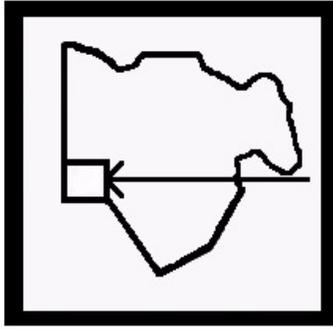
Table 12. Average SAT Scores

	North Allegheny		National	
	Verbal	Math	Verbal	Math
2004	564	562	510	510
2003	548	556	507	519
2002	551	561	504	516
2001	547	553	506	514
2000	553	557	505	514

Source: North Allegheny School District Website

Scholastic Aptitude Test (SAT) scores are often examined as a way to judge how well a school district is preparing its students for college. As Table 12 indicates, the North Allegheny School District has consistently had SAT score averages that are higher than the national average.

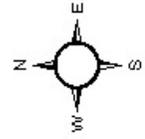
Map 3



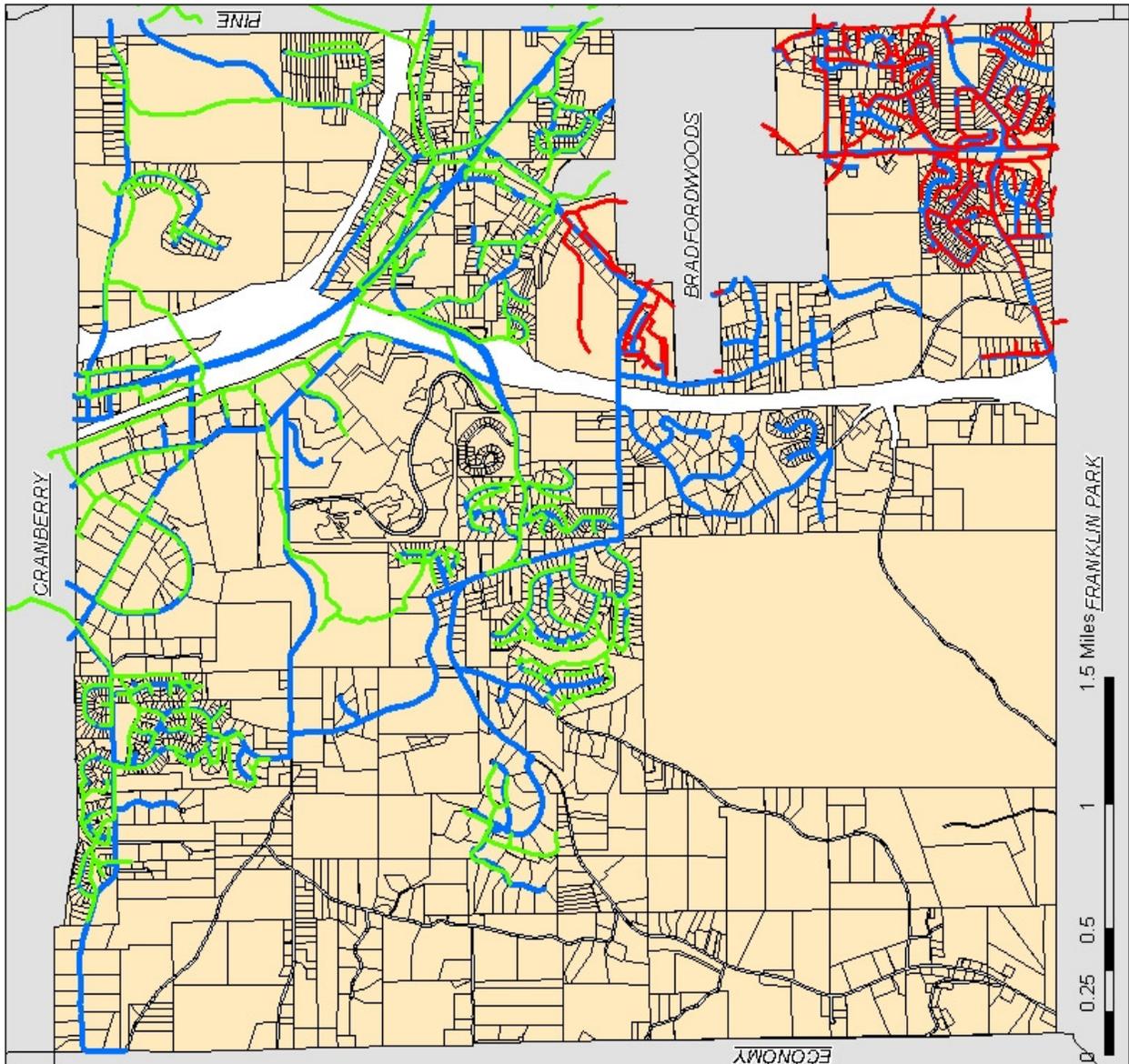
Marshall Township Sanitary Sewage & Water Line Location Map

Data provided by Marshall Township Municipal Sanitary Authority (MTMSA), McCandless Township Sanitary Authority (MTSA) and West View Water. This data is for reference only and should not be used for field location. For more detailed information, please contact MTMSA, MTSA, or West View Water.

-  Marshall Parcels
-  Neighboring Municipalities
-  Waterlines
-  MTMSA
-  MTSA



Marshall Township
GIS Department
2006



Councils of Government (COG)

Councils of Governments (COGs) are special Act 180 organizations. Act 180 is the Intergovernmental Cooperation Law, which was enacted by the general assembly in 1972 and states, “A municipality...may... cooperate or agree to the exercise of any function, power or responsibility with... one or more... municipalities...” COGs are established to enable a group of municipalities to work together on whatever programs are in their mutual interest (DCED, 1997). COGs differ from the typical Act 180 joint program in several ways:

- A COG has broad responsibility. It may be responsible for studying and proposing new joint programs and projects and for coordinating other municipal activities.
- Several existing or proposed Act 180 agreements among COG municipalities can be included under the umbrella of one COG.
- No specific program must be undertaken.
- The COG board or council is almost always comprised of elected officials. Other Act 180 programs may be overseen by either elected or appointed officials.

Marshall Township is part of the North Hills COG. The North Hills COG consists of 19 municipalities: Bradford Woods, Etna, Fox Chapel, Franklin Park, Hampton, Indiana, Marshall Township, McCandless, Millvale, O’Hara, Ohio, Pine, Reserve, Richland, Ross, Shaler, Sharpsburg, West Deer, and West View.

Below is a listing of the North Hills COG projects/programs in which Marshall Township actively participates.

- Multi-Municipal Road Salt Contract – As a result of a multi-municipal contract bid sponsored by the COG, all of the COG municipalities participated in a joint purchasing contract with Central Salt. Performance standards of the contract were significantly improved to mandate proximity of stockpiles, delivery mandates (liquidated damages), regular status and reporting requirements, municipal declarations to trigger emergency salt delivery, and a formula to determine annual increases. The COG municipalities have just completed three successful base years and our first option year. 2005 is the final option year and may be renewed based upon mutual agreement. The fiscal year for salt purchase is September 1 to August 31.
- Cooperative Purchasing – The North Hills COG participates along with seven other Allegheny County COGs in the South Hills Area COG (SHACOG) Cooperative Purchasing Alliance. This program results in greater flexibility and increased buying power for all participants. Items are added to the cooperative purchasing requirements list based upon the degree of collective municipal need for a given item. Marshall Township has benefited from the purchase of leaf bags, road salt, stone, gravel, and other road maintenance materials.
- CATV Model Franchise Agreement – The COG successfully hired a single telecommunications attorney to negotiate new franchise agreements with 11 Comcast and four Armstrong municipalities. Significant and considerable monies were saved by having the COG administer and coordinate meetings between cable providers, attorneys, municipal managers, and school district officials. In this case, the effort concluded in a 10-year franchise agreement with more favorable terms to the municipalities, tighter performance standards, and higher franchise fees.

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- CATV Model R.O.W. Ordinance – This activity was a direct outgrowth of the franchise negotiation. The COG attorney authored the document in order to give the member municipalities more specific control of activities of all types of telecommunications companies within municipal owned rights-of-way. Under certain circumstances, fees are applicable to the utilities. This was one of the first ordinances of its kind in the country.
 - Municipal Member Salary Survey – For the past several years, at the request of managers, the COG has surveyed and tabulated salary and benefit information from all municipal members for administrative, public works, and police. The survey is distributed to all COG delegates.
 - CDL Drug and Alcohol Random Testing – The COG has a contact with Spectrum Medical Associates in Cranberry to provide the Department of Transportation mandated random tests for all applicable public works personnel. The COG administers the program for an annual fee and coordinates with the provider of the service. The COG has negotiated a favorable pricing structure and bills the municipal participants only once per year. Also, because the random pool now consists of more than 180 plus DPW employees, an individual municipality has the same percentage coverage as the whole, but less testing overall.
 - Legislative Forum – At least every other year, or more often by request, the COG coordinates a Legislative Forum to discuss issues and exchange viewpoints of regional importance to our members. The impacts of the proposed and/or pending legislation are also discussed. All appointed and elected officials of the COG are invited, as well as the collective legislative contingent.
 - Annual Municipal Directory – This is a complete listing of our municipal membership listing elected and appointed officials and means of contact. Also, a listing of geographic and budgetary information is included.
 - Multi-Municipal MS-4 Grant – MS-4 stands for Municipal Separate Storm Sewer Systems. This program requires municipalities to receive National Pollutant Discharge Elimination System (NPDES) permits for the discharge of stormwater into streams and rivers. Municipalities are also required to complete five tasks associated with the MS-4 program:
 1. Public education and outreach
 2. Public involvement and education
 3. Illicit discharge detection and elimination
 4. Construction site stormwater runoff control
 5. Post-construction stormwater management in new development and redevelopment

The state provided no funding for municipalities to implement these new programs; however, the state supplied a grant opportunity for municipalities that were a part of an approved watershed plan. This grant would provide some reimbursement to municipalities for the expenses encountered in trying to comply with the mandate. A joint application was filed in 2003 by the COG on behalf of 16 of the member municipalities and three additional neighboring municipalities in three contiguous watersheds. A significant amount of funding by DEP for this joint effort at meeting this otherwise unfunded mandate is anticipated. Also the COG committee of in-house municipal managers is charged with finding and implementing standard procedures which will yield significant fiscal efficiencies for all municipalities involved.

- U.C.C. Joint Appeals Board – the COG has undertaken the objective to form and administer a joint appeals board among a majority of our members to have consistency and continuity of appeals rulings under this statewide mandate. A codes officer committee is assisting in the drafting of the operational bylaws for the board and is establishing standard operating procedures. This effort will save the municipalities’ time and money because each one will not have to go through the process individually.
- Shared C.S.I. Van – A grant was received from the Department of Community and Economic Development (DCED), through the Allegheny County District Attorney’s Office to purchase and retrofit a van for regional crime scene investigation purposes. The van was purchased approximately two years ago and has been operating out of Hampton Township as its central point of deployment. It is available to any North Hills COG municipal police department. This is a self-supporting operational program at present, and all expenses come from an annual municipal mandated fee.
- NHCOC Agricultural Security Area – Approximately 10 years ago, the COG was the initiating and coordinating entity for the organization of numerous farms in 10 different municipalities into a registered Agricultural Security Area under state laws governing the Department of Agriculture. To date, there has been one seven-year update and review with nearly 2,500 acres registered. Under the program, farm owners can exercise certain options to remove their property from the real estate market and receive a per-acre dollar reimbursement in return.
- Managers Advisory Committee Meetings – The North Hills COG convenes these meetings on a regular monthly basis to discuss local government issues of common interest among the membership and to brainstorm and initiate ideas for new projects and programs.
- Household Hazardous Waste Collection – The North Hills COG has worked cooperatively with a newly organized multi-county task force to have one of five collection events held in North Park for the benefit of all residents of member municipalities.
- Survey Requests and Compilation – The COG will undertake and compile surveys for topics of general interest, at the request of the municipal managers. Results are shared with all participants.

Marshall Township Facilities Needs Assessment

In 2004, the Marshall Township Board of Supervisors commissioned the architectural/planning firm of Perkins Eastman to complete a facilities needs assessment for the Township. The results of this study indicate that the Township currently has space issues with many of its facilities. The following are excerpts from the Executive Summary of the Township's Facilities Needs Assessment, which explains the deficiencies in the current facilities and proposals for additional facilities.

- Marshall Township Municipal Building – The building is currently too small to accommodate its present space needs. Significant expansion is needed to adequately accommodate additional staff and programs over the next 10 to 20 years.
- Marshall Township Municipal Sanitary Authority (MTMSA) – The primary needs of the MTMSA include additional storage space, an area for public review of records and the desire to have operable windows to reduce demand on mechanical HVAC equipment.
- Police Substation – Marshall Township currently has no police office within the Township's borders. The current police headquarters in the Pine Township Municipal Building would be augmented by a police substation housed in the Marshall Township Municipal Building.
- Tax Collector – Although the tax collector currently operates out of a home office, the Township needs to be prepared to house the office within the municipal building.
- Parks and Recreation – Marshall Township currently has no community center. Such a facility would provide additional programming space to meet resident needs and increase the quality of life for local residents.
- Public Works Facilities – In addition to being too small to accommodate existing equipment and storage space requirements, the present layout is also not conducive to efficiency of operating costs and functional utility for the staff.
- Volunteer Fire Department – The five bays at the two fire stations are now full and cannot accommodate additional trucks. In addition to maintaining the original fire station in Warrendale, the fire department is looking for a larger second facility to not only accommodate additional trucks, but also equipment storage as well as meeting and support spaces for the firefighters.

In addition to the list of facility deficiencies, Perkins Eastman made several recommendations for the purchase of property and construction of new facilities. The following is a summary of those recommendations:

- Purchase the property on the corner of Pleasant Hill Road and Knob Road or another suitable nearby property. Adjacent property acquisition may be critical to the Township's needs. Proximity to Knob Hill Park and the Public Works property offers much more future flexibility for municipal facilities. The planned extension of sewer to the corner piece of property will increase its value. If the Township acquired the property now, the appreciation in the property will then accrue to the Township instead of a private owner.

Acquisition of this property puts the municipality in a position of multiple options with respect to its facility needs and comprehensive planning. This would allow the Township the flexibility of:

- Using the property as the site for a potential Community Center.
- Incorporating the property as an expansion of protected municipal open space.
- Issuing a developer RFP in the future for private use of the property, which will be compatible with the neighboring municipal recreation facilities.
- Construct a new Community Center on the corner parcel of Pleasant Hill Road and Knob Road (or alternately construct within the existing Knob Hill Park). Construction would be two-phased project, with Phase I being the construction of a lounge and gymnasium and Phase II consisting of multi-purpose and meeting rooms.
- Subject to the expansion of the sewer system along Knob Road, construct a new public works building behind the current building in conjunction with the future improvements of the current building for the Fire Department.

The new public works building will include:

- A double-loaded thoroughfare with two overhead doors at opposite ends with space to accommodate all public works vehicles, workspace and offices – approximately 12,800 square feet total.
- Reconfigured outdoor storage space.
- Easy access to salt dome.

-
- Lunchroom and meeting space shared with and incorporated into the Fire Department’s new space.
 - In coordination with the new public works structure, begin a two-phase renovation of the existing public works building for the new Fire Department headquarters.
 - Phase I - Offices and support Space.
 - Reconstruction of the space that is now between the seven-bay public works garages and the three-bay Fire Department garage space.
 - Roughly 4,000 square feet to accommodate offices, training/meeting space, restrooms, bunkrooms for firefighters, and kitchen.
 - Lunch room – shared with public works.
 - Phase II - Offices and support services
 - New glass door for the first three bays.
 - Lunch room – shared with public works.
 - Proceed with plans to expand the Municipal Office Building with the goal of becoming a LEED certified building – a model of resource and energy efficiency that:
 - Improves staff operating efficiency through an improved office layout, better-conditioned spaces, day lighting improvements, fresh air options, and an overall healthy office environment.
 - Reduces operating expenses through investment in energy efficiency measures, and reduces exposure to wide fluctuation in utility costs.
 - Offers the flexibility to accommodate Marshall Township’s needs for the next 15 to 20 years.
 - Accommodate the needs for a police substation.
 - Provides space for MTMSA.
 - Offers space for the tax collector’s office.

At this time, the Board of Supervisors is evaluating the feasibility of constructing a new public works facility and an addition to the municipal building.

The use of existing public works facilities is uncertain. Current discussions suggest that part of the building will be used by the Fire Department and part by the Parks and Recreation Department.

Before any architectural drawings or construction begins, all spacing issues will need to be resolved.

Analysis

The abundance of quality community facilities and services within Marshall Township has been identified as an asset to the community throughout the planning process. Marshall Township residents are generally satisfied with the services the Township currently provides. As time goes on, the cost of providing the services that Marshall Township residents are accustomed to, and new services that new and existing residents are going to demand, will increase, requiring the Township to come up with additional funds to support these services.

Police

The Township participates in a number of multi-municipal programs. The Northern Regional Police Department is a great example of the benefits of shared services. Although the Township does not necessarily see a reduction in the cost of operating a police department, participating in multi-municipal services does provide for a significant increase in the quality of service being provided. The Township may have to find creative ways to work with our neighbors and the North Hills COG to meet future needs of Township residents.

With the merger of the Pine, Marshall, Bradford Woods Joint Police Force with the Richland Township Police Department to form the Northern Regional Police Department, the public safety needs of Marshall Township should be met for the life of this plan and beyond.

While the department is still headquartered at the Pine Municipal Building, Richland is maintaining office space for officers to use. There was discussion in the Marshall Township Facilities Need Assessment about providing space at the Marshall Township Municipal Building for either office space or a police substation. These plans should be carried through.

Volunteer Fire Department

The Marshall Township Volunteer Fire Department (MTVFD), like most volunteer departments, faces the dilemma of maintaining its volunteer force. As training requirements become more stringent, they are likely to face even greater problems.

In 2005, the MTVFD was in discussions with the Bradford Woods Volunteer Fire Department about potentially consolidating departments. These discussions ended with Bradford Woods deciding that they were not interested in merging. Bradford Woods should be approached again to discuss merging the two departments. Both municipalities would benefit from the extra pool of volunteers and the additional equipment. It is in the best interest of the Township and its residents for the Township to continue to support the MTVFD in every reasonable and cost effective way possible.

Ambulance Service

Due to potential response time issues, the Township needs to work closely with the Ambulance Authority to ensure that Marshall Township residents are provided adequate emergency medical service. As Marshall Township's population continues to grow, ambulance response rates may become more of an issue that the Township will have to be prepared to address.

Sewage

Marshall Township is taking a great step forward in the ability to make public sewage available to all Marshall Township residents by signing the capacity agreement with Economy Borough. Current MTMSA projects will provide service to more of the eastern portion of the Township, while the market will direct the expansion from Economy to the western portion of the Township. There will come a time when all Marshall Township residents will have public sewage, but it is not in the lifespan of this plan. The opening of the western portion of the Township to sanitation will have a major impact on the potential development of the Township and should be carefully monitored and managed.

Water

West View Water Authority has the capacity to supply its member communities, including Marshall Township, for years into the future. The fact that the Authority lacks a formal document is disturbing. Granted, the Authority's water supply comes from the Ohio River, and the chances of the river running dry is unlikely; however, if there were a catastrophe on the river that required the Authority's intake to be shut down, how long could the wells support the Authority's customers? On an average day, the Authority has a 16-million-gallon surplus of water that can be taken from the river. As the population in the Authority's member municipalities continues to grow, the assumption is that this surplus will shrink. Eventually the Authority will have to seek an increase in the number of gallons that it is able to intake on a given day.

Section 301(b) of the Pennsylvania Municipalities Planning Code requires that municipal comprehensive plans include a plan for the reliable supply of water. This plan should be prepared jointly with West View Water Authority and all of its member municipalities.

North Allegheny School District

The Comprehensive Plan Survey results indicate that 62% of respondents look at the school district when determining where to live, and 54% of respondents indicated that the school district is one of the things that they like most about Marshall Township. The North Allegheny School District is in the process of completing a redistricting plan. While overcrowding is not currently an issue at the Marshall Campus schools, there is a problem at several of the district's elementary schools. The school district approved a plan in May of 2006. The district has taken municipal population growth scenarios under consideration and is trying to create a redistricting plan that will accommodate anticipated growth for the next 10 years.

Chapter 5

Parks Recreation and Open Space

Parks and recreation programs provide immediate and long-term health improvement, stress reduction, increasing self-esteem and confidence, and improving academic performance. The benefits to the community include a reduction in adult and juvenile crimes, stronger community and family values, and providing children with a place to play. The environmental benefits are seen through the preservation of plants and wildlife, the control of air, water, and soil quality, and the provision of accessible places to enjoy nature. Lastly, the community realizes economic benefits from increased property values, a reduction in health care and insurance costs, a reduction in employee absenteeism, an increase in employee productivity, and additional tourism dollars.

Existing Conditions

Township-Owned Facilities

Two park facilities located within Marshall Township are owned and maintained by the Township. Also two soccer fields are maintained by the Township but are located on North Allegheny School District property. Improvements and updates to the facilities often involve cooperation between the Township and other community organizations that utilize the facilities. The following are the recreation and open space facilities owned and/or operated by Marshall Township.

Knob Hill Park

Knob Hill Park is a regional attraction that offers a variety of activities. Map 4 on page 57 shows the location of Knob Hill Park and other public and private parks and recreation facilities in the Township. The 116-acre facility has gently rolling terrain with the majority of forested areas on the perimeter of the site. The park offers three picnic pavilions, the Elias Fry Barn, a multi-purpose sports field, the lighted Whitey Soergel Little League and Pony League fields, a sand volleyball court, sledding hill, the Sean DeArment Nature Trail, the Country Castle Playground (which is impressive in its size, and offers varied play events, perimeter concrete path, and tot playground), an 18-hole disc golf course and a three-mile hiking/cross-country-skiing trail system. There is open space throughout with fields and wooded areas.

The Elias Fry Barn was reconstructed in Knob Hill Park in 1997. The reconstruction project utilized 25% of the original materials. It can be rented by residents and non-residents for events. The Whitey Soergel Complex is utilized by the Brad Mar Pine (BMP) Little League Athletic Association. An agreement was signed in 1991 between the association and Marshall Township. This agreement states that Brad Mar Pine shall have exclusive first right of use of the ball fields. BMP also utilizes the concession stand at the Whitey Soergel field complex.

The Sean DeArment Nature Trail was created in 1990 in memory of Sean DeArment, a nature loving township youth. The trail design, landscape plan, and monument were the work of Mel Wann of Wann Contracting; Landscape Architect Stephen Victor; Architect Clark Wallace; Ed Breyak of Breyak-Kutchoko Nursery; and Paul Karki, who identified the specimens. Led by Township Supervisor Sue Gold, it was constructed by an army of Marshall Township volunteers who gave up several Saturdays, Sundays, and many evenings to complete this labor of love.

An 18-hole disc golf course was built in 1997 in cooperation with the Pittsburgh Flying Disc Society. The course is utilized year-round by enthusiasts of all ages and has been ranked by players as one of the best courses in the United States.

Warrendale Park

Warrendale Park consists of eight acres near Warrendale. This park consists of a full-size baseball field (Floyd Davison Field) and bleachers, a picnic pavilion with fireplace (refurbished in 2004), a lighted basketball court, two lighted tennis courts, two sets of lighted horseshoe pits, a concession stand, and a new playground, which will be installed in 2006.

Marshall Campus Soccer Fields

The Marshall Campus Soccer Fields were created in 2001 in cooperation with the North Allegheny School District, North Allegheny Soccer Club, and North Allegheny Lacrosse. The fields are located on North Allegheny's Marshall Campus. The district leases the property to Marshall Township for an annual rental of \$1.00. The initial lease is for 10 years. Marshall Township has sole expense and cost to maintain the fields. The district has first right of use between 7:00 a.m. to 6:00 p.m. for every day that school is in session. Marshall Township's Parks and Recreation Department may rent the field to sport teams after school hours.

School Facilities

A variety of recreation facilities is available to residents of the Township through the North Allegheny School District. School buildings and associated fields and facilities are open evenings and weekends to interested residents and groups for reasonable rental and service charges that help to defray the cost of maintenance and improvements. Inquiries about building fees, rates, and rental may be directed to the North Allegheny School District. The following facilities and fields are available to the community at area schools:

The Baierl Center

The Baierl Center, which is appraised at \$5.1 million, is one of the premier educational and recreational facilities among schools in the nation. The 48,000-square-foot Baierl Center is located on the campus of the North Allegheny Senior High School in McCandless and provides many amenities, including: a 130-foot by 100-foot indoor multi-purpose activity room; three furnished meeting and conference rooms totaling more than 3,500-square-feet; a 3,500 square foot fitness center equipped with cardiovascular machines; selectorized and plate-loaded strength equipment; five furnished offices; an 8,500-square-foot mezzanine with a one-tenth mile multi-lane rubberized, cushioned jogging/walking track; an extensive training room facility equipped with whirlpools; taping tables; treatment tables and a rehabilitation area; four spacious locker rooms; ADA-compliant restroom facilities meeting the needs of the Baierl Center and Newman Stadium; and an indoor/outdoor concession stand for activity room service as well as Newman Stadium events. Although the Baierl Center is located in McCandless, the fact that Marshall Township is located in the North Allegheny School District permits rental of the facilities for Township events at no cost. Line dancing and yoga have been hosted at the Baierl Center by Marshall Township's Recreation Department; however, space is not always available for such Township events.

North Allegheny High School

The North Allegheny High School is located in McCandless Township. The facilities at the complex are provided for students in the school district. The complex contains: an indoor swimming pool that is 25 yards in length and six lanes wide; a baseball field; a softball field; the Newman Stadium football field; three full-size indoor basketball courts; and seven tennis courts.

Marshall Campus

Marshall Campus, located in Marshall Township, is a 93-acre complex comprising of the Marshall Elementary and Middle schools. Each school is home to one gymnasium. There is also a football field, baseball field, two soccer fields, and tennis courts. As previously mentioned, the soccer fields are maintained by the Marshall Township Parks and Recreation Department.

Privately Owned Recreation Facilities

Blade Runners Ice Complex

The 60,000 square-foot Blade Runners Ice Complex was built in 1994. It is a premier dual-rink ice-skating destination which is open year-round. Blade Runners offers programs such as Pick Up Hockey, public skating sessions, speed skating sessions, stick time and learn-to-skate programs.

Millvale Sportsmen's Club

The Millvale Sportsmen's Club occupies 98 acres and includes a 25-and 50-yard pistol range, stocked lake (3 acres), indoor 100 and 200-yard rifle shooting ranges, outdoor archery ranges with 14 targets, two 3-acre field course, two skeet fields, and five trap fields.

The North Side Sportsmen's Association, Inc.

The North Side Sportsmen's Association site occupies 225 acres and includes an indoor pistol range, 300 meter rifle shooting range, indoor archery range, two 3-acre field course, trap/skeet field, and four trap fields.

The Woodlands Foundation

The Woodlands offers 32 acres of beautiful and completely barrier-free woods and open areas, including a nature trail, tent camping, amphitheater, playing field, sports court, and an adaptive par-3 golf course, the only one in the region; fully accessible year-round buildings, including a 48 bed lodge; spacious activity center with fireplace, air hockey tables, media center, and kitchen; creative arts building; indoor aquatic center with water heated to 89 degrees; and dining for 100, with full commercial kitchen and catering services; and program coordinators and staff experienced in working with children and adults with disabilities, chronic illness, and special needs. Health center coverage also is available. The Woodlands offers a variety of rental or use options, including day, evening, weekend, and overnight use of all or part of the campus for retreats, programs, meetings, or conferences.

Family Resource Family Retreat Center

The Family Resource Family Retreat Center is located on 260 acres in northern Marshall Township and southern Cranberry. The center is a summer camp for inner-city and disadvantaged children ages 6 to 11. The Center houses approximately 160 children every week from mid-June to mid-August. During the off-season, the facilities can be rented. Existing facilities include a swimming pool, baseball/softball fields, basketball court, campground, large unprogrammed lawn area, nature/environmental facility, picnic pavilion, playground, pond, restroom facilities, and trails.

Diamond Training

Diamond Training Center is a 30,000-square foot indoor sports practice center. The center hosts a wide range of opportunities such as a pro shop, weight room, long toss/turf area, pro batter cage, mound area, T-area, concession area, party room, private baseball and softball lessons, team rental facilities, and baseball and softball camps. The center is home to the only two pro batters in western Pennsylvania. These two virtual pitching machines are the perfect indoor training tool for serious softball players.

Windwood Health and Sports Club

The Windwood Health and Sports Club, located on 14 acres, offers many health and sports opportunities. Some of the facilities include four indoor tennis courts, four racquetball/handball courts, two whirlpools, steam/sauna, complete nautilus fitness center, aerobics room, ¼-mile track, and refreshment stand. Childcare is also available.

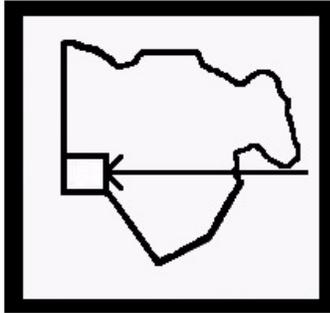
Windwood Pool and Summer Camp

The Windwood Pool and Summer Camp is located on 20 acres. The facilities include a 50-yard swimming pool, hot tub, wading pool, three ping-pong tables, six tennis courts, one basketball court, ropes course, and a shuffleboard lane. Memberships to the swimming pool and facility are offered. A summer day camp is also offered. The day camp provides summer opportunities for children ages 4-12.

Allegheny Athletic Club

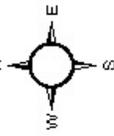
The Allegheny Athletic Club located in Warrendale is a complete health and fitness center. Amenities offered include aerobics, strength training, personal training, massage therapy, chiropractic care, tanning, 30-minute circuit training workout, kickboxing, Latin dance fitness, karate, and childcare.

Map 4

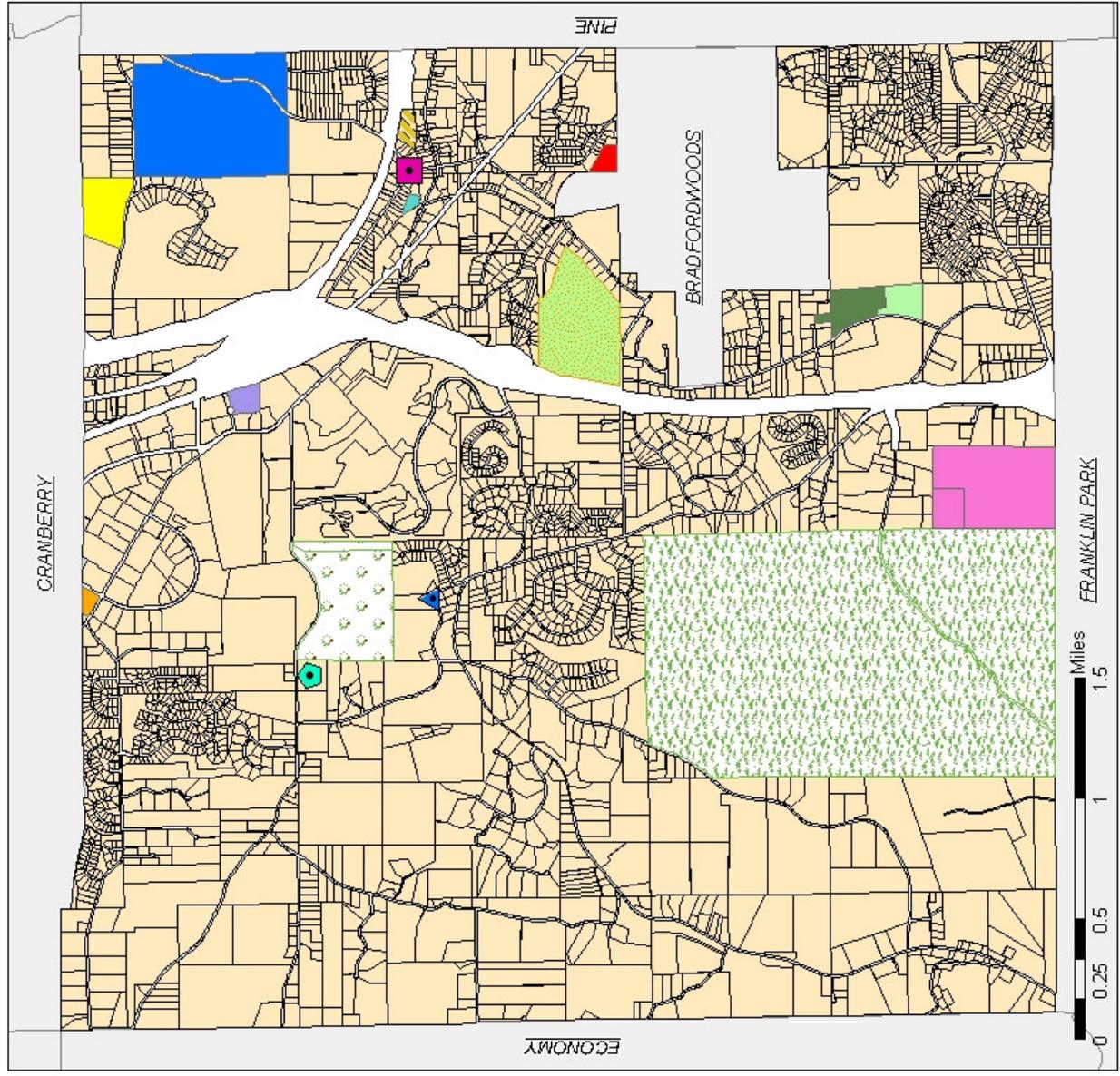


Marshall Township Recreation Areas & Community Facilities

- Marshall Parcels
- Neighboring Municipalities
- Fire Department Warrendale Station
- Marshall Township Municipal Building
- Public Works/Fire Department Substation
- Public Recreation/Community Facilities
- KNOB HILL PARK
- WARRENDALE PARK
- STATE GAMELANDS #203
- N.A. SCHOOL DISTRICT - MARSHALL CAMPUS
- Private Recreation
- ALLEGHENY ATHLETIC CLUB
- BLADE RUNNERS ICE COMPLEX
- DIAMOND TRAINING
- FAMILY RESOURCES FAMILY RETREAT CENTER
- MILVALE SPORTSMEN'S CLUB
- THE NORTHSIDE SPORTSMEN'S ASSOC. INC.
- THE WOODLANDS FOUNDATION
- WINDWOOD HEALTH AND SPORTS CLUB
- WINDWOOD POOL AND SUMMER CAMP



Marshall Township
GIS Department
2006



Select Regional Facilities

State Game Lands

The State Game Lands #203 consists of 1,048 acres. The site is owned and managed by the Pennsylvania Game Commission, Division of Land Management within Marshall Township. It offers nature/cross-country-skiing trails, public hunting, two rifle ranges with 20 firing points each, and one pistol range with 10 firing points.

Franklin Park, Blueberry Hill Park

Blueberry Hill Park is located in the borough of Franklin Park and has ample recreation opportunities to please a wide range of outdoor interests. This park has a football field, baseball/softball complex, a dual-court regulation basketball complex, sand volley court, bocce court, and horseshoe pits. Playgrounds are also scattered within the park grounds, with a tot lot provided for younger children and additional playground equipment and slides provided for older children. A picnic pavilion and lawn space suitable for picnicking are also available on the site. In August 2001, a recreation center was built. This building was designed for use as a rental facility and teen center.

Baierl Family YMCA

A new YMCA facility is scheduled to open on May 1, 2006, in Franklin Park, just beyond Marshall Township's border. This 50,000-square-foot facility will include an indoor and outdoor swimming pool, full-size gymnasium, walking track, aerobics rooms, wellness center, child watch area, two community rooms, a small outdoor ball field, and walking trails.

Cranberry Township

Cranberry Township's recreational needs are served through comprehensive recreation programs and the provision of recreational facilities that include Community Park, North Boundary Park, and the Municipal Center and Gym. Community Park with 68 acres was Cranberry's first significant park and is used extensively by the Cranberry Township Athletic Association and the Seneca Valley Junior Football Association. The park contains five lighted baseball/softball fields and one lighted, multipurpose football field, amphitheater, lighted tennis courts with featured United States Tennis Association-sponsored clinics and lessons, organized sand volleyball leagues, basketball courts, nature trail, and is home to the Cranberry Township Summer Day Camp.

North Boundary Park is home to the community Waterpark, three soccer fields, one baseball field dedicated to the veterans of the community, two picnic shelters completed in 2002, 1.1-mile multipurpose trail, sled-riding hill, children's playground, and green, open space.

The Municipal Center contains the Parks and Recreation Department, community gymnasium, senior/teen center, classrooms and meeting rooms for department-sponsored programs and activities, and a location for community groups to meet.

Additional park land was purchased in 2003. The new property, called Graham Park, will provide additional public recreational areas for the growing community.

Pine Community Park

Pine Community Park encompassing 105 acres, is located across from the Township of Pine Municipal Building. Access to and from the park is off of Pearce Mill Road on the east and Warrendale Road to the north. The park land was purchased by the Township in 1992 for \$825,000 and has since been developed into an extensive recreation facility with many amenities.

Existing recreation facilities at the Pine Community Park include a Pony league field, a Colt league field, two Little League fields that are also utilized as soccer fields, and two additional soccer fields. In addition, there are two sand volleyball courts, a basketball court, a bocce court, and nature and hiking trails. A children's playground area, concession stand with restroom facilities, and two pavilions are additional site amenities located in Pine Community Park.

Beechwood Farms Nature Reserve

This 134-acre nature reserve with more than five miles of walking trails is located southeast of the Township in Fox Chapel. Open to the public from dawn to dusk each day, the nature reserve offers both outdoor and indoor facilities. The Nature Reserve is one of the largest environmental education centers in western Pennsylvania and is the headquarters of the Audubon Society of Western Pennsylvania.

Indoor facilities include the Audubon Nature Store, a 125-seat auditorium, a children's interactive discovery room, the Audubon Center for Native Plants, and a Natural History Library.

A pond was built in 1982 to attract mallards and Canadian geese that continue to reside there. People travel from throughout the state to take advantage of the natural resources of the site, its hiking trails, and educational opportunities.

Hartwood Acres

Hartwood Acres is considered to be a one-of-a-kind park; the 629-acre park was originally a family estate that was sold to the county in 1969. Hartwood Acres is not a typical recreation-and-open-space facility, as it has no designated picnic groves or recreational or sports facilities. However, the park does offer an irreplaceable outdoor, cultural opportunity that is not duplicated in any other public park in the area. The park is most noted for its "Celebration of Lights," which highlights the holiday season from mid-November through January with a spectacular light display.

The Hartwood Mansion, a stately gothic Tudor mansion, is the centerpiece of the park and tours are available by reservation. An outdoor amphitheater has been erected on the site, providing a location for outdoor concerts, theater and dance performances, and symphony music. Multi-use trails for horses, bikes, and walking remain a popular attraction, due largely to the tranquility and peacefulness of the site. Hartwood Acres is also one of the few remaining sites in the area where polo matches are still played, and it is located just 15 miles east of Marshall Township.

Jennings Environmental Education Center

The Jennings Environmental Education Center is a 352-acre resource managed by the Pennsylvania Department of Conservation and Natural Resources. Located in Slippery Rock, 35 miles north of Marshall, the grounds offer a wide variety of nature-related activities for the public to enjoy. There are several miles of walking trails and more than 386 species of plants, 134 species of birds, and a large variety of animals to view and photograph.

The park grounds are open daily from 8:00 A.M. to dusk and provide a backdrop for environmental education and interpretive programs that explore a plethora of ecological and environmental topics. School groups, scouts, church organizations, and private groups may arrange for special programs. College-level students may obtain valuable practical experience through internships in environmental education, interpretation, and resource management.

The highlight of the Jennings Environmental Education Center is the blazing star prairie area, discovered in the late 1950s by Dr. Otto Emery Jennings, who wanted to conserve a rare prairie flower, the blazing star. The center is only one of few relict prairie sites that still exists and was the first “reserve” established in Pennsylvania to protect an individual plant species and remains the only public and protected relict prairie in the commonwealth.

McConnell’s Mills State Park

McConnell’s Mills State Park is located in Lawrence County, 20 miles north of Marshall Township, and encompasses 2,546 acres of the Slippery Rock Creek Gorge, a national natural landmark. The steep-sided gorge contains numerous rocky outcrops, boulders, old forest growth, waterfalls, and rare plants and species. The park provides an abundant array of recreation activities, including tours of the restored rolling gristmill or the covered bridge.

The park is known for offering recreational opportunities that may not be readily available in this area of the state, including climbing and rappelling at the Rim Road Climbing Area or Breakneck Bridge. Whitewater rafting, canoeing, and kayaking are also permitted. The park is also available for fishing, camping, hunting, and picnicking, and there are 11 miles of trails traversing the gorge.

Moraine State Park

The recreational attractions that bring people to 3,225-acre Moraine State Park are Lake Arthur, Frank Preston Conservation Area, and Davis Hollow Marina. The beautiful rolling hills, lush forests, and sparkling waters are especially significant as the park exists because of the efforts of individuals who saved the land from prior coal mining and oil drilling practices. Located approximately 25 miles north of Marshall Township, the park is easily accessed from Interstate 79.

Recreation opportunities in the park are some of the most diverse in the region. For passive users, picnic tables and pavilions are located throughout the park and are open from 7:00 A.M. until sunset. Individual camping is not available in the park; however, there are two camps available for organized group camping. A restricted number of cabins is available to the general public for year-round rental. A number of historic points of interest, including the Davis Cabin and Oil Pump House, are open to visitors. Fishing is allowed in the lake, and common species include bass, black crappie, walleye, and channel catfish, to name a few.

For those seeking more activities, the park has two beaches for sunbathing and swimming. Small motorboats and sailboats are allowed in the lake, and there are also designated areas for windsurfing. The Nautical Nature Tour Boat is available for nature tours on Lake Arthur. The 45-foot pontoon boat is handicap-accessible. The boat is utilized for school trips, dinner and brunch cruises, and is also available for charters. Numerous mountain bike trails are located in the park, and bike rentals are provided onsite. There are also six designated hiking trails that range from 1 to 14 miles in length and accommodate various levels of hiking experience. Winter activities are also available in the park and include ice skating, cross-country skiing, ice boating, ice fishing, snowmobiling, and sledding. Moraine Preservation Fund, a volunteer organization located in the park, launched an Osprey Reintroduction Program in 1994. During this four-year program, 96 young osprey were released at the park. Osprey are now nesting on Lake Arthur and in the surrounding area. Moraine Preservation Fund is currently working on a Barn Owl Reintroduction Program.

North Park/Latodami Nature Center

North Park and the Latodami Nature Center are owned and operated by Allegheny County. North Park, open daily from dawn to dusk, provides programs and facilities that offer many different types of environmental education opportunities for people and groups of all ages on a year-round basis. The park has more than 3,000 acres and includes fields, forests, a pond, wetlands, and stream habitats. Approximately 750 acres of the park are located in the Township of Pine, with the remaining land located in McCandless.

The recreation opportunities in North Park are diverse and provide a range of possibilities for those interested in either active or passive activities. There are approximately 120 picnic shelters, playgrounds, an observation tower, and horse show area. For the more active participant, the park offers soccer fields, a boating area and boathouse, tennis courts, walking and exercise trails, basketball courts, golf courses, softball and baseball fields, a football field, swimming pool, a general-purpose field, and an ice-skating and roller rink. Additional facilities include a lodge and Girl and Boy Scout cabins.

The 234-acre tract of the Latodami Nature Center was acquired by the County in 1969 as an addition to North Park and was formerly known as the Richard Horning estate. The Nature Center is headquartered in the rustic turn-of-the-century dairy barn from the estate and offers the opportunity for individuals to explore and investigate the diverse wildlife and habitats in the park. In addition to the barn, the Nature Center offers an open-air auditorium, local plant and animal displays, and heated classroom within 300 acres of abundant natural resources.

Recreation Programming

The Township has a comprehensive recreation program that is operated year-round and for all ages.

In recent years, Marshall Township has sought to create recreation programming to satisfy the needs of current residents and create a platform for expanded programming for future community needs. As a result of the recommendations contained in the 1996 Master Plan study, as well as a growing demand for more formalized services, facilities and programming, the Marshall Township Board of Supervisors hired its first recreation director and formally instituted the Parks and Recreation Advisory Committee in 1997. The Advisory Committee existed as early as 1990. The recreation director position was initially part-time but became a full-time position in 2003 in response to increasing demands. Recreation programs began with 10 spring/summer programs in the initial year and have since increased to 56 yearly programs today—a 460% increase. Programming options vary in audience and participants, and range from cruises and bus trips to playground programs. In 2000, recreation departments from seven local municipalities—Marshall Township, Franklin Park, Richland, Ohio, Pine, Cranberry, and Ross—joined together to create “Community Tours.” Community Tours is a regional organization that schedules joint excursions such as NASCAR trips, Pirate games, Fall Foliage Dinner Cruises, New York Christmas Express shopping trips, and Mountaineer Race Track Casino trips, when one municipality may not be able to host a trip on its own. In 2002, the Pennsylvania Recreation and Park Society presented Community Tours with an Excellence in Programming Award at its annual conference.

In the 1996 Recreation Master Plan, Marshall Township identified numerous strategies for implementation. In addition to the hiring of a recreation director, the Master Plan recommended the construction of concession stands, paving parking lots, upgrading restroom facilities, doing trail improvements, and constructing a community center. As part of implementing the recommendations, Marshall Township addressed the needs identified at that time and built two concession stands, paved parking lots at Knob Hill Park and Warrendale Park, upgraded restroom facilities in both parks, and improved signage and trails. Recreation surveys completed in 1996 and 2002 identified Marshall Township’s residents’ desire for a functional community center. This Community Center could feature a variety of activity areas and serve senior citizen programs during the weekdays, teen drop-ins during the afternoon, adult programs in the evening, and all ages on the weekends.

The municipal facilities utilized for programming include the Elias Fry Barn in Knob Hill Park (this facility is not heated, allowing only for warm weather programming approximately six months of the year); the municipal building meeting room; the municipal building conference room (this room is heavily scheduled each month with traditional board, committee and authority meetings); and the Bull Pen Pavilion in Warrendale Park (the Bull Pen Pavilion is not heated, allowing only for warm weather programming approximately six months of the year). Due to limited available space, some programs have been held at non-municipal facilities including Windwood Racquetball Club; American Eagle Corporate Headquarters; North Allegheny Baierl Center; the Camelot Banquet Hall; and Marshall Middle School.

The following is a sample of the programs Marshall Township currently provides to residents: Community Day Celebration; Co-Ed Softball League; Playground Program; Garden Club; Movies in the Park; Concerts in the Park; Yoga; Community Tour Trips; Halloween Parade; Easter Egg Hunt; Brunch with Santa; and Web Wise computer classes for seniors.

Trails

A “kick off” Trails Committee meeting was held on July 7, 1994. In 1995, a Hiking/Biking Trail Feasibility Study was conducted by Herbert, Rowland & Grubic, Inc. The committee determined that all of the identified route segments had some merit, providing a northern linkage between Knob Hill Park, Woodland Road, and the RIDC Industrial Park, and potential linkages outside Marshall Township in conjunction with the Allegheny County Greenways Plan. The preferred southern route would connect Knob Hill Park and the Marshall Campus via a route through the County lands (now the site of the Tech 21 development). Trails ranked high in the 1996 survey (60%-70%) and the 2002 survey (70%). As the Township continues to grow, Township staff is working with developers to make sure that new neighborhoods do not encroach upon proposed trail corridors. Incremental sections of the Township trail system will be built until ultimately the sections connect and the system is complete.

Since the 1994 Feasibility Study, approximately 4.4 miles of trails have been completed (see Map 5). Trail easements on additional properties have also been recorded. The Parks and Recreation Department will continue to work on the development of the trail network.

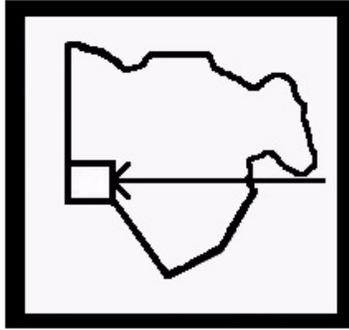
Open Space

Open space is defined in *The Illustrated Book of Development Definitions*, by Harvey S. Moskowitz, as “any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment, or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space.” Marshall Township currently has approximately 356-acres of open space and park land, as well as 1,048 acres of state game lands (see Map 6).

There is an additional 262 acres of land registered under the Agricultural Security Area designation. The Agricultural Security Area program began in 1981 as a tool for strengthening and protecting agriculture in Pennsylvania. Farm landowners, working together, initiated the process of establishing such areas in which agriculture is the primary activity. Participating farmers are entitled to special consideration from local and state government agencies, thus encouraging the continuing use of the land for products of agricultural purposes.

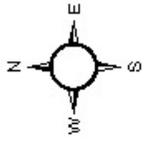
The cultural, historic, and environmentally sensitive lands within Marshall Township are a rare resource that once gone can never be replaced. In light of development pressures on the Township and the potential for significant loss of these lands, the Township has begun to investigate the need for open space preservation strategies, methods, and desirability. The Board of Supervisors tasked staff with completing a report outlining the needs, goals, and options for open space preservation with the Township. This report will be completed and submitted to the Board of Supervisors in spring 2006.

Map 5

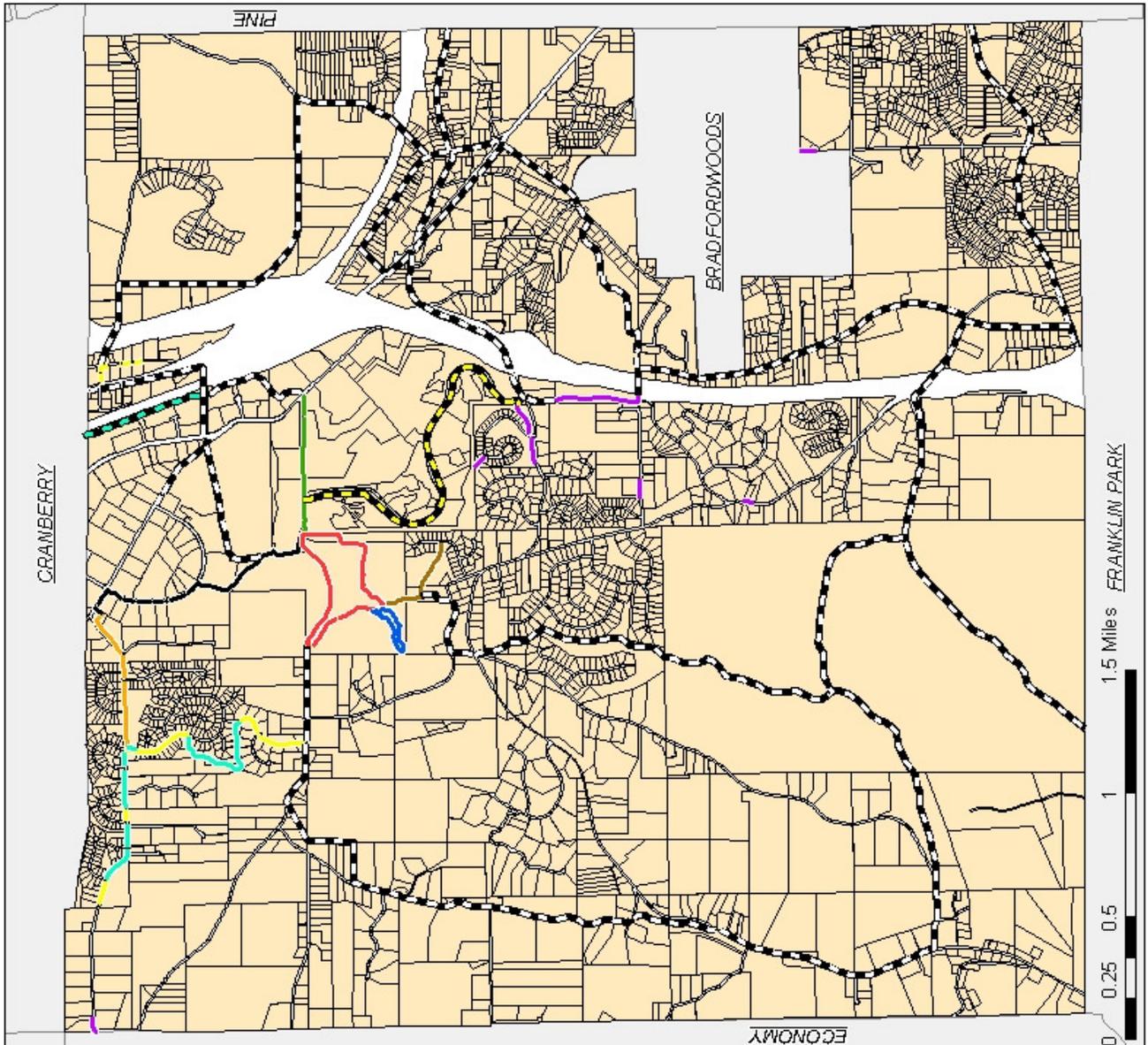


**Marshall Township
Pedestrian Pathways**

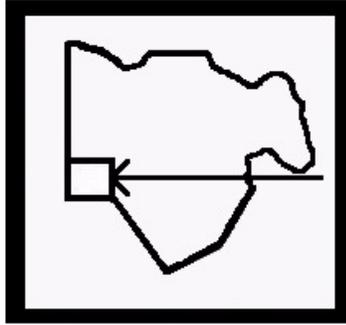
- Marshall Parcels
- Neighboring Municipalities
- Pedestrian Pathways**
- Trail Easement
- Existing Sidewalk
- Existing Trail
- Knob Hill Trail
- Marconi Trail
- Sean DeArment Trail
- Shadow Wood Trail
- Thorn Hill Trail
- Woodland Road Trail
- Proposed Tech 21 Trail
- Proposed Trail-1996
- Proposed Trail



Marshall Township
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Map 6

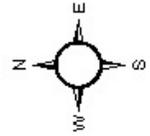


Marshall Township Agricultural Security Areas, Open Space & Parks

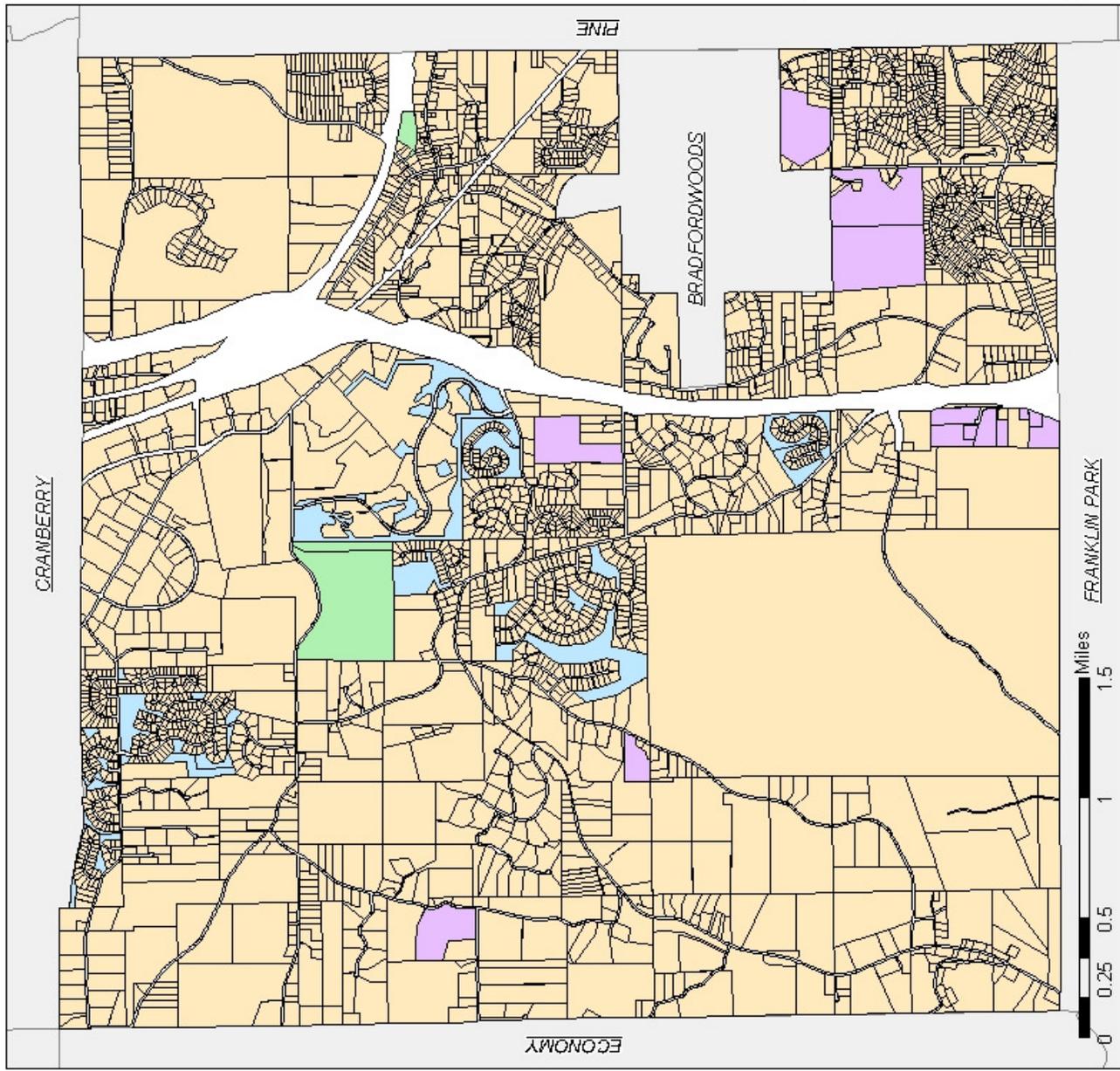
SPC identified participants of Agricultural Security Areas from parcel maps, municipal maps, or aerial photographs. These areas were drafted and digitized from 7.5 minute USGS topographic quadrangle maps. The approximate total area of Agricultural Security in the Township is 262 acres.

Marshall Township Parks (Knob and Warrendale) total approximately 118 acres. Open Space is land dedicated through approved subdivisions in Marshall Township and totals approximately 238 acres.

- Marshall Parcels
- Neighboring Municipalities
- Agricultural Security Lands
- OpenSpace
- Public Parks



Marshall Township
GIS Department
2006



Analysis

Marshall Township provides an abundance of parks, recreational opportunities and open space to its residents and is one of the major assets which draws people to the area. But we can do better.

A detailed look at the Township's parks and recreation facilities and programs through a Recreation, Park and Open Space Plan will help direct Township resources so that we can do a better job in the future of providing the variety of facilities and programs our residents want.

More than half of survey respondents are satisfied with the availability of recreational opportunities and 93% want to see more park and open space development. This is particularly true in the southeastern portion of the Township which is generally underserved with Township facilities. A committee has been designated by the supervisors to investigate and make recommendations relative to open space. This effort should be accelerated and a comprehensive investigation of recreation facilities and programs that will be needed for a growing community should be initiated.

Chapter 6

Transportation

Marshall Township's location within southwestern Pennsylvania's regional transportation network is an essential element of its existing and potential land use patterns. The Township's proximity to these roadways and transit systems supplies its residents with accessibility to the City of Pittsburgh and the region's growing suburban areas. The maintenance and improvement of these transportation systems require special consideration in the Comprehensive Plan process.

Existing Conditions

Functional Classification of Roadways

The Federal-Aid Highway Act of 1973 required the use of functional highway classifications to update and modify the Federal-Aid Highway systems. This legislative requirement still applies today. The U.S. Department of Transportation, Federal Highway Administration Functional Classification Guidelines state "Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network."

This Comprehensive Plan update will utilize the same six road categories as the 1991 Marshall Township Comprehensive Plan (Looking Into the Future...Comprehensive Plan), which sorted the municipality's roadways into the following classifications (see Map 7).

- *Interstate*—designed as limited-access roadways intended to carry large volumes of traffic at high speeds over great distances (Interstates 76 and 79).

Two of the region's major interstate highway systems, the Pennsylvania Turnpike (I-76) and the Raymond P. Shafer Highway (I-79), converge within the northeast quadrant of Marshall Township. The Pennsylvania Turnpike passes through the municipality's northern and eastern borders. Although it does not provide direct access within Marshall Township, an interchange located one-half mile north of the Township provides direct access to both I-79 and Perry Highway (Route 19).

I-79 bisects the Township as it travels in a north-south direction. A portion of one full (Exit 73) and two partial interchanges (Exits 75 and 76) along I-79 are located within the Township. These interchanges provide access to Route 19, the Red Belt (Warrendale Bayne Road and Warrendale Bakerstown Road), and the Orange Belt (Route 910 or Wexford Bayne Road).

- *Principal Arterial*—carries a high volume of traffic for intra-state, inter-county, and inter-city travel (Route 19).

Other than the Turnpike and I-79, Route 19 is the only continuous four lane highway in the Township. The majority of Marshall's commercially zoned and commercially developed property either abuts or is in close proximity to this divided highway, which follows a similar path as the Turnpike in the Township's northeast quadrant.

- *Minor Arterial*—carries a high volume of traffic for intra-county and inter-community travel. These roads normally serve the higher-classification roads providing access to and from the arterials (Red Belt, Orange Belt, Mingo Road, and Pleasant Hill Road).

The Orange Belt and Red Belt are two of six color-coded circumferential roadways that link various towns, highways, and important sites within Allegheny County. The Orange Belt, in the southeast quadrant of the Township, provides I-79 access to Marshall and a significant area of Allegheny County's North Hills region. The Red Belt is the Township's best-suited east-west route and also provides regional access to I-79 for a considerable portion of the North Hills.

Mingo Road and Pleasant Hill Road provide a north-south route within Marshall Township. Mingo Road interconnects the Orange and Red belts. Pleasant Hill Road intersects the Red Belt and continues toward the Township's northwest border.

- *Major Collector*—serves intra-county and inter-community travel but at a lower volume, and usually connects to an arterial to provide access to the surrounding land. Access is not directly from this road but from a subroad connected to the collector (Freeport Road, Thorn Hill Road, Brush Creek Road, Commonwealth Road, Knob Road, and Wexford Run Road).
- *Minor Collector*—serves intra-community travel at a volume below the major collector. The roadway provides access to the land using lower-order roads and sometimes directs access from itself (Woodland Road, Spang Road, Markman Park Road, Shenot Road, Neely School Road, and Bradford Road).
- *Local roads*—defined as all roads not classified as *Interstate, Arterial or Collector*.

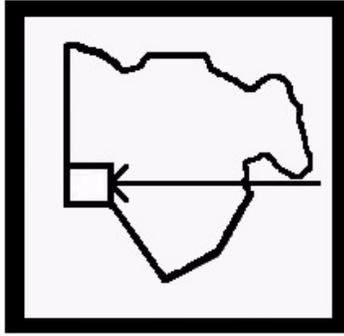
Roadway Ownership

All *Local and Minor Collector* roads are either Township or privately owned and maintained, with the exception of Pittsburgh-Rochester Road which is a *Local* road owned by PENNDOT. Most *Minor Arterial* and *Principal Arterial* roads are owned by PENNDOT or Allegheny County. The Pennsylvania Turnpike Commission operates the Pennsylvania Turnpike, and I-79 is a federal highway maintained by PENNDOT (see Map 8).



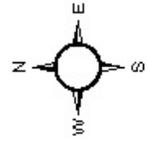
Woodland Road-Minor Collector

Map 8

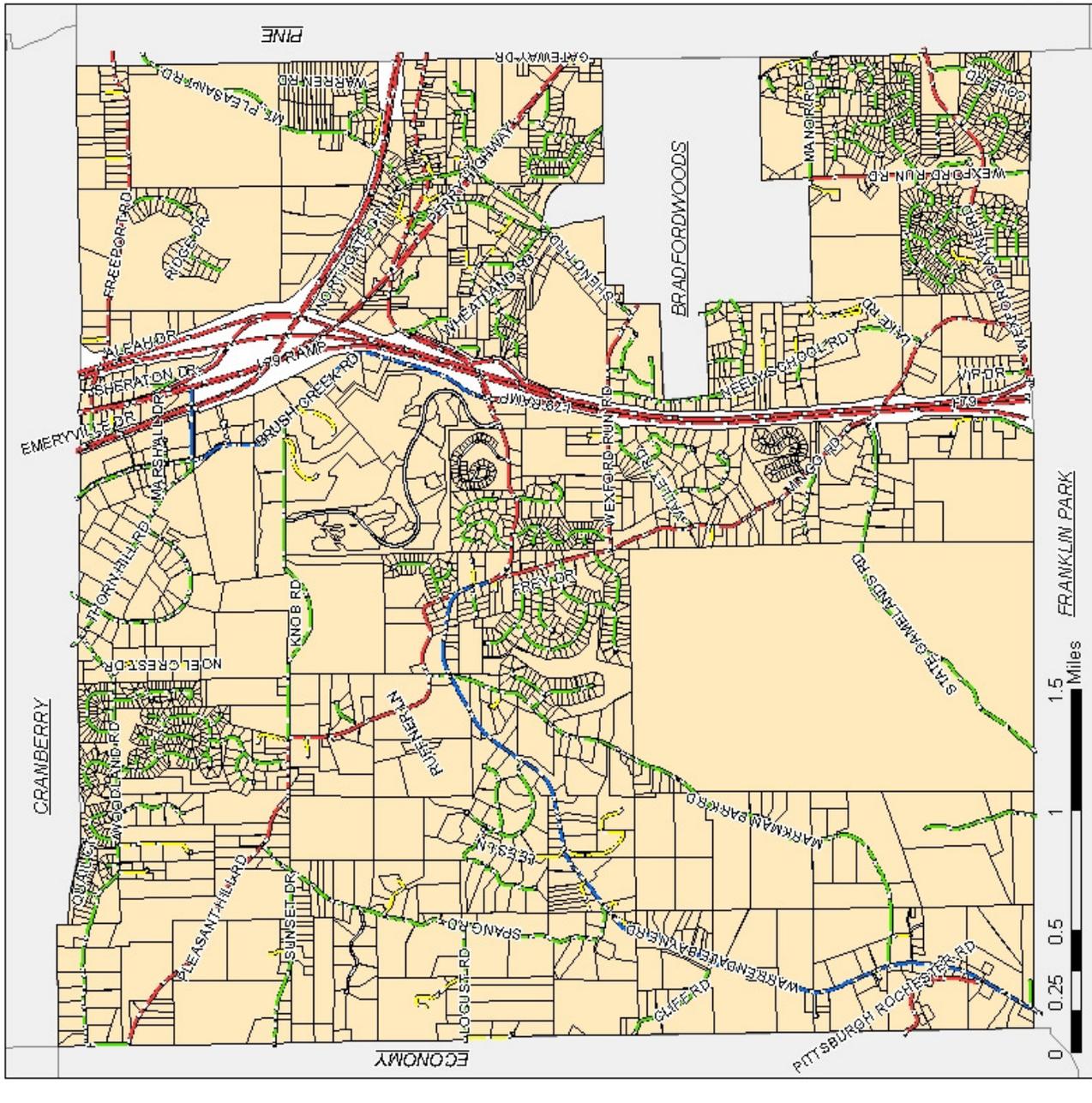


Marshall Township Roadway Ownership

- Marshall Parcels
 - Neighboring Municipalities
- Roadway Owner**
- County
 - Private
 - State
 - Township



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Traffic Counts and Safety

Marshall Township received traffic counts from PENNDOT's District 11 for the majority of state-owned roadways. Traffic count dates range from 1998 to 2005. Roadway segments not provided by PENNDOT District 11 were extracted from PENNDOT's Internet Traffic Monitoring System (ITMS), which allows a web user to access PENNDOT traffic count data and view maps of selected areas along with video. Traffic dates are not available on this website. The Annual Average Daily Traffic (AADT) represents the total of all vehicles counted in a year divided by 365 days. Traffic volume in Table 13 is for both lanes of traffic, unless specifically noted.

Table 13. Annual Average Daily Traffic	
ROADWAY SEGMENT—traffic count dates in []	AADT
Freeport Road [2004]	3,618
I-76	32,969
I-79 Southbound [2004]: from Township Line (Cranberry Township) to Route 19 Southbound On Ramp	13,101
I-79 Southbound [2004]: from Route 19 Southbound On Ramp to Red Belt Southbound On Ramp	35,835
I-79 Southbound: from Red Belt Southbound On Ramp to Township Line (Franklin Park Borough)	39,318
I-79 Northbound [2004]: from Township Line (Franklin Park Borough) to Exit 73—Warrendale	41,715
I-79 Northbound [2004]: from Exit 73—Warrendale to Exit 74—Perry Highway	34,293
I-79 Northbound [2004]: from Exit 73—Warrendale to Township Line (Cranberry Township)	18,010
Red Belt: from Township Line (Franklin Park Borough) to Pittsburgh-Rochester Road	2,111
Red Belt: from Pittsburgh-Rochester Road to Pleasant Hill Road	2,362
Red Belt [2004]: from Pleasant Hill Road to Brush Creek Road	6,631
Red Belt [2004]: from Brush Creek Road to Wheatland Road	9,548
Red Belt [2004]: from Wheatland Road to Route 19	9,547
Red Belt [1999]: from Route 19 to Township Line (Pine Township)	8,268
Mingo Road [2004]: from Wexford Run Road to Red Belt	2,243
Mingo Road [2002]: from Orange Belt to Wexford Run Road	1,999
Orange Belt: Eastbound [2003] from Township Line (Franklin Park Borough) to Mingo Road	10,419

Table 13. Annual Average Daily Traffic—Continued

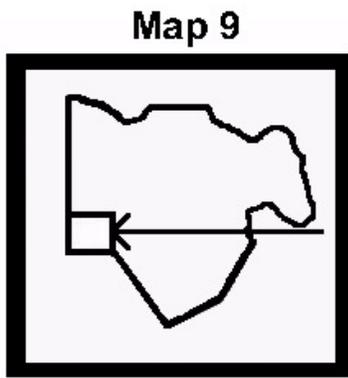
ROADWAY SEGMENT—traffic count dates in []	AADT
Orange Belt Westbound [2003]: from Mingo Road to Township Line (Franklin Park)	10,303
Orange Belt [2004]: from Mingo Road to Wexford Run Road	16,934
Orange Belt [2004]: from Wexford Run Road to Township Line (Pine Township)	13,913
Pleasant Hill Road [2004]: from Township Line (Economy Borough) to Markman Park Road	3,357
Pleasant Hill Road [2004]: from Markman Park Road to Red Belt	4,052
Route 19 Southbound [2002]: from Township Line (Cranberry Township) to Freeport Road	29,153
Route 19 Southbound [1999]: from Freeport Road to Route 19 Southbound I-79 On Ramp	25,992
Route 19 Southbound [2004]: from Route 19 Southbound I-79 On Ramp to Red Belt	7,745
Route 19 Southbound [2003]: from Red Belt to Shenot Road	9,502
Route 19 Southbound [2005]: from Shenot Road to Township Line (Pine Township)	10,502
Route 19 Northbound [2005]: from Township Line (Pine Township) to Northgate Drive	11,449
Route 19 Northbound [2003]: from Northgate Drive to Red Belt	10,047
Route 19 Northbound [2004]: from Red Belt to I-79 Exit 74—Perry Highway Off Ramp	10,409
Route 19 Northbound [1999]: from I-79 Exit 74—Perry Highway Off Ramp to Freeport Road	27,984
Route 19 Northbound [2002]: from Freeport Road to Township Line (Cranberry Township)	26,026
Shenot Road [2003]	2,237
Wexford Run Road [2001]: from Shenot Road to Mingo Road	1,628
Wexford Run Road [2001]: from Orange Belt to Shenot Road	3,643

The roadway segments presented above differ slightly from those provided in the 1991 Comprehensive Plan, thus making an accurate comparison difficult. An overview of the statistics indicates traffic increases on most roadways. For example, the statistics show Shenot Road counts increased from 1,256 to 2,237 and Pleasant Hill Road counts increased from 1,857 to 4,052. Increases in traffic can be attributed to Marshall Township's population increases as well as the growth of neighboring communities.

PENNDOT's Bureau of Highway Safety and Traffic Engineering records statistics of reportable motor vehicle crashes in the commonwealth. The figures are compiled from the traffic crash reports that are submitted to PENNDOT by state, county, municipal, and other law enforcement agencies. The attributes contained within this database include the total number of accidents at particular intersections, the type of collision, probable causes of an accident, and severity of injuries. The conditions present at the time an incident took place—such as road surface, weather, day of the week, and time of day—are also included. The total number of accidents that occurred at various intersections within Marshall Township is listed in Table 14 and illustrated on Map 9. This data encompasses 1998-2003. Due to quality control issues, 2002 statistics are not included.

INTERSECTION	NUMBER OF ACCIDENTS
Freeport Road @ Sheraton Road	9
Route 19 @ Freeport Road	30
Route 19 @ Thorn Hill Road	79
Pleasant Hill Road @ Spang Road	1
Pleasant Hill Road @ Knob Road	1
Pleasant Hill Road @ Markman Park Road	0
Red Belt @ Mingo Road	5
Red Belt @ Wheatland Road	2
Route 19 @ Red Belt	15
Red Belt @ Northgate Drive	1
Route 19 @ Northgate Road	6
Wexford Run Road @ Shenot Road	1
Mingo Road @ Wexford Run Road	1
Mingo Road @ Neely School Road	0
Orange Belt @ Mingo Road	9
Orange Belt @ Wexford Run Road	9
Orange Belt @ Cole Road	9

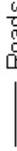
The Route 19/Freeport intersection and the Route 19/Thorn Hill intersection had the highest number of incidents in this time period. Nineteen of the 30 accidents that occurred at the Route 19/Freeport intersection were rear-end collisions. Fifty-seven of the 79 incidents at the Route 19/Thorn Hill intersection were rear-end collisions. Further information regarding traffic counts and vehicle incidents can be obtained by contacting PENNDOT.

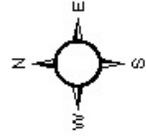


Map 9

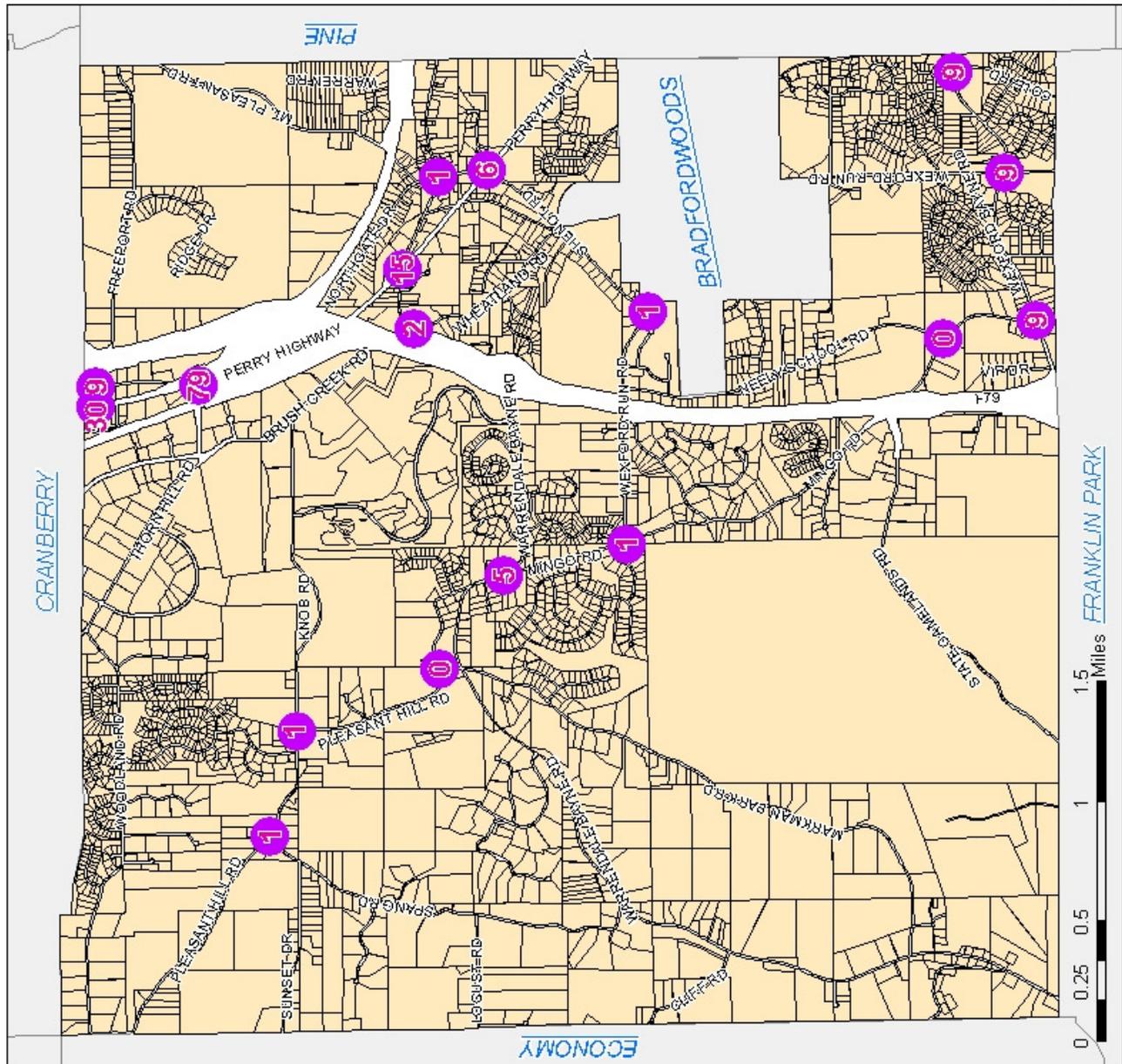
Marshall Township Vehicle Incidents at Roadway Intersections

Data provided by the Pennsylvania Department of Transportation Bureau of Highway Safety & Traffic Engineering. Data includes statistics from 1998-2003 (due to quality control complications, statistics from 2002 are not included). This map depicts the total number of incidents during these years. More detailed information can be obtained by contacting Marshall Township or Penn DOT.

-  Marshall Parcels
-  Neighboring Municipalities
-  Roads
-  Incidents



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Marshall Township Road Maintenance Program

Marshall Township is responsible for the maintenance of all Township-owned roads. The condition of these roadways is monitored daily by the Township's Public Works Department. Annual inspections are conducted by the Township engineer, public works director, and Township manager to assess road conditions and prioritize the projects that are necessary to maintain the integrity of these roadways. The resultant Annual Inspection Report provides the basis for identifying candidate projects to the Township's annual paving program. Projects identified as priority needs are cost-estimated by the Township engineer and, within the confines of the established annual budget, a bid package is prepared and advertised.

In addition, the Public Works director updates the Board of Supervisors monthly regarding road maintenance activities via a written report.

The Township maintains a "Road Report" which catalogs each Township-owned roadway, noting road dimensions, composition, attribute, and maintenance project records.

Transportation Impact Fee

On June 7, 2004, the Marshall Township Board of Supervisors enacted Resolution No. 708, establishing an "Impact Fee Advisory Committee" with the intention of adopting a Transportation Impact Fee (TrIF) Ordinance. Transportation demand analyses completed through the development of Marshall Township's proposed TrIF Ordinance will be utilized in this Comprehensive Plan update. These analyses were prepared by the Township's transportation engineer, Trans Associates (TA), in accordance with Article V-A of the Pennsylvania Municipalities Planning Code (MPC).

The MPC permits municipalities to adopt TrIF ordinances to offset costs incurred by new land development within designated Transportation Service Areas (TSAs). TSAs are geographically defined areas not to exceed seven square miles which contain potential development sites that may require transportation improvements. Funds collected through this fee must be used to improve conditions caused by new development within these TSAs, not for improvements such as expansion of municipal facilities or repairing deficiencies that were in existence prior to new development.

Three studies are required to be adopted by the local governing body prior to the enactment of a TrIF ordinance: a land use assumptions report; a roadway sufficiency analysis; and a transportation capital improvements plan.

The Land Use Assumptions Report created for Marshall Township's proposed TrIF Ordinance included all major subdivision and land development projects that had been approved and not completely built as of November 2004. Applications being reviewed by the Township and potential near-term developments were also included. The location, density, and intensity of predicted residential and commercial development of land parcels deemed undeveloped, underdeveloped, or prime for development is presented in Map 10.

Trans Associates utilized the following resources while preparing their future land use assumptions:

- Input received from the Impact Fee Advisory Committee
- Chapter 208 of the Marshall Code, Zoning, and the Zoning Map
- Marshall Township’s yearly building permit summary for years 2000-2003
- Department of Census 1980, 1990, and 2000 population and housing statistics
- Southwestern Pennsylvania Commission midyear census statistics

TA’s future land uses were assumed to be consistent with the Township’s existing Comprehensive Plan and zoning requirements for use and density, with the exception of the western portion of the Township. One dwelling per acre rather than one dwelling per two acres was assumed for this district because of the possible extension of public sewer and water service in this area. Marshall Township’s Board of Supervisors adopted the Land Use Assumptions Report by resolution (No. 728) on February 7, 2005.

A Roadway Sufficiency Analysis was created based upon the adopted Land Use Assumptions Report. This analysis established preferred levels of service, the existing level of infrastructure sufficiency, and the need for road improvements attributable to projected pass-through traffic and future new development.

Level of Service (LOS) is a measurement of traffic congestion. On an A - F” scale (“A” signifies a congestion free road and “F” is severely congested), the Impact Fee Advisory Committee established “D” as Marshall Township’s minimum preferred LOS. This LOS is consistent with PENNDOT’s criteria for urban areas that specify a minimum acceptable LOS for design purposes as LOS “D.”

Thirty-three intersections and 20 roadway segments were examined to establish Marshall Township’s existing level of infrastructure sufficiency. Data for this study was collected in December 2004-January 2005. Five intersections were found to operate at a LOS below “D:”

- Perry Highway/Freeport Road/Emeryville Drive
- Thorn Hill Road/Brush Creek Road/Commonwealth Drive
- Perry Highway/Warrendale Bayne Road
- Wexford Bayne Road/Mingo Road
- Wexford Bayne Road/Cole Road

Traffic volume projections for pass-through traffic and new development traffic were prepared for the year 2025. These projections were based upon the adopted Land Use Assumptions Report. Two TSAs (Eastern TSA and Western TSA, see Map 11) not exceeding seven square miles were established to determine new development and pass-through traffic projections.

Article V-A of the MPC defines a pass-through trip as a trip that has both an origin and destination outside a particular TSA. Pass-through trips must be projected so that forecasted deficiencies caused by these trips can be established. Deficiencies caused by pass-through trips cannot be funded through impact fees. 2025 travel demand modeling anticipated seven intersections operating at a LOS “D” as a result of pass-through traffic:

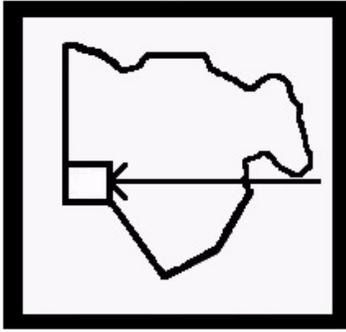
- Perry Highway/Freeport Road/Emeryville Drive
- Thorn Hill Road/Brush Creek Road/Commonwealth Drive
- Perry Highway/Thorn Hill Road
- Warrendale Bayne Road/Northgate Road
- Thorn Hill Road/Woodland Road
- Warrendale Bayne Road/Mingo Road
- Wexford Bayne Road/Wexford Run Road

2025 projections for new development traffic were calculated assuming that existing deficiencies and pass-through deficiencies were mitigated. Analysis of 2025 morning and afternoon peak hour new development traffic volumes was performed for all study intersections. Six intersections projected to operate at a LOS below “D:”

- Freeport Road/Dutilh Road/Sheraton Drive
- Warrendale Bayne Road/Brush Creek Road/I-79 Southbound Ramp
- Warrendale Bayne Road/Wheatland Road
- Perry Highway/Shenot Road/Northgate Road
- Wexford Bayne Road/Wexford Run Road
- Wexford Bayne Road/VIP Drive/Brandt School Road

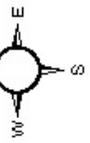
Marshall Township’s Board of Supervisors adopted the Roadway Sufficiency Analysis by resolution (No. 732) on August 1, 2005. The findings contained within this report were used as a basis for determining road improvements that the Township should consider for adoption in its Transportation Capital Improvements Plan. The Transportation Capital Improvement Plan (Resolution No. 734) was adopted by the Board of Supervisors on October 5, 2005. Table 15 and Map 11 summarize the improvements recommended for Marshall Township roadways. This plan only specifies the improvements required to maintain the preferred level of service on deficient roadways attributable to projected future developments. As per the MPC, a local governing body may periodically, but no more frequently than annually, request the Impact Fee Advisory Committee to review the Transportation Capital Improvements Plan and make recommendations for revisions. The TrIF Ordinance (No. 360) was adopted by Marshall Township Board of Supervisors on November 29, 2005.

Map 11



**Marshall Township
Transportation
Impact Fee
Transportation
Service Areas
& Proposed
Capital Improvements**

-  Marshall Parcels
(white parcels are not included within a TSA)
-  Neighboring Municipalities
-  Roads
- Transportation Service Areas**
-  EASTERN TSA
-  WESTERN TSA
-  1 Proposed Capital Improvements
(refer to Table 15)



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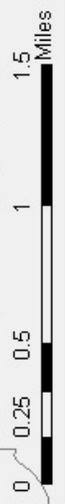
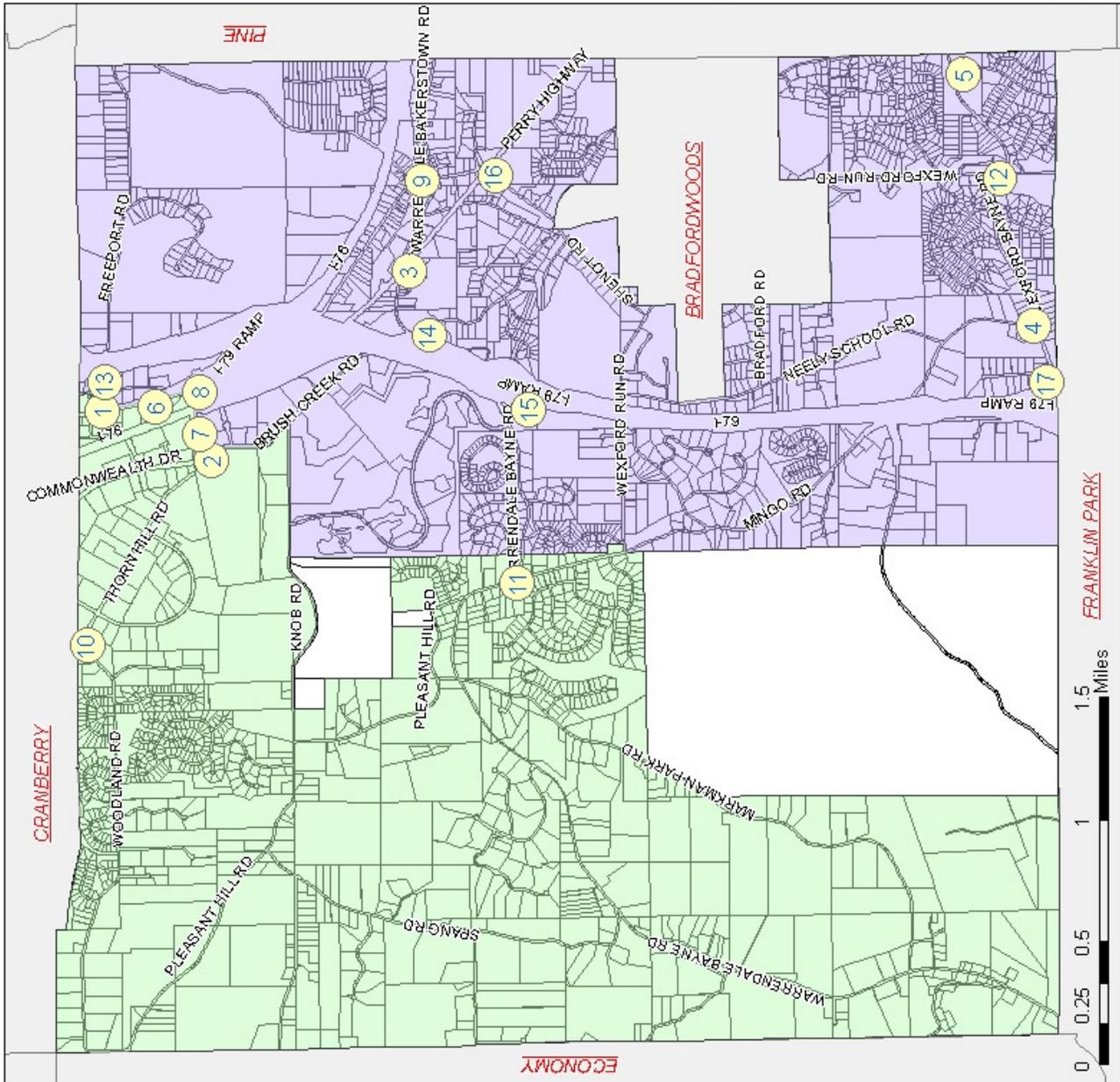


Table 15: Transportation Capital Improvements Plan Summary
Marshall Township, Allegheny County, Pennsylvania

Map No. ⁽¹⁾	Project No.	Location	Description of Project	Const. Year	Total Project Cost (Dollars) ⁽²⁾	Desired State/Federal Funding (Dollars) ⁽³⁾	Other Funding (Dollars) ⁽⁴⁾	TSA-W Impact Fee (Dollars)	TSA-E Impact Fee (Dollars)	Comments
1	1-WE	Freeport Rd. (S.R. 4054) at Perry Highway (S.R. 0019)	Widen Freeport Rd. approach to provide a left/left-through/right turn lane at Perry Highway	2008	\$568,463	\$0	\$483,193	\$42,635	\$42,635	Potential developer funding.
2	2-WE	Thorn Hill Rd./Brush Creek Rd./ Commonwealth Dr.	Widen northbound Brush Creek Rd. approach for a right turn lane. Redesignate eastbound Thorn Hill Rd. as a left-through/through-right.	2007	\$330,888	\$0	\$327,888	\$1,500	\$1,500	Potential developer funding of right turn lane
3	3-E	Perry Highway (S.R. 0019)/Warrendale-Bayne Rd. (S.R. 4052)	Widen eastbound Warrendale-Bayne Rd. approach to provide left/through/right turn lanes. Widen westbound Warrendale-Bayne Rd. approach to provide left/through/through-right lanes.	2007	\$3,662,845	\$0	\$3,662,845	\$0	\$0	Potential developer funding
4	4-E	Wexford-Bayne Rd. (S.R. 0910)/Mingo Rd. (S.R. 4051)	Install traffic signal	2006	\$126,000	\$0	\$126,000	\$0	\$0	Potential developer funding including the widening of Mingo Rd.
5	5-E	Wexford-Bayne Rd. (S.R. 0910)/Cole Rd.	Install traffic signal	2008	\$138,915	\$0	\$129,191	\$0	\$9,724	
6	6-WE	Perry Highway (S.R. 0019) between Thorn Hill Rd. and Cranberry Township line	Widen Perry Highway to provide a third through lane southbound between Cranberry Township line and Thorn Hill Rd. and a third through lane northbound between I-79 off ramp and the Cranberry Township line	2020	\$3,625,168	\$2,900,134	\$0	\$362,517	\$362,517	To be coordinated with the widening of Route 19 from Marshall Township to Route 228 to six lanes as part of Cranberry Township's TCIP.
7	7-W	Thorn Hill Rd./Brush Creek Rd./ Commonwealth Dr.	Widen westbound Thorn Hill Rd. approach to provide a right turn lane	2025	\$876,809	\$0	\$727,752	\$149,857	\$0	
8	8-WE	Perry Highway (S.R. 0019)/Thorn Hill Rd.	Provide dual left turn lanes and a right turn lane on the Thorn Hill Rd. approach	2025	\$554,781	\$0	\$432,729	\$61,026	\$61,026	Replacement of Thorn Hill Rd. bridge over the Turnpike anticipated to be funded by the Pennsylvania Turnpike Commission.
9	9-E	Warrendale-Bayne Rd. (S.R. 4052)/Northgate Dr.	Install traffic signal	2014	\$193,916	\$0	\$176,464	\$0	\$17,452	
10	10-W	Thorn Hill Rd./Woodland Rd.	Install traffic signal	2021	\$272,859	\$0	\$204,644	\$68,215	\$0	
11	11-W	Warrendale-Bayne Rd. (S.R. 4052)/Mingo Rd. (S.R. 4051)	Realign Mingo Rd. and install traffic signal	2024	\$7,761,568	\$6,209,254	\$854,132	\$698,182	\$0	
12	12-E/ 17-E	Wexford-Bayne Rd. (S.R. 0910)/Wexford Run Rd. (S.R. 4053)	Widen Wexford-Bayne Rd. to provide eastbound/westbound left turn lanes. Widen Wexford Run Rd. to provide northbound/southbound left turn lanes.	2021	\$3,166,926	\$2,533,541	\$475,039	\$0	\$158,346	
13	13-WE	Sheraton Dr./Freeport Rd. (S.R. 4054)	Install traffic signal	2016	\$213,792	\$0	\$171,034	\$21,379	\$21,379	
14	14-E	Warrendale-Bayne Rd. (S.R. 4052)/Wheatland Rd.	Install traffic signal	2023	\$300,827	\$0	\$255,703	\$0	\$45,124	
15	15-E	Warrendale-Bayne Rd. (S.R. 4052)/Brush Creek Rd./I-79 Southbound On-Ramp	Provide right/right-through/through/left turn lanes on eastbound Warrendale-Bayne Rd. approach. Provide left/through/through-right lanes on Brush Creek Rd. approach. Widen I-79 On-Ramp to accept two lanes.	2015	\$2,519,082	\$1,586,681	\$0	\$0	\$932,401	Assumes improvements at the intersection are already implemented as part of the Tech 21 development.
16	16-E	Perry Highway (S.R. 0019)/Shenot Rd. (S.R. 4020)/Northgate Dr.	Widen Shenot Rd. approach to provide a right turn lane and widen Northgate Dr. approach to provide a left turn lane. Extend northbound left turn lane on Perry Highway.	2022	\$2,162,423	\$1,708,314	\$0	\$0	\$454,109	
17	18-E	Wexford-Bayne Rd. (S.R. 0910)/V.I.P. Dr./Brandt School Rd.	Widen V.I.P. Dr. approach to provide left/through/right turn lanes	2022	\$719,096	\$0	\$661,568	\$0	\$57,528	
			TOTALS		\$27,194,358	\$14,937,925	\$8,688,182	\$1,405,311	\$2,163,741	
			New P.M. Peak Hour Trips Per TSA					841	1,481	
			IMPACT FEE PER TRIP					\$1,671	\$1,461	

Notes:

- (1) See Map 8 for project location map.
- (2) Total project cost includes construction, engineering, right-of-way, inspection and utility relocation, if applicable. Project costs are future values for the construction year shown.
- (3) This represents Marshall Township's desired level of State and/or Federal participation and is not necessarily included as part of the Southwestern Pennsylvania Commission's current Transportation Improvement Program (TIP).
- (4) Other funding includes Township general funds and developer's contributions.

Transportation Improvement Program

Federal regulations require that the Southwestern Pennsylvania Commission (SPC), as the designated Metropolitan Planning Organization (MPO) for the Pittsburgh Transportation Management Area, develop and maintain a Transportation Improvement Program (TIP). The TIP identifies the region's highest priority transportation projects, develops a multi-year implementation program, and identifies necessary federal and non-federal funding. All projects on the TIP must be consistent with the MPO's regional long-range transportation plan, which anticipates needs for periods of at least 20 years.

The TIP covers a minimum three-year period of investment and must be updated at least every two years through a cooperative effort of local, state, and federal agencies including participation of the general public. The 2005-2008 TIP for Southwestern Pennsylvania identified the primary highway and transit improvements programmed for advancement from October 1, 2004, to September 30, 2008 (federal fiscal years 2005-2008). The next TIP update will occur in 2006. Projects must be included on the TIP to be eligible for federal funding. The following projects proposed to be completed in Marshall Township were included in the 2005-2008 TIP:

- Resurface I-79 from Route 910 to Butler County line
- Patch and overlay of the road and paving the shoulders of I-79 to Butler County Line
- Road and intersection improvements to Warrendale Bayne Road

Additional information regarding the TIP process can be obtained by contacting SPC.

Public Transit

The Port Authority of Allegheny County (PAAC) provides two main bus routes to the residents of Marshall Township and surrounding communities: the 13K and 12A (as of August 30, 2005). In addition to their daily services, PAAC also provides Township residents with public transit for special events such as Pittsburgh Steelers' games. PAAC utilizes two Park-N-Ride lots for these services. The Warrendale Park-N-Ride Lot, located at the intersection of Warrendale Bayne Road and Brush Creek Road, has 112 spaces and is serviced by the 13K transit route. The Blade Runners Park-N-Ride Lot, located on Marshall Drive in the RIDC Industrial Park, has 160 spaces and is serviced by the 13K and 12A transit routes.

The 13K provides Monday through Friday express bus service during peak traffic hours to and from the City of Pittsburgh. This transit service utilizes I-79, I-279, and the I-279 HOV lane during its non-stop route to Pittsburgh. The 13K travels from Marshall to Pittsburgh 10 times between the hours of 5:36 A.M. and 8:21 A.M. and averages a departure every 18 minutes. The average commute time is 35 minutes.



Warrendale Park-N-Ride Lot

The 13K late-afternoon service from Pittsburgh to Marshall Township runs nine times between 3:15 P.M. and 6:11 P.M. with a departure every 23 minutes on average. The average evening commute is 33 minutes. The 13K provides five “reverse commute” express departures from Pittsburgh to Marshall Township in the morning and three “reverse commute” express departures from Marshall Township to Pittsburgh in the afternoon.

In contrast, the 12A provides Monday through Friday service during off-peak traffic hours and makes frequent stops along Route 19 and McKnight Road on its route to Pittsburgh. The 12A departs from the Blade Runners Park-N-Ride four times during midday between 10:16 A.M. and 2:56 P.M. and four times at night between 6:13 P.M. and 10:51 P.M., with an average commute time to Pittsburgh of one hour and 14 minutes. The 12A provides five midday and three night-time departures from Pittsburgh to Marshall Township.

The 12A provides the only regular Saturday and Sunday transit service to Marshall residents. This weekend service follows the same route as the weekday service. The 12A departs from the Blade Runners Park-N-Ride eight times between 7:50 A.M. and 9:46 P.M. on Saturdays, and seven times between 10:21 A.M. and 4:51 P.M. on Sundays. The 12A departs Pittsburgh for Marshall Township nine times between 6:00 A.M. and 10:00 P.M. on Saturdays, and eight times between 8:30 A.M. and 4:05 P.M. on Sundays. Additional information on existing public transit service in Marshall Township can be obtained by contacting PAAC.

The existing Park-N-Ride facilities located within Marshall Township serve as public transit hubs for many growing municipalities in northern Allegheny County, southern Butler County, and eastern Beaver County. Due to this fact, these facilities normally operate at or above full capacity during weekday service. This signifies a need within the Township and region for additional Park-N-Ride facilities.

A Cranberry Area Transit Study was completed in 2004 to evaluate the needs and identify options for public transportation in this region. The study area, which includes Marshall Township, is located in the southwest corner of Butler County, with a small portion located in northwest Allegheny County, and is bordered on the west by Beaver County.

The results of this study recommend a two-stage implementation plan including a demonstration program to test the service concept which, if successful, would be followed by a long term-plan for continued service. Funding for the demonstration will be primarily the state of Pennsylvania, local governments, and rider fares. The recommended time for starting service is spring 2006.

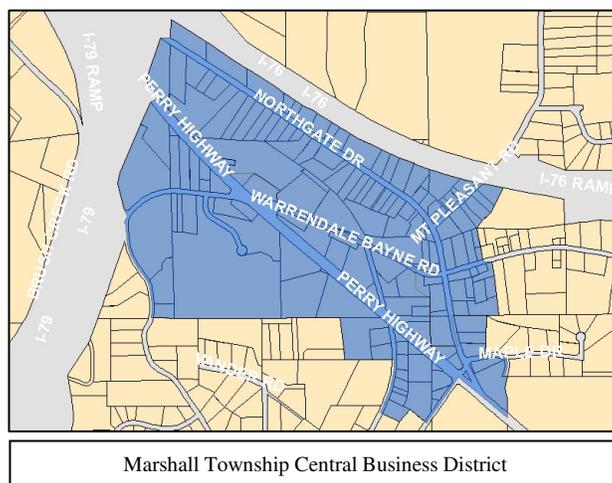
Non-Motorized Circulation

Non-motorized circulation plays an important role in mobility management. When motorists reduce their vehicle use, a significant portion of trips often shifts to walking and cycling, either entirely or in conjunction with other alternative modes such as transit and ride-sharing. Improving non-motorized travel conditions, increasing non-motorized travel, and shifts from motorized to non-motorized transport can reduce traffic congestion and increase health and fitness.

Along these lines, Marshall Township has taken steps to improve non-motorized circulation within its borders. Adopted on February 28, 2005, the Central Business District (CBD) was created to encourage the development of a sustainable town center in Marshall Township. The CBD is located in what is generally considered Warrendale. The intent of this legislation was to build upon the history of Warrendale and re-establish the environment as an inviting place that is accessible to pedestrians and safely facilitates the joint movement of vehicles and people. Design standards such as sidewalks, street trees, and uniform streetscape standards are a requirement within this district. In addition to the CBD, Marshall Township requires all new subdivisions and land developments to provide sidewalk or pedestrian pathway easements to connect to existing or planned pathways.

The CBD's close proximity to existing Park-N-Ride facilities also lends itself to Transit Oriented Development (TOD). Components of TOD generally include a mixture of residential, employment, and commercial opportunities designed for pedestrians without excluding vehicular traffic. TOD should incorporate transit centers in their design or be located within a ten-minute walk of transit centers such as a Park-N-Ride facility. TODs would further encourage non-motorized circulation throughout the Township, help to increase pedestrian traffic, and promote healthier lifestyles with more walking.

Traffic-calming measures such as raised crosswalks, median pedestrian islands, and sidewalk extensions could be incorporated into all land development to improve conditions for motorized and non-motorized means of transport. Traffic calming is a set of street designs and traffic rules that slow and reduce traffic while encouraging walkers and cyclists to share the street. The philosophy behind traffic calming is that streets are valuable public spaces that should be shared equally by all users. Traffic calming devices are simple, inexpensive, self-enforcing, and easily modified to accommodate emergency vehicles, garbage trucks, and buses.



Analysis

The improvement of the Township's transportation network to enhance traffic circulation and safety requires special consideration in Marshall Township's Comprehensive Plan process. The classification of roads may require future revisions if land use patterns change within the Township. For example, the possible extension of public sewers within the Big Sewickley Creek Watershed could cause an increase of residential development and its resultant traffic. *Minor Collector* roads in this area, such as Markman Park and Spang, may need to be reclassified as *Major Collectors* in the future. The revitalization of Warrendale and potential reconnection of Northgate Drive with Route 19, and the possible increase of residential development along Mt. Pleasant Road, may require these roadways to be reclassified from *Local* roads to *Minor Collector* roads.

It will be necessary for the Township to improve and expand upon existing roadways to service potential residential and commercial development. The adoption of the TrIF Ordinance by the Marshall Township Board of Supervisors will help to ensure that recent developments will pay their fair share of the cost of providing the facilities required to increase roadway sufficiency and safety within the Township. The Township's continued participation in SPC's TIP process will be necessary for consideration in future state and county plans. This is particularly important at the intersection of arterial roads and major collector roads because the majority of these thoroughfares are owned and maintained by the state or county.

However, the TrIF Ordinance will provide no relief to the Township for the increased traffic on Township roadways cause by growth in neighboring municipalities. Continued growth in Cranberry and Pine places increasing burdens on Freeport Road, Route 910 and all of the collector roads leading to the increasing number of Port Authority Park and Ride lots. This situation will get worse before it gets better and Township officials need to investigate regional, state and federal resources available to help alleviate the traffic burden that Marshall is and will increasingly face due solely to its location.

Marshall Township leaders and residents are encouraged to continue to identify transit and non-motorized needs and proactively pursue opportunities to address those needs. Support of programs such as the Cranberry Area Transit Study and planning methods such as TOD and traffic calming will help provide Township residents with increased mobility and transportation options in the future.

Chapter 7

Housing

Existing Conditions

It is important to examine existing housing conditions within a community to understand the trends and identify future needs. The appeal of a community is related to the availability of attractive, affordable homes as well as the different types of housing found in its neighborhoods. Homes that are occupied and well-kept create a residential character that is attractive to current residents and future homebuyers. This portion of the Comprehensive Plan analyzes the present conditions of the housing stock in the Township and compares these conditions to the surrounding municipalities, Allegheny County, and Pennsylvania. There are a number of pictures throughout this section that capture the “feel” of the Township’s housing stock and neighborhoods.



Typical Marshall Township Housing Stock, Marshall Township 2005

Housing units are structures intended for residential use and can include a house, apartment, townhouse, modular home, mobile home, or even a single room that is maintained as a separate living quarter. The analysis of the housing units/housing stock within a community provides a strong foundation for comparison because as residents may be transient and household composition may change, the housing units they occupy remain relatively permanent.

The relationship between owner-occupied and renter-occupied housing and vacancy rates typically correspond with the availability of and demand for housing. Owner-occupied homes are traditionally considered more desirable as they retain a better resale value and are typically in better physical shape than rental units. Renters are considered to be less connected to a community as they have less at stake than a homeowner and many communities try to limit the number of rental units. Generally speaking, municipal officials become concerned as homeownership rates drop consistently over a period of time as decreasing homeowner rates can be indicative of a decline in the “well-being” of a community.



Typical Marshall Township Housing Stock, Marshall Township 2005

Municipal officials also need to monitor the number of occupied housing units compared to the number of vacant housing units within their communities. The potential for deterioration, vandalism, and arson increases as homes are left vacant. These factors may also influence the value of homes in the community and thus impact the tax base and financial stability of the municipality.



Typical Marshall Township Housing Stock, Marshall Township 2005

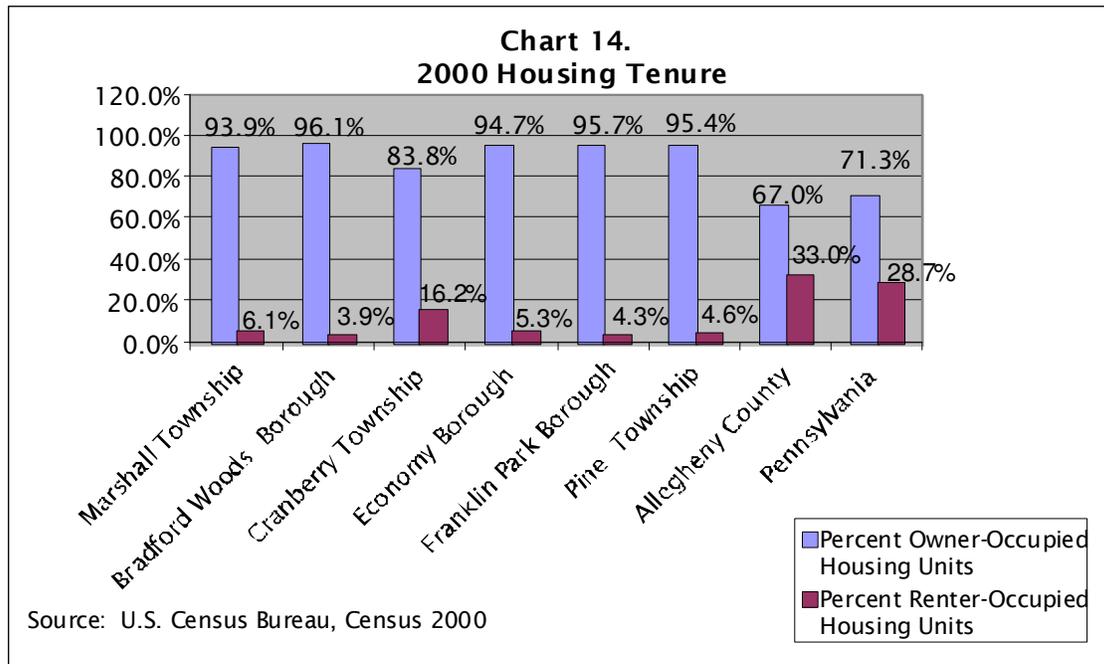
Table 16, below, Housing Occupancy, indicates that Marshall Township had a total of 2,018 housing units. The only neighboring municipality with a smaller number of units was Bradford Woods with 478. Cranberry had the largest number of units (8,724), followed by Franklin Park (3,973), Economy (3,629), and Pine (2,500). Marshall experienced a 46% increase in the number of housing units between 1990 and 2000. Pine experienced the highest percentage of increase with 65%, followed by Cranberry (60%). Franklin Park (16%) and Bradford Woods (0.4%) both experienced a smaller percentage of growth than Marshall Township.

Vacancy rates for Marshall Township and its surrounding municipalities were all under 5%.

	Marshall Township	Bradford Woods Borough	Cranberry Township	Economy Borough	Franklin Park Borough	Pine Township
Total Housing Units	2,018	478	8,724	3,629	3,973	2,500
Housing Units (1990 - 2000)	46.0%	0.4%	60.1%	7.6%	16.2%	65.1%
Percent Occupied Units	96.3%	97.1%	95.7%	97.2%	97.3%	96.4%
Percent Vacant Units	3.7%	2.9%	4.3%	2.8%	2.7%	3.6%
Percent Seasonal Use	0.1%	0.8%	0.3%	0.2%	0.5%	0.2%

Source: U.S. Census Bureau, Census 2000

Chart 14 shows the total number of occupied units and then breaks those units down as to whether they are owner-occupied or renter-occupied. Marshall Township, Bradford Woods, Economy, Franklin Park, and Pine all had owner-occupancy rates of 93% or greater. Cranberry (83.8%) was significantly lower than the surrounding municipalities. All were higher than Allegheny County (67%) and Pennsylvania (71%).



The age of existing housing stock can provide information about the quality of housing in a municipality, the potential for housing growth, housing maintenance needs, and historic value. As shown below in Table 17, 73% of Marshall Township’s housing stock has been built since 1960, and 36.2% of the Township’s housing stock was constructed after 1990. The municipalities surrounding Marshall Township indicate a similar trend. The exception was Bradford Woods whose housing stock is considerably older than the other communities (approximately 43% of the Bradford Woods’ housing stock was constructed before 1959). Allegheny County (64%) and Pennsylvania (55%) had an older housing stock.

Table 17. Age of Housing Units, 2000

	Marshall Township		Bradford Woods Borough		Cranberry Township		Economy Borough		Franklin Park Borough		Pine Township		Allegheny County		Pennsylvania	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Total Housing Units	2,018	100.0%	478	100.0%	8,726	100.0%	3,629	100.0%	3,973	100.0%	2,500	100.0%	583,646	100.0%	5,249,750	100.0%
1990s	730	36.2%	19	4.0%	3,496	40.1%	436	12.0%	799	20.1%	1,114	44.5%	31,103	5.4%	546,277	10.5%
1980s	415	20.6%	87	18.2%	2,418	24.6%	373	10.3%	1,341	33.8%	201	8.0%	37,182	6.4%	531,986	10.1%
1970s	181	9.0%	114	23.8%	1,913	21.9%	987	27.2%	549	13.8%	144	5.8%	64,173	11.0%	709,768	13.5%
1960s	146	7.2%	51	10.7%	471	5.4%	498	13.7%	357	9.0%	317	12.7%	75,032	12.8%	595,897	11.4%
1959 and earlier	546	27.0%	207	43.3%	698	8.0%	1,335	36.8%	927	23.3%	724	29.0%	376,156	64.4%	2,865,822	54.5%

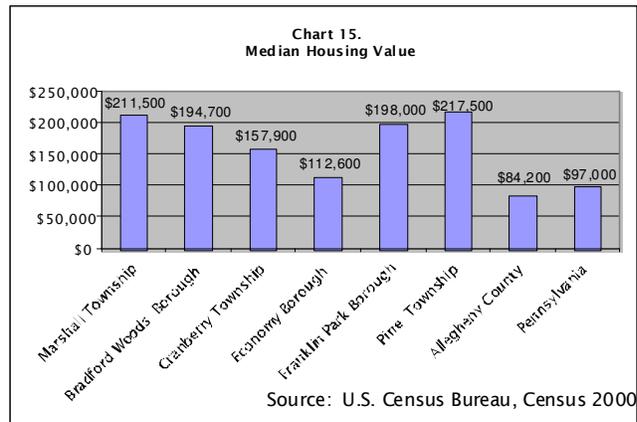
Source: U.S. Census Bureau, Census 2000



Typical Marshall Township Housing Stock, Marshall Township

As previously stated, Marshall Township experienced its greatest increase in housing stock during the 1990s. An examination of Township Building Permit Data shows that an average of 55 building permits per year were issued during the 1990s. The number of permits issued has been decreasing since 2000 with 42 permits issued in 2003 and 31 issued in 2004. We expect this number to increase because of a number of recently approved plans.

A look at the Median Housing Value, Chart 15, indicates that Marshall Township has the second highest median value (\$211,500), which is slightly less than Pine (\$217,500). Franklin Park (\$198,000), Bradford Woods (\$194,700), Cranberry (\$157,900), and Economy (\$112,600) were lower than Marshall Township but still rank much higher than Pennsylvania (\$97,000) and Allegheny County (\$84,200).



Several housing developments have recently been approved or are in the approval process:

- Cambridge Manor 46 single-family
- Copper Creek 20 single-family
- Marshall Heights 129 townhouse units
- Marshall Towne Center 108 apartments
- Providence Point 40 single-family
- Summit, The 26 single-family
- Tech 21 120 condominiums
- Venango Trails* 504: 278 paired units and 226 single-family

*The Venango Trails plan consisting of 504 units was denied by the Board of Supervisors. This plan is currently in litigation and the ultimate number of units is unknown.

Map 23 on page 143 depicts the location of these developments. There are potentially 1,002 new housing units that could be constructed in the next 10 to 15 years. Of those units, 685 are proposed to be multi-family.

Analysis

Housing is reflective of a community's social and economic status. The condition and supply of housing can be used as an indicator of economic cycles, population growth or decline, and architectural trends. Availability of safe, sound, and affordable housing is vital to a community and is part of the quality of life factors that potential residents seek. Therefore, planning for adequate and affordable housing should be balanced with other community planning objectives.

Marshall Township's housing stock is in very good condition. More than half of the Township's housing stock was constructed in the 1980s and the 1990s. More than 93% of the Township's housing units are owner-occupied, which are generally better maintained than renter-occupied units. The maintenance of this housing stock over time will help ensure the Township's current social and economic status.

The vast majority of housing stock in Marshall Township are single-family units but the number of apartments and townhouses will increase over the next 10 to 15 years, with the potential 635 multi-family units proposed. This change will add to the diversity of housing options available in the Township.

Although the Township had been averaging approximately 55 building permits per year prior to 2000 this number has decreased to approximately 34 permits per year. The Township expects to maintain or increase this current level in the future as approved residential plans in the Township begin construction. Any decrease in the number of housing starts has a potential impact on tax revenue growth which must be taken into consideration in all budget and resource projections.

Chapter 8

Economic Development

Existing Conditions

The 15-year time span between 1990 and 2004 saw the Pennsylvania economy both mirror and lag behind the U.S. economy. On the positive side, the trend in total employment in the state generally mirrored the United States by expanding in 13 of the 15 years, decreasing only during recessions (1990-1991 and 2001-2002), and Pennsylvania generally more than kept pace with the nation in lowering its rates of unemployment. On the negative side, however, annual job growth typically lagged behind the United States, while Pennsylvania's population growth between 1990 and 2000 was only one-fourth the U.S. rate (Source: The Pennsylvania State University, Center for Economic and Community Development, 2004).

The U.S. Department of Commerce reported an improving Pennsylvania economy in 2004, as demonstrated by the Gross State Product (GSP) of 3% in 2004 as compared to 2.3% for the previous five years. However, GSP lagged behind the mid-Atlantic states (4.2%) and the United States (4.3%).

Between June of 1999 and 2001, Allegheny County was one of four counties in Pennsylvania to have an increase in total employment in excess of 5,000. However, Allegheny County lost the most jobs during the 2001-2003 recession/recovery period (22,000 jobs, or 42% more than the next weakest county). The bulk of new jobs in Pennsylvania since 2001 were created in the central and southeastern part of the state, as well as in the Poconos.

The top 10 growth industries in Pennsylvania illustrate the major changes that the Pennsylvania economy has undergone over the years. Nine of the 10 growth industries were in the services sector, with the only non-service industry being management of companies and enterprises (see Table 18).

Table 18. "Top 10" Growth Industries: Pennsylvania, June 1990 - 2004

Rank	% Change in Employment	Industry	Number Change in Employment
1	7	Ambulatory Health Care Services	15,213
2	2.9	Food Services & Drinking Places	9,898
3	5.4	Nursing and Residential Care Facilities	9,517
4	14.8	Management of Companies & Enterprises	8,326
5	5	Educational Services	7,489
6	7.4	Social Services	6,664
7	18.2	Wholesale Electronic Markets, Agents & Brokers	6,463
8	18.1	Warehousing & Storage	5,178
9	3.8	Credit Intermediation & Related Activities	4,189
10	7.3	Transit & Ground Passenger Transportation	1,964

Source: Update on Pennsylvania: Road to 2005: The Economy: Jobs, Income, Population, and Forecasts

Further illustrating the changing Pennsylvania economy, Table 19 outlines the top 10 declining industries in Pennsylvania between 2001 and 2003. The change is driven by business firms contracting and restructuring or actually terminating operations. During this time span, manufacturing industries dominate the list of the top 10 declining industries, which is a continuation of the decades-long decline of this sector in Pennsylvania. Seven of the top 10 declining industries were in manufacturing, with computer and electronics product manufacturing leading in employment loss at 20,499 jobs.

Rank	% Change in Employment	Industry	Number Change in Employment
1	-31.3	Computer & Electronics Product Manufacturing	-20,499
2	-6.7	Administration & Support Services	-17,895
3	-19.6	Machinery Manufacturing	-13,694
4	-12.0	Fabricated Metal Product Manufacturing	-12,209
5	-21.3	Transportation equipment Manufacturing	-11,154
6	-16.8	Primary Metal Manufacturing	-8,993
7	-34.3	Apparel Manufacturing	-8,315
8	-2.7	Professional, Scientific, & Technical Services	-7,719
9	-6.0	Merchant Wholesalers - Durable Goods	-7,525
10	-12.1	Plastic & Rubber Products Manufacturing	-5,847

Source: Update on Pennsylvania: Road to 2005: The Economy: Jobs, Income, Population, and Forecasts

Regional Economy

Allegheny County, with a population of 1,270,612, is the driving force behind the southwestern Pennsylvania economic region. The southwestern/Pittsburgh economic region includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland counties. As the largest municipality at 334,563, the City of Pittsburgh is the cornerstone of not only Allegheny County but also the region. Located approximately 12 miles north of Pittsburgh, Marshall Township is part of the Greater Pittsburgh economic region. Allegheny County is classified as its own Workforce Investment Area (WIA), Three Rivers WIA, according to the Pennsylvania Department of Labor and Industry. Table 20 depicts employment trends for Allegheny County from 1990–2004. The County's unemployment rate was 4.3% in 1990, increasing to a high of 6.3% in 1993. Following this increase, the unemployment rate began to decline and reached a low of 3.9% in 1999. Coinciding with the national recession, unemployment rate began to increase in 2001 through 2003 to 5.7%, before declining slightly to 5.4% in 2004.

Year	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate (%)
2004	644,892	610,081	34,811	5.4
2003	641,682	605,093	36,590	5.7
2002	647,849	613,246	34,603	5.3
2001	643,225	615,312	27,913	4.3
2000	635,850	610,135	25,715	4.0
1999	658,208	632,655	25,553	3.9
1998	659,312	632,479	26,833	4.1
1997	663,868	635,247	28,621	4.3
1996	656,838	626,493	30,345	4.6
1995	651,986	617,682	34,304	5.3
1994	658,362	620,341	38,021	5.8
1993	665,384	623,283	42,101	6.3
1992	661,711	619,779	41,932	6.3
1991	649,696	615,348	34,348	5.3
1990	641,200	613,400	27,800	4.3

Source: PA Department of Labor and Industry, PALMIDS

According to the Allegheny County Department of Economic Development, the following are the top 10 private employers in the County with corresponding number of employees:

1. UPMC Health System	26,700
2. West Penn Allegheny Health System	10,200
3. University of Pittsburgh	10,100
4. PNC Financial Services Group, Inc.	6,900
5. Mellon Financial Corporation	6,500
6. Giant Eagle Incorporated	5,700
7. Highmark Blue Cross Blue Shield	5,400
8. U.S. Steel Corporation	5,000
9. Eat 'n Park Hospitality Group	4,500
10. US Airways Group, Inc.	4,000

The top employment sectors in Allegheny County are listed in Table 21. Health care and social administration is the top employment industry in Allegheny County, employing more than 100,000 persons. More than 40,000 of these work for the top two private employers in the County—UPMC and West Penn Allegheny health systems.

Rank	Industry	Employees
1	Health Care and Social Assistance	107,800
2	Retail Trade	79,200
3	Accommodation and Food Services	52,950
4	Manufacturing	50,700
5	Professional, Scientific, and Technical Services	48,300
6	Finance and Insurance	43,800
7	Administrative and Support and Waste Management and Remediation Services	39,700
8	Construction	33,225
9	Educational Services	31,600
10	Other Services (except Public Administration)	26,700
	All Other Services	187525

Source: Pennsylvania Center for Workforce Information and Analysis

To assist the local Workforce Investment Boards (WIB) and training providers, the Center for Workforce Information and Analysis (CWIA) compiles annual demand occupation lists. The demand lists are not meant to be all-inclusive. The Pennsylvania Department of Labor and Industry published the 2003 Demand Occupations for the Three Rivers WIA. Table 22 lists those demand occupations that have or are expected to have 200 or more annual openings, including openings due to growth and replacements, as well as the education/training level required.

As can be seen in Table 22, the majority of the demand occupations that have 200 or more annual job openings for the Three Rivers WIA are in the service sector and require no post-secondary education. The only four demand occupations that require at the least some post-secondary education are teachers, general and operations managers, and registered nurses.

Occupational Title	Education/Training Required		
	College Degree or More	Some Post-Secondary	On-The-Job Training
Bartenders			X
Cashiers			X
Combined Food Preparation & Serving Workers			X
Counter Attendants: Cafeteria, Food Concessions, & Coffee Shop			X
Customer Service Representatives			X
Elementary School Teachers, Except Special Eduaction	X		
Food Preparation Wokders			X
General & Operations Manager	X		
Janitors & Cleaners			X
Laborers & Freight, Stock & Material Movers			X
Office Clerks, General			X
Registered Nurses		X	
Retail Salespersons			X
Sales Representatives, Except Technical & Scientific Products			X
Secondary School Teachers, Except Special & Vocational Education	X		
Stock Clerks & Order Fillers			X
Tellers			X
Waiters & Waitresses			X

Source: The Pennsylvnmaia State University, Center for Economic & Commuity Development

In addition, the Pittsburgh Regional Alliance has released recent expansions and relocations of businesses that have occurred in Allegheny County. They cover a variety of fields, including information technology, medical devices, financial services, consumer healthcare, and manufacturing.

Serving as the Metropolitan Planning Organization (MPO) for 10 counties in southwestern Pennsylvania, including Allegheny County, the Southwestern Pennsylvania Commission (SPC) published the 2025 Transportation and Development Plan for Southwestern Pennsylvania in July 2000. The plan addresses counties' individual needs, guided by the plan's regional goals and objectives, and provides a list of proposed investments for each county. The proposed investments are expected to spawn approximately 128,000 jobs, and the estimated total public and private investment in these economic development projects is approximately \$10 billion in the whole SPC region.

The regional economic development goals included in the plan are:

- Southwestern Pennsylvania will have a vibrant and diverse economy;
- Economic prosperity will be distributed equitably through the region as a result of job opportunities;
- Strategic industry clusters will grow, attracting other industries to the region, and distinctive markets will be developed, taking advantage of unique assets found in the region;
- Businesses will find competitive sites and facilities;
- Businesses will be able to start, locate, and expand rapidly;
- The region's attractiveness as a place to do business will be well-known nationally and internationally; and
- To enhance economic development, the region will have a workforce of the size and with the skills needed by the types of industries in and attracted to the region.

For Allegheny County, outside of the City of Pittsburgh, the plan lists 34 new capacity development projects, one anchor project, and seven build-out projects. Two of these projects are earmarked for Marshall Township.

The first project is the Tech 21 Initiative. The project involves the creation of a high-tech office park, support commercial, hotel and housing development. This project is expected to create 7,000 jobs. The initial investment to prepare for the development is \$10 million and the total public and private investment throughout the development is expected to be \$150 million.

The second project is the Mitsubishi Project located in Thorn Hill Industrial Park. This project includes the construction of a new 50,000-square-foot administration, engineering, and assembly facility. The project is estimated to create 70 new jobs. The initial investment to prepare for the development is \$200,000, and the total public and private investment is expected to be \$8.2 million.

Local Economy

According to the Marshall Township tax Collector and Berkheimer Associates, Marshall Township has approximately 324 businesses. The majority of those businesses are located within the Regional Industrial Development Corporation’s (RIDC) Thorn Hill Industrial Park (THIP). The THIP is located in both Marshall Township and Cranberry Township. According to RIDC, the Park has 11 parcels of land available for development in Marshall Township. The following is a tenant listing for Thorn Hill Industrial Park in Marshall Township.

1. Ericsson Communications	26. Kirby Electric, Inc.
2. Magee Plastics Company	27. CTR Systems, Inc.
3. United States Postal Service (Bulk Mail Center)	28. Pro Am Safety, Inc.
4. Vector Security	29. RIDC Thorn Hill Place
5. All State Insurance Company	30. Herion USA, Inc.
6. Verizon Wireless – Pittsburgh Regional Headquarters	31. Joy Manufacturing
7. American Eagle Outfitters	32. U.S. Filter
8. Marco Contractors	33. Olsen Healthcare
9. Citizens Bank	34. Tribune Review Publishing Co.
10. Blade Runners Ice Complex	35. Chick Workholding Solutions, Inc.
11. RIDC Commonwealth Manor I – American Eagle Outfitters	36. Philips Production
12. RIDC Commonwealth Manor II – Accu Copy, Bronx/Taylor-Wilson, Marconi Communications, Healthcare Information Corporation, Microbac Laboratories, Inc. – Pittsburgh Division, Patterson Dental Company	37. Materials Research Society
13. 120 Commonwealth Drive	38. Mitsubishi Electric Power Products, Inc.
14. Cutler-Hammer	39. Mitsubishi Electric Power Products, Inc.
15. Pennsylvania Fashions, Inc.	40. Asten Johnson
16. Fredrick Logan Company/Autotrols	41. Star Stainless Screw Company
17. Grinnell Fire Protection	42. Hospital Council of Western Pennsylvania*
18. Erie Insurance Group	43. Parks Moving and Storage, Inc.*
19. McClure Johnson	65. WESCO Distribution, Inc.*
20. SAE International, Performance Review Institute, Service Technicians Society	68. Fasteners Unlimited Inc.
21. SAE International	69. DSM Machinery Company
22. Hospital Council	70. Crescent Commons – Grinnell Fire Protection, GSA, Kemper Insurance Company
23. Allegiance Healthcare Corp.	71. Iron & Steel Society & Minerals, Metals, Materials Society*
24. SAE International	72. Right Ascension Inc.
25. Victaulic Company of America	73. Keystone Commerce Center – Derse Exhibits*
	* indicates lots split between Marshall Township and Cranberry Township

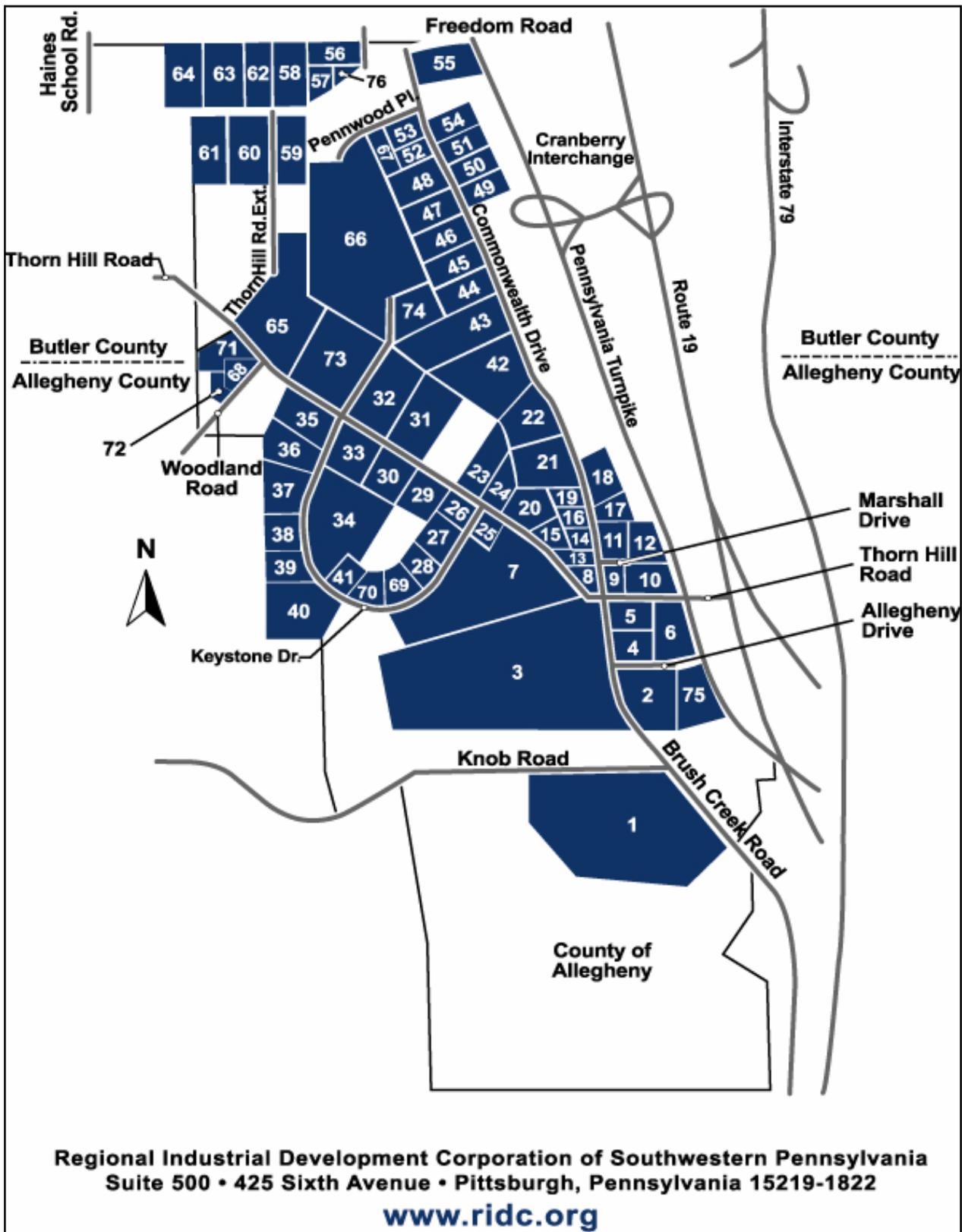


Table 23. Top 10 Largest Employers in Marshall Township, 2005

Rank	Employer	Employees
1	AE Corporate services	107,800
2	Finance Branch	79,200
3	Marconi Communications	52,950
4	Cellco Communications	50,700
5	Society of Automotive Engineers	48,300
6	Tribune Review Publishing	43,800
7	North Allegheny School District	39,700
8	Warrendale Hotel Association	33,225
9	Asten Johnson, Inc.	31,600
10	Erie Indemnity Company	26,700

Source: Berkheimer Associates, 2005

Thorn Hill Industrial Park is not the only location within the Township that houses businesses; however, it is the location of several of the Township's largest employers. Table 23 lists the 10 largest employers in Marshall Township for 2005. In addition to the industrial park, Marshall Township also has businesses located in the Warrendale Central Business District area, along the Rt. 19 corridor, and at the I-79/Rt. 910 interchange. (See Map 12)

The Township's Central Business District and particularly Warrendale have been designated as an area for potential redevelopment. There are several tools available to assist the Township with these revitalization efforts:

1. Reactivate the Warrendale Business Association, incorporated in May 1982. The association has had several cycles of activity and inactivity. One of the reasons the group initially formed was to have a collective voice in the rezoning of the Warrendale area.
2. Main Street Program (potential eligibility): This program is a local public/private partnership designed to assist a community's downtown economic development efforts through:
 - a. Establishing a local organization dedicated to downtown revitalization (chamber of commerce or business association); and
 - b. Hiring a professional downtown coordinator to manage the revitalization. As a requirement of the program, the Township would need to hire a Main Street manager.

The Main Street Program is designed to promote preservation by using the quality elements of a built environment to create a positive image for everyone who uses the downtown area, residents and visitors alike (Land Use in Pennsylvania, 2000).

The Warrendale Business Association, when reactivated, should apply for a grant for revitalization from the Pennsylvania Department of Community and Economic Development. This initial grant is intended to help complete the required planning in the first year of the Main Street Program and establish an office. Once those requirements have been fulfilled, additional funds of up to \$170,000 (over three years) of matching state funds could be used to hire a Main Street manager to oversee improvement and marketing of the Warrendale area. In addition to hiring a Main Street manager, the Main Street Program would provide up to \$20,000 per year to help merchants improve their facades. Individual store owners would be eligible for a maximum matching grant of \$2,500, provided new storefronts meet design criteria established by the Township and approved by the State.

3. Design guidelines: One component of the Main Street Program is to develop guidelines and standards for building facades and streetscapes. The set of guidelines ensures a semblance of commonality in a downtown area. By preserving an area's unique character, these guidelines often boost property values and stimulate investment as well as foster community pride and help to improve quality of life (Governor's Center for Local Government Services, 2000). The Central Business District Ordinance passed by the Board of Supervisors in February 2005 has some guidelines and requirements for streetscapes as well as general design guidelines for buildings. Currently, the Township has charged the Township engineer with completing a streetscape master plan to help determine the location for improvements such as sidewalks, street lights, etc.
4. Neighborhood Improvement District (NID): NIDs are legal entities solely created for the implementation of neighborhood improvement activities in defined districts. An NID is a limited geographic area within a municipality, in which a special assessment is levied on all designated property owners, other than tax-exempt property, for the purpose of promoting the economic and general welfare of the district and the municipality (Act 130 of 2000). Maintenance, security, marketing, and capital improvements are some of the projects that can occur in an NID.

Funding is available through a variety of state and local sources to assist with these beautification efforts. The Pennsylvania Department of Community and Economic Development (DCED) works in coordination with the Pennsylvania Downtown Center (PDC), which is a nonprofit organization established to provide technical assistance and training to communities interested in downtown revitalization. The PDC operates a "road show," where it travels to communities and provides a daylong session to assist in organizing local efforts. The PDC will also provide, for a fee, assistance with conducting a visioning process as the first step in downtown revitalization.

5. Hometown Streets/Safe Route to School Program: This program focuses funds on projects that help revitalize existing communities and improve walking routes to school for children. This program is funded through PENNDOT, but a committee comprised of SPC, representatives from each of their member municipalities, and a representative from the state agencies makes the decision as to which projects are funded.

With the approval of the Tech 21 Master Plan in 2004, the Township is poised to see an influx of new businesses to the Township. Tech 21's Master Plan included two phases of development. Phase I includes the construction of 120 residential units and up to four office/research and development buildings (up to 320,000 square feet of space). Phase II of the project will include construction of a 120-room business hotel, two sit-down restaurants, and up to approximately 998,000 square feet of office/research and development buildings.

Tech 21 is currently moving forward with Phase I of their development. In December 2005, the Board of Supervisors approved the first development plan for Tech 21. The plan, Phase I of a corporate headquarters for a medical imaging company named MEDRAD, was for a three-story, 125,000-square-foot office research building. MEDRAD hopes to be able to occupy this building in late 2006/early 2007. MEDRAD is currently working on plans for Phase II of their corporate headquarters. This building is proposed to mirror the first building and be another three-story 125,000-square-foot building.

In addition to the MEDRAD site, the Township is currently reviewing an application for the residential element of Tech 21. The application proposes 12 buildings containing 120 condominium units.

Warrendale Village is a proposed retail development located at the corner of the Red Belt and Route 19. This development was originally approved in 1999, however, the developer was unable to follow through with the development. Recently, a new developer has shown interest in the site and is currently developing a new set of plans for a commercial development.

Several recent business events may affect the local economy. Marconi Communications recently sold its 92-acre campus, housing 575,000 square feet of office space, to Ericsson. The acquisition was effective January 1, 2006, and the acquired businesses will be consolidated into Ericsson's accounts starting with the first quarter of 2006. To date, Ericsson has not announced any plans for the Marshall

Township facility. Additionally,

American Eagle Outfitters is moving its design group from its location in the THIP to the South Side Works. American Eagle is also moving forward with plans to construct two additional buildings in THIP to hold some of their computer operation and accounting groups. The impact of these two events to the local economy cannot be determined at the present time but will have an effect, as Marconi was the largest taxpayer in Marshall Township for 2005. Table 24 lists the 10 largest taxpayers in Marshall Township for 2005.

Rank	Taxpayer	Assessment	Township Face
1	Marconi (4 Parcels)	\$59,374,100.00	\$100,935.97
2	RIDC (18 Parcels)	\$27,332,000.00	\$46,464.40
3	Warrendale Hotel Associates	\$12,600,000.00	\$26,600.24
4	Tribune Review Publishing Company	\$14,000,000.00	\$23,800.00
5	Linnar Realty Company II (2 Parcels)	\$13,557,700.00	\$23,048.09
6	Mitsubishi Electric (3 Parcels)	\$7,795,900.00	\$7,324.96
7	Atlanta Northern Wire, Inc.	\$5,550,500.00	\$9,435.85
8	Ruinoff, Joanne T.	\$5,060,000.00	\$8,602.00
9	US Filter, Inc.	\$4,966,700.00	\$8,443.39
9	Allegiance Healthcare Corporation	\$4,961,700.00	\$8,433.70
10	Magee Ted N.	\$4,961,000.00	\$8,433.70

Source: Marshall Township Tax Collector, 2005

Business Assistance Resources

There are a number of groups that operate within Allegheny County that offer assistance to local and regional businesses available to residents and business owners.

Allegheny County Department of Economic Development

The Allegheny County Department of Economic Development (ACDOED) provides municipalities in Allegheny County with technical assistance needed to attract and retain businesses in the county. The department has many programs to offer, one such program being the Business Expansion Network (BEN).

BEN is aimed at fostering growth among the area's existing employers by identifying companies that are poised to expand and create new jobs and connecting them with appropriate programs within the public sector that could help facilitate job creation.

BEN is a cooperative effort among three groups: existing employers with an interest in expanding; a network of professional service firms that can help identify those businesses and bring them to the County's attention; and Allegheny County, which administers a variety of funding programs and works with other partner organizations to facilitate job growth and business expansion.

The Professional Service Provider Network (PSPN), a part of the BEN, consists of law firms, accountants, investment advisors, and other business consultants in the region. PSPN members nominate companies that meet program criteria and may be eligible for public-sector support. The nominations are reviewed by the Allegheny County Department of Economic Development to determine what programs may be the most appropriate.

Eligible companies must employ at least 15 full-time workers, have been in business for at least five years with stable or growing revenue, and be committed to increasing the number of employees by at least 10 percent by creating new, family-sustaining jobs. Eligible businesses and activities include manufacturing, industrial, research and development, advanced technology, and business services firms. Ineligible business activities generally include retail operations.

Redevelopment Authority of Allegheny County

The Redevelopment Authority of Allegheny County (RAAC) was created in 1950 by the Allegheny County Board of Commissioners and is located in the same office as the Allegheny County Department of Economic Development. The mission of RAAC is to assist in the generation, stimulation, and management of economic and community growth. The authority achieves this mission by acquiring and preparing real estate for economic development activities; managing finances from various public sources; and facilitating the reuse of vacant, tax delinquent, or blighted property through the power of eminent domain. As an independent authority, a volunteer Board of Directors, comprising of six members, governs the RAAC.

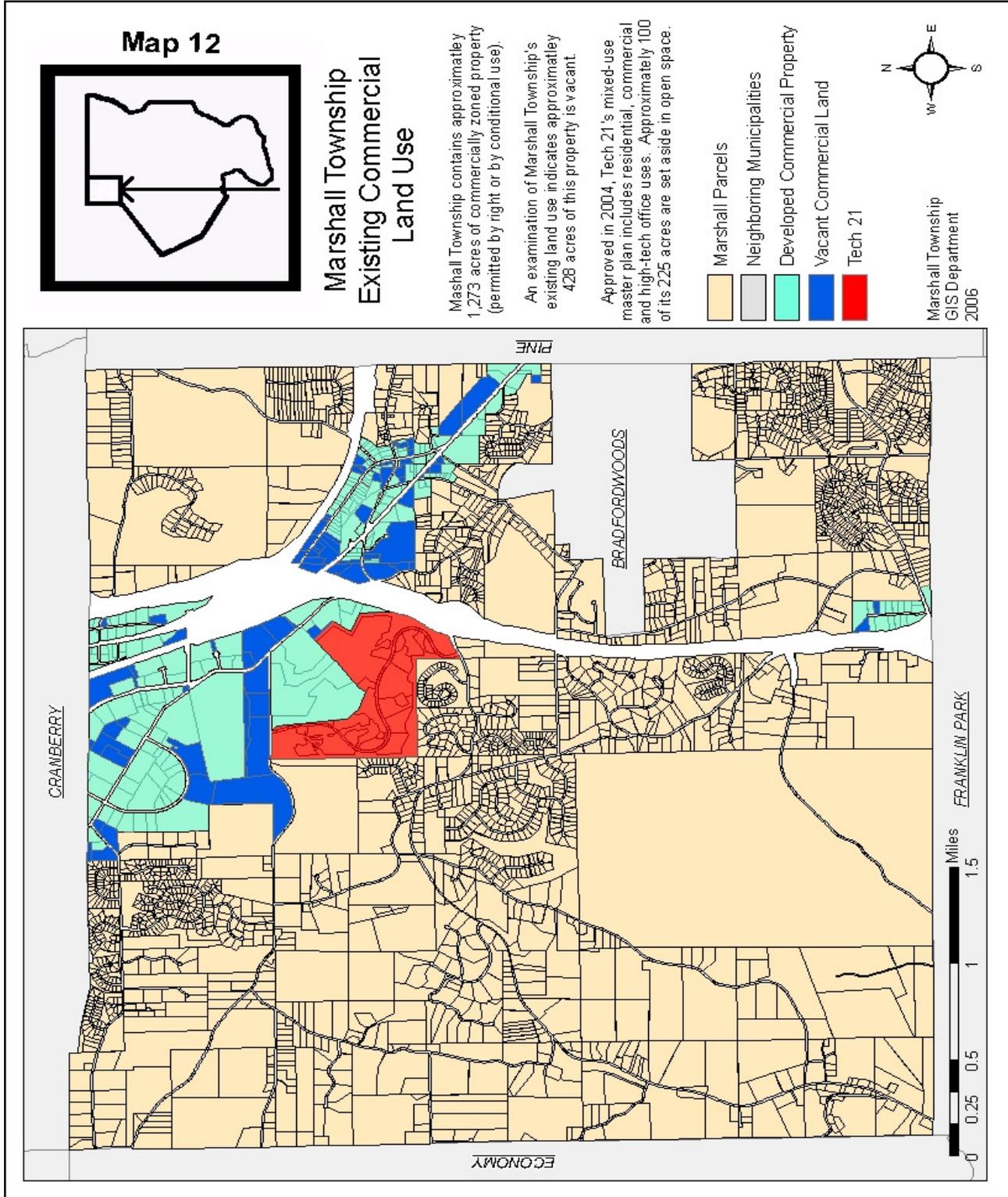
RAAC's activities cover four areas:

Economic Development Fund (EDF) - RAAC is responsible for administering Allegheny County's \$50 million low-interest revolving loan fund that was established in 1995 to create and retain jobs in the region. Since its inception, the EDF has created or retained an estimated 6,360 new jobs with a \$43.8 million investment in local companies. Recipients include Marconi Communications (formerly FORE Systems), EchoStar Communications, and Marcegaglia USA.

Redevelopment Projects - RAAC coordinates comprehensive plans with local municipalities and conducts economic feasibility studies to leverage County resources for redevelopment projects to benefit the local tax base. The authority recently administered a State Redevelopment Assistance Capital Grant for the Airside Business Park at Pittsburgh International Airport and is overseeing the redevelopment of the former Carrie Furnace Steel site in Braddock for a proposed National Park Service site dedicated to promote the region's rich steelmaking heritage.

Tax Increment Financing - RAAC manages tax diversion plans to finance public infrastructure improvements that allow redevelopment activities to take place. A portion of the new assessed value of the property creates new tax revenues that are used to payoff debt issued to finance the improvements. The RAAC was instrumental in organizing a tax-revenue-sharing district between the municipalities of Homestead, Munhall, and West Homestead for The Waterfront, a \$300 million synergistic mix of commercial, retail, and residential development.

Housing Redevelopment - RAAC also aids ACDOED housing division initiatives with financing, business development, master planning, and reclamation activities. Allegheny County is improving its housing stock through the administration of the Home Improvement Program of Allegheny County (IMPAC), Vacant Property Recovery Program, and large-scale housing redevelopment.



Analysis

Marshall Township's economic makeup offers a unique balance of a desirable residential component, along with a thriving commercial base consisting of more than 600 acres of the Thorn Hill Industrial Park, 2.5 miles of commercial property along the Route 19 corridor, and small businesses in the Warrendale area. Our commercial base has recently been augmented with the long anticipated groundbreaking of the Tech 21 Office Park, a facility which will offer office sites, a hotel, restaurants, and condominium units.

The most recent economic developments within the Township include:

- Movement of the Heinz worldwide Research and Development facility to the Ericsson property
- Expansion of the Mitsubishi facility at Thorn Hill Industrial Park
- American Eagle's announcement to move its headquarters operating from Thorn Hill Industrial Park to the Southside Works and expansion of its warehousing and distribution capability at Thorn Hill Industrial Park
- Medrad's announcement to move its worldwide corporate headquarters to the Tech 21 Office Park in the Spring of 2007

An analysis of the Township's employment data reveals further evidence of our diverse base. Although often perceived as a "bedroom community," there are more who work in Marshall Township (7,000) than reside here (6,600). As a result, a successful economy for Marshall Township dictates balancing two elements: the residential environment and the business climate. Both produce tax revenue and both result in demands for Township services. The Township must work to preserve its strong residential experience (attractive homes in inviting environments supported by a high level of services) as well as its desirable business sites (insulated sites with available infrastructure, access to technology, and a tax structure that does not include business privilege or mercantile taxes). Our diversified tax base allows the Township to meet the needs of both the residential and commercial sectors, without undue burden to either, while affording the school district access to the positive cash flow created by our commercial component.

In order to retain this balance, the Township must investigate the possibility of revitalizing the Warrendale Central Business District as well as helping to intelligently promote the development of vacant parcels in Tech 21, the Thorn Hill Industrial Park and along the Route 19 commercial corridor.

Chapter 9

Natural Resources

Existing Conditions

Determining how to preserve the natural features of Marshall Township is an important step in the development of the Comprehensive Plan.

Climate

Allegheny County has a humid continental climate. The average daily high temperature is 60°F, with January's average the lowest at 35°F and July's average the highest at 83°F. Annual precipitation in the County is 36 to 40 inches. Summers are generally warm and humid, with precipitation mostly in the form of rain showers. Winter is marked by a succession of freeze/thaw periods occurring every winter. Snowfall ranges from 30 to 50 inches (Source: Pennsylvania Department of Environmental Protection).

Topography and Steep Slopes

Rolling hills and steep topography are both characteristics of Marshall Township. The elevation of Marshall Township ranges from approximately 1,315 feet above sea level on the highest hilltop (near the Seasons subdivision) to approximately 860 feet adjacent to Big Sewickley Creek (see Map 13). Map 14, Steep Slope Areas, indicates that most of the Township and future development of the Township is impacted by steeply sloped areas.

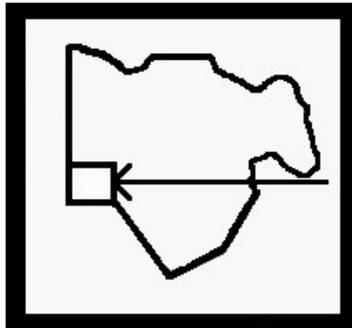
Slope is measured as a percent of vertical to horizontal distance; that is, a 25% slope would mean a rise or fall of one foot for each four feet in horizontal distance. Generally, slopes in excess of 25% represent severe constraints to land development and are not suited to development using ordinary methods and technology. Steep slopes are constraints on development for several reasons. For example, great care in planning and design, and in the use of sophisticated technology, is required to build at very low densities; access roads usually present grading problems. Also, it is quite difficult to prevent erosion during construction, which results in stream pollution. Landslides are associated with steep slopes and represent safety problems.

Land with slopes between 15 and 24% can be developed only with careful site planning and special attention to erosion and landslide problems. Road grades can still be a problem. Within the context of Marshall Township, areas with these slopes are generally not suitable for development other than low-density residential development.

Land with a slope of 14% or less is characterized as rolling to level. Within the overall topography in Marshall Township, much of this type of land is located within floodplains or along the tops of ridges.

The Township's current steep slope regulations limit impact to 25% and greater slope to 20% (80% preservation) and impact to 15% - 24% slopes to 60% (40% conservation). Discussions of these provisions and their effectiveness will take place during the rewriting of the Township's ordinances.

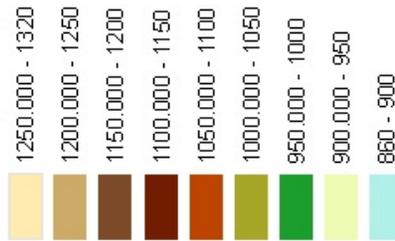
Map 13



**Marshall Township
Elevation Relief Map**

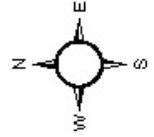
Neighboring Municipalities

Elevation (in feet)

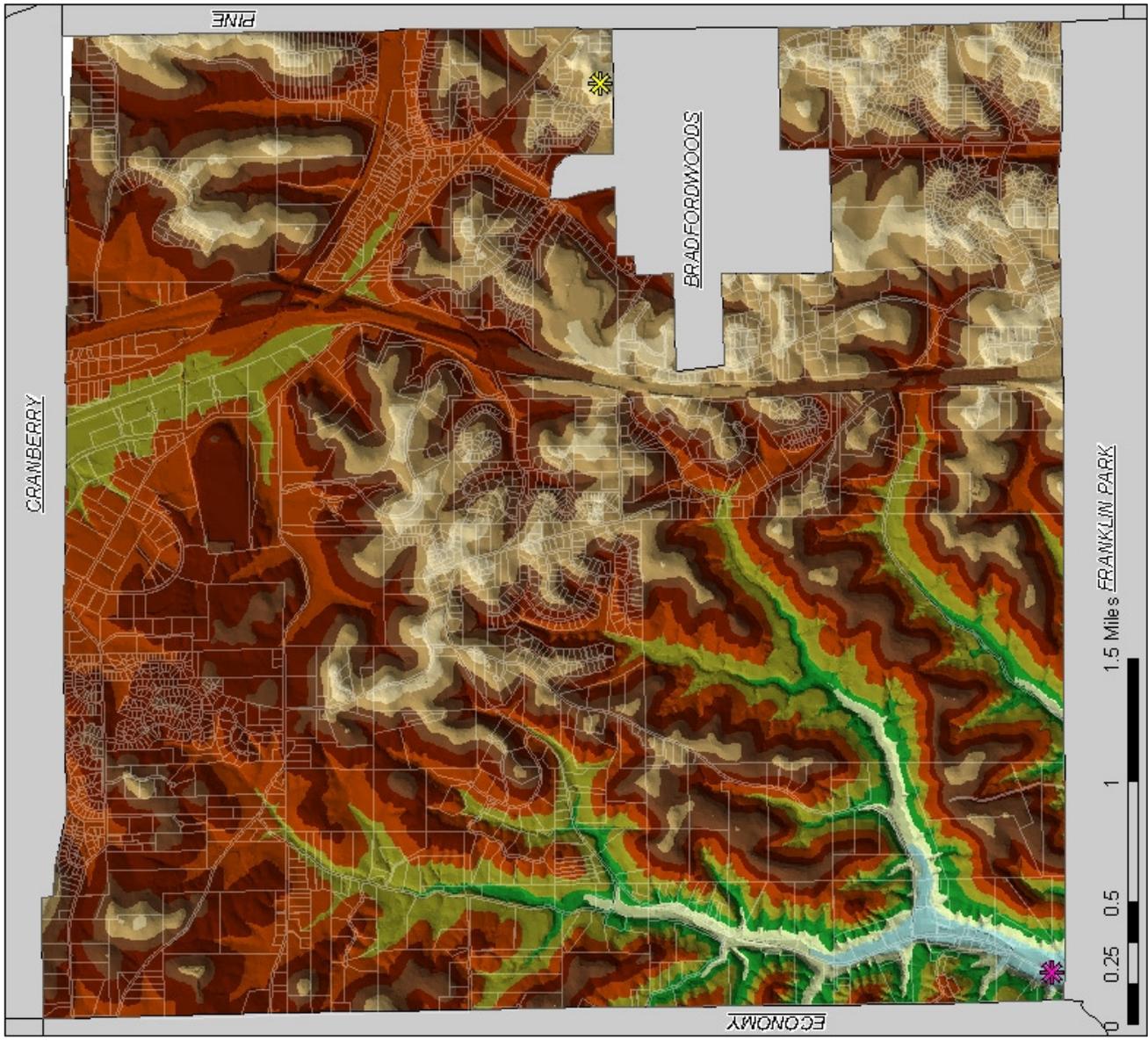


Approximate Low Point

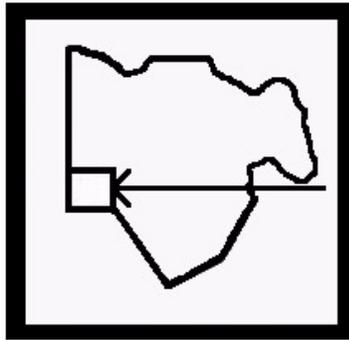
Approximate High Point



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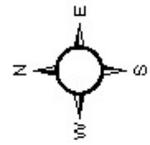
Map 14



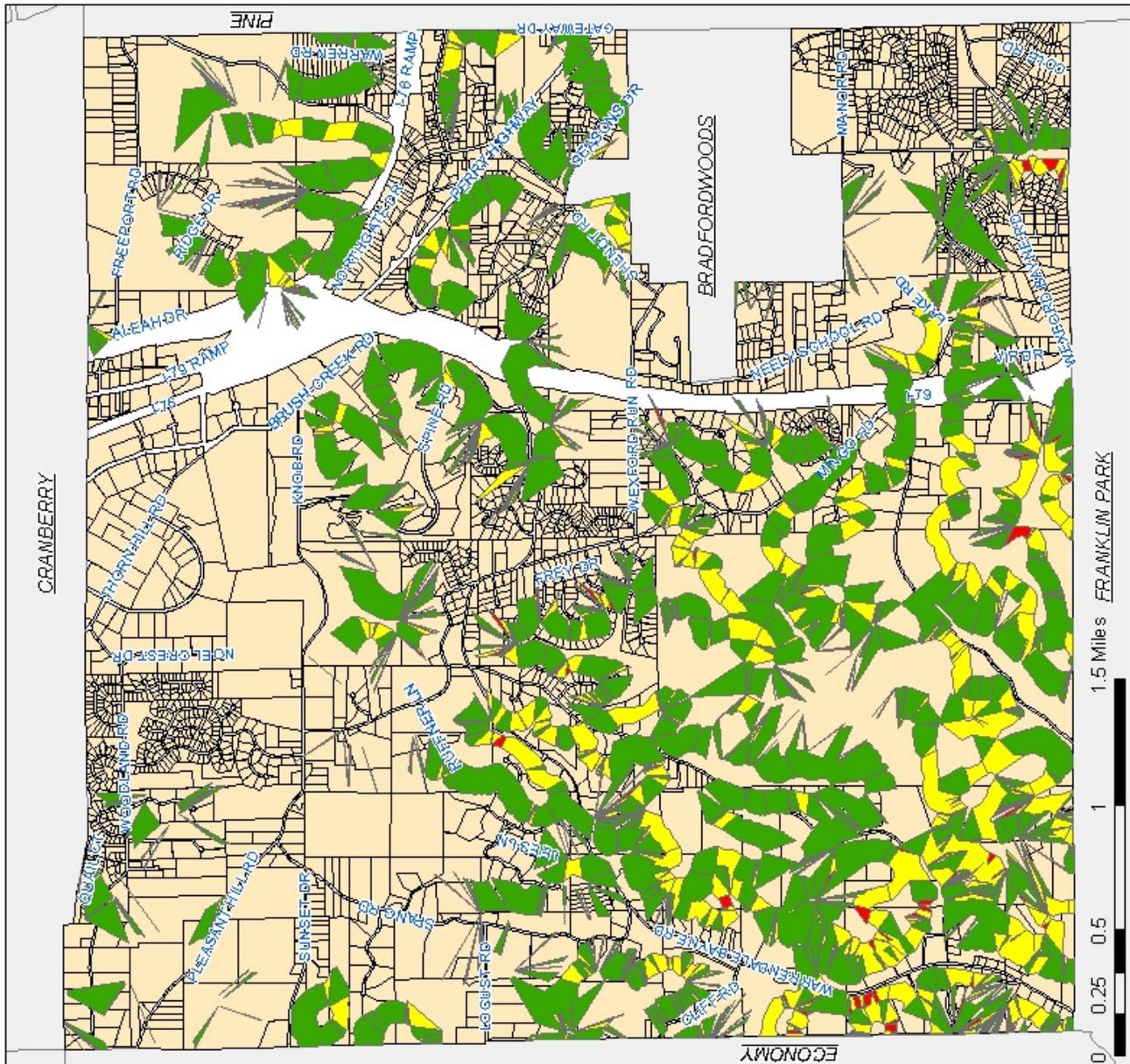
Marshall Township Steep Slope Areas

Slope mapping was provided by the Southwestern Pennsylvania Commission (SPC), the official Metropolitan Planning Organization (MPO) for SW PA. GIS files representing topography with a 20-foot contour interval from USGS 7.5 minute quadrangles were reduced to 100-foot contour lines. These were used to create triangular integrated network (TIN) to calculate the percent slope. The resultant TIN was classified in 5 intervals to represent the percent slope. Adjacent polygons of the same percent slope from the TIN were dissolved to produce revised polygons for each county in the region.

- Marshall Parcels
 - Neighboring Municipalities
- Steep Slopes**
- >15-25%
 - >25-40%
 - >40%



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Geology

Pennsylvania is divided into numerous physiographic provinces. A province is defined as a region in which all parts are similar in geologic structure, climate and relief, and have a unified geomorphic history. According to the Pennsylvania Geological Survey, Marshall Township is located in the Pittsburgh Low Plateau section of the Appalachian Plateaus Province. The Pittsburgh Low Plateau section consists of a smooth undulating upland surface cut by numerous, narrow, relatively shallow valleys. The uplands are developed on rocks containing the bulk of significant bituminous coal in Pennsylvania.

The geological formations underlying the Township were formed during the Pennsylvanian Period, approximately 290 million to 330 million years ago. Table 25 provides the rock formations of the Pennsylvanian Period found in Marshall Township.

Period	Formation	Description
Pennsylvanian	Casselman Formation	Cyclic sequences of shale, slitstone, sandstone, and redbeds, thin impure limestone, and thin nonpersistent coal. Redbeds are associated with landslides, base is at the top of Ames limestone.
Pennsylvanian	Glenshaw Formation	Cyclic sequences of shale, sandstone, redbeds, and thin limestone and coal; includes four marinelimestone or shale horizons. Red beds are involved in landslides, base is at the top of Upper Freeport Coal

Source: Geologic Map of Pennsylvania 1980: Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Topographic and Geologic Survey.

Soils

Soil is produced through the interaction of five natural forces: climate; plant and animal life; parent material; topographic relief; and time. The degree and influence of each of these factors differ from place to place and influence the characteristics of the soil.

General knowledge of the soil associations within the Township is useful for planning. These associations can provide background information for determining suitable land uses, watershed management, forestland management, agricultural, and community development.

While there are several soil types in Marshall Township, there are two general soil associations. The extreme southwestern portion of the Township is located within the Gilpin-Upshur-Atkins association. This association is moderately deep, well-drained soils underlain by red and gray shale on uplands and deep, poorly drained soils on flood plains.

The remaining area of the Township is within the Gilpin-Wharton-Upshur association. This association is moderately deep, well-drained and moderately well drained soils underlain by red and gray shale on uplands.

The soil types associated with the two associations found in the Township run on the “shallow” end. Shallow soil, or shallow depth to bedrock, can be a limitation on development, causing problems with the construction of basements and foundations, restricting the proper functioning of on-lot sewage systems and by making public utilities expensive to install. These types of soils are found throughout the Township, but the highest concentration is found in the southwest portion of the Township.

Wet soils or soils with seasonably high water tables are also found throughout the Township. These types of soils have water tables within three feet of the ground surface, especially during the late winter and early spring months. This type of soil generally follows streambeds. This soil limitation can affect the design, construction, and maintenance of any below-ground installation, such as basements and foundations, and can restrict the functioning of on-lot sewage systems.

It is not a surprise that with the high incidence of steeply sloped areas within the Township, there are also landslide-prone soils. These soils are associated with a combination of slope, geological, and groundwater conditions. The groundwater serves as a lubricant to facilitate the effect of gravity by allowing soils to move across the underlying bedrock. Landslides may be caused by natural conditions, by excavation, or by alteration of natural groundwater conditions. Landslide-prone soils, as with other natural constraints, can be dangerous in a multitude of ways when used for development. They are particularly dangerous during construction when excavation is in process and vegetation has been removed. Afterward, the weight of structures can create dangerous conditions, both in terms of the uses of the buildings themselves and any uses located down slope of them. Most of the Township’s landslide-prone soils are located in the southwest portion of the Township.

Prime Agricultural Soils

Prime agricultural soils have a mixture of soil and landscape attributes that are best suited for agricultural purposes. Prime agricultural soils are deep, with good internal drainage, and are level or nearly level. This type of soil is sought by developers because of its good drainage and topographically flat characteristics. As Map 15 indicates, there are prime agricultural soils located throughout the Township.

While Map 15 indicates where prime soils are located, it is important to understand that once prime agriculture soils are developed, they are no longer considered “prime” for agricultural purposes.

Waterways

The major landscape feature for water resource studies is the watershed boundary. A watershed is defined by the U.S. Environmental Protection Agency (USEPA) as the area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake, or groundwater. Although the term watershed can refer to all sizes of watersheds as defined above, certain terms are used to organize these areas in a hierarchical manner. A basin is a large-scale watershed. Sub-basins are smaller-scale basins. It is common to use the term watershed to describe areas smaller than a basin or sub-basin. Sub-watersheds are smaller watersheds, on the scale of a community.

At its highest order, Pennsylvania can be divided into three sections: lands that drain to the North Atlantic, to the mid-Atlantic, and to the Gulf of Mexico. Waters that drain into the Gulf of Mexico are located in the Ohio River Basin. Southwestern Pennsylvania and Marshall Township are located within this major watershed.

As shown in the illustration, six local sub-watersheds are located within Marshall Township. Marshall Township shares these watersheds with the following municipalities:

Pine Creek/Wexford Run Sub-Watersheds

Allegheny County: Bradford Woods, Etna, Fox Chapel, Franklin Park, Hampton, Indiana, McCandless, O’Hara, Pine, Richland, Ross, Shaler, Sharpsburg

Brush Creek Sub-Watershed

Allegheny County: Bradford Woods, Pine

Beaver County: New Sewickley, North Sewickley, Daugherty, Marion

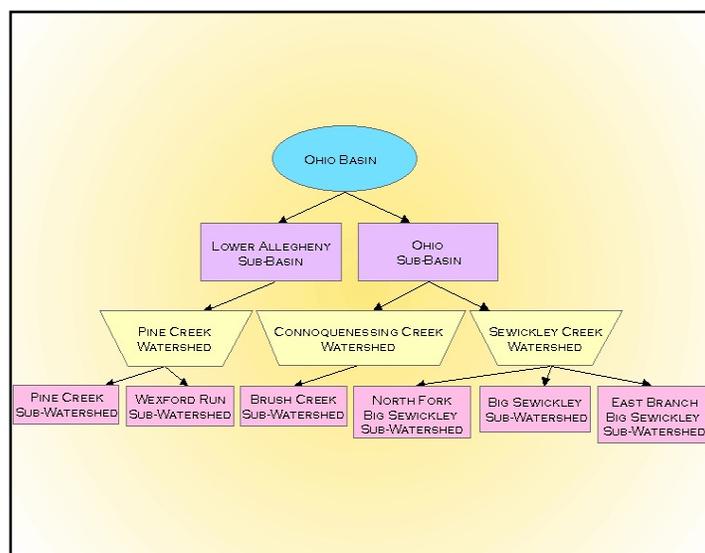
Butler County: Cranberry, Jackson, Seven Fields

North Fork Big Sewickley Creek/East Branch Big Sewickley Creek/ Big Sewickley Creek Sub-Watersheds

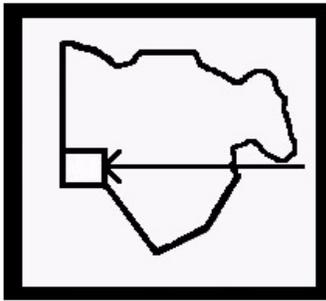
Allegheny County: Bell Acres, Bradford Woods, Franklin Park

Beaver County: Economy, New Sewickley

Butler County: Cranberry



Map 15



Marshall Township Prime Agricultural Soils

As per the Allegheny County Conservation District, the following soil types qualify as prime farmland. These soils contain soil factors and slope features that are extremely well-suited for agricultural purposes. These soils are deep, well drained, and level to nearly level. Land is no longer considered prime once it is developed for non-agricultural purposes.

- AgB - Allegheny silt loam, coarse subsoil variant
- CkB1/- Clarksburg silt loam
- CmB - Clymer silt loam
- CuB - Culleoka silt loam
- CwB - Culleoka-Weikert shaly silt loams
- GIB - Gilpin silt loam
- GpB - Gilpin-Upsher complex
- HaB - Hazelton loam
- Hu - Huntington silt loam
- Ln - Lindsie silt loam
- Ph - Philo silt loam
- RaA - Rainsboro silt loam
- RyB - Rayne silt loam
- UaB - Usphur silty clay loam
- WhB1/- Wharton silt loam

Marshall Parcels

Neighboring Municipalities

Prime Agricultural Soils

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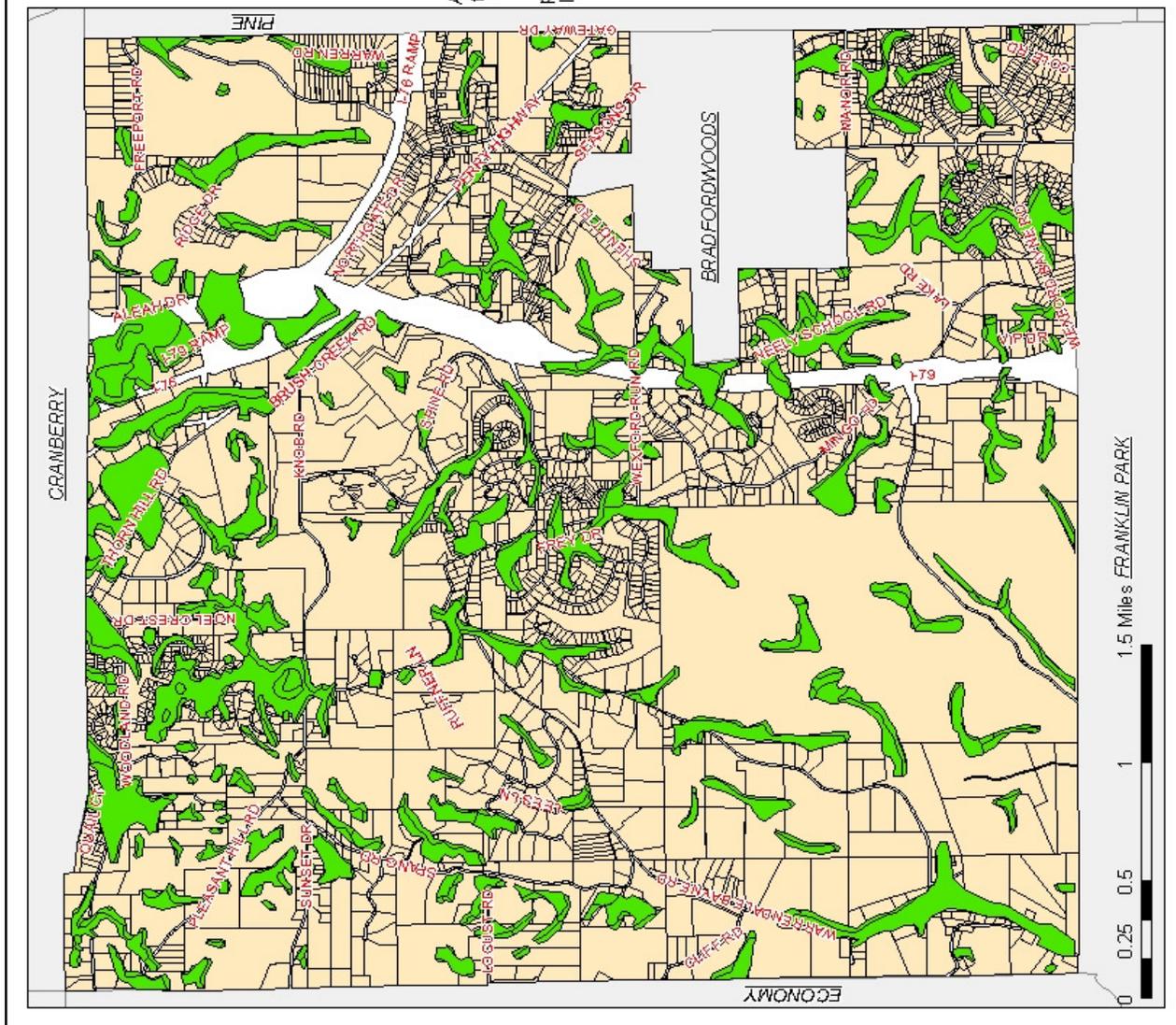


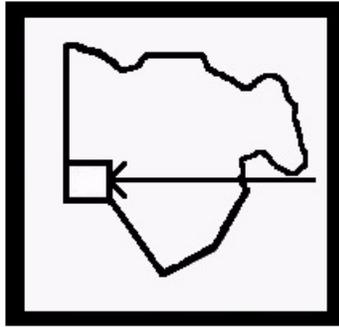
Table 26 below lists the streams found in the Township and Map 16 illustrates the boundaries of the Township’s six sub-watersheds.

Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point, and managers are able to gain a more complete understanding of overall conditions in an area and the stressors, which affect those conditions. This entails a strategy that crosses municipal boundaries and requires a great deal of coordination, cooperation, and communication within and between municipalities sharing the same watershed.

Of the six sub-watersheds in Marshall Township, the Pine Creek Watershed, the Brush Creek Watershed, and the Big Sewickley Creek Watershed have watershed associations. The Pine Creek Watershed Association currently has a grant application in to the Department of Conservation and Natural Resources for the completion of a Rivers Conservation Plan. A Rivers Conservation Plan will identify significant natural, recreational and cultural resources as well as issues, concerns and threats to river resources. The result will be recommendations to conserve, enhance and restore the watershed.

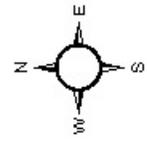
Named Tributaries	25 PA Code Chapter 93 Water Quality Standard	Notes
Big Sewickley Creek ¹	TSF	
East Branch Big Sewickley Creek	TSF ²	
North Fork Big Sewickley Creek ¹	TSF ²	
Pine Creek ¹	CWF	Basin, Source to North Park Lake Dam
Wexford Run	CWF ²	
Brush Creek	WWF	
All unnamed tributaries (UNT)	*	
1 These waterways are also officially classified as "approved trout waters" by the PA Fish and Boat Commission. This means that they meet criteria qualifying them to be stocked with trout by the Fish & Boat Commission.		
2 Although not specifically listed under 25 PA Code Chapter 93 Water Quality Standards, tributary waters are assumed to have the same water quality criteria as the downstream waterway.		
* UNTs are assumed to have the same water quality criteria as the downstream waterway (i.e., an UNT to Big Sewickley Creek would be a TSF).		
TSF - Trout Stocking—Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.		

Map 16

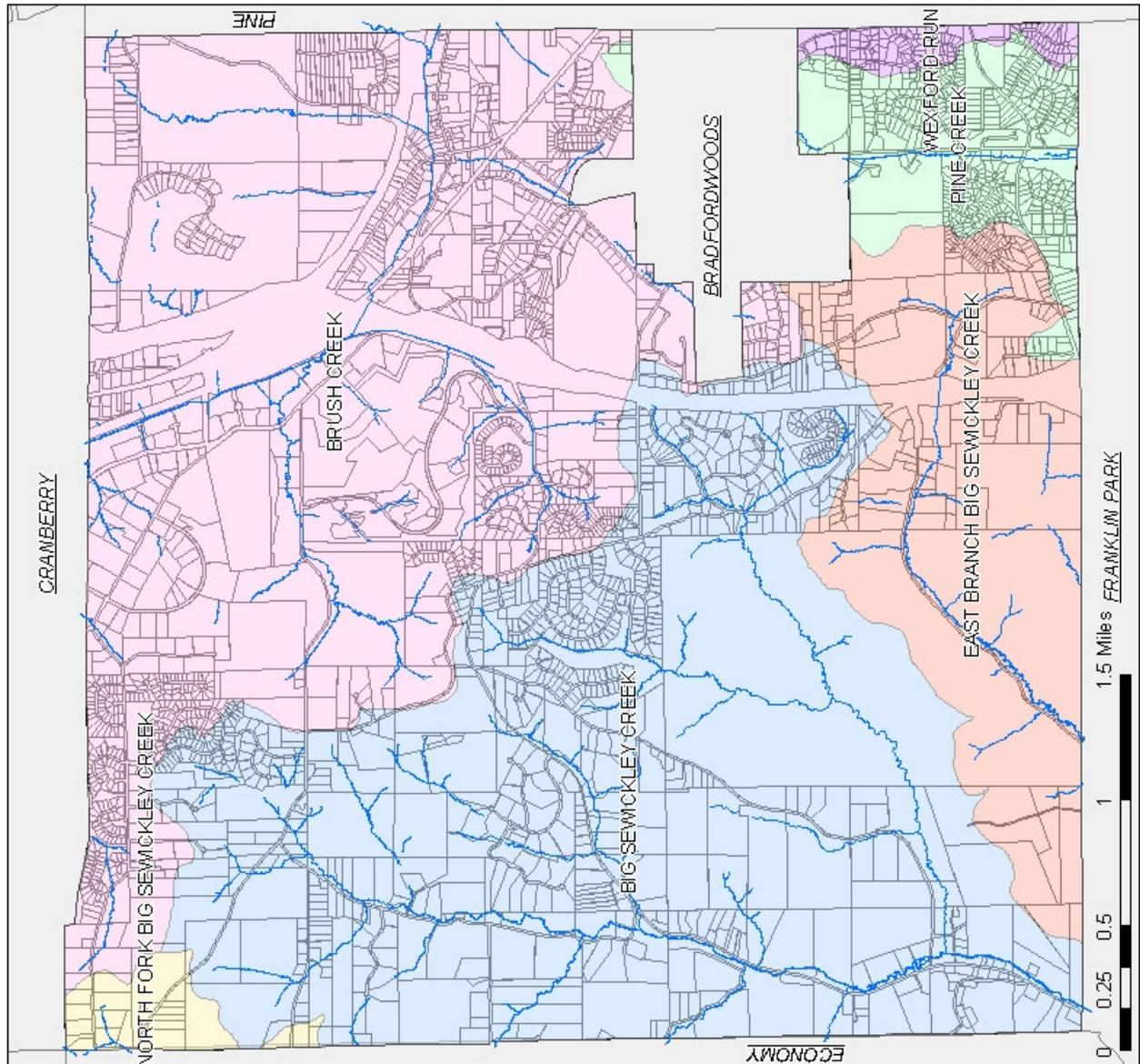


Marshall Township Local Sub-Watersheds

- Waterways
- Marshall Parcels
- Neighboring Municipalities
- Local Sub-Watersheds**
 - BIG SEWICKLEY CREEK
 - BRUSH CREEK
 - EAST BRANCH BIG SEWICKLEY CREEK
 - NORTH FORK BIG SEWICKLEY CREEK
 - PINE CREEK
 - WEXFORD RUN



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Floodplains

Floodplains are the low, flat, periodically flooded lands adjacent to rivers, lakes, and oceans and subject to geomorphic (land-shaping) and hydrologic (water flow) processes. As distinguished from the floodplain, a river floodway is the dry zone typically between levees, which is designed to convey floodwaters.

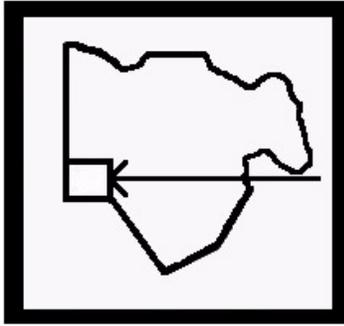
The 100-year floodplain is the area that has flooded an average of once every 100 years, and the 500-year floodplain is expected to be covered with water an average of once every 500 years.

Flood management and insurance rates are coordinated through the National Flood Insurance Program. This program, which was established by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, was an effort to reduce the damage and hazards associated with flood events. To accomplish these goals, the Federal Emergency Management Agency (FEMA) conducts routine flood insurance studies, which investigate the severity and existence of flood hazards throughout the country. The results of these studies are then used to develop risk data that can be applied during land use planning and floodplain development. The location of the 100-year floodplains located in Marshall Township can be seen on Map 17.

Wetlands

Wetlands can be defined as transitional layers between terrestrial and aquatic environments where the water table often exists at or near the surface, or the land is inundated by water (Cowardin, Carter, Golet, LaRoe, 1979). As such, wetlands frequently exhibit a combination of physical and biological characteristics of each system. Three factors are recognized as criteria for wetland classification: the presence of hydric soils; inundation or saturated conditions during part of the growing season; and a dominance of water-loving vegetation (Environmental Laboratory, 1987). Wetlands perform many valuable functions for a community, such as water retention, sediment trapping, toxic material retention, flood flow alteration, and wildlife and aquatic habitat. Map 18 illustrates the location of wetlands 10 acres and larger located within the Township, and Map 19 illustrates a natural resource composite.

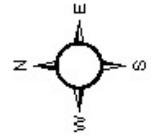
Map 17



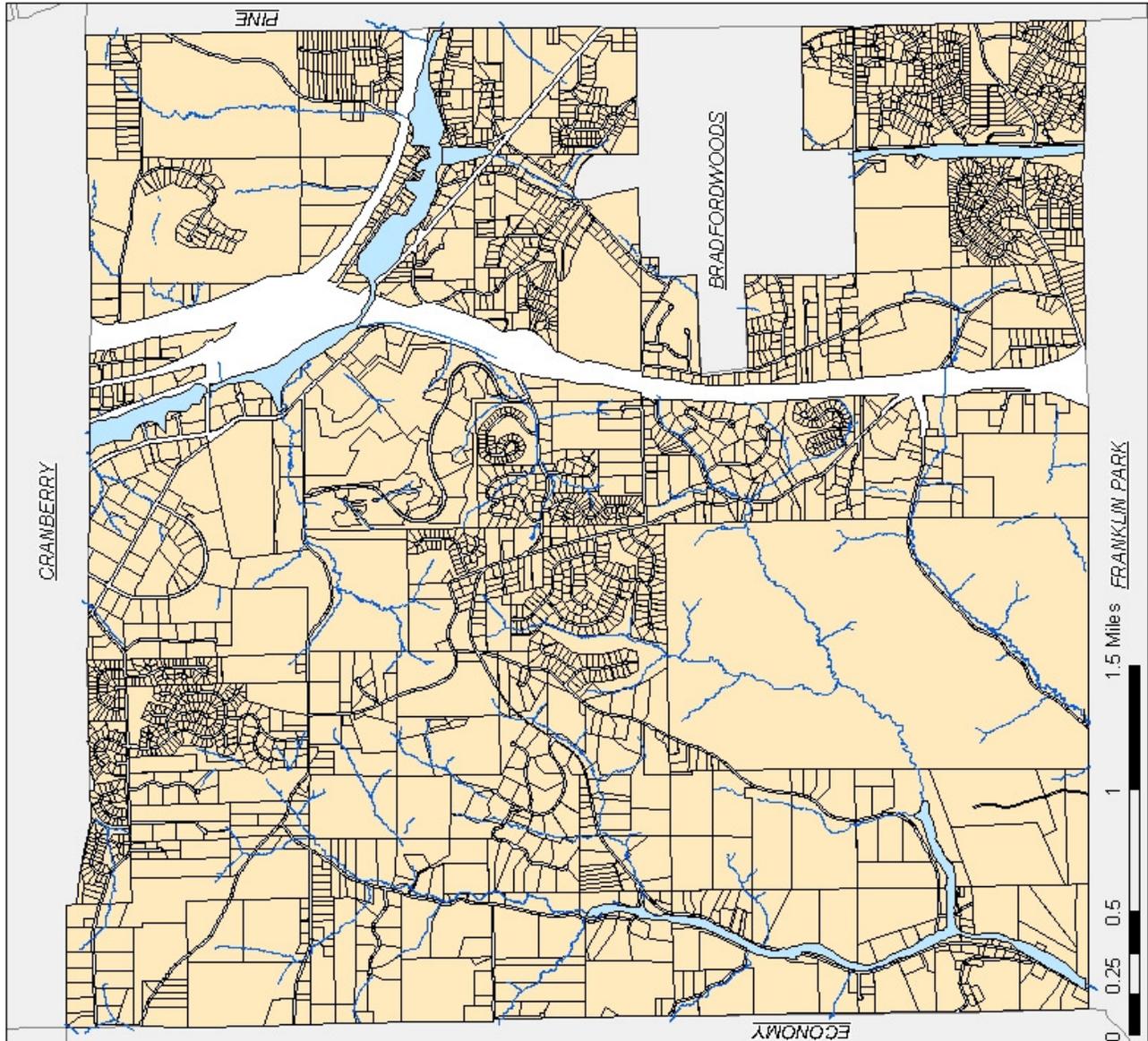
Marshall Township Floodplains

100 year flood plains were located from FEMA or Army Corps of Engineer maps, drafted on 7.5 minute topographic quadrangle maps, and digitized into SPC's GIS. This information is supplemented and updated by data collected by SPC.

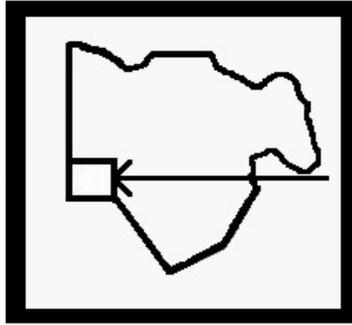
- Waterways
- Floodplains
- Marshall Parcels
- Neighboring Municipalities



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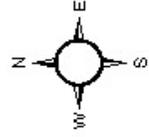
Map 18



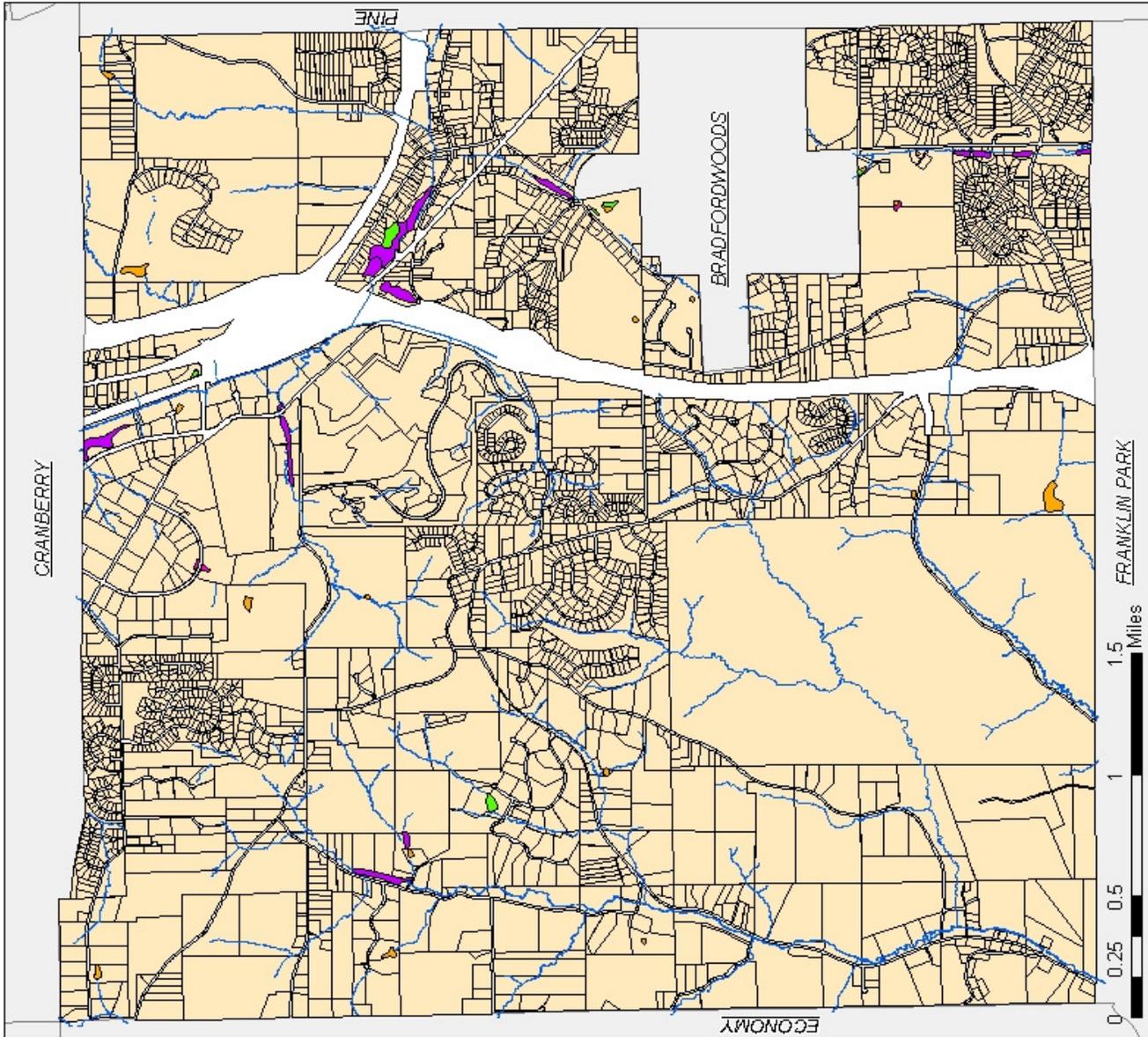
Marshall Township Wetlands

SPC identified and digitized wetlands of 10 or more acres from National Wetlands Inventory (NWI) maps. Includes both forested and non-forested wetlands.

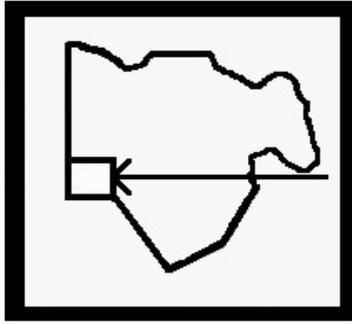
- Waterways
- Marshall Parcels
- Neighboring Municipalities
- WETLAND TYPES**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Other



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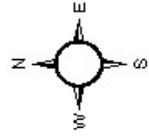


Map 19

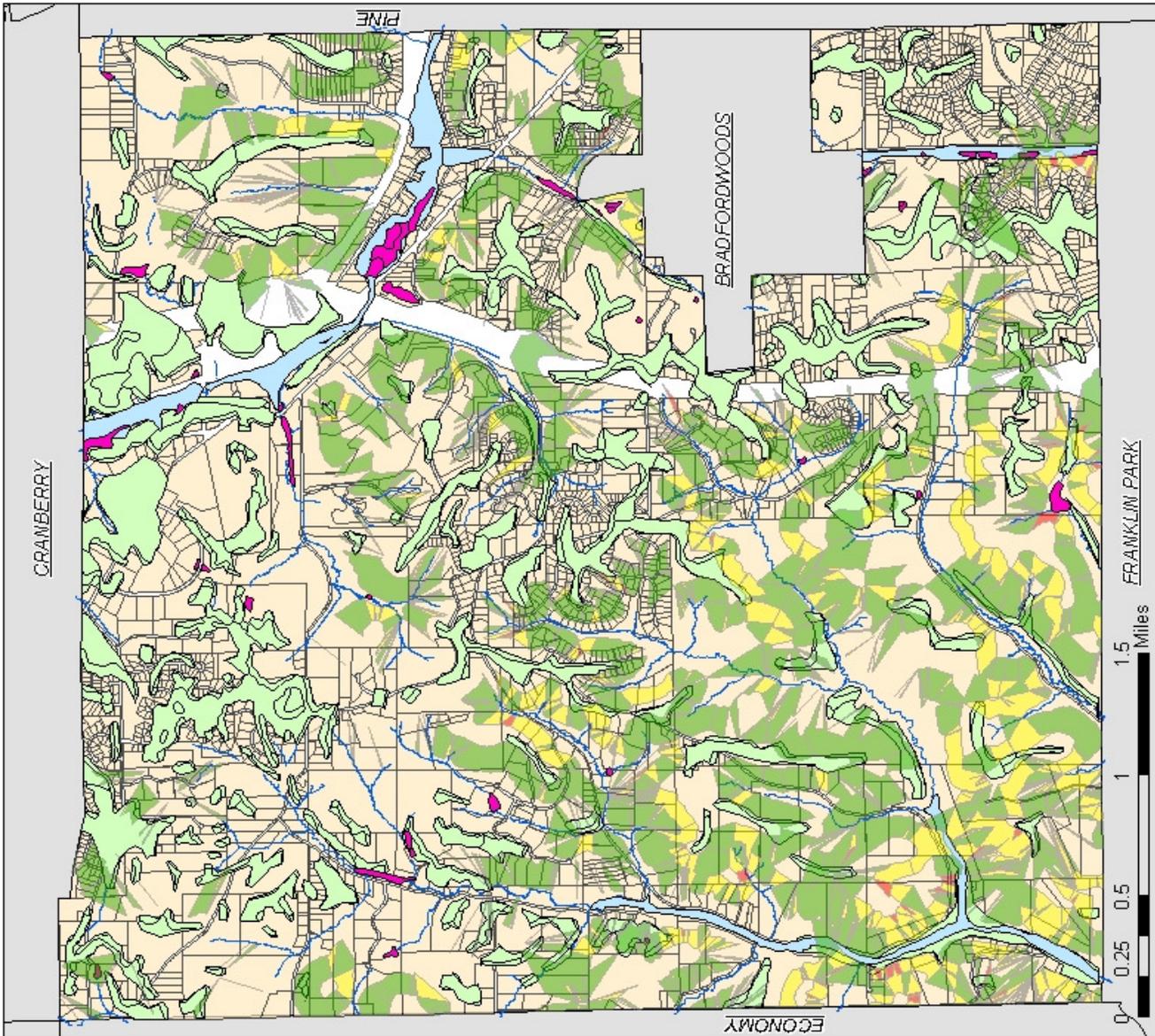


Marshall Township Natural Resource Composite

- Marshall Parcels
- Neighboring Municipalities
- Flood
- Waterways
- PrimAgSoils
- Wetlands
- Slopes**
 - >15-25%
 - >25-40%
 - >40%



Marshall Township
GIS Department
2006



Ecological Habitats

Marshall Township has large quantities of undeveloped green space/forest land. These large forested areas are essential to wildlife habitats as riparian buffers are crucial for the quality of a stream. The patterns of ownership and management of forest resources are important when considering forested areas as biological habitat or for their value in protecting water quality. Forested areas provide habitat for numerous plant and wildlife species, as well as forming windbreaks in agricultural areas to prevent windblown soil erosion. Forested areas also serve an effective visual and noise buffer between land uses.

Best-management practices for the timber industry, in the state game lands and on private property, will help ensure the conservation of the Township's extensive forest resources. To help ensure that best-management practices are implemented, the Township amended its logging ordinance in 2005 and created a forest management and timber harvesting ordinance. This ordinance requires any property owner interested in logging their property to complete a forest management plan. The forest management plan, prepared by a professional forester, will spell out the steps necessary to keep a healthy forest ecosystem for years in the future. The adoption of this ordinance is a benefit for the Township in that habitat will be preserved and the character and look of the Township, which residents value, will also be preserved.

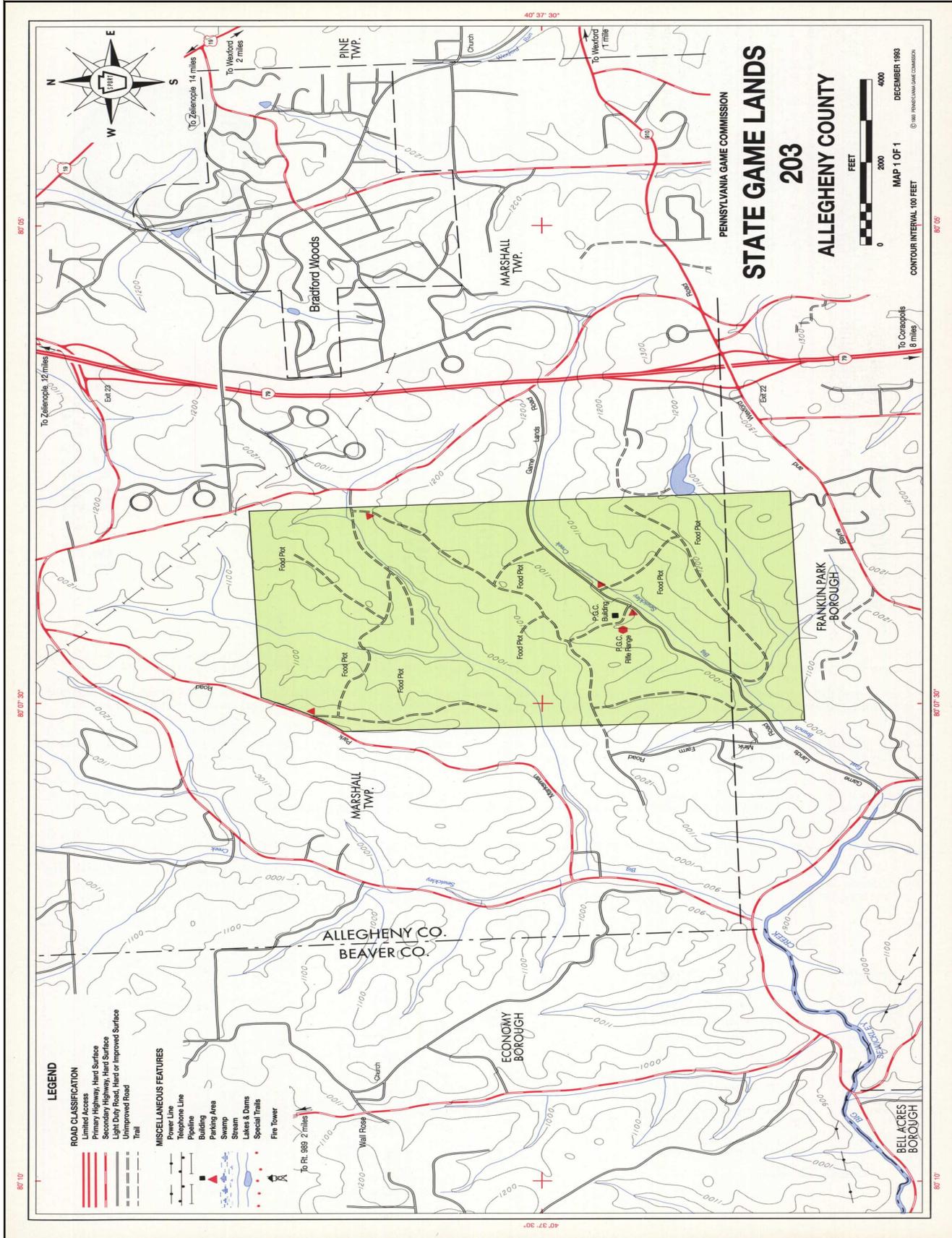
Natural Heritage Areas

According to the Allegheny County Natural Heritage Inventory, Marshall Township has two areas of significance: the Big and Little Sewickley Creek Landscape Conservation Area (LCA) and State Game Lands 203.

The Big and Little Sewickley Creek LCA encompasses a watershed of a high-quality stream, as well as a large tract of highly diverse forest designated as a Biological Diversity Area. The Natural Heritage Inventory has classified the Big and Little Sewickley Creek LCA as an exceptional site, meaning that the site represents areas of great importance for the biological diversity and ecological integrity of the County, State, or region. One or more occurrences of state or national species of special concern, a rare natural community type, a relatively undisturbed natural area, or high-quality biological diversity area are present at the site.

State Game Lands 203 are the only game lands located in Allegheny County. State Game Lands 203 is largely forested with patches of cleared land in the form of food plots, clearcuts, and reverting forest, all of which is managed for wildlife. The State game lands forest represents some of the most natural land in the area and an important green space for Allegheny County. The upland areas of the game lands contain a Dry-Mesic Acidic Central Forest Community. The Natural Heritage Inventory explains that high-quality examples of this kind of forest are rare in Allegheny County and should be preserved so that it can mature on its own and be preserved as an example of old-growth forest in the future (see Map 20).

MAP 20—Courtesy of Pennsylvania Game Commission



Invasive Plants

According to the Pennsylvania Department of Conservation and Natural Resources, invasive plants are plants which grow quickly and aggressively, spreading and displacing other plants. Invasives are usually introduced by people either accidentally or on purpose, into a region far from their native habitat. Invasive vegetation can take over an ecological habitat and destroy the natural habitat. Any plant growing where it is not wanted and having objectionable characteristics, such as aggressive growth, or noxious properties that cause allergic reactions or poisoning, are considered invasive vegetation. The introduction of these invasive species dates back to the earliest arrivals of explorers and settlers to the region. Their ships were carriers of a wide variety of seeds and invasive animals. Seeds were present in hay bales, natural packaging, and in food products.

When invasive species become established in forestlands, on stream banks, or in wetlands, they tend to suffocate native vegetation. This leads to the reduction in the biological diversity of the area, the decrease in wildlife habitat of the area, and in some situations, the degradation of water quality and reduction of the recreational value of an area.

The Pennsylvania Department of Conservation and Natural Resources classifies invasive species as to whether they are a serious threat or a moderate threat. Species that fall in the serious threat category are considered the worst offenders to our native ecosystem; many of them have been designated as “noxious weeds” by the Pennsylvania Department of Agriculture and are seen as a major concern to Pennsylvania’s agricultural community. Species considered moderate threats are known to invade native plant communities and are deserving of vigilance. Tables 27 and 28 lists invasive species found in southwestern Pennsylvania.

To control the rampant spread of invasive species within the Township, the updated zoning and subdivision and land development ordinance will include a list of plant materials prohibited within the Township.

Air Quality

Air pollution is one of the nation’s largest environmental health risks. Two hundred million tons of toxic emissions pollute the air in the United States each year. Much of this pollution is created by human influences such as industry, power plants, cars, and trucks.

The southwestern Pennsylvania regional area is one of the 13 Pennsylvania Department of Environmental Protection’s designated air basins (PADEP, 2003). The Air Quality Index for DEP’s southwest region—which reports daily on levels of five major air pollutants: ozone; particulate matter; sulfur dioxide; carbon monoxide; and nitrogen dioxide—was 47 when this report was prepared, signifying the highest rating (Good) on DEP’s website. Numerous sources of air pollution including ozone, nitrogen oxides, sulfur dioxide, methane, and fine particulates are common pollutants in this area. While each source is produced by different conditions, the burning of fossil fuels, automobile emissions, industries, and power plants are the primary producers of air pollution.

Table 27. Southwestern Pennsylvania Invasive Species - Serious Threat

Common Name	Scientific Name	Plant Form	Occurance	Facts
Garlic Mustard	<i>Alliaria petiolata</i>	Flower	Frequent	Invasive in many states; spreading aggressively in woodlands by seed
Musk Thistle	<i>Carduus nutans</i>	Flower	Frequent	PA Noxious Weed
Canada Thistle	<i>Cirsium avense</i>	Flower	Frequent	PA Noxious Weed
Bull Thistle	<i>Cirsium vulgare</i>	Flower	Frequent	PA Noxious Weed
Jimsonweed	<i>Datura stramonium</i>	Flower	Frequent	Sometimes cultivated; spread by seed, PA Noxious Weed
Purple Loosestrife	<i>Lythrum salicaria, L. virtatum</i>	Flower	Occasional	Garden escape which has become invasive in many states; PA Noxious Weed
Common Reed	<i>Phragmites australis</i>	Grass	Occasional	Native and introduces strains; wetland grass which can form huge colonies
Japanese Knotweed	<i>Polygonum (Falopia) cuspidatum</i>	Flower	Occasional	Invasive in many states; difficult to control; spreads by roots and seeds.
Johnson Grass	<i>Sorghum halepense</i>	Grass	Occasional	Grass; PA Noxious Weed; spreads by roots and seeds
Autumn Olive	<i>Elaeagnus umbellata</i>	Shrub	Occasional	Escaped from plantings and invasive in many states; rapidly spread by birds.
Morrow's Honeysuckle	<i>Lonicera morrowi</i>	Shrub	Frequent	Escaped from plantings and invasive in many states; rapidly spread by birds.
Tartarian Honeysuckle	<i>Lonicera tartarcia</i>	Shrub	Frequent	Escaped from plantings; seeds spread by birds.
Multiflora Rose	<i>Rosa multiflora</i>	Shrub	Frequent	Invasive in many states; seeds spread by birds; PA Noxious Weed
Norway Maple	<i>Acer plantanoides</i>	Tree	Occasional	Commonly planted and escaped; invasive in many states; wind spreads prolific seeds.
Tree-of-Heaven	<i>Ailanthus altissima</i>	Tree	Occasional	Invasive in many states; wind spreads prolific seeds.
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	Vine	Frequent	Escaped from cultivation and invasive in many states; spreading rapidly by birds.
Japanese Honeysuckle	<i>Lonicera japonica</i>	Vine	Occasional	Invasive in many states.
Mile-a-Minute Vine	<i>Polygonum perfoliatum</i>	Vine	Rare	Range expanding; PA Noxious Weed
Kudzu	<i>Pueraria lobata</i>	Vine	Rare	Invasive in many states; PA Noxious Weed.

Source: Pennsylvania Department of Conservation and Natural Resources Website.

Table 28. Southwestern Pennsylvania Invasive Species - Moderate Threat

Common Name	Scientific Name	Plant Form	Occurance	Facts
Goutweed	<i>Aegopodium podagraria</i>	Flower	Occasional	Commonly planted in the past and escaped; spread aggressively by roots.
Cheatgrass	<i>Bromus tectorum</i>	Grass	Occasional	Annual grass; very invasive throughout the west; spreads by seed.
Dame's Rocket	<i>Hesperis matronalis</i>	Flower	Frequent	Planted in gardens; escaped and naturalized along roads; spread by seed.
Eurasian Water-Milfoil	<i>Myriophyllum spicatum</i>	Flower	Rare	Invasive in many states; aquatic.
Star-of-Bethlehem	<i>Omithogallum nutans, umbellatum</i>	Flower	Frequent	Common garden plant which has widely escaped.
Wild Parsnip	<i>Pastinaca sativa</i>	Flower	Frequent	Found commonly along roadsides; widespread and abundant; spread by seed.
Reed Canary Grass	<i>Phalaris arundinacea</i>	Grass	Frequent	Aggressive wetland grass; native and introduced strains; widespread and abundant.
Lesser Celandine	<i>Ranunculus ficaria</i>	Flower	Rare	Spreads by roots and shoots; can be very aggressive in wetlands.
Japanese Barberry	<i>Berberis thunbergii</i>	Shrub	Frequent	Escaped from cultivation and invasive in many states; spread by birds.
European Barberry	<i>Berberis vulgaris</i>	Shrub	Frequent	Escaped from cultivation; spread by birds.
Russian Olive	<i>Elaeagnus angustifolia</i>	Shrub	Occasional	Escaped from plantings and invasive in many states; spread by birds.
Border Privet	<i>Ligustrum obtusifolium</i>	Shrub	Frequent	Escaped from cultivation. Seeds spread by birds.
Common Privet	<i>Ligustrum vulgare</i>	Shrub	Frequent	Planted very commonly in the past and escaped; invasive in many states.
Common Buckthorn	<i>Rhamnus catharticus</i>	Shrub	Occasional	Becoming a problem in Pennsylvania
Glossy Buckthorn	<i>Rhamnus frangula</i>	Shrub	Occasional	Becoming a problem in Pennsylvania
Wineberry	<i>Rubus phoenicolasius</i>	Shrub	Occasional	Common bramble; not cultivated; spread by seed.
Siberian Elm	<i>Ulmus pumila</i>	Tree	Rare	Escaped from cultivation.

Source: Pennsylvania Department of Conservation and Natural Resources Website.

Leadership in Energy and Environmental Design

According to the Sierra Club, a worldwide environmental organization, there is a movement in America's cities, counties, and states to help solve one of our country's most pressing problems: global warming. Frustrated by stalling on the federal level, local leaders are moving forward with innovative energy solutions that cut our dependence on oil, benefit public health, and save taxpayer dollars. The Sierra Club is calling municipalities that follow this movement "Cool Cities." The energy conservation measures that Cool Cities have enacted fall under three categories: cleaner vehicles, energy efficiency, and renewable energy.

It would be impractical for the Township to implement the measures that fall under the cleaner vehicles and renewable energy categories, but through the Township's zoning and subdivision ordinances, the Township could adopt and implement some energy efficiency measures.

The Leadership in Energy and Environmental Design (LEED), a program of the U.S. Green Building Council, can be used to assist the Township in these endeavors. The Green Building Council's website lists the following statistics and facts:

The built environment has a profound impact on our natural environment, economy, health, and productivity.

In the United States, buildings account for:

- 36% of total energy use/65% of electricity consumption
- 30% of greenhouse gas emissions
- 30% of raw materials use
- 30% of waste output/136 million tons annually
- 12% of potable water consumption

Breakthroughs in building science, technology, and operations are available to designers, builders, and owners who want to build green and maximize both economic and environmental performance.

Environmental benefits:

- Enhance and protect ecosystems and biodiversity
- Improve air and water quality
- Reduce solid waste
- Conserve natural resources

Economic benefits:

- Reduce operating costs
- Enhance asset value and profits
- Improve employee productivity and satisfaction
- Optimize life-cycle economic performance

Health and community benefits:

- Improve air, thermal, and acoustic environments
- Enhance occupant comfort and health
- Minimize strain on local infrastructure
- Contribute to overall quality of life

LEED has been in the forefront of developing techniques, standards, and a rating system for the certification of “green” buildings. Now, they are stepping beyond buildings and developing criteria for neighborhood developments as well as criteria for retrofitting existing buildings to be more energy-efficient.

LEED neighborhood development standards are currently being pilot-tested. Environmental preservation is one set of criteria development will have to meet to become LEED-certified, and is the most realistic standards to include in Marshall Township’s future ordinances. The environmental preservation criterion includes site design for habitat conservation, steep slope preservation, minimization of site disturbance during construction, erosion and sedimentation control, and stormwater.

Analysis

The quality of the Township's environment is one of the factors contributing to the Township's character and makes Marshall Township a desirable place to live and work. These environmental resources need to be protected to preserve the economic well-being and character of the Township. A step beyond preservation to enhancing these resources to make them accessible, attractive and useable to/by Township residents will make the Township more desirable than it is today. Natural resource preservation regulations developed in the future zoning, subdivision and land development ordinances should ensure the compatibility and balance of development with the continued productivity and value of environmentally sensitive land and water areas.

Topography

Slopes are significant factors when determining the extent and type of development to be planned. Land along the streams with very little slope is usually determined to be in a floodplain. Land with slopes 25% and greater presents problems for developments and poses potential threats of slope failure.

As shown on Map 21, there are many areas of the Township in which steep slopes are an issue, particularly in the western portion of the Township where we may be facing development pressure in the future. Steep slope regulations generally limits the construction of structures on areas identified as having a slope of 25% or greater. The intent of such regulations is to prevent injury or financial loss and to maintain adequate foliage cover on hillsides and preserve open space. Steep slope regulations prevent construction on areas deemed landslide-prone by the Township engineer.

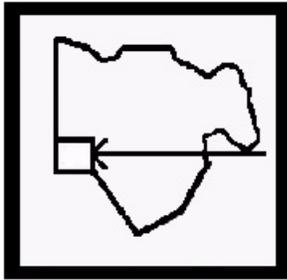
Currently, Marshall Township has provisions limiting the amount of disturbance that can occur on slopes 15% to 25%, and on slopes 25% and greater. The effectiveness of these provisions and the further limiting disturbance on these slopes will be discussed in detail during the drafting of the Township's new zoning and subdivision and land development ordinances.

Soils and Geology

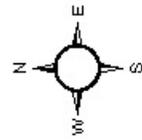
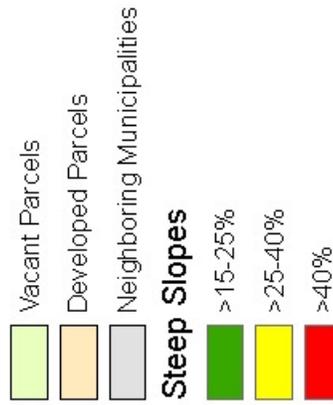
In terms of planning efforts, soils are important in determining the suitability of a site for on-lot sewage disposal systems, development opportunities, areas of high agricultural productivity, and areas that may be prone to landslides. Soils usually vary throughout a given profile and are rarely uniform throughout a site.

The makeup of the soils and geology of a region have a large impact on the suitability of a site or area for development. Soils determine the ability of a site to absorb and filter the effluent from septic systems, the suitability for the construction of foundations or other types of structures, the cost of building roads, and the appropriate type of landscaping. Soil surveys should be checked for suitability with every development project, whether residential, commercial, or industrial in nature.

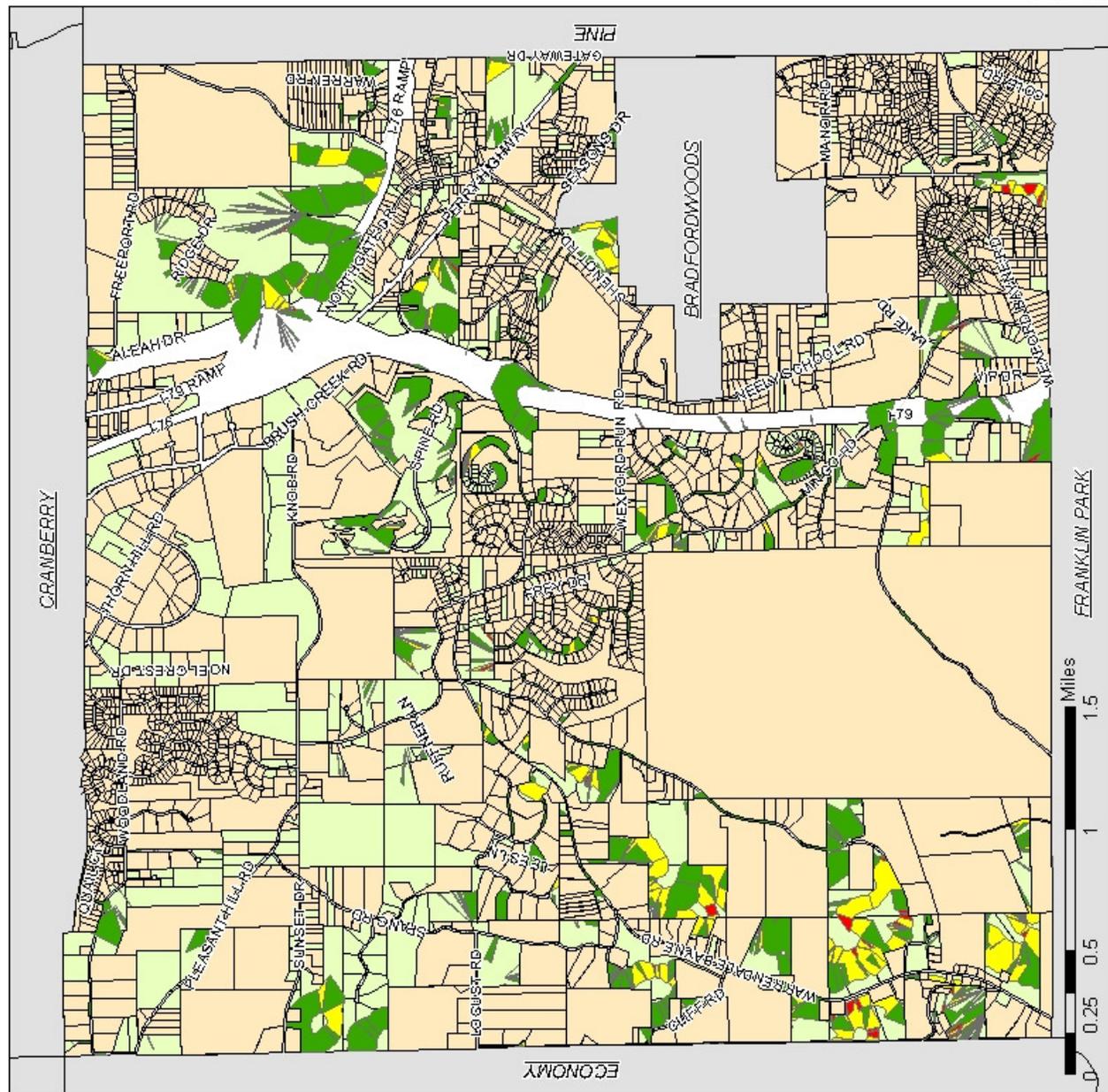
Map 21



**Marshall Township
Steep Slopes
relative to Vacant Land**



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Waterways and Floodplains

Development along streams can result in major impacts to the water resources of a region. As discovered in September 2004, a stream will take what is upstream and move it downstream. Serious thought has to be given to the safety of people, homes, and businesses downstream when approval for construction of buildings or the storage of material is given in an identified floodplain.

Construction occurring within the floodplain should either be elevated or flood-proofed or be constructed above the elevation of the floodplain.

Wetlands

Wetlands perform several functions including the retention and gradual release of floodwaters and bank stabilization. Wetlands slow flooding by limiting the movement of water through the wetland, increasing retention time, and allowing water to infiltrate into the soil. When floodwaters recede, wetlands function to gradually release stored water back into the streams. The root systems associated with herbaceous and scrub/shrub wetlands vegetation anchors otherwise unstable alluvial soils of stream banks.

The largest concentration of wetlands in the Township is in the Warrendale area, particularly between Northgate Drive and Route 19. The Township must be aware and take special care not to disturb these wetlands as we work to revitalize our Central Business District.

As with Marshall Township's other natural resources, an effort needs to be made to continue to preserve and maintain wetland systems for both their function and aquatic habitat.

Waterways

Marshall Township has a number of streams and sub-watersheds located within its boundaries. These streams are a vital resource for plant and animal habitat. The health of this resource directly affects several others; because they stretch beyond the boundaries of the Township, they should be examined regionally.

The organizations established to do this are the watershed associations. The Township needs to work with these groups and coordinate to achieve our mutual goals.

Ecological Habitats

Forest lands, stream valleys, and wetlands will be lost to development if we do not continue to take steps to preserve them. Preserving and enhancing the ecological integrity of the region lies within the ability and commitment of local governments, public/private agencies, citizens groups, and landowners to agree on specific conservation goals and work together to see them accomplished.

Natural Heritage Areas

The Big and Little Sewickley Creek Landscape Conservation Area is a biological jewel, and efforts should be taken to preserve its integrity, especially as public sewage is introduced to the western portion of the Township and development occurs.

The preservation of this area will be a topic of discussion as the Township updates its ordinances and seeks to find a solution that is mutually beneficial to the property owners who have a right to develop and preserve this unique feature. The use of an overlay district could be a potential solution to this problem as the Big and Little Sewickley Creek Landscape Conservation Area is located in Franklin Park as well as the Township.

Leadership in Energy and Environmental Design

In an attempt to become what the Sierra Club would call a “cool township,” we need to require that developers construct new buildings to be energy-efficient. LEED has standards for energy efficiency detailed in the requirements for becoming LEED-certified that could be pulled into the Township ordinances. While developers may claim that this places a financial burden upon them, this cost would be passed on to the eventual owners or tenants of the building. Studies have indicated that the upfront costs associated with constructing energy-efficient buildings are quickly recouped by the reduction in energy bills. As energy costs continue to skyrocket, buildings constructed with a higher level of energy efficiency will be in demand.

Beyond energy efficiency, the standards LEED is currently pilot-testing for neighborhood design, particularly the provision for environmental preservation, should be examined for inclusion in the Township’s new ordinances. The Township should be certain that the consultant hired to update the Township’s ordinances is familiar with the LEED provisions and can incorporate them into the ordinances in an effective manner.

Chapter 10

Land Use

Existing Conditions

The Land Use element of the Marshall Township Comprehensive Plan comprises three sections: Existing Land Use Inventory; Local Land Use Controls; and the Future Land Use Map. The Existing Land Use inventory includes the inventory and identification of existing land uses within the Township. A parcel map created by the Marshall Township GIS Department was used as a base map and the existing land uses were identified through a series of staff field views. Marshall Township's local land use controls discuss the Township's existing ordinances. The Future Land Use Map identifies probable land use patterns based upon current trends, growth patterns, and natural development constraints (see Map 22).

Existing Land Use Inventory

Marshall Township is 15.58 square miles in size with a population of approximately 6,500. Marshall Township's density of 385 people per square mile is low compared to our neighbors (Bradford Woods 1,263; Cranberry 1,038; Economy 529; Franklin Park 839; and Pine 458). Marshall Township is not a densely developed community. Although the Township is a suburb of Pittsburgh and has many traditional suburban neighborhoods, there are areas of the Township, particularly the western portion of the Township, that are very rural and provide no indication that the City of Pittsburgh is a 20-minute drive away.

The following land use categories and corresponding descriptions were used in the existing land use inventory:

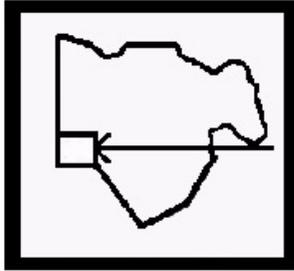
Commercial: Included are areas used by private individuals or by organizations for capital gain, which may include retail shopping, automotive, financial, professional, governmental, and miscellaneous recreational and service activities to which the public requires direct and frequent access. The majority of Marshall Township's commercial uses are located along the Route 19 corridor in Warrendale and at the 79/Route 910 interchange.

Public/Educational/Institutional: Sites containing any building or structure owned or operated by a governmental agency or nonprofit community service provider open for public uses with or without a fee that provides a service to the public. Included in this category are municipal offices, fire departments, churches, schools, and State Game Lands 203. These uses are scattered throughout the Township.

Residential – Single Family: This category includes all dwellings used for single-family residential purposes. Single-family residential property accounts for the largest percentage of land use in the Township.

Residential – Multi-Family: This category includes all buildings that house more than one dwelling unit. The Blueberry Hill retirement community located on Wexford Run Road has the largest concentration of multi-family housing in the Township.

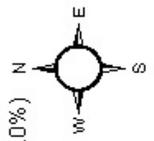
Map 22



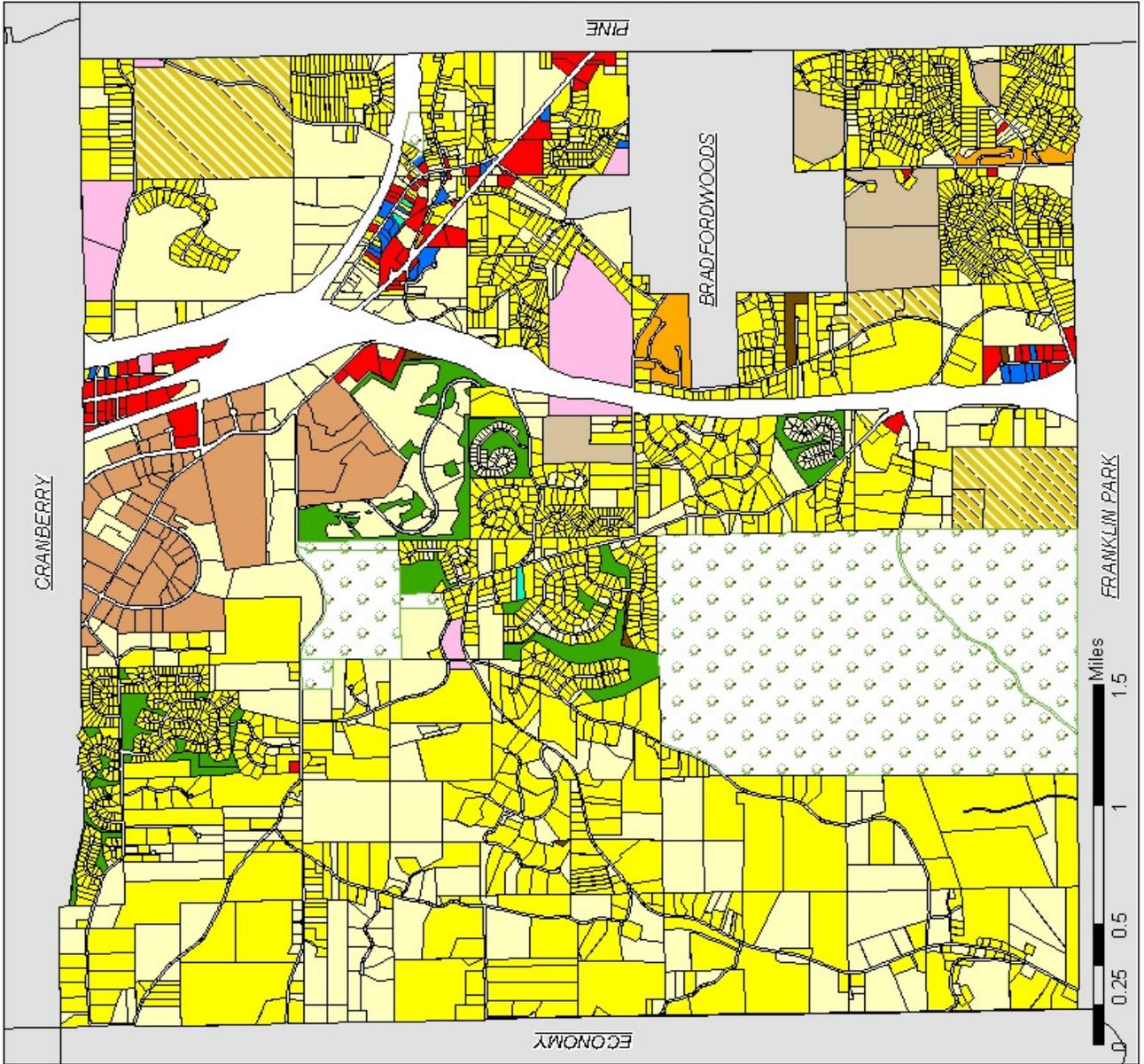
**Marshall Township
Existing Land Use
Land Use Classifications**

(Acres and % of Total Area)
Marshall Township is approximately
14.79 square miles in total area
(9465.52 acres)

- Single Family(3799,267 - 40.1%)
- Vacant Parcels(2248,347 - 23.8%)
- Public(1227,123 - 13.0%)
- Outdoor Rec(525,992 - 5.6%)
- Ind./Office Park(443,967 - 4.9%)
- Open Space(237,98 - 2.5%)
- Agriculture(191,32 - 2.1%)
- Commercial(181,92 - 2.0%)
- Edu./Inst.(175,79 - 1.9%)
- Multi-Family(63,356 - 0.7%)
- Office(32,256 - 0.3%)
- Utilities(16,66 - 0.2%)
- Mixed Use(5,109 - 0.0%)



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Agriculture: Land being used predominately for agricultural purposes, including the commercial production and preparation for market crops, livestock, and livestock products and the production, harvesting, and preparation for market or use of agricultural and similar crops and commodities. Agricultural land is primarily located in the southeastern part of Marshall Township with Shenot's and Bauerle's farms. The Soergels also have land that they are actively farming on Wexford Run Road.

Outdoor Recreation: This land use category includes land used for commercial recreation purposes. Examples include the Northside and Millvale sportsman's clubs, and the facilities at Windwood.

Open Space: This category encompasses land within Marshall Township's approved residential subdivisions that has been deeded as open space. These open space areas are located in the Greenbriar, Shadow Wood, Sewickley Farms, Quail Crossing, and the Buckingham Ridge plans.

Vacant: This land category is defined as that land in which there is no discernable use.

Industrial/Office Park: This use encompasses the RIDC Park, the Ericsson properties, and Tech 21. These properties have a mix of office and light industrial uses. Light industrial includes activities such as construction warehousing and light manufacturing.

Table 29 identifies the acreage and percentage of total for each land use classification in Marshall Township. Single Family Residential, at 40%, is the largest land use within the Township. Residential is followed by Vacant (25%). The next largest land use in the Township is the Public/Educational/Institutional land use category with approximately 15%. Following the Public/Educational/Institutional land use is Outdoor Recreational (5.6%), Industrial/Office Park (4.9%), Agricultural (2.1%), Commercial (2.0%), Open Space (1.2%), Multi-Family Residential (0.7%), Office (0.3%), Utilities (0.2%), and Mixed Use (0.0%) (See Map 22, Marshall Township Existing Land Use).

Use	Acreage	Percent
Marshall Township	9,465.52	100.0%
Single Family Residential	3,799.27	40.1%
Multi-Family Residential	63.36	0.7%
Public/Educational/Institutional	1,402.91	14.9%
Commercial	181.92	2.0%
Industrial/Office Park	443.97	4.9%
Office	32.26	0.3%
Mixed Use	5.11	0.0%
Outdoor Recreational	525.99	5.6%
Open Space	117.91	1.2%
Agriculture	191.32	2.1%
Utilities	16.66	0.2%
Vacant	2,368.42	25.0%
Source: Marshall Township Staff Field View, 2005		

Several major subdivisions and development plans have been approved or are very close to approval in the Township that deserve to be mentioned in this land use analysis because of their imminent nature. These projects are mapped on Map 23 and a description is provided below.

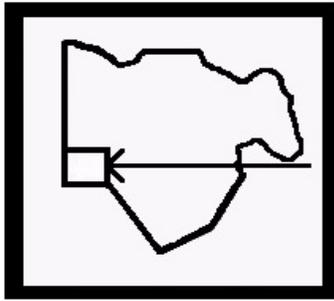
- Cambridge Manor – located along Mingo Road, Cambridge Manor is a 42-acre planned residential development. The plan has final approval for a 46-lot single-family residential development; 17 units are proposed for Phase I, and 29 units are planned for Phase II.
- Copper Creek – located on 93 acres off Mt. Pleasant Road, Copper Creek is a proposed 20-lot single-family residential subdivision.
- Marshall Heights – located at the intersection of Route 910 and Mingo Roads, Marshall Heights proposes the construction of 129 townhouse units along with a pharmacy and a bank on approximately 29 acres.
- Marshall Towne Center – located on 7.1 acres located on Northgate Road near the dead end this project is proposing approximately 100 apartment units.
- Providence Point – located along the Red Belt, this project is a proposed 40-lot single-family residential subdivision on approximately 39 acres.
- Summit, The - located on 75 acres along Mt. Pleasant Road, The Summit is a 27-lot subdivision.
- Tech-21 – located on 225 acres and would have access from both the Red Belt and Knob Road, Tech-21 is a mixed-use development that is proposed to include 120 residential units, commercial in the form of a hotel and restaurants, and corporate office/technology.
- Venango Trails – located on 324-acres at the site of the former golf course off Freeport Road, Venango Trails will likely be developed within the time frame of this Comprehensive Plan.
- Warrendale Village - located at the corner of Route 19 and the Red Belt, this project is proposed as a mixed-use commercial development.

Agriculture

As noted previously, Marshall Township has 191.32 acres of agricultural land. These acres are considered “prime agricultural land,” defined by Executive Order 2003-2 as:

- In active agricultural use (not including growing timber)
- Lands devoted to active agricultural use in the preceding three years

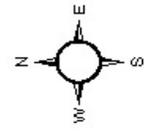
Map 23



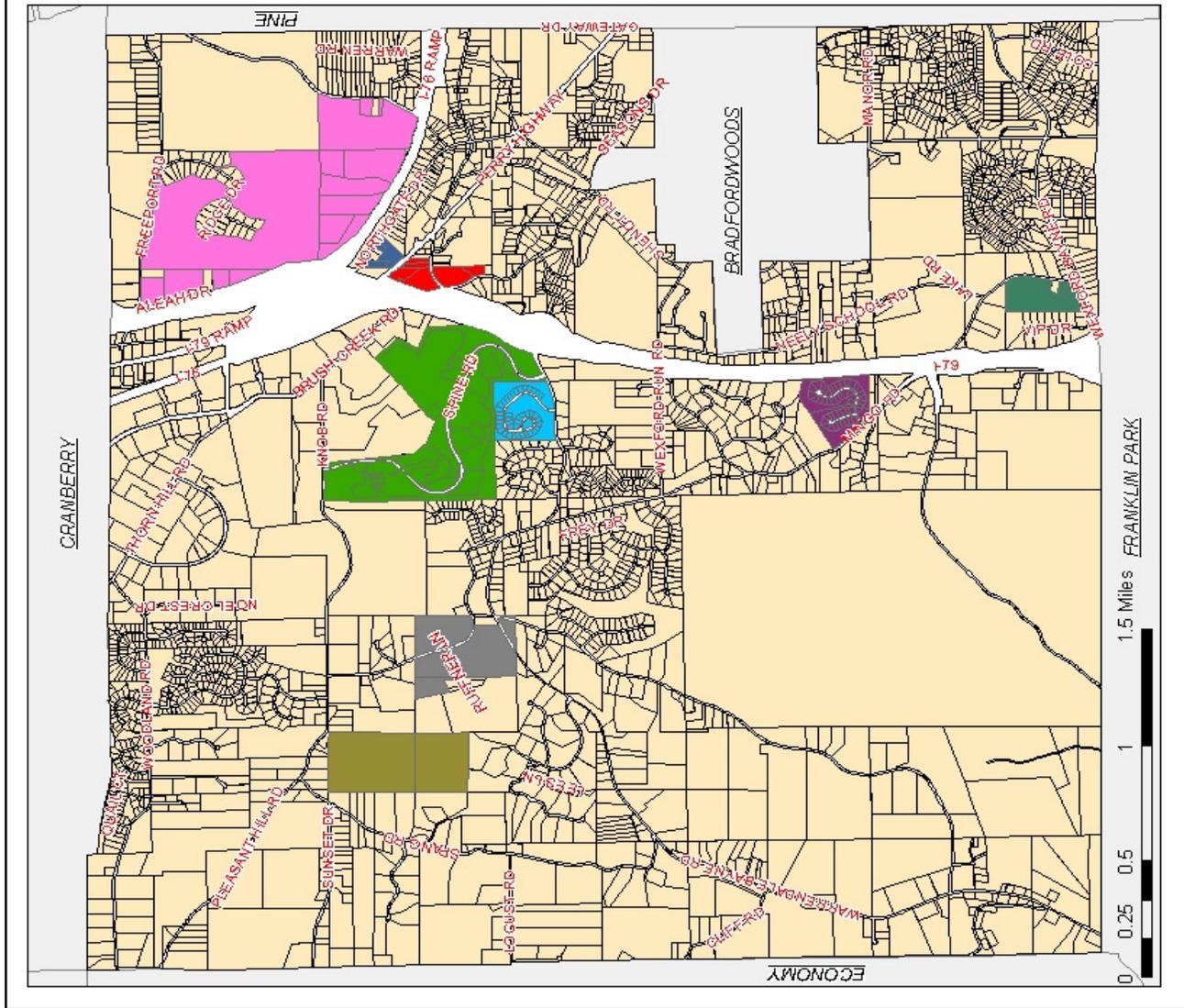
Marshall Township Pending Land Development

The following list of land development projects are in various stages of review by Marshall Township.

- Marshall Parcels
 - Neighboring Municipalities
- #### Pending Projects
- Cambridge Manor
 - Copper Creek
 - Marshall Heights
 - Marshall Towne Center
 - Providence Point
 - Tech 21
 - The Summit
 - Venango Trails
 - Warrendale Village



Marshall Township
GIS Department
2006



-
- Fall into at least one of the categories of land. State agencies shall provide protection to “prime agricultural land” under this Executive Order based upon the following levels of priority:
 1. Preserved farmland (highest priority)
 2. Farmland in agricultural security areas (second highest priority)
 3. Farmland enrolled in Act 319 of 1974, as amended (Clean and Green) or Act 515 of 1996, as amended (third highest priority)
 4. Farmland planned for agricultural use and subject to effective agricultural zoning (fourth highest priority)
 5. Land Capability Classes I, II, III, and IV Farmland and Unique Farmland (fifth highest priority)

The Agricultural Security Area Law (Act 43 of 1981) enables landowners to propose the creation of agricultural security areas (ASA) to local units of government. Agricultural security areas consist of 250 or more acres of viable farmland and may be comprised of multiple noncontiguous tracts of land at least 10 acres in size. At least 50% of the soils on the land must have a soil capability class of I – IV, as determined by the USDA Soil Survey, and zoning shall permit agricultural use but need not exclude other uses. Incentives to encourage farming and to discourage development in these agricultural areas are provided through the act. The Agricultural Security Area Law authorizes county governments to establish programs for the purchase of development easements. Another important feature of the act is that municipalities are prohibited from enacting laws/ordinances that unreasonably restrict from practices within the agricultural security area.

Marshall Township has 262.39 acres designated as Agricultural Security Lands (see Map 24) for locations.

Local Land Use Controls

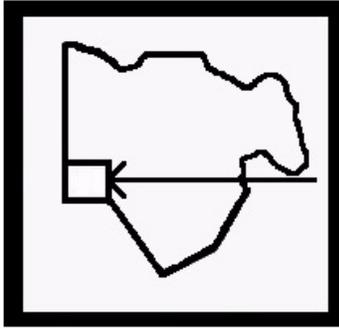
A Comprehensive Plan provides a logical basis for zoning and other land use ordinances. However, plans are dependent upon local laws, ordinances, and private actions to implement the concepts and recommendations set forth in the plans.

The Pennsylvania Municipalities Planning Code (MPC) defines land use ordinance as “any ordinance or map adopted pursuant to the authority granted in Article IV, V, VI, and VII.” Land use ordinances are legislative actions exercised by the governing body of a municipality. As such, there are four types of land use ordinances:

- Official map
- Subdivision and land development
- Zoning
- Planned Residential Development Provisions (PRD) as part of a zoning ordinance

The most common methods of land use control used by municipalities, and the two that Marshall Township has enacted, are zoning ordinances and subdivision and land development ordinances (SALDO).

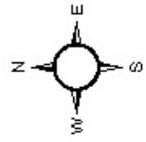
Map 24



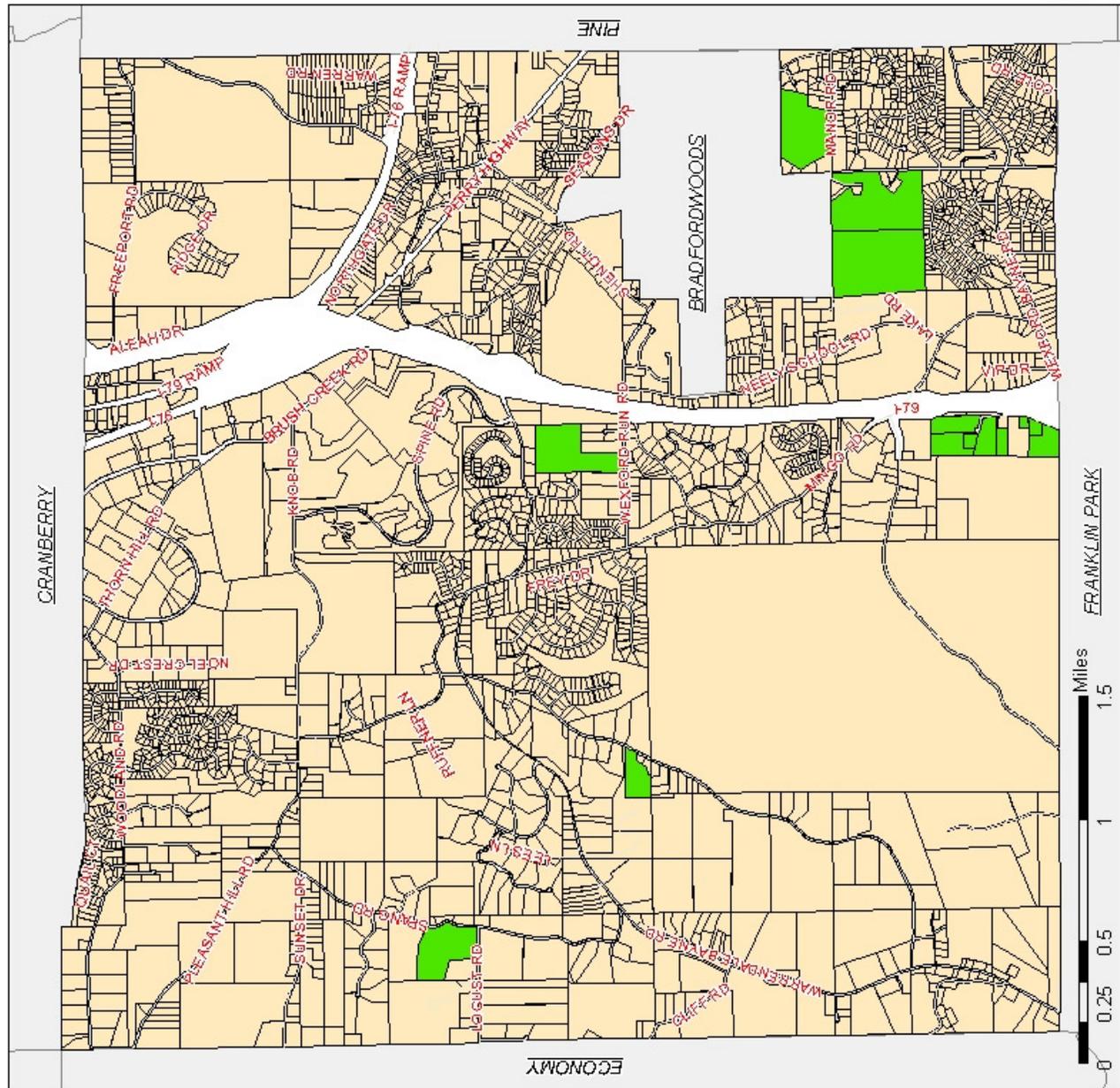
Marshall Township Agricultural Security Lands

SPC identified participants of Agricultural Security Areas from parcel maps, municipal maps, or aerial photographs. These areas were drafted on and digitized from 7.5 minute USGS topographic quadrangle maps.

- Marshall Parcels
- Neighboring Municipalities
- Agricultural Security Lands
(total area - 262.39 acres)



Marshall Township
GIS Department
2006



Zoning

Zoning is a land use tool that allows a community to regulate the use of land and the location and intensity of development. A zoning ordinance is used to protect the public health, safety, and welfare as well as guide growth. It is also designed to regulate and promote:

- Uses of land, water courses, and other bodies of water
- Size, height, bulk, and location of structures
- Areas and dimensions of land to be occupied or to be unoccupied by uses and structures
- Density of population and intensity of use
- A variety of residential dwelling types
- All basic forms of housing
- Protection of natural resources and agricultural land
- Reasonable overall community growth

Marshall Township has had a zoning ordinance in place since 1945, with the most recent amendments occurring in 2005. The Township is divided into eight zoning districts and four overlay districts:

- Countryside (CS)
- Estate (E)
- Suburban Residential (SR)
- Medium Density Residential (MDR)
- Highway Commercial (HC)
- Planned Office/Research/ Business Park (PORBP)
- Central Business District (CBD) with Town Center (TC) and Route 19 Boulevard (RB) subdistricts
- Planned Industrial Park (PIP)
- Floodplain Overlay
- Open Space, Public, and Conservation
- Corridor Enhancement Overlay
- Residential, Research, and Technology Park Overlay

One of the first tasks to be completed after the Comprehensive Plan is adopted will be the update of the zoning ordinance. Generally speaking, the lot size, setback, and use provisions for the E, SR, and MDR residential districts function well in the current ordinance. The Township does not see a need for a major rewrite for those districts. The same can be said for the HC, PORBP, CBD, and PIP districts. The crux of the rewrite is going to be provisions for the western portion of the Township. Throughout this document we have stated repeatedly that the western portion of the Township has numerous environmental resources that warrant protection. The challenge to be faced in writing the new zoning ordinance will be to ensure that land owners have the ability to develop their property, if desired, while preserving as much of the natural environment as possible.

Subdivision and Land Development Ordinance (SALDO)

As the second most commonly used land use ordinance in Pennsylvania (other than the zoning ordinance), the SALDO contains regulations for the creation of new lots or changes in property lines as well as the construction of public or private improvements to land. A SALDO offers municipalities a degree of protection against unwise, poorly planned growth. Subdivision and land development regulations are designed to:

- Ensure a well-designed subdivision or land development;
- Set minimum standards for the layout or design of developments;
- Promote coordinated development;
- Ensure the installation of necessary improvements;
- Minimize existing or foreseen problems; and
- Manage stormwater runoff and erosion.

Marshall Township adopted its SALDO in 1955 with the most recent amendments in 2004.

Official Map

An official map is a land use ordinance that a municipality adopts to implement recommendations in a Comprehensive Plan. It is a declaration by the governing body of the projected areas the municipality needs for public purposes at some point in the future. An official map is prepared and adopted in accordance with procedures set forth in Article IV of the MPC. The official map can:

- Provide focus for various agencies and boards to identify needed road improvements or widening, streetscape improvements such as the installation of sidewalks, wellhead protection areas, parks, playgrounds, and sites for other public improvements;
- Help implement the Comprehensive Plan and Capital Improvement Program; and
- Allow for a municipality to reserve private land for certain future public uses.

Planned Residential Development (PRD)

A PRD is a land use control device that combines elements of both zoning and subdivision and land development ordinances by bringing together mixed residential and non-residential development and open space and recreational facilities. The fundamental idea behind a PRD is for a municipality to establish overall density, water supply, sewage disposal, and percentage of open space standards, and the permission for the developer to develop with considerable flexibility within these established criteria. A PRD should be an option only if the developer meets certain criteria. It should not be a form of development specifically mandated by a general ordinance.

Codes

The adoption of various construction, property maintenance, and fire prevention codes has been increasingly recognized as a tool to promote public health, safety, and welfare. Codes establish minimum standards for safety to life, health, and property. To be effective, the administration of building construction and maintenance codes must be coordinated with zoning regulations or other municipally related programs.

Pennsylvania adopted the Uniform Construction Code (UCC), Act 45. Under Act 45, municipalities were required to adopt the UCC and determine how it was to be administered and enforced within each municipality. Each municipality was given an opportunity to either “opt in,” which meant that they will administer and enforce the UCC themselves (or through a third-party agency) or a municipality could choose to “opt out” which meant that the Department of Labor and Industry was responsible for administration and enforcement. Marshall Township “opted in” to the UCC and has a full time building inspector. The UCC includes building, plumbing and electrical, fire protection, and property maintenance codes.

Future Land Use Map

The future land use map is a tool meant to guide the way land resources are used and to provide a blueprint that can manage future growth. The future land use map becomes the foundation for updating current land use controls such as zoning ordinances. Map 25 depicts the future land use plan for Marshall Township. The map was developed based upon current and predicted trends, public input, and environmental development constraints, such as steep slopes, floodplains, and wetlands.

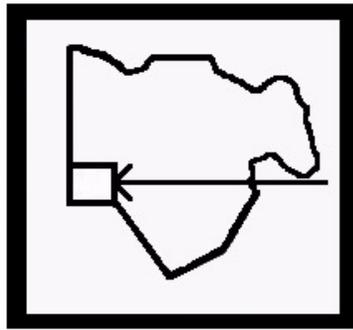
Through the planning process, the following issues were identified as being the most important for Marshall Township in terms of future land use planning:

- Natural resource preservation
- Flexible zoning
- Revitalization of Warrendale
- Development of the western portion of the Township

Future land use categories listed below are not zoning categories but are a description of the use of the land. When the Township moves forward with the creation of the new zoning ordinance, these land use categories will be used to “guide” the process:

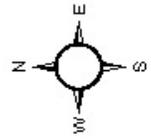
Suburban Residential – This category describes most of the developed residential area in Marshall Township. These areas encompass land, most of which is already developed and should maintain existing densities for future development.

Map 25

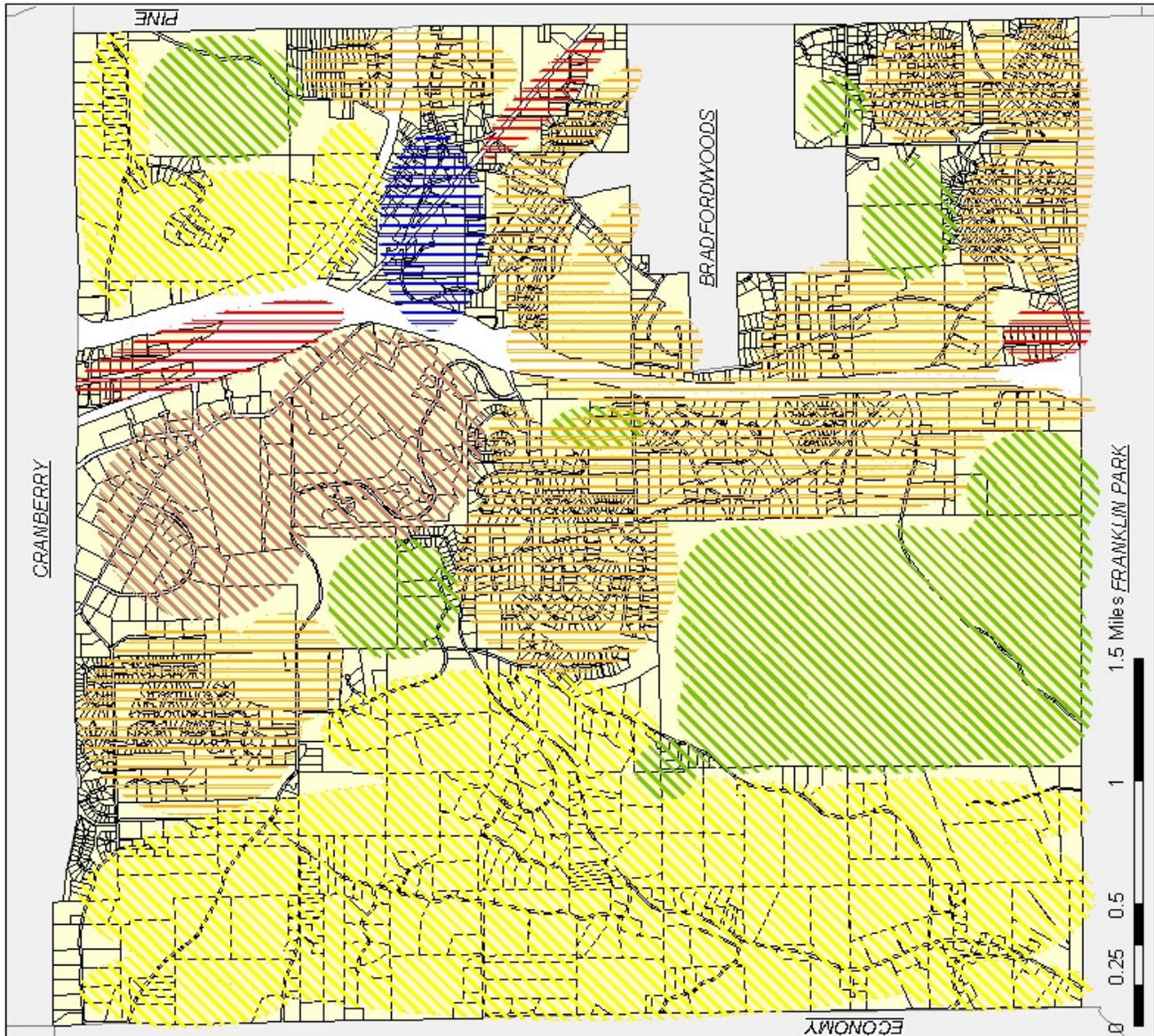


**Marshall Township
Future Land Use**

-  Marshall Parcels
 -  Neighboring Municipalities
- FUTURE LAND USE**
-  Central Business District
 -  Commercial
 -  Conservation
 -  Conservation Residential
 -  Office/Industrial
 -  Suburban Residential



Marshall Township
GIS Department
2006



Conservation Residential – Areas denoted as conservation residential have unique features or circumstances and abundant natural resources that are desired to be protected. Conservation residential primarily consists of single-family detached dwellings on a minimum of one-acre lots. Flexibility must be included in these areas to allow for resource protection by providing clustering of units, or conservation design. The effect of these measures may allow for a much higher density (closeness of units to one another) of development on one area of a site but requiring the conservation and preservation of the Township’s precious natural resources in another area of a site. This may also lessen the traditional appearance of suburban sprawl, with one-acre lots spread throughout the Township.

Commercial – Areas designated to provide a mix of commercial establishments including convenience commercial, large commercial, restaurants, car dealers, shopping centers, and hotels/motels. Stand-alone office buildings are also included in these areas.

Office/Industrial Park – This category is designated for office parks with multi-story office buildings and light industrial uses.

Central Business District – This category generally encompasses the Warrendale area and is designated to provide a mix of residential, office, and commercial activities typically associated with a “downtown” or “main street” area. Both new construction and infill construction are encouraged. In addition to the land uses associated with this area, significant efforts should be made to revitalize the area visually, including streetscape improvements and possible facade improvements.

Conservation – It is the intention to leave areas designated as conservation undeveloped, or green space. Conservation areas include the municipal parks, State Game Land 203, both sportsman’s clubs, and land that is currently being used for agricultural purposes or is in the Agricultural Security Land program.

Analysis

Existing land use patterns within the Township are based upon infrastructure availability. Commercial enterprises are found along Route 19 and the I-79 interchange, within easy access of arterial roads and public water and sewage. The same can be said for the industrial/office park land uses. The pattern remains true for residential land uses. Residential uses are scattered throughout the Township, but the larger subdivisions and concentrated developments can be found where public water and sewage are available. Because of these patterns, the Township is more densely developed in the eastern portion and not as densely developed in the western portion. Over the next 10 to 20 years, as public sewage is introduced to the western portion of the Township, we are likely to see increased development in the west. If this development were to occur in an uncontrolled or haphazardly it would completely change the Township's character and leave Marshall Township as another sprawling suburb.

While residential is the largest land use in the Township, we are fortunate to have the industrial/office and commercial sectors which pay real estate taxes and can partially offset the cost of providing services to Township residents.

Two main purposes for completing this Comprehensive Plan are to update the Township's ordinances to reflect changes that have occurred in the Municipalities Planning Code (MPC) and to provide zoning that will allow for intelligent management of anticipated growth in the western portion of the Township as public sewers are introduced. Other elements of the zoning ordinance that need to be examined include resource protection standards, Estate and Suburban Residential criteria, Planned Residential Development standards, and the general flow and the ability to understand the ordinance.

The Marshall Township Subdivision and Land Development Ordinance also needs to be updated to reflect changes in the MPC and address some points of confusion.

As stated in the Introduction of this plan all of the individual elements or chapters of this plan are interrelated and affect each other. No where is this more true than in the land use element. Virtually every goal of this plan is ultimately related to land use.

- Maintain unique character of Marshall Township
- Provide high-quality water and sanitary sewage to all of Marshall Township
- Continue to provide a variety of park, recreation and open space options to Marshall Township residents
- Encourage quality and diversity of future housing stock
- Investigate the revitalization of the Warrendale area
- Promote economic development in the Township
- Balance the protection of Marshall Township's natural resources with demands for economic growth and development
- Improve areas prone to flooding

The desire to achieve these goals is what makes the updating of the Township's zoning, subdivision and land development ordinances important. Specifically, the zoning update will tackle the question of how development is going to occur in the western portion of the Township without causing mass destruction to natural resources and altering the character of the Township. Additionally, is required open space within major subdivision and land development plans going to be able to be included as a Township park, recreation and open space options for residents?

The ability to provide quality and diversity of housing stock as well as the ability to revitalize Warrendale area and promote economic development, will again be directly impacted by the updated ordinance. Bulk regulations (minimum lot size and setbacks) and permitted and conditional uses in each of the zoning district dictates what will happen in those districts over the next ten years.

Finally, the Township will be able to determine if the ordinance updates have been successful and in the best interest of the Township by how well the ordinances balance the protection Marshall Township's natural resources with the demands for economic growth and development.

Chapter 11

Implementation Plan

Implementation Plan

The matrix on the following pages lists the goals resulting from the comprehensive planning process and the specific objectives that will guide the Township in reaching the goals. These goals are a culmination of the planning process, existing conditions, analysis, and public participation.

Although the planning elements are listed in no particular order, the goals within each planning element are listed in order of priority as determined by those in attendance at the September 14 public meeting. Each of the objectives has been given a general time frame for completion, 1-3 years, 4-6 years, or 7-10 years. Ongoing objectives have been given a one-to-ten year time frame. The time frames will be instrumental in tracking the progress of plan implementation. The last column of the matrix, titled “Status of Implementation,” will be used to provide yearly updates to the Board of Supervisors regarding the status of the plan. At the end of each year, staff will give the Board of Supervisors a detailed summary of what was accomplished in that year for each objective. The matrix will be completed in such a way that in 2016, when the Township is working on its next comprehensive plan, the Board, staff, and residents will be able to see exactly what was accomplished and when, as well as what may need to be carried over to the new comprehensive plan.

The time frames associated with the Implementation Plan will also be useful for budgeting purposes. They will allow staff and the Board of Supervisors to budget for objectives that need to be reached within the budget year.

The Implementation Plan lists potential partners and funding sources. The Board of Supervisors, as the Township’s governing body, is ultimately responsible for the implementation of the plan, and the listings of potential partners are the groups who could work with the Board of Supervisors in achieving these objectives.

The second matrix included in this chapter is a Funding Sources and Technical Assistance Guide. The Funding Sources and Technical Assistance Guide is an alphabetical listing of Federal, state, and local agencies as well as nonprofit organizations and consultants that can answer questions, provide technical assistance, and/or potentially be a source for funding (grants, reimbursement programs, or low-interest loans).

One of the first steps the Board of Supervisors should take in implementing this Comprehensive Plan is to develop a set of policy statements that support the goals and objectives of this Plan. These policy statements along with the goals and objectives, will guide the Township through implementation. Following are some suggested areas the Board of Supervisors may want to consider developing policy statements for:

History and Community Character

- Scenic and Historic Resource Policy

Community Facilities and Services

- Sanitary Sewage Extension Policy
- Multi-Municipal Coordination Policy

Parks Recreation and Open Space

- Open Space Preservation Policy

Transportation

- Transportation (vehicular, mass, bicycle, and pedestrian) Safety Policy
- Pedestrian and Bicycle Mobility Policy

Housing

- Green Building Policy
- Housing Diversity Policy

Economic Development

- Economic Develop Support Policy

Natural Resources

- Natural Resource Preservation Policy
- Soil and Geological Resources Policy
- Energy Conservation Policy
- Water Resource Policy

Land Use

- Agricultural Resource Policy
- Smart Development Policy
- Variance and Modification Request Policy

History and Community Character				
GOAL: Maintain unique character of Marshall Township.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Implement zoning that preserves the Township's natural resources.	Consultant, Planning Commission, Solicitor	DCED, Township	1 - 3	
Explore land preservation measures.	Residents, Committee	DCNR, Township	1 - 3	
Work with watershed associations to explore common goals.	Residents, Pine Creek Watershed Association	N/A	3 - 6	
GOAL: Increase awareness of the Township's unique identity				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Reestablish the Warrendale Post Office.	United States Postal Service	N/A	1 - 3	
Consolidate zip codes within the Township eventually establishing a single zip code.	United States Postal Service	N/A	7 - 10	
Develop new signage/logo for Marshall Township.	Residents, Consultant	Township	1 - 3	
Create nicely landscaped gateways at the entrances to the Township.	Residents, Western Pennsylvania Conservancy, Consultants	Township	1 - 3	
Involve business community in marketing the Township.	Business community, consultant	Township	1 - 10	
Promote activities and development within the Township's Central Business District.	Central Business District Businesses, Consultant	Township	1 - 10	

Community Facilities and Services					
GOAL: Provide high-quality water and sanitary sewage to all of Marshall Township.					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Update the Comprehensive Sewage Plan for the Township.	Consultant, Township Engineer, MTMSA	DCEd	1 - 3		
Create a Comprehensive Water Service Plan for the Township.	Consultant, Township Engineer, West View Water Authority	DCEd, PENNVEST	3 - 6		
Implement sewage agreement with Economy Borough.	Economy Borough, MTMSA, Board of Supervisors	N/A	1 - 3	Complete	
Implement the Valley Road Sewage Plan. Establish a stream monitoring program.	Residents, MTMSA Local University, Watershed Group	PENNVEST, MTMSA DCNR, Township	1 - 3 1 - 3		
GOAL: Continue to work cooperatively with neighboring communities and the North Hills COG to provide municipal services and facilities					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Maintain good relationship with the Northern Regional Police Department.	Pine, Bradford Woods, and Richland Police officers	N/A	1 - 10		
Maintain good relationship with Marshall Township Volunteer Fire Department.	Volunteer Fire Department	N/A	1 - 10		
Explore opportunities for multi-municipal planning and cooperation.	Surrounding Municipalities	DCEd, DCNR, Local Government Academy, other potential sources depending on the type of planning	1 - 10		
Continue to participate in North Hills COG Programs.	North Hills COG	Township	1 - 10		
GOAL: Be prepared to meet higher levels of demand for services (public safety, education, etc.) by Marshall Township Residents					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Educate residents on existing programs and services.	Residents	Township	1 - 10		
Hold regular public meetings to gain input/feedback on the Township services.	Residents, Parks and Recreation Advisory Board	N/A	1 - 10		
Provide adequate facilities for public safety, as per the facilities need study.	Consultant	Township	1 - 10		
Work cooperatively with North Allegheny School District to ensure that children receive quality education.	North Allegheny School District, Parent Teacher Association	N/A	1 - 10		

Parks, Recreation, and Open Space				
GOAL: Continue to provide a variety of park, recreation, and open space options to Marshall Township residents.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Complete/update a DCNR "approved" Comprehensive Recreation, Park, and Open Space Plan.	DCNR, Parks and Recreation Advisory Board	DCNR, Township	3 - 6	
Continue to explore joint/multi-municipal opportunities for parks and recreation.	"North Hills Communities", Marshall Township Parks and Recreation Department	N/A	1 - 10	
Educate residents on existing programs and services.	Residents	Township	1 - 10	
Continue to expand on the Township's trail system.	DCNR, Parks and Recreation Advisory Board, Developers	DCNR, Township	1 - 10	
Hold regular public meetings to gain input/feedback on the Township park and recreation services.	Residents, Parks and Recreation Advisory Board	N/A	1 - 10	

Transportation					
GOAL: Improve the operation of Marshall Township's transportation network to enhance traffic circulation and safety within the Township.					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Properly maintain existing roads.	Legislators, PENNDOT, Allegheny County	Federal Government, PENNDOT, Township	1 - 10		
Implement the Transportation Capital Improvement Plan.	Developers, PENNDOT	Developers, PENNDOT, Township	1 - 10		
Evaluate potential road expansion to aid with circulation.	Consultant, Developers	Developers, Township	1 - 10		
Work with legislators to get federal earmarks for transportation improvement projects.	Legislators, PENNDOT	N/A	1 - 10		
GOAL: Improve pedestrian and bicycle circulation and safety within the Township.					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Establish a pedestrian network throughout the Township.	Residents	Township	1 - 10		
Implement traffic calming measures as indicated by the Township's policy.	Consultant, Township Manager	Township	1 - 10		
Explore the feasibility of adding dedicated bike lanes to Township roads.	Consultant, Parks and Recreation Advisory Board	DCNR, Township	3 - 6		
Provide "safety" signage in heavily traveled pedestrian areas.	N/A	Township	1 - 10		
GOAL: Improve public transportation access in Marshall Township in a manner consistent with the Township's character.					
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation	
Work with the Port Authority of Allegheny and other regional transportation agencies to provide additional service to the Township.	PAAC, Butler Transit	N/A	1 - 10		
Create additional Park and Ride facilities.	PAAC, Butler Transit	PAAC	1 - 10		
Encourage Transit-Oriented Development.	PAAC, Consultant	N/A	1 - 10		
Explore possibilities of providing internal circulation to Central Business District and other areas.	PAAC, Consultant	Township	6 - 10		

Housing				
GOAL: Maintain quality housing stock to service all current and future Marshall Township residents.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Continue to enforce the Township Property Maintenance Code.	Residents	N/A	1 - 10	
Explore the possibility of adopting architectural standards.	Consultant	Township	1 - 3	
GOAL: Encourage quality and diversity of future housing stock.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Work with land developers to encourage quality and environmentally sensitive home construction.	Developers	N/A	1 - 10	
Create zoning that allows for a variety of housing sizes and design.	Developers, Consultant	Township	1 - 3	

Economic Development				
GOAL: Revitalize Marshall Township's "Central Business District" to a thriving commercial center.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Explore the possibility of a Main Street Program.	Pennsylvania Association of Downtown's Central Business District Residents and Business Owners	Pennsylvania Association of Downtowns, Residents/business owners, Township	1 - 3	
Encourage membership in the Northern Allegheny Chamber of Commerce.	Business Owners, North Hills Area Chamber of Commerce	N/A	1 - 3	
Improve vehicular and pedestrian circulation.	PENNDOT, Allegheny County	PENNDOT, Traffic Impact Fee, Township	1 - 10	
Encourage redevelopment/infill development on existing parcels.	Property Owners, Developers	N/A	1 - 10	
Create a Marshall Township Improvement Fund in the budget.	Property Owners, Developers, DCED	Township	1 - 10	
GOAL: Promote Economic Development in the Township.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Work with Tech 21-Partners and CB Richard Ellis to develop the Tech 21 property.	Tech 21, CB Richard Ellis	N/A	1 - 10	
Work with RIDC to promote buildout of Thorn Hill Industrial Park.	RIDC	N/A	1 - 10	

Natural Resources				
GOAL: Balance the protection of Marshall Township's natural resources with demands for economic growth and development.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Create a zoning ordinance that allows for flexibility to preserve the Township's natural resources.	Consultant, Planning Commission	Township	1 - 3	
Incorporate LEED standards for the construction of energy-efficient buildings in the updated Township ordinances.	Consultant, Planning Commission	Township	1 - 3	
Incorporate LEED standards for neighborhood design in the updated Township ordinances.	Consultant, Planning Commission	Township	1 - 3	
Use available sources (Allegheny County, SPC) to keep natural resource data complete and up to date.	Allegheny County, SPC, Consultant	Township, Alternative sources may be available depending on the project.	1 - 10	
GOAL: Improve areas prone to flooding.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Create buffers around streams.	Residents, Consultants	DCNR, Township	1 - 10	
Maintain clear floodways.	Residents	N/A	1 - 10	
Evaluate new technology and methods for stormwater management.	Engineer, Consultants	N/A, Township	1 - 10	
Adopt clear and concise floodplain regulations.	Consultant	Township	1 - 3	
Continue to participate in FEMA National Flood Insurance Program.	FEMA	N/A	1 - 10	
GOAL: Enhance aesthetics of the Township by making waterways and natural resources accessible, attractive, enjoyable, and useful for residents.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Establish park/open space corridors surrounding waterways.	Consultant, Watershed Association, Parks and Recreation Advisory Board	DCNR, Township	1 - 10	
Establish public conservation areas within the Township.	Consultant, Watershed Association, Parks and Recreation Advisory Board	DCNR, Township	1 - 10	

Land Use				
GOAL: Ensure that future land use ordinances are flexible, thorough, and well-administered.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Adopt a clear, concise, and flexible zoning ordinance.	Consultant, Planning Commission, Solicitor, Township Engineer	Township	1 - 3	
Ensure proper staffing.	N/A	Township	1 - 10	
Encourage staff training and networking.	Training Organizations	Township	1 - 10	
GOAL: Encourage future development in a managed and thoughtful fashion.				
Objectives	Potential Partners	Funding Sources	Time Frame (Years)	Status of Implementation
Adopt a clear, concise, and flexible zoning ordinance.	Consultant, Planning Commission, Solicitor, Township Engineer	Township	1 - 3	
Work closely with future developers.	Developers	N/A	1 - 10	
Implement the Township's Future Land Use Plan.	Developers, Consultants, Residents, Planning Commission	Township	1 - 10	
Adopt a zoning map that reflects the Comprehensive Plan.	Consultant, Planning Commission, Solicitor, Township Engineer	Township	1 - 3	

Funding Sources & Technical Assistance Support		
Grant/Agency/Support	Contact Information	Description and Eligibility
Army Corps of Engineers	U.S. Army Corps of Engineers Pittsburgh District 2032 William S. Morehead Federal Building 1000 Liberty Avenue Pittsburgh, PA 15222-4186 Phone: 412-395-7500 FAX: 412-644-2811	Technical and management expertise, emphasizing governmental responsibilities while working in partnership with our clients and private industry on projects that include water and land-related natural resources, engineering, facility design, disaster relief, environmental restoration, and management.
Community-Based Restoration Program (CRP)	U.S. Department of Commerce National Oceanic and Atmospheric Administration Office of Habitat Conservation, FHC3 1315 East-West Highway, Silver Springs, MD 20910 310-713-0174	Provides funds for small-scale, locally driven habitat restoration projects that foster natural resource stewardship within communities.
Department of Community and Economic Development-Community Revitalization Grant Program	DCED Customer Service 1-800-379-7448	Grants and technical assistance.
Department of Community and Economic Development-Land Use and Technical Assistance Program	DCED Customer Service 1-800-379-7448	Grants and technical assistance.
Downtown Research & Development Center	28 West 25 th Street, 8 th Floor New York, NY 10010 Phone: 212-228-0246 FAX: 212-228-0376 www.downtowndevelopment.com	Technical assistance.
EMS Operating Funds (EMSOF)	Division of Emergency Medical Services, Department of Health 717-787-8740	Provide funding to maintain, develop, and improve the quality of the EMS system in Pennsylvania.
Environmental Protection Agency Superfund	Superfund Hotline 800-424-9346	A federal agency that provides reimbursement program for emergency services that respond to Haz-Mat incidents.
Federal Emergency Management Agency	500 C Street SW Washington, D.C. 20472 Phone: 202-566-1600 www.fema.gov	Technical assistance and funding.

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
Federal Property Reimbursement Program	United States Fire Administration, Emmitsburg, MD 1-800-238-3358	Assists local emergency organizations to determine if they are eligible for reimbursement of expenses incurred while providing services on federal property.
Federal Surplus Property Program	Federal Surplus Property Program 1-800-235-1555	Provides available federal surplus equipment/items to municipalities.
Governor's Center for Local Government Services	1-888-223-6837	Technical assistance and funding.
Pennsylvania State Association of Township Supervisors	Phone: 717-763-0930 FAX: 717-763-9732	PA State Association of Township Supervisors offers various support services and publications regarding training, grants and loans.
International Society of Arboriculture	http://www.isa-arbor.org	Information to assist with landscaping/tree plantings.

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
Local Government Academy	800 Allegheny Avenue, Suite 402 Pittsburgh, PA 15233 Phone: 412-237-3171 FAX: 412-237-3139	Serving all of Southwestern Pennsylvania, the Local Government Academy's purpose is to promote excellence in government by providing educational opportunities to assist public officials, employees, and citizens in effectively meeting the needs of their communities; to develop in elected officials the skills needed for effective leadership and responsible policy making. To develop in public employees the skills needed for professional management, supervision, and the efficient and effective delivery of public services; to promote, wherever possible, the concepts and methods of intergovernmental cooperation including resource sharing and coordinated planning; and to achieve these objectives by working with elected officials, public employees, educational institutions and government agencies in the design and delivery of its educational programs.
Local Government Capital Projects Loan Program	Sharon Grau at 1-888-223-6837 or email sgrau@state.pa.us	Provides low-interest loans for the equipment and facility needs for small local governments. (Local governments with populations of 12,000 or less).

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
National Telecommunications and Information Administration, U.S. Department of Commerce	Technology Opportunities Program, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue, NW, HCHB, Room 4096, Washington, DC 20230;	As an agency of the U.S. Department of Commerce, NTIA is the Executive Branch's principal voice on domestic and international telecommunications and information technology issues. NTIA works to spur innovation, encourage competition, help create jobs and support policies that provide consumers with more choices and better quality telecommunications and information technology applications for the provision of "educational, health care, or public information" in the nation's public and nonprofit sectors.
PA Cleanways	105 West Fourth Street Greensburg, PA 15601 724-836-4121	A nonprofit organization that helps communities take action against illegal dumping and littering.
Pennsylvania Department of Conservation and Natural Resources	Pennsylvania Department of Conservation and Natural Resources PO Box 8475 Harrisburg, PA 17105 717-787-7672	The Community Conservation Partnerships Program is a combination of several funding sources and grant programs: the Commonwealth's Keystone Recreation, Park and Conservation Fund (Key 93), the Environmental Stewardship and Watershed Protection Act (Growing Greener), and Act 68 Snowmobile and ATV Trails Fund. The program also includes federal funding from the Land and Water Conservation Fund (LWCF) and the Recreational Trails component of the Transportation Equity Act for the 21st Century (TEA-21).
Pennsylvania Game Commission	Southwest Region 4820 Route 711 Bolivar, PA 15923 Phone: 724-238-9523 www.pgc.state.pa.us	Technical assistance.

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
Pennsylvania Department of Environmental Protection	Growing Greener: Environmental Stewardship and Watershed Protection Act 1-877-PAGREEN or www.dep.state.us	Funding to clean up abandoned mines, restore watersheds, and provide new and upgraded water and sewer systems.
Pennsylvania Department of Environmental Protection	Source Water Protection Grant Program Bureau of Watershed Management 717-787-5259	Grants for the start-up and development of local, voluntary source water protection programs.
Pennsylvania Department of Environmental Protection	Nonpoint Source Pollution Control Bureau of Watershed Management 717-787-5259	Funding for projects that restore or protect impaired waters through education, monitoring, or practices to control or reduce nonpoint sources of pollution.
Pennsylvania Department of Environmental Protection	Stream Improvement Program Bureau of Waterways Engineering 717-787-3411	State-provided design and construction projects to eliminate imminent threats due to flooding and stream bank erosion.
Pennsylvania Department of Environmental Protection	Stormwater Management Program Bureau of Watershed Management 717-772-5661	Grants and technical assistance for planning and implementing stormwater control.
Pennsylvania Fish and Boat Commission	www.fish.state.pa.us	Technical assistance.
PENNDOT District 11-0	PA Department of Transportation District 11-0 51 Fox Chapel Road Pittsburgh, PA 15238 412-781-3260	Technical assistance.
Pennsylvania Infrastructure Investment Authority (PENNVEST)	717-783-6798 www.penn-vest.state.pa.us	Provides low-interest loans for the design and engineering of drinking water, wastewater, and stormwater infrastructure projects.
PENNVEST	Terri Dickow, training coordinator, PA Association of Boroughs, at 1-800-232-7722 or email tdickow@boroughs.org	Provides low-interest loans and grants for new construction or for improvements to publicly or privately owned drinking water or sewage treatment facilities. Pennvest can also fund municipally owned stormwater management systems.

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
Port Authority of Allegheny County	345 Sixth Avenue 3rd Floor Pittsburgh, PA 15222-2527 Phone: 412-442-2000 www.portauthority.org	Technical assistance.
Regional Industrial Development Corporation of Southwestern Pennsylvania	425 Sixth Avenue, Suite 500 Pittsburgh, PA 15219-1822 Phone: 412-471-3939 www.ridc.org	Technical assistance.
Section 902 Grants	PA DEP Regional Planning and Recycling Coordinators - Southwest Region Sharon Svitek, Stephen Sales, Bob Emmert 412-442-4000	Grants for recycling program implementation. Funding is also available to all municipalities and counties for a wide spectrum of equipment, containers, and educational outreach.
Section 904 Recycling Performance Grants	PA DEP Regional Planning and Recycling Coordinators - Southwest Region Sharon Svitek, Stephen Sales, Bob Emmert 412-442-4001	Grants are awarded to provide incentives to counties and municipalities, awarding more money for more successful recycling programs.
Shared Municipal Services	Fred Redding at 1-888-223-6837 or email fredredding@state.pa.us	Provides grant funds to promote cooperation among municipalities, two or more local governments, or Councils of Governments (COGs).
South Western Pennsylvania Commission	425 Sixth Avenue, Suite 2500 Pittsburgh, PA 15219-1852 Phone: (412) 391-5590 www.spc9.org	Technical assistance and funding.
State Surplus Property Program	State Surplus Property Program 717-787-4083	Used equipment available to local governments and volunteer fire companies.
State Wildlife Program (Non-Tribal)	U.S. Fish and Wildlife Service (USFWS) State Wildlife Grant (SWG)	Provides grants to states, territories, and D.C. for wildlife conservation.

Funding Sources & Technical Assistance Support - Continued		
Grant/Agency/Support	Contact Information	Description and Eligibility
Trans Associates Engineering Consultants, Inc.	Twin Towers, Suite 400 4955 Steubenville Pike Pittsburgh, PA 15205 Phone: 412-490-0630 www.transassociates.com	Technical assistance.
The Pennsylvania Historic and Museum Commission	Rehabilitation Investment Tax Credit 1-800-201-3231 www.phmc.state.pa.us	Tax program that encourages private investment in rehabilitating historic properties.
Volunteer Firefighter's Relief Associations	Auditor General's Office 717-787-1308	Technical assistance.
Volunteer Loan Assistance Program (2% loan program)	State Fire Commissioner's Office 1-800-670-3473	Finances new and used equipment and structures for ambulance and fire companies.
Water Resources Education Network	Sherene Hess League of Women Voters 724-465-2595	Grants for education of the public on protecting watersheds and public drinking water supplies.
Western Pennsylvania Field Institute	304 Forbes Avenue, 2 nd Floor Pittsburgh, PA 15222 412-255-0564	Nonprofit organization dedicated to making the outdoor recreation community a vibrant centerpiece of this region.
Western Pennsylvania Watershed Protection Program	John Dawes 814-669-4847	Match funding for the preservation and restoration of water resources and watersheds.

Appendices

Appendix 1 - Survey

Marshall Township Comprehensive Plan Public Input Survey

HOW DO YOU DEFINE QUALITY OF LIFE?

1. When choosing a place to live, what factors play the biggest role in making that place seem desirable to you? Please indicate by putting a check in the blank of the factors most important to you.

	Number of Responses	Response Ratio
Close to Hometown	14	9%
Close to Family	54	35%
Close to Friends	27	18%
Close to Cultural Activities	42	27%
Close to Entertainment	24	16%
Close to Parks/Playgrounds	49	32%
Close to Employment	67	44%
Close to Shopping	60	39%
Public Transportation Available	11	7%
Quality Housing Available	87	57%
Affordability of Housing	43	28%
Close to Schools K-12	26	17%
In a High-Quality School District	95	62%
Good Air/Water Quality	61	40%
Low Crime Rate	131	86%
Affordable Cost of Living	67	37%
Low Local Tax Rates	64	42%
Other, Please Specify	27	18%

2. The things I like MOST about Marshall Township are: (Rate the choices with 1 being the most important and 4 the least important)

The top percentage indicates total respondent ratio; the bottom number represents actual number of respondents selecting the option

	1	2	3	4
	Most Important			Least Important
1. Location	70%	20%	6%	4%
	97	28	8	6
2. Availability of Recreation	8%	30%	28%	24%
	8	29	37	23
3. Availability of Jobs	4%	23%	37%	37%
	3	19	30	30
4. Appearance	51%	26%	13%	10%
	59	30	15	11
5. Road Network	21%	48%	18%	12%
	19	43	16	11
6. Environmental and Natural Features	47%	34%	13%	6%
	61	44	17	8
7. Community Services	14%	40%	32%	15%
	12	35	28	13
8. Housing	36%	42%	12%	10%
	36	42	12	10
9. Special Events	5%	28%	35%	33%
	4	22	28	26
10. School District	54%	20%	12%	13%
	66	25	15	16
11. Character	42%	35%	9%	14%
	40	34	9	13
12. Other	36%	27%	16%	22%
	16	12	7	10

3. The things I like LEAST about Marshall Township are: (Rate the choices with 1 being the most important and 4 the least important)

The top percentage indicates total respondent ratio; the bottom number represents actual number of respondents selecting the option

	1	2	3	4
	Most Important			Least Important
1. Location	13%	18%	13%	56%
	7	10	7	31
2. Availability of Recreation	22%	30%	25%	22%
	15	20	17	15
3. Availability of Jobs	25%	29%	19%	27%
	16	18	12	17
4. Appearance	10%	25%	29%	37%
	5	13	15	19
5. Road Network	24%	29%	33%	14%
	18	22	25	11
6. Environmental and Natural Features	17%	25%	19%	38%
	9	13	10	20
7. Community Services	18%	32%	34%	15%
	12	21	22	10
8. Housing	14%	37%	31%	18%
	7	18	15	9
9. Special Events	9%	26%	38%	26%
	6	17	25	17
10. School District	15%	28%	17%	41%
	8	15	9	22
11. Character	13%	28%	33%	26%
	7	15	18	14
12. Other	56%	16%	11%	17%
	36	10	7	11

4. What additional comments do you have regarding the most or least valuable qualities of Marshall Township?

 119 responses

WHAT NEEDS TO BE DONE TO IMPROVE THE QUALITY OF LIFE IN MARSHALL TOWNSHIP?

5. What type of development would you like to see in Marshall Township? Please indicate by placing a check mark in the blank.

The top percentage indicates total respondent ratio; the bottom number represents actual number of respondents selecting the option

	1	2
	More	Less
1. Parks and Open Space	93% 123	7% 9
2. Community Center	66% 81	34% 41
3. Small 1-2 Story Shops or Restaurants	58% 75	42% 55
4. Large Shopping Center	10% 12	90% 114
5. Grocery Stores	31% 36	69% 81
6. High-Rise Apartment or Commercial Buildings	5% 7	95% 122
7. Industrial Parks	15% 17	85% 97
8. Small Houses (1-3 BR)	58% 66	42% 48
9. Large Houses (4 + BR)	44% 6	56% 17
10. Townhouses/Condominiums	24% 27	76% 87
11. Other	51% 27	49% 26

HOW DOES MARSHALL TOWNSHIP MEASURE UP TO YOUR DESIRED QUALITY OF LIFE?

6. How satisfied are you with the current status of the following items in Marshall Township? For each item, please mark as follows:

The top percentage indicates total respondent ratio; the bottom number represents actual number of respondents selecting the option

	1	2	3
	Not Satisfied	No Opinion	Satisfied
1. Air Quality	3%	7%	90%
	5	10	130
2. Water Quality	8%	13%	80%
	11	18	114
3. Availability of Recreational Opportunities	20%	26%	54%
	29	37	76
4. Library	27%	34%	40%
	38	48	57
5. Road and Facility Maintenance	18%	13%	68%
	26	19	96
6. Emergency Services	4%	29%	67%
	5	41	95
7. Availability of Public Transportation	22%	52%	26%
	31	75	37
8. Quality and Affordability of Housing	14%	24%	62%
	20	33	87
9. Local Tax Rates	38%	19%	43%
	54	27	62
10. Crime Rates	3%	7%	90%
	4	10	129
11. Degree of Racial Harmony	7%	44%	49%
	10	61	69
12. Non-Residential Development	28%	32%	41%
	38	44	56
13. School District	11%	14%	75%
	16	20	106
14. Other	16%	50%	34%
	6	19	13

7. Please rank the priority you believe should be given to funding for each of the following activities (since funding is limited, please do not check High for all activities):

The top percentage indicates total respondent ratio; the bottom number represents actual number of respondents selecting the option

	1	2	3
	High	Medium	Low
1. Road/Bridge Maintenance	52% 73	44% 61	4% 6
2. Safety Improvements for Existing Roads/Intersections, etc.	52% 74	41% 59	7% 10
3. Public Facilities (buildings, garages, community center, etc.)	26% 35	40% 55	34% 46
4. Traffic Flow Improvements on Existing Road	44% 61	44% 62	12% 17
5. Pedestrian Improvements (trails/sidewalks)	41% 57	37% 52	22% 31
6. Bicycle Improvements (dedicated trails/bike lanes)	35% 49	35% 49	29% 41
7. New Road Construction	9% 12	31% 41	60% 81
8. New Public Transportation Options	20% 28	29% 40	51% 72
9. Other	35% 17	33% 16	31% 15

DEMOGRAPHIC INFORMATION (for the following questions, please only provide information for the individual completing this survey)

8. AGE

		Number of Responses	Response Ratio
Under 20		0	0%
20-24		0	0%
25-34		12	8%
35-44		48	33%
45-54		44	30%
55-64		28	19%
65-75		10	7%
74+		5	3%
Total:		147	100%

9. Gender

		Number of Responses	Response Ratio
Male		70	49%
Female		73	51%
Total:		143	100%

10. Years Lived in Marshall Township

		Number of Responses	Response Ratio
Less than 5 Years		31	21%
5 to 9 Years		40	28%
10 to 14 Years		28	19%
15 to 19 Years		23	16%
20+ Years		12	16%
Total:		145	100%

11. Highest Level of Education Completed

		Number of Responses	Response Ratio
Less than 9th Grade		0	0%
9th to 12th Grade, No Diploma		0	0%
High School Diploma or GED		9	6%
Some College, No Degree		16	11%
Associates Degree		21	14%
Bachelors Degree		31	21%
Masters Degree		43	30%
Doctorate Degree		13	9%
Professional Degree		12	8%
Total:		145	100%

12. Number of People in your Household

144 Responses

13. Current Employment Status (choose the ONE most applicable)

		Number of Responses	Response Ratio
Self-Employed		21	14%
Part-Time		12	8%
Unemployed		3	2%
Student		0	0%
Full-Time		70	48%
Homemaker		23	16%
Retired		18	12%
On Disability		0	0%
Total:		147	100%

14. Occupation (choose the ONE most applicable)

		Number of Responses	Response Ratio
Management, professional, and related occupations		101	84%
Service occupations; sales and office occupations		17	14%
Farming, fishing, and forestry occupations		0	0%
Construction, extraction, and maintenance occupations		2	2%
Production, transportation, and material moving occupation		0	0%
	Total:	120	100%

15. Name and Address (optional)

 63 Responses

16. Email Address (optional)

 37 Responses

Thank you for taking the time to complete this survey.

Number of People in your Household

#	Response	#	Response	#	Response	#	Response	#	Response
1	3	31	one	61	2	91	4	121	4
2	2	32	4	62	3	92	1	122	4
3	5	33	5	63	2	93	5	123	2
4	2	34	3	64	4	94	5	124	4
5	4	35	2	65	3	95	4	125	5
6	3	36	3	66	2	96	2	126	6
7	2	37	4	67	1	97	2	127	6
8	2	38	4	68	4	98	4	128	4
9	3	39	4	69	7	99	5	129	2
10	2	40	5	70	2	100	2	130	4
11	2	41	5	71	4	101	4	131	4
12	2	42	5	72	2	102	5	132	2
13	4	43	4	73	2	103	4	133	4
14	2	44	2	74	5	104	4	134	4
15	3	45	2	75	4	105	4	135	4
16	2	46	2	76	3	106	2	136	4
17	4	47	5	77	5	107	4	137	5
18	6	48	3	78	4	108	2	138	4
19	4	49	2	79	5	109	3	139	four
20	4	50	5	80	3	110	6	140	7
21	5	51	4	81	5	111	6	141	2
22	5	52	2	82	2	112	4	142	7
23	4	53	2	83	2	113	5	143	4
24	5	54	5	84	4	114	5	144	3
25	1	55	5	85	4	115	two		
26	4	56	5	86	2	116	4		
27	4	57	2	87	4	117	4		
28	2	58	3	88	2	118	2		
29	1	59	4	89	2	119	5		
30	2	60	1	90	3	120	3		

Appendix 2 - SWOT Results

STRENGTHS

1. Location/Accessibility - 15
2. Unique Character: Picturesque, farm markets, diversity with development - 13
3. “Smart” Growth/Open Space Quality Development (Res.) - 12
4. Schools - 11
5. Unique Environmental Character - Topography/open space/headwaters - 7
6. Well-managed Local Government: Services/recreation/etc./police - 2
7. Community Interaction - 0

WEAKNESSES

1. Poorly written ordinances - 16
2. Lack of community feel due to inadequate facilities and programs - 13
3. Lack of promoting assets of Township leading to lack of identity - 10
4. Stagnated growth as a result of topography sanitation/water availability in Western part of Township - 8
5. Location - Development pressures in north and south - 8
6. Lack of dining and entertainment options within Township - 4
7. Lack of Municipal cooperation – Integrating Administrative Services - 1
8. Form of government, i.e., election of tax collector - 0
9. Lack of vision for Brush Creek area - 0

OPPORTUNITIES

1. Development of: Warrendale, Post Office, mom & pop stores, neighborhood restaurant, and library branch children activities - 20
2. Extend/Improve environmental protection/land trust - 11
3. Establish identity - 9
4. Market for “empty nesters” and starters - 6
5. Comprehensive Plan - 5
6. Multi-municipal planning - 4
7. “Mixed Use” development: Tech 21/THIP - 2
8. Improvement of services, i.e., sewers, public transportation, and unique recreation - 1
9. Take advantage of highway/interstate access - 0

THREATS

1. Sewer throughout Township - 16
2. Traffic - 11
3. Low-quality development, i.e., Tech 21 and Ryan/Maronda homes - 6
4. Growth (within and neighbors) - 6
5. Negative attitude toward new development - 5
6. Taxes - 2
7. Allow flexible land-use tools, timing of new ordinances, land-use management/well-administered - 2
8. Imminent development/Consider longtime residents concerns - 1
9. Decrease in housing values - 1
10. Water/sewers in west - 0
11. Lack of volunteers for Fire Department - 0
12. Burden of services on local government - 0
13. Interrelations of local government - 0

Appendix 3 - CIE Results

Please rank each of the following with **1** being the **least** important to you and **5** being the **most** important.

1. Efforts should be made to preserve the following resources		
<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
1a	4.31	Woodlands/Open Space
1b	4.05	Open Space
1c	3.68	Wetland
1d	3.31	Steep Slopes
1e	4.10	Farms



2. The following issues should be addressed by municipal officials		
<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
2a	3.89	Traffic
2b	4.15	Dumping
2c	3.89	Erosion
2d	2.84	Property Maintenance

3. Municipal officials should encourage the following development		
<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
3a	3.72	Commercial with landscaping
3b	2.68	Bed & Breakfast
3c	2.84	Estate lots
3d	3.68	Conservation Subdivision
3e	2.10	PRD
3f	2.38	Industrial Parks
3g	1.94	Strip Commercial
3h	2.35	Office
3i	3.66	Mixed use with streetscape improvements
3j	3.00	Transit-oriented developments





6. Officials should encourage the following types of housing

<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
6a	4.16	Single-Family Residential
6b	2.55	Mixed Use (Residential/Commercial)
6c	2.21	Duplex
6d	2.38	Townhomes
6e	1.83	Apartments
6f	2.94	Senior Housing
6g	1.26	Mobile Home Parks



7. We need the following facilities to support the development of the following municipal facilities

<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
7a	2.89	Community Center
7b	2.84	Community Playground
7c	2.78	Paved Trails
7d	2.73	Sports Fields
7e	1.66	Fishing Spots
7f	2.15	Amphitheatre
7g	1.89	Swimming Pool
7h	2.05	Tennis Courts
7i	1.38	Skate Park
7j	1.50	Dek Hockey

8. The following services should be improved

<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
8a	3.58	Library
8b	2.82	Street Maintenance
8c	2.05	Schools
8d	3.05	Sewer
8e	2.94	Recycling
8f	2.70	Fire
8g	2.61	Garbage
8h	2.61	Water
8i	1.72	Cable
8j	2.16	Administration
8k	2.29	EMS
8l	2.17	Gas
8m	2.23	Electric
8n	2.23	Police



9. The following improvements are needed in the CBD

<u>Slide #</u>	<u>Rank</u>	<u>Title</u>
9a	3.94	Building Façade
9b	4.05	Landscaping
9c	3.88	Street Trees
9d	3.33	Gateway (landscaped)
9e	3.27	Street Lighting
9f	2.47	Community Banners
9g	2.88	Street Furniture



Appendix 4 - Goals

Goals

History and Community Character Goals:

1. Maintain the unique character of Marshall Township. - 36
2. Increase awareness of the Township's unique identity. - 10

Community Facilities & Services:

1. Provide high-quality water and sanitary sewer to all of Marshall Township. - 19
2. Continue to work cooperatively with neighboring communities and the North Hills Council of Governments to provide municipal services. - 19
3. Be prepared to meet higher levels of demand for services (public safety, education, etc.) by Marshall Township residents. - 12

Parks, Recreation, and Open Space:

1. Continue to provide a variety of park, recreation, and open space options to Marshall Township residents.

Transportation:

1. Improve operation of Marshall Township transportation network to enhance traffic circulation and safety within the Township. - 17
2. Improve pedestrian and bicycle circulation and safety within the Township. - 15
3. Improve public transportation access in Marshall Township in a manner consistent with the Township's character. - 11

Housing:

1. Maintain quality housing stock to service all current and future Marshall Township residents. - 5
2. Encourage quality and diversity of future housing stock. - 7

Economic Development:

1. Revitalize Marshall Township's Central Business District to a thriving Commercial Center. - 18
2. Promote economic development in the Township.

Natural Resources:

1. Balance the protection of Marshall Township’s natural resources and demands for economic growth and development. - 22
2. Improve areas prone to flooding. - 3
3. Enhance the aesthetics of the Township by making waterways and natural resources accessible, attractive, useful, and enjoyable for the residents. - 8

Land Use:

1. Ensure that future land use ordinances are flexible, thorough, and well-administered. - 28
2. Encourage future development in a managed and thoughtful fashion. - 11

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