

COMPREHENSIVE PLAN

WEST SHENANGO TOWNSHIP CRAWFORD COUNTY, PENNSYLVANIA

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RESOLUTION
OF THE BOARD OF TOWNSHIP SUPERVISORS OF
WEST SHENANGO TOWNSHIP, CRAWFORD COUNTY, PA.

WHEREAS, the West Shenango Township Planning Commission has been created to consider, among other things, long range plans for the growth and development of the Township; and

WHEREAS, the Planning Commission has used the services of the Crawford County Planning Commission staff and various studies, surveys and analyses of the Township have been completed and discussed in public meetings and a series of Township development objectives and policies have been formulated by the Planning Commission; and

WHEREAS, plans and policies affecting the future of West Shenango Township have been developed and adopted for recommendation by the Planning Commission to this Board; and

WHEREAS, the West Shenango Township Supervisors have been represented at the regular meetings of the Planning Commission through the course of the preparation of a comprehensive plan; and

WHEREAS, this Board has reviewed and approved the Background Information; the Regional Context; the Population Forecasts; the Plan Objectives, Policies, Projects and Programs for future land use, roads, community facilities and services, and housing, the Existing Land Use map and the Land Use Plan map; and

WHEREAS, it is the responsibility of the Township Supervisors to exercise foresight in guiding the affairs of the Township; and

WHEREAS, it is in the best interests of the Township to establish policies for management of its growth and development; and

WHEREAS, a public hearing was held on September 24, 1979 on a Comprehensive Plan of West Shenango Township and the results of that public hearing provided to the Board;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF WEST SHENANGO TOWNSHIP, CRAWFORD COUNTY, PENNSYLVANIA;

That the document, Comprehensive Plan of West Shenango Township dated June, 1979, shall be the guide for the future development of West Shenango Township, including the Existing Use and Land Use Plan maps and related maps.

ADOPTED THIS 1st DAY OF October, 1979

ATTEST:

Robert J. Valesky
Robert J. Valesky, Chairman
West Shenango Township
Board of Supervisors

Sandra E. Royal
Sandra E. Royal, Secretary
West Shenango Township
Board of Supervisors

Thomas L. Mowery
Thomas L. Mowery, Supervisor

John D. Dannible
John D. Dannible, Supervisor



COMPREHENSIVE PLAN WEST SHENANGO TOWNSHIP

CRAWFORD COUNTY, PENNSYLVANIA
CYCLE ONE - JUNE, 1979

This plan was prepared under the policy guidance of the West Shenango Township Planning Commission. The Commission's membership is as follows:

Joseph Palmiter, Chairman
Olwen Markulin, Secretary
John Dannible
Janet Floch
Steve Markulin
Kenneth Rapp

The plan was authorized for preparation by the Board of Township Supervisors of West Shenango Township:

Robert J. Valesky, Chairman
John Dannible
Thomas L. Mowery
Sandra E. Royal, Secretary

Preparation of this document was financed in a substantial way through a grant from the Appalachian Regional Commission.

Technical assistance was provided West Shenango Township by the staff of the Crawford County Planning Commission. Staff members participating in the work were as follows:

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Frank A. Ciarochi*,	Branch Office Director
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Lois J. May,	Secretary
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* Frank A. Ciarochi resigned during the planning period.

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INTRODUCTION

Spurred by U. S. Steel Corporation's proposal to build a fully integrated steel making facility at the shores of Lake Erie, the Appalachian Regional Commission (ARC) agreed to fund planning programs for six municipalities in Western Crawford County - enabling them to prepare for growth impacts expected to be generated by the development of this industrial complex. West Shenango Township was one of the six municipalities to request this assistance and, as such, this Plan represents the first formal effort to establish guidelines for the control of growth and development within the Township.

The planning grant provided by ARC was administered by the Northwest Pennsylvania Regional Planning and Development Commission (NRPDC), which also handled a regional transportation study in connection with the expected impacts of U. S. Steel's proposal. The grant was received locally by the Crawford County Planning Commission, whose staff acted as consultant to the West Shenango Planning Commission. Over the past year, the Planning Commission has collected and analyzed information related to socio-economic and environmental conditions, facility constraints, and opportunities and problems - working toward a plan which accurately reflects the needs of the community.

The report is named a cycle one plan because time was a major constraint in determining the scope of the study. Expecting a steel mill to be built in the near future, and the Township having no plan to guide growth, it was considered most important to digest basic facts about the Township and take stock of local values so as to determine what the residents really care about in terms of their Township's character. In short, it was most important to get a quick idea of what the Township's direction should be relative to potential growth impacts and establish an information base and policy guide to aid in local decision making. In addition, this plan sets the stage for more detailed, project oriented work in succeeding years - when the impacts from U. S. Steel and other developments can be more accurately assessed.

While the major purpose behind developing this plan was to prepare for U. S. Steel impacts, however, a substantial effort has also been made to address some of the adverse impacts which Pymatuning State Park has generated within the Township. Undoubtedly, had a study similar to this one been done when the Reservoir was proposed, we would not be facing some of the problems which exist today. Unlike some of the other municipalities planning for U. S. Steel, West Shenango has learned from the first-hand experience of not having adequate controls in place at the time the Park was developed - and can draw on this experience to benefit its future.

This plan is bound as it is, in a loose leaf notebook, so that it can be supplemented in future planning cycles. The report is divided into two areas; Background Information (containing analyses of existing conditions and data), and the Plan. Two maps of West Shenango are provided in the report's cover jacket; these maps display existing land use and the Land Use Plan. Many other large maps were completed during the planning process and are on file at the Township building and in the offices of the Crawford County Planning Commission. A list of these references appears in the Appendix.

For the reader who is not aware of West Shenango's location with respect to the balance of Crawford County and the surrounding region, a location map is provided on the following page.

HISTORIC PERSPECTIVE

On the petition of citizens of South Shenango Township to the Court of Quarter Sessions to divide the Township, land was surveyed early in 1863 for a new township to be called West Shenango. James Espy was appointed surveyor and Eliphalet Allen and R. S. McKay, viewers. With a slight alteration of the proposed boundaries, the new Township was approved and confirmed by the court on August 14, 1863, whereupon an election was ordered to be held at the Turnersville Schoolhouse to elect two township inspectors and a judge.

The new township contained 4,947 acres, making it the smallest township in Crawford County. The land surface was level, and the soil well adapted to the culture of fruit and grain. The Franklin Division of the Lake Shore and Michigan Southern Railroad passed through the Township in a northwest and southeast direction on what is today the Conrail right-of-way.

Many of the early settlers of the Township were actually residents of adjoining municipalities, who made the necessary settlements through tenants. Some of the early pioneers included Jeremiah Yoke, Andrew Betts, James French, Edward Hatton, Samuel Scott, John White, and Benjamin Snodgrass. Snodgrass was a settler through life and his descendants are still in the Township.

Andrew Betts operated a gristmill on his property as early as 1810. It was fed by a strong spring and did the grinding in that neighborhood for a number of years. He also owned a distillery in 1810, and a little later built a saw mill. Edward Hatton built a little corn-cracker on Hatton's Run, and kept it open for many years. Hatton was also one of the Township's earliest school teachers. Henry Difford and sons operated a cheese factory in the southwest part of the Township. Polly Moss, of Ohio, taught a school in the southwest portion of the Township around 1820. Schools were rare in early times and the children often attended schools in South Shenango.

State Line Methodist Episcopal Society was organized with fourteen members around 1819. The society first worshipped in a schoolhouse, and in 1851 constructed a church at a cost of \$1,100. This church was located adjacent to the church cemetery across the road from where the existing church, constructed in 1891, now stands.

In the 1880's, Turnersville was a little village of approximately twenty families. Its origin is due to David Turner, who entertained high hopes of speedily making it a place of importance. Adopting the suggestions of advisors, on the day of the public sale of lots around 1835, Turner procured a barrel of sugar and

a keg of whiskey for the entertainment of the attending crowd. Though the liquor was consumed, the lots were not sold, and in a year or two Turner left the area disposing of his property to Peter Doty and Israel Kuder.

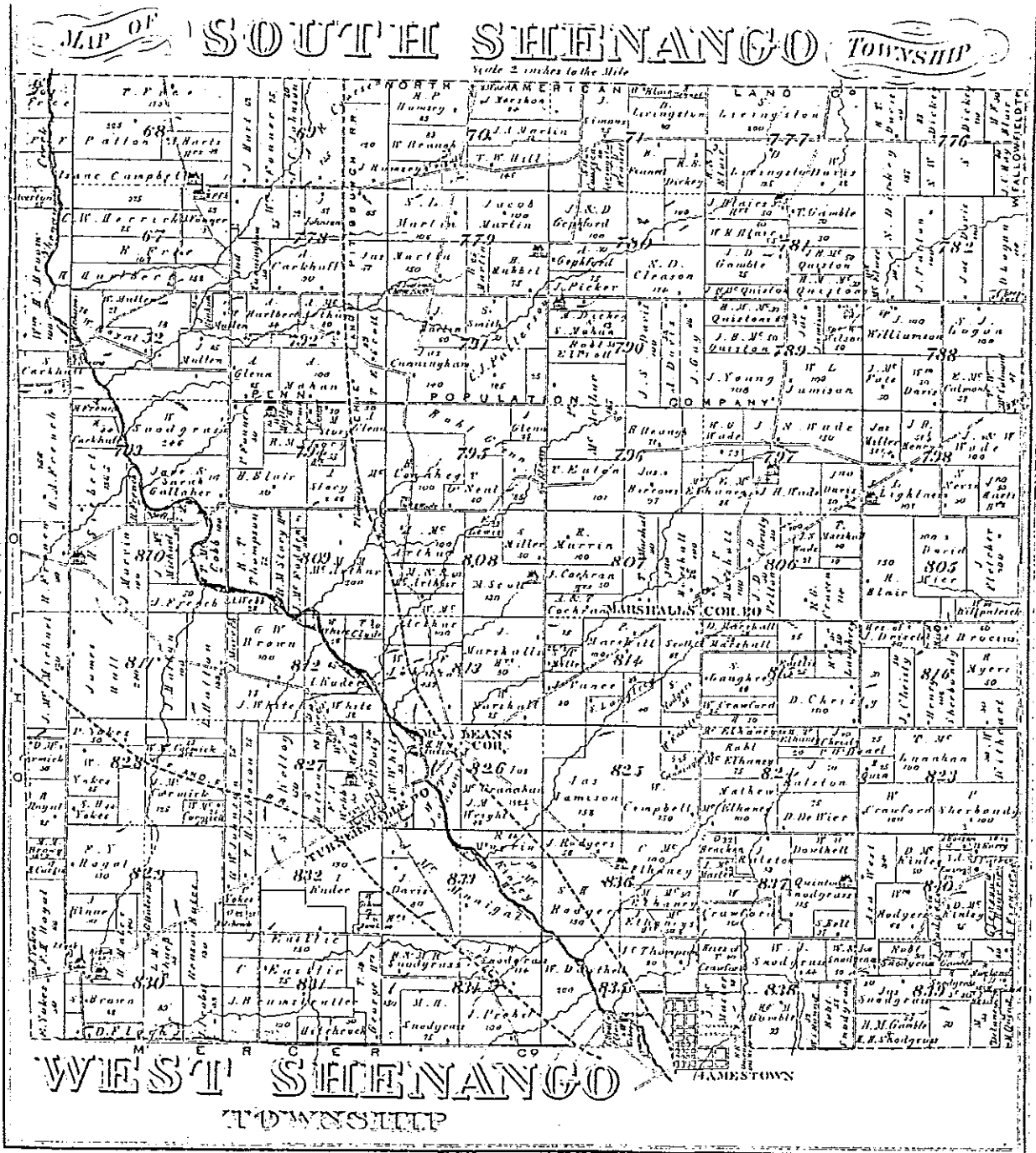
In 1885, the village contained one store, a hotel, one harness, one wagon and one blacksmith shop, a school, and a Methodist Protestant Church. Jesse Webb kept the first tavern; Charles Davis started the first store. Both Methodist Episcopal and Methodist Protestant were active at Turnersville, and in common built a schoolhouse and church where regular services of both branches were held, but in time both societies disbanded.¹

Shortly after the Civil War, in 1869, the General Assembly of Pennsylvania authorized a survey for the purpose of determining the feasibility of draining the Pymatuning Swamp. In subsequent acts, from 1911 through 1925, the Assembly approved the development of Pymatuning Reservoir, including the acquisition and clearing of land and the construction of a dam north of Jamestown. While the primary purpose of this project was to regulate the flow of water in the Shenango and Beaver Rivers, it also served to create one of the most unique recreational and wildlife habitats in the State. More important in terms of this Plan, however, is the impact which Pymatuning State Park has had on the type and extent of development in West Shenango Township. While detailed analyses of impacts on the Township's land use pattern will be provided in the next section, it is important to state here, from an historical perspective, that no other single factor has had nearly the influence on the development of West Shenango as that generated by the construction of Pymatuning Reservoir.

The map on the following page depicts West Shenango and South Shenango Townships as they appeared in 1876. This map is taken from an 1876 publication, entitled Combination Atlas Map of Crawford County, Pennsylvania, by Everts, Ensign and Everts.

¹NOTE: The historical facts in this narrative were compiled from History of Crawford County, Pennsylvania by R. C. Brown; Warner, Beers and Co., Chicago, Illinois, 1885.

FIGURE 2



EXISTING LAND USE

INTRODUCTION

The analysis of existing land use is a fundamental starting point for planning. The survey, mapping, and analysis of existing land use not only defines the existing land use pattern - it also exposes problems which exist and indicates the momentum of and trends in land development.

The pattern of development shown on the "Existing Land Use" map (contained in the cover jacket of this report) depicts the arrangement and distribution of human activity within West Shenango Township. The data displayed on this map is based upon a field survey conducted in September, 1978, and will be utilized in conjunction with data related to other man-made and natural features of the Township in developing the comprehensive plan. The categories of land use identified by the land use survey are as follows:

- Residential
- Vacant Subdivided Lot
- Public
- Semi-Public
- Agriculture
- Vacant Field
- Woodland and Brush
- Commercial
- Mixed Residential-Commercial
- State Park
- Recreation-Public and Private

LAND USE PATTERNS

As discussed in the Historic Perspective, the pattern of land use in West Shenango has been greatly influenced by the partial location of Pymatuning State Park within its boundaries. The Park, which was created when Pymatuning Dam was completed as a flood-control project, in 1934, has served to attract increasing numbers of visitors to its facilities over the years. Attendance at Pymatuning has quadrupled since the 1950's, ranking, statewide, second only to Presque Isle State Park in the total number of visitors which it attracts. In 1977, for example, attendance at Pymatuning was 4,107,672, compared with Presque Isle's 4,132,142 - actually less than a one percent margin.

In addition to occupying significant acreage within the Township, the Park has also had a large impact in terms of its attraction for seasonal home development. This type of dwelling is the second most prevalent in the Township accounting for approximately one-third of all residential structures in the community. These seasonal homes are, for the most part, located in allotments, or

subdivisions, which are situated north of the Conrail tracks in the vicinity of Turnersville. The only exception to this is the Frontier Acres Allotment - located south of the tracks, off of L. R. 20002. The remainder of the Township, south of the Conrail tracks, is occupied by rural residential and agricultural uses - with much of the land covered by woodlands and brush.

The following discussion summarizes the land use survey by each of the categories listed previously:

- Residential Residential uses in West Shenango include permanent residences, seasonal residences, mobile homes, farm complexes, and multiple family dwellings.

Major residential concentrations occur in the seven recorded allotments (subdivisions) which are located in the Turnersville area. The majority of the homes in allotments are seasonal residences, which have constituted the predominant form of development in West Shenango over the past four decades. These allotments contain a total of 981 lots, all of which were created to take advantage of the demand for seasonal homes generated by Pymatuning State Park. Today, however, there is a mixture of seasonal and year-round residences located in the allotments due primarily to the fact that many previously seasonal residents have retired and settled permanently in the area.

Table 1, entitled Allotment Characteristics, summarizes ownership and the extent of development within each allotment. As is indicated, 581 lots (59 percent of the total) have been purchased from the original subdividers, and 181 lots (18 percent) have been developed. The discussion of housing in the Township, which follows this section, will explore some of the reasons for this apparent lack of demand. Table 1 also indicates that, with the exception of the Holiday Park Allotment, there are no standard lot sizes within allotments. Rather, lots range from as small as 3500 square feet in the Sunset Acres allotment to over an acre in the West Bay allotment. Finally, the table indicates the number of year round, versus seasonal, residences in each allotment. As can be seen, approximately one third of all homes in allotments are occupied throughout the year.

Residential units which are located outside the allotments are primarily situated along the frontage of roads and are often associated with farm complexes. These rural residences are generally the oldest in the Township - with several having unique architectural design.

- Vacant Subdivided Lot Lots which have been subdivided but are not yet developed are included in this category. Primarily, these lots are located within the allotments.

TABLE 1
ALLOTMENT CHARACTERISTICS
WEST SHERANGO TOWNSHIP

Allotment	Total # Lots	# Vac.	# Dev.	Ownership Characteristics					Lots Purchased ¹ #	Year-round Residences	Average Lot Sizes	
				1 Lot	2 Lots	3 Lots	4 Lots	5 Lots				
Holiday Park	457	407	50	7	33	10	10	5	173	38 %	22	6,000 sq. ft.
Frontier Acres	202	161	41	13	26	4	4	6	137	68 %	8	Varies: 7,000 sq. ft.- 17,000 sq. ft.
Park Manor	81	70	11	9	3	-	-	-	15	19 %	5	Varies: 6,900 sq. ft.- 18,750 sq. ft.
Park View	38	19	19	5	5	1	2	1	36	95 %	5	Varies: 5,250 sq. ft.- 28,000 sq. ft.
Pyma Lake Terrace	68	48	20	8	10	-	3	1	45	66 %	4	Varies: 6,750 sq. ft.- 28,000 sq. ft.
Sunset Acres	61	54	7	2	7	1	1	-	29	48 %	0	Varies: 3,500 sq. ft.- 18,000 sq. ft.
West Bay	74	41	33	8	15	4	3	2	73	99 %	13	Varies: 4,000 sq. ft.- 1 Acre +
TOTALS	981	800	181	52	99	20	23	15	581	59 %	57	

¹ Assumes remainder to still be owned by original subdivider.

SOURCE: Field survey conducted September, 1978;
Crawford County Tax Assessment Records; and
West Shenango Township Planning Commission

- Public Structures and lands which are used for government or public functions are included in this classification. The only use identified in the Township as being public is the West Shenango Municipal Building on West Lake Road. Pymatuning State Park, which is owned by the public but used for recreation purposes, is included in its own category.
- Semi-Public This category includes those uses in West Shenango which, while not owned or maintained by any unit of government, are usually for general public use or group membership. The only use included in this category is the Stateline Methodist Church and Cemetery.
- Agriculture Lands within the Township which are currently being utilized for crop production or grazing. As mentioned earlier, this use occurs mostly south of the Conrail tracks, with substantial acreage along Bush and Countyline Roads.
- Vacant Field This category was utilized to identify land in the Township which is not being farmed at present, but which could, with proper management techniques, be put back into farm production.
- Woodlands and Brush Areas within the Township which are supporting trees or advanced brush growth are included in this category. In some instances, these areas were actively farmed in the past. In fact, some of the brush lands identified may actually be more appropriately classified as "poorly managed pasture land". Most areas, however, are probably in a transition to woodlands, due either to lack of use for a period of years or to their inaccessibility to farm machinery because of slope or other natural condition.
- Commercial This land use category identifies structures which are used solely for business and/or sales purposes. These uses are primarily scattered along U. S. 322 and occur in no significant concentrations. Included in the classification of commercial use are:
 - Dayton's Cottages
 - Fonner's Exxon Service & Trailer Park
 - Maple Grove
 - Richter's Store, Arco, and Cottages
 - Shanri-La Sales and Service
 - Shine's Grill
 - Walk and Putt
 - West Bay Cottages
 - West Bay Trailer Sales

- Mixed Residential - Commercial Where business and residential uses are combined within the same structure, this category was used. This includes:
 - Anchorage Restaurant
 - Nimel's Boat Sales
 - Our Place
 - Pymatuning Hotel
 - West Bay Boat Sales

- State Park This category encompasses the land holdings of Pymatuning State Park.

- Recreation - Public and Private This category was used to identify uses which provide recreational opportunities separate from those which are operated by the State Park. These uses include:
 - Century Boat Club
 - Pymatuning Outboard Motor Club
 - Pymatuning Yacht Club
 - Roll-On-In Campground and Cottages
 - Shangri-La Campground

LAND USE ACCOUNTS

Table 2, entitled Existing Land Use Accounts, details the total acreage in West Shenango devoted to each of the land use categories described above. As the table indicates, the largest single land use category in the Township is Pymatuning State Park, which accounts for approximately forty percent of the total area of West Shenango. Of this forty percent, however, seventeen percent is covered by water and twenty-three percent is land. The next largest use of land is agriculture, which consumes approximately twenty-six percent of Township land; followed by woodland and brush, which covers approximately twenty-four percent of the available land area. Consequently, approximately ninety percent of the Township is relatively open and undeveloped, with the remaining ten percent representing the developed area of the Township (i.e., residential, commercial).

TABLE 2
 EXISTING LAND USE ACCOUNTS - 1979
 WEST SHENANGO TOWNSHIP

USE CATEGORY	ACRES	SQUARE MILES	% OF TOTAL TOWNSHIP AREA
Residential	187	.29	3.2
Vacant Subdivided Lots	105	.16	1.7
Public	1	-	-
Semi-Public	3	-	.1
Agriculture	1,499	2.34	25.6
Vacant Fields	160	.25	2.7
Woodland & Brush	1,386	2.16	23.6
Commercial	14	.02	.2
Mixed Residential-Commercial	3	-	.1
State Park (land)	985	1.50	16.8
State Park (water)	1,367	2.10	23.4
Recreation (Public & Private)	15	.02	.3
SUBTOTAL	5,725	8.84	97.7
Public Roads	123	.19	2.1
Private Roads	9	.01	.2
TOTAL	5,857¹	9.04	100.0

SOURCE: Crawford County Planning Commission

¹NOTE: The total acreage figure in this table is the sum of all use categories taken from the Existing Land Use Map. A publication, entitled Crawford County Municipal Areas, indicates West Shenango Township's area to be 6,170 acres.

HOUSING

The discussion of housing in West Shenango focuses primarily upon the characteristics of homes within allotments, as these are where the largest concentration of housing occur - and where the largest number of housing problems exist - within the Township. Homes which are located in the rural areas of the community are, with few exceptions, very well kept (despite a wide range of ages) and pose no real problems for the Township.

Within allotments, however, the character of housing varies considerably, due primarily to the seasonal influence of Pymatuning State Park. As mentioned in the discussion of existing land use, there is a mixture of year-round and seasonally occupied residences within allotments. This "phenomenon", in and of itself, has created problems related to property upkeep - particularly where seasonal homes have been abandoned.

Also, as discussed earlier, there are 181 lots which have been developed within the seven allotments in the Township. These 181 lots represent only eighteen percent of all available subdivided lots, encompassing not only frame structures, but also mobile homes. The land use field survey, conducted in the fall of 1978, indicated that there were 308 homes in West Shenango. Consequently, almost two-thirds of the Township's housing stock is located within the allotments. Table 3, entitled Summary of Residential Land Uses, provides a breakdown by each type of residence (e.g., seasonal residential, mobile home) for North, South and West Shenango Townships. It should be noted that mobile homes were not differentiated in terms of seasonal versus year-round use. Consequently, it can be assumed that the actual number of seasonal residential units is higher than indicated.

TABLE 3
SUMMARY OF RESIDENTIAL LAND USES, 1978
NORTH, SOUTH AND WEST SHENANGO TOWNSHIPS

TYPE OF RESIDENCE	NORTH		SOUTH		WEST	
	#	%	#	%	#	%
Residential (Permanent)	267	18	222	17.3	103	33.4
Residential (Seasonal)	696	46	613	47.7	93	30.2
Residential (Mobile Home)	507	34	345	26.8	87	28.2
Residential (Farm Complex)	36	2	106	8.2	21	6.8
Residential (Multiple Family)	-		-		4	1.3
TOTAL	1506	100.	1286	100.0	308	100.0

NOTE: Percentages may not add due to rounding
SOURCE: CCPC Field Survey September, 1978

The Crawford County Comprehensive Plan indicated that, in 1970, there were 297 homes in the Township - fifty nine of which were seasonal residences. Comparing this information with the field survey, there have been only eleven new homes constructed in the Township over the past nine years - or an increase of 3.7 percent. In contrast, the housing growth rates in North and South Shenango were 50.8 percent and 39.9 percent respectively during the same time period.

The major limiting factor to the full development of the remaining available lots in West Shenango is the problem with soils which are unsuitable for on-lot septic systems. As poor soils are characteristic throughout the Township, only a public sewerage system (or private package treatment systems) would make the majority of available lots developable. Another contributing factor to the lack of development in the Township, however, is the uncared for appearance of many homes and areas within allotments. In subdivisions such as Frontier Acres and Sunset Acres, cottages and mobile homes have been vandalized and abandoned serving as health hazards and eyesores to existing and prospective residents. In addition, a sprinkling of junk cars and boats and the general mixture of mobile homes and frame structures serves to detract from the desirability of owning land in many areas.

Undoubtedly, many of the housing problems which the Township faces today are the result of its total inexperience in dealing with large scale development at the time Pymatuning Reservoir was completed. While the location of the State Park has certainly been an economic and recreational asset to the community, its impact in terms of its attraction for seasonal housing has been, at best, a mixed blessing. No development control ordinances were in effect at the time the reservoir was completed; and, as referred to in the introduction to this report, no planning program was undertaken to assist communities such as West Shenango in dealing with the impacts which were certain to come. Thus, the blame for today's conditions cannot be entirely placed upon West Shenango; rather, the "blame" is shared by the State, the County and the Township. With a lack of adequate control, private landholders who wished to subdivide and take advantage of the demand for vacation home property, did so with little regard for natural features - apparently seeking only to carve as many lots out of their land as they could. The result is a detriment to the beauty that attracted people in the first place.

In recent years, the Township has adopted a few development control ordinances, including a subdivision ordinance. However, the problem of enforcement of regulations is a very serious one. Because of West Shenango's size and population, it can hardly afford to pay a full time code enforcement officer in addition to its other established responsibilities. Consequently, the task of dealing responsibly with new development is a difficult one; much less dealing with problems which have been allowed to exist for years.

POPULATION

INTRODUCTION

The analysis of population trends, both past and present, is a very important part of the planning process for any community. Such an analysis not only provides additional insight into a community's history, but it also provides a basis for making assumptions about what the future population of the community might be. This section provides a description of historic trends in population within West Shenango, along with a comparison of future population estimates.

POPULATION TRENDS

As discussed earlier, West Shenango Township was established from a part of South Shenango in 1863. Table 4, entitled Total Population Trends, 1870-1970, provides a summary of population growth and decline within the Township for each decade since its creation. As shown on the Table, the Township's population increased slightly during the 1870's, and then declined steadily through the 1940's. It should be noted that this trend was typical throughout Crawford County for this same time period. Prior to 1870, growth county-wide was attributed to net in-migration. Yet, since 1870 - for more than a century - the county has experienced more out migration than in-migration. Certain factors, such as the industrial revolution, war, and the depression undoubtedly were responsible for much of the decline in population county-wide through the 1930's. In West Shenango, however, the population decline slowed in the 1930's and 1940's, reversing itself entirely prior to 1950. This total reversal is obviously attributable to the development of Pymatuning Reservoir in the early 30's, which generated a regional attraction for seasonal and year-round housing development. Thus, since 1940, West Shenango has departed from the county-wide trend of population decline, and has increased steadily to the present. The overall change from 1940 to 1970 is a net increase of 240 people, or a 130% increase in total population.

TABLE 4
TOTAL POPULATION TRENDS, 1870-1970
WEST SHENANGO TOWNSHIP

DECADE	TOTAL POPULATION	DIFFERENCE BETWEEN DECADES	
		NUMERICAL	PERCENT
1870	357	-	-
1880	361	+4	+1.1
1890	328	-33	-9.1
1900	277	-51	-15.5
1910	227	-50	-18.1
1920	202	-25	-11.0
1930	192	-10	-5.0
1940	184	-8	-4.2
1950	234	+50	+27.2
1960	321	+87	+37.2
1970	424	+103	+32.1

SOURCE: U. S. Census, 1870-1970

An indication that this growth trend is continuing is available through the Current Population Reports, "Population Estimates and Projections" (Series P-25, No. 686) published by the U. S. Bureau of the Census in 1977. This publication provides an estimate of the 1975 population of the Township as being 484. This would indicate a net increase of sixty residents - or a fourteen percent increase between 1970 and 1975. These estimates were based upon Federal Income Tax returns (to determine rates of migration), and also on birth and death rates (indices of natural growth).

POPULATION TRENDS IN THE PYMATUNING AREA

Table 5, Comparison of Population Trends, 1940-1970, Pymatuning Area, provides a comparison of population change for local municipalities in the general Pymatuning Area. This group of communities was identified as a County 'Sub-Area' in the Crawford County Comprehensive Plan, and includes North, South and West Shenango Townships, Conneaut and Pine Townships, and Linesville and Jamestown Boroughs. This table shows that the population increase which occurred in West Shenango as a result of Pymatuning Reservoir is similar to that which has been experienced by other municipalities in the Pymatuning Area.

TABLE 5
COMPARISON OF POPULATION TRENDS, 1940-1970
PYMATUNING AREA

MUNICIPALITY	1940 POPULATION	1950 POPULATION	% CHANGE 40-50	1960 POPULATION	% CHANGE 50-60	1970 POPULATION	% CHANGE 60-70	% CHANGE 40-70
North Shenango	488	511	+ 4.7	472	- 7.6	621	+31.6	+27.3
South Shenango	654	751	+14.8	898	+19.6	1,132	+26.1	+73.1
West Shenango	184	234	+27.2	321	+37.2	424	+32.1	+130.4
Conneaut	1,208	1,235	+ 2.2	1,295	+ 4.9	1,322	+ 2.1	+ 9.4
Pine	263	350	+33.1	327	- 6.6	392	+19.9	+49.0
Linesville	1,150	1,246	+ 8.3	1,255	+ .7	1,265	+ .8	+10.0
Jamestown	819	931	+13.7	897	- 3.7	937	+ 4.5	+14.4
TOTAL PYMATUNING AREA	4,766	5,258	+10.3	5,465	+ 3.9	6,093	+11.5	+27.8
CRAWFORD COUNTY	61,664	78,948	+10.2	77,956	- 1.3	81,342	+ 4.3	+13.5

SOURCE: U. S. Census, 1940-1970

As shown on the table, West Shenango had the highest growth rate over the thirty year period (130.4%). South Shenango had the second highest percentage growth rate (73.1%), yet had the highest numerical increase; increasing by 478 people between 1940 and 1970. The lowest growth rate occurred in Conneaut Township (9.4%).

The bottom rows of the table provide statistics for the total Pymatuning Area and for Crawford County. As can be seen, the growth rate for the Pymatuning Area during the thirty-year period is over twice that for the County (27.8% vs. 13.5%). Consequently, the Pymatuning Area is definitely a growth area within the County - accounting for approximately fourteen percent of all County growth during the period between 1940 and 1970.

AGE COMPOSITION

Table 6, entitled Population Distribution by Age and Sex - 1970, provides a more detailed analysis of the Township's population - for different age groups and males vs. females. The purpose of this analysis is to identify and compare specific segments of the Township population.

TABLE 6
POPULATION DISTRIBUTION BY AGE & SEX - 1970
WEST SHENANGO TOWNSHIP

AGE GROUP	MALE	FEMALE	TOTAL	% OF TOTAL POPULATION
0-4	17	11	28	6.6
5-14	31	40	71	16.7
15-24	31	29	60	14.2
25-34	20	25	45	10.6
35-44	21	19	40	9.4
45-54	35	29	64	15.1
55-64	27	31	58	13.7
65+	38	20	58	13.7
TOTALS	220	204	424	100.0

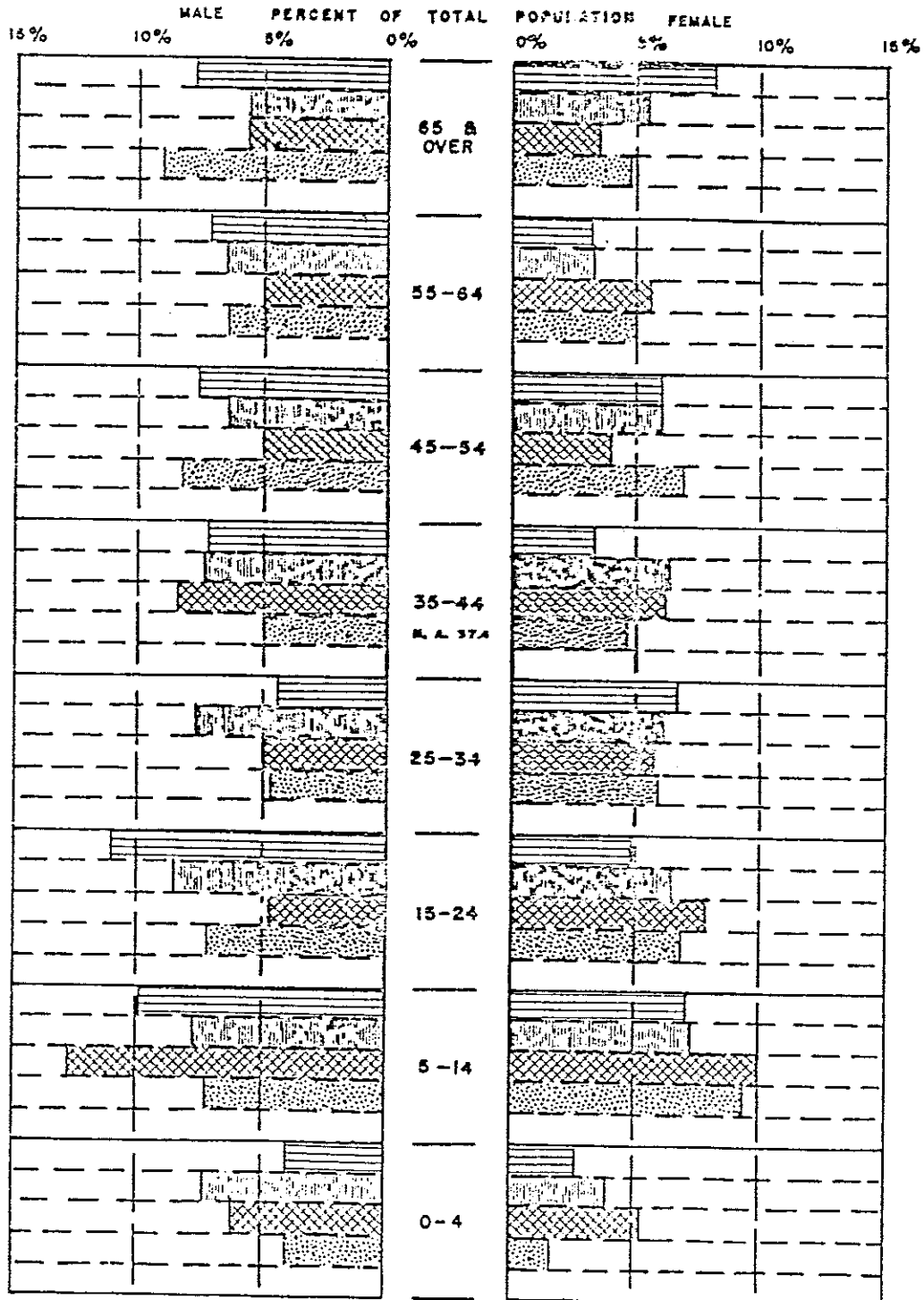
SOURCE: U. S. Census - 1970

For example, the table indicates that 13.7 percent of the Township population is elderly (ages 65+); 6.6 percent are preschool children (ages 0-4; approximately 30.9 percent are school age children (ages 5-24); and 48.8 percent comprise the main working force and homemakers of the Township (ages 25-64). The largest single age group is the 5-14 group, with 16.7 percent of the total population. Males slightly outnumber females in the Township, but not by any significant amount.

The bar graph after Table 6 graphically summarizes population trends by age and sex for West Shenango between 1940 and 1970. This provides an easier way to "consume" the data represented in Table 5 and 6, by showing the percent of total population in each ten year age group for both males and females through four decades.

FIGURE 3
 POPULATION BY AGE GROUP AND SEX, 1940-1970
 WEST SHENANGO TOWNSHIP

	MALE	FEMALE	TOTAL
1940	107	77	184
1950	129	105	234
1960	167	154	321
1970	220	204	424



SOURCE: U. S. Census

POPULATION FORECASTS

There are numerous methods which can be used to calculate population forecasts; some are very simple, while others are extremely complex. All, however, are estimates based upon our knowledge of past trends and our understanding of future constraints. As such, the forecasts discussed here are intended to reflect alternative sets of assumptions regarding the future of West Shenango, and should not be interpreted as something more exact.

Basically, three methods were utilized to project population. These include: a.) projecting past growth rates into the future; b.) plotting past population figures and projecting future growth based upon a line which "best fits" past growth; and c.) a consideration of estimates of the impact of U. S. Steel's proposed plant, if built. Following is a description of each of these methods:

Arithmetic Extrapolation

This method involves the calculation of a previous population trend, and the projection of that trend into the future. Two previous trends were calculated for projection into the future; these are the growth rate between 1940 and 1970, and the growth rate between 1970 and 1975.

The rate of growth between 1940 and 1970 averaged 32.2 percent per decade. By projecting this same rate of growth over the next two decades, the following forecasts are derived:

<u>Year</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Forecast	561	742	981

These projections indicate that, by the year 2000, the population of West Shenango would be approximately twice the 1975 estimate of 484 residents. Realistically, these estimates seem too high, particularly since we know that the growth rate slowed between 1970 and 1975 to 14.2 percent (28.4 percent, if assumed constant through 1980). Assuming the growth rate between 1970 and 1975 to continue, the following projections are attained:

<u>Year</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Forecast	544	698	896

As can be seen, these projections are substantially lower than the previous set. The U. S. Census, however, has provided a population estimate for 1976 which indicates that the growth rate in the Township is further declining. The 1976 estimated population of West Shenango was 488 - only four persons over the 1975 estimate of 484. Considering this 1976 estimate, the rate of growth between 1970 and 1980 would drop to twenty-five percent, and result in even lower projections.

Linear Regression

This method represents another way of projecting past trends into the future. It is best explained by saying that a series of past population figures are plotted over a period of time and then a "best fit" straight line is drawn equidistant through these plottings and projected on into the future. The process is done mathematically, but can also be plotted on graph paper if one desires. By utilizing population figures from the U. S. Census for the years 1940, 1950, 1960, 1970 and 1975, the following projections were arrived at for West Shenango:

Year	1980	1990	2000
Forecast	512	599	686

These figures represent the lowest and, perhaps, the most realistic forecasts derived, particularly since they temper recent declining growth rates with past higher rates. The Linear Regression method averages approximately twenty percent growth per decade - more than twelve percent less than the first projection.

Table 7 summarizes each of the forecasts provided above. It should be mentioned, however, that none of these forecasts take into account potential U. S. Steel impacts. The discussion following Table 7 addresses this issue.

TABLE 7
SUMMARY OF POPULATION FORECASTS
WEST SHENANGO TOWNSHIP

Method	Forecast		
	1980	1990	2000
Arithmetic Extrapolation			
1940 - 1970 rate	561	742	981
1970 - 1975 rate	544	698	896
1970 - 1976 rate	530	663	829
Linear Regression	512	599	686

SOURCE: CCPC Staff Calculations

U. S. STEEL RELATED GROWTH

In light of U. S. Steel's proposal to construct a steel fabricating plant along Lake Erie, the Northwest Pennsylvania Futures Committee has developed population projections for those persons expected to reside in Pennsylvania as a result of the construction of the plant. For purposes of planning, the secondary growth expected to be generated by U. S. Steel is set at 40,000 people by 1990. This projected population is expected to split evenly between Pennsylvania and Ohio; thus, 20,000 new residents are

expected to locate in northwest Pennsylvania if U. S. Steel's proposal becomes reality. The Futures Committee's work is based on empirical data obtained through a number of attitude surveys. A distribution formula was set up, based upon the relative attractiveness of the various cities, boroughs and townships in the defined impact area. Factors such as closeness to work, closeness to recreation and closeness to hospital services were important things considered in the formula. Without considering constraints which operate on municipal facilities and services (e.g., lack of public sewer, municipal police protection, etc.), West Shenango is projected to gain 103 persons through U. S. Steel impact by 1990. This would represent 103 persons in addition to the previous projections for 1990 which are based upon past trends. Consequently, if we assume the Linear Regression forecasts to be the most realistic, and we add the impact of U. S. Steel, the 1990 population of West Shenango could reach approximately seven hundred persons.

SUMMARY

In evaluating the accuracy of the various projections presented in this section, one must also consider other factors which appear to have an influence on population within West Shenango. For example, we know that there have been only eleven new homes constructed in the Township over the past nine years - yet a population increase of over sixty persons has occurred. This indicates, perhaps, that seasonal homes are being converted to year-round use by people who are retiring. As this is undoubtedly true, we cannot gauge population increase by the number of housing starts in the Township, as much of the increase is being "absorbed" by the existing, previously seasonal, housing stock. In addition, we must also consider what will happen when these homes are sold; will they revert to seasonal use, or continue to be occupied year-round? If they revert to seasonal use, the Township would stand to lose population. Thus, the large number of seasonal residences in West Shenango is also a factor which can have a substantial impact upon population growth or decline - enabling one to further understand the complexity involved in accurately predicting future population levels.

ECONOMIC ANALYSIS

INTRODUCTION

This portion of the background analysis for West Shenango Township focuses upon the labor force characteristics of the community. The data contained in this analysis takes a closer look at the population of the Township so that a generalized understanding of employment, occupation groups and income can be obtained. Such an analysis not only provides a description of the economic vitality of the residents of the Township, but also provides valuable insight, when compared with other "background" information contained herein, in developing the future land use and facilities plans.

LABOR FORCE

The analysis of the labor force focuses on the occupation groups within the Township. The general characteristics of labor force are described along with a comparison to data for all of Crawford County.

Table 8, Composition of the Labor Force - 1970, lists the various components of the labor force for West Shenango. The data contained in this and other tables in this section is taken from the 1970 Census.¹ The U. S. Census includes anyone who is 14 years old or over as a potential member of the labor force. Generally, however, those who are 14 and 15 years of age are counted as "self employed". This is to say that while most children in this age group are not directly employed, they do earn income by performing such services as baby sitting and yard work.

TABLE 8
COMPOSITION OF THE LABOR FORCE - 1970
WEST SHENANGO TOWNSHIP

	MALE	FEMALE	TOTAL
14 year old+	157	131	288
Civilian Labor Force	126	26	152
% of Total	80.3	19.8	52.8
Employed	126	26	152
Unemployed	0	0	0
% of Civilian Labor Force	0	0	0
Not in Labor Force	31	105	136
Inmate of Institution	0	0	0
Enrolled in school	7	23	30
Military	0	0	0
Other	24	82	106

SOURCE: U. S. Census, 1970

At the same time, many people over 14 years of age are not counted as part of the labor force; for example, a housewife, a student, or a member of the armed forces. When a person is in the civilian labor force, he or she can also be either employed or unemployed.

The total number of males 14 years and over in the Township was 157 in 1970. Of this number, 126 (approximately 80 percent) were part of the civilian labor force. The Census indicates that all 126 of these persons were employed. Of those males who were not included in the civilian labor force (31, or 20 percent), seven were enrolled in school and twenty-four were classified as "other" (retired persons, etc.). The table also indicates that there were 131 females aged 14 and over with twenty-six (approximately 20 percent) encompassed in the civilian labor force - all of whom were employed. Of those females not included in the labor force, twenty-three were enrolled in school, and eighty-two were classified as "Other" (housewives, retired persons, etc.).

By comparing Table 8 with Table 9, which lists the same data for all of Crawford County, one can see that the male labor force in West Shenango is significantly higher, percentage-wise, than that in the County overall (80.3 percent vs. 66.1 percent). Also of interest are the statistics for females in the labor force. In West Shenango, 19.8 percent of all women 14 years and older are in the labor force, as compared with 35.4 percent for the County - indicating that fewer women in the Township are actively seeking employment. A comparison of the table also indicates that the Township unemployment rate of zero is significantly better than that for the County - possibly indicating that the labor force of the Township is less affected by fluctuations in the regional economy, but more likely that the Census was taken during the tourist season when employment would be highest.

TABLE 9
COMPOSITION OF THE LABOR FORCE - 1970
CRAWFORD COUNTY

	MALE	FEMALE	TOTAL
14 yrs. old+	31,465	31,337	62,802
Civilian Labor Force	20,819	11,108	31,927
% of Total	66.1	35.4	50.8
Employed	20,183	10,625	30,808
Unemployed	636	483	1,119
% of Civilian Labor Force	3.1	4.3	3.5
Not in Labor Force	10,646	20,229	30,875
Inmate of Institution	320	528	848
Enrolled in School	3,360	3,659	7,019
Military	20	0	20
Other	6,946	16,042	22,988

SOURCE: U. S. Census, 1970

INDUSTRY AND OCCUPATION GROUPS

The number of persons employed in each industry is shown on Table 10, entitled Employed Persons by Major Industry Classification - 1970. The table provides a breakdown for both males and females by industry, along with that industry's percentage of Township employment. For example, there were five males residing in West Shenango who were employed in agriculture and forestry, and those workers constituted 3.3 percent of the Township work force. In addition, the last column of the table provides a comparison to all of Crawford County - indicating each industry's percentage of total County employment.

TABLE 10
EMPLOYED PERSONS BY MAJOR INDUSTRY CLASSIFICATION - 1970
WEST SHENANGO TOWNSHIP

CLASSIFICATION	SEX		TOTAL	% OF TOTAL	% OF TOTAL CRAWFORD CO.
	MALE	FEMALE			
Agriculture & Forestry	5	-	5	3.3	4.2
Mining	-	-	-	-	.2
Construction	12	-	12	7.9	5.4
Manuf.-Durable	24	14	38	25.0	28.8
Manuf.-Non Durable	-	-	-	-	11.0
Transportation	11	-	11	7.2	7.0
Wholesale & Retail Trade	57	6	63	41.4	16.0
F.I.R.E.	-	-	-	-	2.6
Business & Repair Service	-	-	-	-	1.4
Personal Service	-	-	-	-	3.5
Entertainment & Recreation Service	6	-	6	3.9	.7
Professional Service	-	6	6	3.9	16.6
Public Service	11	-	11	7.2	2.7
Industry not Reported*	10	-	10	-	-
TOTAL EMPLOYED	126	26	152	100.0	100.0

* Not included in Total
SOURCE: U.S. Census, 1970

Table 10 also indicates that a large majority of Township residents work in the wholesale and retail trade industries (41.4 percent), which lies in sharp contrast to the statistics provided for the entire County, (16 percent). This obviously appears to be a result of the influence of Pymatuning State Park in terms of its attraction for tourist-oriented commercial activity. The next largest categories for employed persons are the manufacture of Durable Goods and Construction, employing twenty-five percent and 7.9 percent of all workers respectively.

Whereas the majority of Township residents employed in wholesale and retail trade are male (57 males vs. 6 females), County statistics show a far less pronounced gap between sexes for this industry. It is also interesting to compare the fact that the majority of Township

females are employed in the manufacture of durable goods, versus the professional service and wholesale and retail grade industries which employ the highest number of females county-wide.

Table 11, Comparison of Occupation Groups - 1970 provides data which classifies persons by their occupation within each industry rather than by type of industry. Again, data is provided for both males and females, with percentages provided to indicate each occupation's share of total Township and County employment.

TABLE 11
COMPARISON OF OCCUPATION GROUPS - 1970
WEST SHENANGO TOWNSHIP

OCCUPATION	SEX		TOTAL	% OF TOTAL	% OF TOTAL CRAWFORD COUNTY
	MALE	FEMALE			
Professional & Technical	-	6	6	3.9	11.3
Management & Administrative	6	-	6	3.9	7.0
Sales	6	-	6	3.9	5.8
Clerical	6	4	10	6.6	12.7
Craftsmen/Foremen	34	-	34	22.4	17.8
Operatives	13	16	29	19.1	21.3
Transportation Operators	7	-	7	4.6	3.6
Laborers(Except Farm)	32	-	32	21.1	4.9
Farm Laborers	-	-	-	-	1.3
Farmers/Farm Managers	5	-	5	3.3	2.6
Services	17	-	17	11.2	10.2
Private Hsld. Workers	-	-	-	-	1.4
Not Reported*	10	-	10	-	-
TOTAL EMPLOYED	126	26	152	100.0	100.0

* Not included in Totals
SOURCE: U. S. Census, 1970

As the table indicates, the highest number of males in the Township are employed as craftsmen and foremen and laborers. Females are most commonly employed in the operative category - even more so than males. The highest overall occupational category for the Township (including both males and females) was craftsmen/foremen. Countywide statistics show a higher number employed as operatives, with craftsmen/foremen following second.

INCOME

Table 12, Income Distribution for Families and Unrelated Individuals - 1970 provides a summary of income ranges for families and unrelated individuals residing in the Township. As shown by the table, 13.9 percent of the Township's "income receivers" earned less than \$2,000 in 1969 - with no one earning over \$15,000. The

mean income for families, as shown on the table, was \$8,274 - a figure which is over \$1,000 less than the County-wide mean income of \$9,323.

TABLE 12
INCOME DISTRIBUTION FOR FAMILIES & UNRELATED INDIVIDUALS-1970
WEST SHENANGO TOWNSHIP

INCOME RANGE	HOUSEHOLD STATUS		TOTAL	% OF TOTAL
	FAMILY	UNREL. INDIV.		
Less than 2,000	6	13	19	13.9
2,000 - 2,999	-	-	-	-
3,000 - 3,999	12	-	12	8.8
4,000 - 4,999	18	-	18	13.1
5,000 - 5,999	-	-	-	-
6,000 - 6,999	7	-	7	5.1
7,000 - 7,999	13	-	13	9.5
8,000 - 9,999	19	-	19	13.9
10,000 - 11,999	15	5	20	14.6
12,000 - 14,999	29	-	29	21.2
15,000 - 24,999	-	-	-	-
25,000 - 49,999	-	-	-	-
50,000 AND OVER	-	-	-	-
TOTAL	119	18	137	100.0
MEAN INCOME	\$8,274	\$3,256	\$7,615	

SOURCE: U. S. Census, 1970

Table 13, entitled Persons 14 Yrs. + by Income Category - 1970 provides data on income received by persons 14 years and over (rather than families and unrelated individuals) by the income range and sex. The largest grouping of individuals listed on the table earn no income at all (82 persons, or 28.5 percent of the total). In addition, another thirty-two percent earn less than \$2,000 - placing over sixty percent of the Township's labor force in an income category of \$2,000 or less. Of those who earn incomes, the largest number of individuals earn between \$6,000 and \$7,000 (16 percent) followed by those earning between \$8,000 and \$10,000 (14.1 percent).

TABLE 13
PERSONS 14 YRS. + BY INCOME CATEGORY-1970
WEST SHENANGO TOWNSHIP

INCOME RANGE	SEX		TOTAL	% OF TOTAL
	MALE	FEMALE		
NO INCOME	7	75	82	28.5
Less than 1,000	13	23	36	17.5
1,000 - 1,999	19	11	30	14.6
2,000 - 2,999	-	-	-	-
3,000 - 3,999	6	6	12	5.8
4,000 - 4,999	18	10	28	13.6
5,000 - 5,999	6	6	12	5.8
6,000 - 6,999	33	-	33	16.0
7,000 - 7,999	6	-	6	2.9
8,000 - 9,999	29	-	29	14.1
10,000 - 14,999	20	-	20	9.7
15,000 - 24,999	-	-	-	-
25,000 AND OVER	-	-	-	-
TOTAL WITH INCOME	150	56	206	100.0
PER CAPITA INCOME	\$6,112	\$2,129	\$5,029	

SOURCE: U. S. Census, 1970

SUMMARY

The data presented in this analysis of employment and income, while approximately ten years old, none the less provides some valuable and relevant insight into factors affecting employment in the Township - particularly the influence of Pymatuning State Park.

Also, as stated in the introduction to this analysis, it is very important to compare the information contained here with other background analyses which have been completed. For example, while Table 11 indicates that there were only five farmers/farm managers residing in the Township, observations made during the land use survey together with additional information collected on the location of active full-time and active part-time farms, show that this "handfull" of farmers own or lease a substantial portion of land in the Township. Thus, what appears to be a relatively insignificant statistic, is, when combined with other available information, very important.

¹NOTE: The data in this section is taken from unpublished Census data supplied by the Southwestern Pennsylvania Regional Planning Commission and, as such, differs in some circumstances from published statistics - such as those utilized in the population analysis in this report.

FACILITIES AND SERVICES

INTRODUCTION

The analysis of facilities and services evaluates the adequacy of public investments made to enhance such things as, public safety, leisure-time activity, and living comfort. Included in this analysis are facilities and services such as roads, schools, recreation, library service, police and fire protection, and the municipal building. Also, an inventory of public and semi-public utilities is provided.

ROAD SYSTEM

The most important service provided by the Supervisors of West Shenango is the maintenance of a large segment of the existing road system within the Township. While the Township road system is not very extensive in terms of mileage, it is nonetheless the most important public investment made by the community.

There is a total of 10.48 miles of road maintained by the Township. Of this total, two miles have been improved with a sealing treatment consisting of a heavy oil coating overlaid by limestone chips. The remaining 8.48 miles are of a rougher gravel construction, receiving only oil treatment in the spring to hold down dust.

The State maintains a road network in the Township of 9.88 miles. By combining the total State and Township road systems, there are 20.36 miles of publicly maintained road in West Shenango. The percentage break between Township and State roads is 51.5 percent and 48.5 percent respectively.

There is a clear difference in pavement characteristics between the Township and State systems; whereas, all Township roads are gravel, all State roads have a bituminous surface. It should be pointed out, however, that the surface of L.R. 20002 is in very poor condition. This roadway, which extends from U. S. 322 West to the State line, hasn't been improved by the State since 1965.

Drainage Structures and Bridges

All Township roads were surveyed in the fall of 1978 by the staff of the Crawford County Planning Commission. In addition to pavement type and width (which was estimated to range from 10 to 16 feet) the survey also inventoried all drainage structures in the Township road system. Following is a summary of that data:

- | | |
|----------------------------------|----|
| - Culverts (all types and sizes) | 14 |
| - Bridges | 2 |

In addition, the survey also inventoried drainage structures and bridges on the State system. These include:

- Culverts (all types and sizes) 25
- Bridges 1

Road Classifications

The Federal Government, through staff assistance from the State Highway Department, maintains a Functional Highway Classification System for all roads in all communities throughout the State. This classification system is based upon the premise that some roads serve more important functions than others because they carry higher traffic volumes, they are designed to higher standards, and they connect major activity centers. Following is a description of the "hierarchy" which is utilized in the Functional Classification System:

Major Arterial The system of major arterial highways serves the principal centers of activity within and between states. These are usually urban areas having a population of 25,000 or over. Major arterials carry the highest traffic volumes and facilitate trips of the longest length (e.g., interstate highways). For major arterials, the concept of service to abutting properties is subordinate to the provision of travel service for major traffic movements.

Minor Arterial This system of roadways interconnects with and augments the major arterial system providing service to trips of more moderate length at a somewhat lower level of travel mobility than major arterials. This system includes all arterials not classified as major, and includes facilities that place more emphasis on land access than does the major system.

Major Collector This road system generally serves traffic of an intracounty, rather than intercounty or statewide importance. The system often provides service to a county seat or larger settlement area, as well as areas of traffic generation not directly served by the higher systems.

Minor Collector This road network collects traffic from local roads and "feeds" it to the higher road systems. These roads may penetrate neighborhoods, distributing trips from the higher systems to their ultimate destinations.

Local The local road system serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility, and generally discourages traffic movement.

It is important to realize that minor collector and local roads are not eligible to receive federal funding assistance for upkeep, whereas the higher order systems can receive such funds. Minor collector and local roads must be maintained through state and local

monies. The one exception to this rule is the Federal Off-Systems funding program, which does make money available for minor collector and local road improvements. Any road, however, which receives federal aid must be brought up to a minimum cartway or travel-way width of twenty feet. The Functional Highway Classification System is an important guide in planning for the level of service on roads, and thus it is an important consideration for planning for the use of land.

Table 14 provides a listing of the roads in West Shenango by functional classification.

TABLE 14
ROAD CLASSIFICATIONS
WEST SHENANGO TOWNSHIP

CLASSIFICATION	ROAD
Major Arterial	None
Minor Arterial	U.S. 322 (L.R. 206)
Major Collector	None
Minor Collector	West Lake Rd (L.R. 20155)
Local	All remaining State and Township roads

SOURCE: PennDOT

Average Daily Traffic

Data indicating the average daily traffic flow (ADT) has been compiled for the State roads in West Shenango. These counts are taken by PennDOT for all roads in its system, and represent the average number of vehicles utilizing a particular road on any given day. Such counts must be updated periodically to take account of changing conditions in traffic circulation. The following table summarizes traffic volumes for State roads within West Shenango.

TABLE 15
1978 TRAFFIC VOLUMES
WEST SHENANGO TOWNSHIP

ROAD	1978 ADT
U. S. 322	2034 to 2825
L.R. 20155	170
L.R. 20002	283 to 339
L.R. 20001	170

SOURCE: PennDOT

Summary

Analyzing the existing road network for alignment problems and any other conditions pertinent to the network's "well being" cause the following observations to be made:

- County Line Road - U. S. 322 Intersection County Line Road (T. R. 301) intersects U. S. 322 at a bad angle and on a curve where sight distance to the west is further restricted by a stand of pine trees. Considering speeds along U. S. 322 (despite the posted 45 mile per hour speed limit at this intersection) sight distance needs to be improved.
- L. R. 20002 As mentioned earlier, the condition of L. R. 20002 is very poor; its surface having deteriorated in many places to the point of being worse than many less important Township roads. Considering that this road serves a major collector function within the Township, and that it also serves as a link with Ohio, its surface should be upgraded and maintained at a much higher standard.

SCHOOLS

West Shenango is included within the Jamestown Area School District. This District "straddles" the Crawford County-Mercer County line and serves, in addition to West Shenango, South Shenango and Greene Townships and Jamestown Borough. Two schools are maintained by the District; the Jamestown Area Elementary (grades kindergarten through six) located on Douthett Drive at its intersection with East Lake Road in South Shenango, and the Jamestown Area High School (grades seven through twelve) located at Liberty and Shenango Streets in Jamestown.

Table 16, entitled Existing School Facilities, provides a general description of the District's two schools.

TABLE 16
EXISTING SCHOOL FACILITIES
JAMESTOWN AREA SCHOOL DISTRICT

SCHOOL	GRADES	YR. BUILT/ ADDED TO	CONDITION	ACRES	CLASSROOMS	CAPACITY	'78-'79 ENROLLMENT
Jamestown Area Elem. School	K-6	1973	Good	25	Open Classroom	525	430
Jamestown Area High School	7-12	1942, 1951, 1958	Good	15	23	475	380

SOURCE: Jamestown Area School District, 1979

Enrollment in the District has declined in recent years, decreasing from 890 students in the 1975-76 school year to the current enrollment of 810. The District Administration estimates that future enrollments will stabilize around eight hundred students. Of the current enrollment of 810 students, it is estimated that approximately eight students (10 percent of the total enrollment) come from West Shenango Township. This estimate is based upon school bus service areas.

As can be seen by the table, both the elementary and high schools have ample room to accommodate growth without compromising educational quality. With this in mind, the only improvements currently being planned are renovations to upgrade some of the classroom space in the high school. Recreation facilities available at each school are discussed in detail in the next section.

RECREATION

The residents of West Shenango are very fortunate to live in a community where such a wide variety of high quality recreation facilities and programs exist. Few people, outside those residing in the Township and other surrounding municipalities, have the ease of access to a facility as unique as Pymatuning State Park.

Also, in addition to having the State Park, West Shenango residents may participate in the programs and activities sponsored by the Jamestown Area Recreation Board. This Board is made up of the municipalities of Jamestown and Greene Township in Mercer County, and South and West Shenango in Crawford County. While the Recreation Board owns no property or buildings, it nonetheless utilizes many private and public facilities to conduct its numerous programs - ranging from baseball and tennis to skiing.

This section of the background information seeks to supply Township residents with a greater knowledge of the unique environment created by Pymatuning State Park and its numerous facilities. It is also the purpose here to detail the recreation facilities utilized by the Jamestown Area Recreation Board.

Pymatuning State Park

With the dedication of Pymatuning Dam on August 17, 1934, the largest man-made lake in the State of Pennsylvania was created. As stated earlier, the "Pymatuning dream" began over a century ago, when the Pennsylvania General Assembly provided for a survey and an estimate of the cost to reclaim the Pymatuning swamp lands. Through subsequent legislation and study, it was originally determined that 22,000 acres would be required for the development of a reservoir - affecting 313 properties (260 in Pennsylvania and 53 in Ohio). Not until 1921, however, did land actually begin to be acquired, at which time approximately one-third of the required acreage was purchased. Seventy two dwellings and eighty-eight barns were ultimately affected in the development of the reservoir. Land acquisitions were completed and ground was broken for construction of the dam in late 1931.

The completed lake has a seventy mile shoreline and covers an area of approximately 17,000 acres. The park facilities in Pennsylvania and Ohio contain an additional 8,000 acres of land, providing a total park area of 25,000 acres.

Attendance figures for the Pennsylvania portion of the Park have quadrupled in the past twenty years - increasing from 1,050,000 visitors in 1958 to 4,107,672 in 1977. With attendance increasing, it was necessary to develop a master plan for the future development of the Park in the early 1960's. This plan outlined a rigorous acquisition program for additional park lands, as well as facilities plans for all areas of the Park. Major projects completed under the Master Plan includes: the Linesville Beach Complex, the Jamestown Beach and Jamestown Camping Areas, and the Tuttle Point Beach and Camping Area in North Shenango. Also, the new administration and maintenance buildings now being constructed in West Shenango were originally proposed in the 1963 Master Plan.

The Pennsylvania Department of Environmental Resources, Division of Outdoor Recreation, began work on an update to the 1963 Master Plan some time ago. Higher priority of other planning projects, however, has forced the delay of its completion. It is expected that the land acquisition thrust of the 1963 plan will be reduced considerably, with an emphasis placed instead upon the rehabilitation or replacement of existing facilities and more optimum use of currently owned park land. Projects which are currently included in the Department's five-year capital budget request include: the replacement of boat liveries at Linesville and Espyville, and rehabilitation of the boat livery in West Shenango. Also included is the replacement of several outdated comfort stations which are located throughout the Park.

It is interesting to note that a significant amount of investment has occurred in the relatively small segment of State Park located in West Shenango. In addition, the Township has the privilege of having the main entrance to Pymatuning State Park located within its boundaries. Facilities available in the Township include: two camping areas, two beaches, two picnic areas, a boat launch and a boat livery. Also, three private boat clubs lease land from the State in West Shenango. These include: the Pymatuning Yacht Club, Century Boat Club and Pymatuning Outboard Motor Club. Thus, West Shenango residents have convenient access to the entire range of facilities offered by the State Park.

Jamestown Area Recreation Board

The Jamestown Area Recreation Board was formed by Jamestown Borough Council approximately ten years ago in response to the need for organized recreational activities and programs for Jamestown Area residents. The Board decided to include in its service area those communities which are part of the Jamestown Area School District, and utilize available facilities in all four communities. The Board has a full-time director and is very flexible in terms of its approach to recreation so that it can best serve the wants and needs of the area's residents.

The following table provides a detailed listing, by municipality, of the facilities utilized by the Recreation Board.

TABLE 17
RECREATION FACILITIES
JAMESTOWN AREA RECREATION BOARD

MUNICIPALITY	NAME OF FACILITY/SITE	TYPE OF FACILITIES AVAILABLE
Boro. of Jamestown	Jamestown Area High School	Gymnasium and locker room Weight room Classrooms for supervised activities Baseball field (utilized by the Board for soccer) Office of the Recreation Board of Director
	Japco Recreation Area	Little League Baseball field Softball field Playground (swingset and sandboxes)
	Scipio Street Tennis Court	Tennis court (lighted)
	Borough Hall	Meeting place for community organizations
	South Shenango Twp.	Jamestown Area Elementary School
Walnut Creek Golf Course		9-hole golf course
Pymatuning State Park		Picnic areas, beach, boat launch
West Shenango Twp.	Pymatuning State Park	Picnic areas, beaches, boat launch/livery, camping

SOURCE: Jamestown Area Recreation Board

LIBRARY

Library facilities are available to West Shenango residents through the Jamestown Area School District, and at Andover, Ohio, Greenville, and Meadville.

FIRE PROTECTION

West Shenango receives its fire protection from the Jamestown Volunteer Fire Department. The Department is housed in a new fire hall, located on U. S. 322 in Jamestown Borough, and has 120 active members. The following equipment is utilized by the Department:

- 3 - Pumper trucks (1937, 1962, 1971)
- 1 - 2,600 gallon tanker (1968)
- 1 - 1,500 gallon tanker (1957)
- 1 - Grass Fighter unit (1975)
- 1 - Rescue Van (1977)

Service provided to West Shenango by this fire department is considered to be excellent. Plans to purchase new equipment include a new pumper in 1982.

POLICE PROTECTION

Insufficient tax revenue prohibits West Shenango from maintaining its own police force. At the present time, protection is provided by the Meadville Barracks of the Pennsylvania State Police. This service is understandably less than "optimum", as the State Police cannot possibly provide round-the-clock patrol for all areas of the Township.

TOWNSHIP BUILDING

The original West Shenango Township building was constructed in 1958, just west of Turnersville on West Lake Road. The original building contained only one meeting room, and has since been added to and remodeled to provide two restrooms and a storage room. The site on which the building is located is small, providing primarily for off-street parking.

UTILITIES

- West Shenango residents receive electric service from Penn Power.
- National Fuel Gas provides natural gas to the northwest portion of the Township, from a line which runs from Jamestown parallel to the Conrail tracks. The primary service areas in the Township are Turnersville and the Holiday Park Allotment. This system could be expanded should the need arise at some future point.
- Telephone service is provided by the Westford Independent Phone Company.

LAND AND SOILS

INTRODUCTION

Through the survey and analysis of existing land use patterns, we have studied the "man-made environment" of West Shenango, or more accurately, man's impact on the natural landscape of the Township. In developing the future land use plan, it becomes necessary to combine this analysis of the man-made environment with an understanding of the natural environment so that future growth can be located in areas which are capable of supporting development.

PHYSIOGRAPHY

West Shenango Township is located in the southwest corner of Crawford County; the Township shares its western boundary with the State of Ohio (Williamsfield and Kinsman Townships); its southern boundary with Mercer County (Greene Township and Jamestown Borough), and its eastern boundary with Pymatuning State Park (South Shenango) and the Shenango River. The Township's geometric shape is that of a triangle, and covers an area of 6,170 acres, including both the land and water areas of the State Park.

The topography of the Township ranges in elevation from 1,000 feet above sea level in Snodgrass Hollow to 1,130 feet in the southwest. The majority of the Township, however, lies at an elevation of approximately 1,050 feet, with the water level in Pymatuning Reservoir being at 1,010 feet. Sugar Creek, the Township's only major stream, flows north from Mercer County and enters West Shenango at a point midway between L. R. 20001 and Bates Road. The stream then flows back into Mercer County and re-enters the Township east of Bates Road, where it takes a northeasterly course until it intersects the Shenango River just south of Pymatuning Dam. Sugar Creek is responsible for "carving out" Snodgrass Hollow, certainly the Township's most unique natural area, located in the southeast portion of the community. It is interesting to note that a person standing in Snodgrass Hollow is at an elevation which is actually ten feet below the water surface of Pymatuning Reservoir.

The land in the Township drains into Pymatuning Reservoir and the Shenango River, which eventually makes its way into the Ohio and Mississippi Rivers. There are also approximately fifteen smaller streams traversing the landscape in addition to Sugar Creek, all of which feed the Shenango River system.

SOIL CONDITIONS

The soil analysis for West Shenango looks at soils in terms of their suitability for certain types of uses - specifically agriculture and residential development. By analyzing the data available from the Soil Conservation Service, it is possible to

identify the best agricultural areas in the Township, as well as those areas which are best suited to supporting on-lot septic systems. The soils data also delineates those areas adjacent to Township streams which are susceptible to flooding, or stream overflow.

In general terms, the Township is primarily overlain by the Frenchtown and Venango soil associations. Both of these soils are characterized as having a high water table and slow to very slow permeability. The soils which are subject to flooding are Holly soils; these are also characterized as having a water table at or near the surface and are of moderately slow permeability. The best soils in the Township are classified as Cambridge soils; these are moderately well drained soils with a seasonal high water table found in scattered locations in the south and northwest portions of the Township. The following analysis provides a description of the above soils based upon their suitability for agriculture and on-lot sewage disposal, and a discussion of those areas of the Township which are susceptible to stream overflow.

Agricultural Quality

The Soil Conservation Service has classified soils according to eight "capability classifications" for agricultural use. Soil limitation becomes progressively greater as the classification numbers increase. The following is a listing of the eight soil classes, and an explanation of the limitations inherent in each.

- Class I Soils that have few limitations which restrict their use.
- Class II Soils that have some limitations which reduce the choice of plants or require moderate conservation practices.
- Class III Soils that have severe limitations which reduce the choice of plants, require special conservation practices, or both.
- Class IV Soils that have very severe limitations which restrict the choice of plants, require careful management, or both.
- Class V Soils that have little or no erosion hazard but have other limitations which are impractical to remove and limit their use largely to pasture, woodland, or wildlife food and cover.
- Class VI Soils that have severe limitations which make them generally unsuited to cultivation and limit their use largely to pasture, woodland, or wildlife food and cover.

- Class VII Soils that have very severe limitations which make them unsuited to cultivation and restrict their use largely to grazing, woodland or wildlife.
- Class VIII Soils and land forms that have limitations which prevent their use for commercial plant production and restrict their use to recreation, wildlife, water supply and aesthetic purposes.

No soils in the Township are included in the Class I category. The Cambridge soils are considered to be Class II soils; the Frenchtown and Venango soils are Class III; and the Holly soils are classified as Class III or Class VI, depending on the amount of clay in the soil.

For the purposes of the Plan, the soil classes were grouped into three major categories: good (Classes I and II), fair (Class III), and poor (Classes IV through VIII). The vast majority of soils in the Township are categorized as being fair for agricultural production, with the major limiting factors in all the soils being slow permeability and a high water table.

On-Lot Sewage Suitability

The capability of soil to properly filter sewage effluent is the most critical land constraint on development in areas where centralized sewage treatment systems do not exist. Filtering capability is based on: (1) Soil permeability, (2) depth of soil to bedrock or some other impervious layer, and (3) the slope of the land. Once again, the soils in the Township were categorized as good, fair or poor, depending upon their ability to support on-lot septic systems. The criteria for these categories is as follows:

- Good Suitability Soils in this category will normally be approved by the Township's sewage enforcement officer and the Pennsylvania Department of Environmental Resources (PennDER) for conventional disposal systems. Soils which are good for on-lot septic systems:
 - (a) are not susceptible to flooding;
 - (b) have minimum depth to impervious layer of six (6) feet;
 - (c) have a depth of four (4) feet or more to the seasonal high water table;
 - (d) are termed "well-drained" by the U. S. Soil Conservation Service;
 - (e) have percolation rates of 6 to 60 minutes; this means it takes 6 to 60 minutes for water to drop one inch in a saturated hole; or in reference to permeability, it means the soil has a range of between 10.0 and 1.0 (inches of water movement per hour);

- (f) are located on slopes of 15 percent or less;
 - (g) are not so stony as to make system installation impossible.
- Fair Suitability Soils in this category will not normally qualify for conventional on-lot systems, but may qualify for a modified or alternate system. To adequately function in these soils, a system would have to be more elaborate than a conventional system, generally involving higher cost. Soils grouped within this category:
- (a) are not susceptible to flooding;
 - (b) have a minimum depth to the impervious layer of twenty (20) inches;
 - (c) have a depth to the seasonal high water table of between twenty (20) inches and four (4) feet;
 - (d) are termed 'moderately well-drained' by the U. S. Soil Conservation Service;
 - (e) have percolation rates of 60 to 300 minutes and a permeability range of 1.0 to 0.2 inches per hour;
 - (f) are located on slopes no greater than 25 percent;
 - (g) are not so stony as to make proper system installation impossible.
- Poor Suitability Soils within this category will not normally qualify for a conventional sewage disposal system and may not qualify for an alternate system due to the presence of one or all of the following conditions. These soils may:
- (a) be susceptible to flooding;
 - (b) have a depth to the impervious layer of less than twenty (20) inches;
 - (c) have a depth to the seasonal high water table of less than twenty (20) inches;
 - (d) be termed poorly or very poorly drained by the U. S. Soil Conservation Service;
 - (e) have a percolation rate of greater than 300 minutes and a permeability range of less than 0.2 inches per hour;
 - (f) be located on slopes exceeding 25 percent;
 - (g) be so stony as to make system installation impossible.

These three categories represent generalized statements about soil suitability. The mapping of these soils provides a general idea of the on-lot sewage suitability of the Township's land. This map indicates that the majority of land in West Shenango is poor for on-lot sewage systems, with very small areas classified as good

and fair in the south and northwest portions of the Township. It must be noted, however, that the areas designated as good and fair are also classified as the best agricultural soils in the Township. Exceptions to the conditions shown on the map may be discovered when a specific parcel is examined in more detail. (See Appendix for map reference).

In light of the fact that soils in the Township are so poor for on-lot septic systems, the Township Supervisors have been working with their engineers to secure funding for the design and construction of a centralized sewer system for the Township. At the present time, however, conditions in the Township, in terms of malfunctioning on-lot systems and subsequent pollution to the Township and Pymatuning Reservoir, are not determined by PennDER to be severe enough to pose a significant-enough health hazard to warrant public investment in a sewerage system.

Thus, for example, while there may be a high incidence of failing on-lot sewage systems in the Holiday Park allotment, their collective impact on the environment is relatively insignificant (only 11 percent of all lots are developed). Ironically, it is the poor soils which have limited development, and thus, kept a "significant" health hazard from occurring.

Flood Prone Areas

Another limiting factor on development is the susceptibility of land to flooding, or stream overflow. Lands within West Shenango which border streams and which are subject to stream overflow were identified by the Soil Conservation Service by the extent of alluvial soils bordering the Township's streams. (These are soils which are composed of sand, silt and clay deposited, or left behind, when a stream overflows).

In most instances where land is subject to stream overflow in West Shenango, the adjacent area is rural and often being farmed thus, posing no threat or constraint on development. In some areas, however, allotments have been plotted along the paths of streams with no design consideration for the course of the stream through the subdivision. Consequently, those lots over which the stream passes have been rendered partially or wholly undevelopable, unless the stream is culverted. This problem occurs in the Holiday Park and Sunset Acres allotments.

GROUNDWATER RESOURCES

The analysis of groundwater resources is of interest to this background study due to the fact that there is no municipal water supply serving the residents of West Shenango Township. The information contained herein is taken from a study, entitled Geology and Hydrology of Western Crawford County (1978) by George Shiner and John Gallaher of the U. S. Geological Survey. This study shows that, in Crawford County, there are two general types of

earth materials which store groundwater; glacial drift and bedrock. Following is an analysis of the characteristics of these aquifers, along with a discussion of how they relate to West Shenango.

Glacial Drift

Glacial drift includes all materials deposited because of glacial activity; this encompasses glacial till and glacial outwash. Till is a varied mixture of clay, silt, sand, gravel and boulders which were deposited directly by a glacier without any sorting by water. When the same materials have been sorted by the glacial runoff water, they are classified as outwash. In terms of aquifers, till is generally very poor, while outwash has been found to be the most productive aquifer in the area - being the only earth material in western Crawford County capable of yielding over 130 gallons per minute. Thus, with the exception of Linesville, all public water supplies in the area studied tap outwash deposits.

In West Shenango, glacial outwash underlies land in the vicinity of Sugar Run and the Shenango River. Therefore, only a small portion of the Township can benefit from this deposit, and it becomes more important to analyze the extent of bedrock aquifers.

Bedrock Aquifers

There are many different types of rocks which make up the different layers of bedrock in western Crawford County. As with glacial deposits, some of these are good aquifers, and some are not, depending upon their physical character, thickness and the amount of fracturing of the rock layers. Also, in areas where glacial drift occurs, the thickness and permeability of the till or outwash will have an effect on underlying bedrock aquifers. Each of these factors may vary greatly over short distances. Thus it is possible for well yields to vary within small areas.

The study by Shiner identifies the Cussewago and Sharpsville sandstones as being the most productive bedrock aquifers in the western half of the County. These rock formations are characterized by many stable fractures and large pore spaces which permit easy movement of water. Of these two aquifers, the Cussewago sandstone is the more productive. By mapping these two aquifers, it is found that the Cussewago sandstone is located throughout the Township at depths varying from ground surface to 130 feet. The Sharpsville sandstone is located in the southern third of the Township and generally lies at a depth thirty feet above the Cussewago.

An inventory of some of the wells in the Township, indicating depth and yield, reinforces the geologic data discussed above. The majority of residential wells surveyed have a yield of between ten and thirty gallons per minute - considered a good yield for residential purposes. In addition, there are several high-yield wells pumping from forty to more than eighty-five gallons per minute throughout the Township.

REGIONAL CONTEXT

INTRODUCTION

West Shenango Township is part of a much larger social, economic and political community. Although its governing body, the Board of Township Supervisors, has the power to do many things, the Township depends on the county, state and federal governments to provide many needed services. In addition to this it is often necessary to cooperate with adjacent townships and boroughs on many issues. No municipality is an "island". This section is devoted to a discussion of some pertinent issues in connection with the Township's regional context.

NORTHWEST PENNSYLVANIA FUTURES COMMITTEE

In March of 1977 the state government, aware that the U. S. Steel Corporation was expecting to construct a large steel making complex on Lake Erie at the Pennsylvania-Ohio boundary line, organized the Northwest Pennsylvania Futures Committee (NWPF). The leadership at the state level in organizing this Committee came from the Department of Community Affairs and the Governor's Office. The original voting membership included seven persons from the state each representing interested and involved departments of state government and seven so called local members; three persons appointed by the Crawford County Commissioners, three persons appointed by the Erie County Executive, and one person from Northwest Pennsylvania Regional Planning and Development Commission. Also invited to serve as non voting members of the Committee were officials from Ohio and U. S. Steel.

The purpose of the Futures Committee, as it is called, is to insure coordination of county and municipal planning in the impact area of the proposed mill, to provide staff to handle issues of a regional concern, to provide a forum for the exchange of information and to develop an organization that could assist the local municipalities and the counties in competing favorably for State and federal grants. Currently, the Futures Committee has a staff of three persons. The voting membership of the Committee has been changed, but it is still pursuing its same objectives. The Committee has met once a month for almost two years and has provided a forum for the exchange of ideas in connection with the planning for impacts expected from this large complex. It was through aid from the Futures Committee that planning funds were provided to the Crawford County Planning Commission to undertake municipal planning in western Crawford County. To date, the Futures Committee has not seen fit to develop a regional plan for settlements relative to the impact population. This task will probably not be done because it is the feeling of most people involved with the Committee that each municipality itself along with each of the two counties should do its own planning and cooperate among themselves in terms of the regional context. The Committee, however, is

doing a detailed projection of where the impact population is most likely to settle and it may eventually make comments on individual municipal community plans relative to settlement trends set in motion by the advent of the steel plant.

Before U. S. Steel can build the proposed plant an environmental impact statement must be completed. Work on this statement has been going on approximately two years. Currently the U. S. Army Corps of Engineers, responsible for the statement, is obtaining a final round of comment. By the end of May (1979) all comment must be entered for the record and the statement will be complete and its declarations announced - very likely in June or July (1979). Then, of course, the U. S. Steel Corporation will make its final decision relative to building the proposed facility.

The Crawford County Planning Commission staff expects to use the impact population and population distribution forecasts that have been developed by the Futures Committee staff. These forecasts were discussed in the Population section of this report. Staff of the Futures Committee is developing a series of technical reports on various tools municipalities can use to manage and control growth. These reports are available from the Committee office in the Springfield Township Supervisor's building in Erie County.

CRAWFORD COUNTY COMPREHENSIVE PLAN

The Crawford County Comprehensive Plan is a general guide for development throughout its fifty-one municipalities. Individual boroughs and townships doing their own plans should be aware of its proposals, but they are free to depart from them if they think such course is in their best interest. The County Land Use Plan indicates that most of West Shenango Township should be maintained in rural/agricultural use. Residential uses are encouraged to locate in the eastern portion of the Township - generally adjacent to Pymatuning State Park, and extending slightly west of U. S. 322.

The County Plan, however, is currently being considered for revision so that it is consistent with the more detailed planning now being done in western Crawford County to prepare for U. S. Steel impacts. In addition to updating the land use plan so that it is consistent with the recommendations of this and other more current reports, the County Plan also places a major emphasis on coordinating road maintenance policy across municipal, county and state lines so as to aid in achieving the objectives of the land use plan. As such, roads management is seen as an integral part of growth and land use management in the County. The detailed recommendations for future land use and road maintenance within West Shenango, as discussed in the plan section of this report, will be incorporated into the County Plan.

RELATIONSHIPS TO ADJACENT MUNICIPALITIES

As shown on the Location Map in the introduction to this report, West Shenango Township shares its boundaries with five separate municipalities. Only one of these communities - South Shenango Township - is located in Crawford County. Of the remaining four, two are located to the south in Mercer County; these are Greene Township and Jamestown Borough. The last two are located to the west in Ohio, and include Williamsfield Township in Ashtabula County and Kinsman Township in Trumbull County.

With the exception of the Borough of Jamestown, all of the municipalities surrounding West Shenango are primarily agricultural/rural in character - particularly along the Township's western and southern boundaries. South Shenango, to the east, is actually separated from West Shenango by Pymatuning Reservoir and is characterized by a similar type of seasonal housing (as is found in West Shenango) adjacent to the State Park, with agriculture predominating in the majority of the Township to the east.

At the present time, only Williamsfield Township in Ashtabula County has a zoning ordinance; this ordinance promotes agriculture in the area of its common boundary with West Shenango and encourages commercial activity along U. S. 322. In addition, the Ashtabula County Planning Department is currently undertaking a planning study for its municipalities which border on Pymatuning State Park to help them prepare for U. S. Steel impacts. Jamestown Borough is also just beginning a comprehensive planning study with staff assistance provided by the Mercer County Planning Department; this will be the Borough's first planning effort. Finally, South Shenango is now completing work on its first comprehensive planning program, and will focus in the next year on development control ordinances.

Because of the Township's geographic location and the road network which serves it, residents are oriented more to Mercer County and Ohio (Jamestown, Greenville, and Kinsman) than they are to Crawford County and, more specifically, Meadville. Consequently, road linkages and land use relationships with these areas are a major concern of this plan.

FISCAL ANALYSIS

INTRODUCTION

Rational and workable future spending proposals must be directly related to West Shenango Township's basic financial position, established obligations, and the anticipated growth of the Township's tax base. The following analysis considers West Shenango's current and past financial condition and provides a general projection of future revenues. By comparing this analysis with the needs identified in the land use and facilities plans, a better understanding of the Township's ability to implement certain projects can be gained.

REVENUE AND EXPENDITURE TRENDS

Table 18, entitled Revenue, Expenditures and Assessed Valuation Trends, summarizes West Shenango's receipts, expenditures and increases in assessed valuation over the past five years.

TABLE 18
REVENUE, EXPENDITURE AND ASSESSED VALUATION TRENDS
WEST SHENANGO TOWNSHIP

	1974	1975	1976	1977	1978
REVENUES					
Previous Year's Balance ¹	\$ 19,061	\$ 23,160	\$ 7,257	\$ 8,778	\$ 19,255
Taxes	15,286	16,357	18,262	16,995	20,695
Other Revenue	14,858	20,191	15,829	20,379	20,640
Non-Revenue Receipts	2,319	14,256	19,961	14,602	1,118
TOTAL REVENUE	\$ 51,524	\$ 73,964	\$ 61,309	\$ 60,754	\$ 61,708
EXPENDITURES					
General Government	\$ 4,428	\$ 12,393	\$ 5,821	\$ 5,524	\$ 8,329
Protection to Persons and Property	841	714	701	857	846
Highways	13,368	44,562	23,512	15,045	47,527
Recreation	100	100	100	100	-
Miscellaneous	961	1,548	2,220	5,805	1,292
Non-Governmental	12,619	13,678	23,394	14,206	1,438
TOTAL EXPENDITURES	\$ 32,317	\$ 72,995	\$ 55,748	\$ 41,537	\$ 59,432
BALANCE¹	\$ 19,207	\$ 969	\$ 5,561	\$ 19,217	\$ 2,276
ASSESSED VALUATION²	\$ 679,900	\$ 696,900	\$720,250	\$731,650	\$747,850
TAXES					
Real Estate	7 Mills	10 Mills	10 Mills	10 Mills	10 Mills
Earned Income	½%	½%	½%	½%	½%
Per Capita	\$5	\$5	\$5	\$5	\$5
Real Estate Transfer	1%	1%	1%	1%	1%

¹ Includes Securities and Investments held.

² Assessed valuation is computed at 30% of replacement value using 1971 dollars.

NOTE: Figures may not add due to rounding

SOURCE: West Shenango Township Records.

In each of the five years surveyed, two of the major sources of Township revenue were State Liquid Fuels and Federal Revenue Sharing funds. Both of these are grouped together under the "Other Revenue" category, which constitutes one of the largest income categories over the five-year period. Income from taxes accounts generally for the second highest category of Township revenue. Taxes levied by the Township include real estate, earned income, per capita, and real estate transfer taxes. Table 19 provides a detailed breakdown of the Township tax structure, as well as other tax obligations - both County and School District - imposed on the Township's tax payers. The current Township real estate millage of 10 mills is 12 mills below the statutory millage established by Pennsylvania tax enabling legislation.

TABLE 19
1978 TAX STRUCTURE
WEST SHENANGO TOWNSHIP

TOWNSHIP TAXES	RATE
Real Estate	10 Mills
Earned Income	$\frac{1}{2}$ percent
Per Capita	\$5
Real Estate Transfer	1 percent
OTHER TAXES	
Crawford County	
Real Estate	13 mills
Per Capita	\$5
Jamestown Area School District	
Real Estate	97 mills
Per Capita	\$10
Earned Income	$\frac{1}{2}$ percent

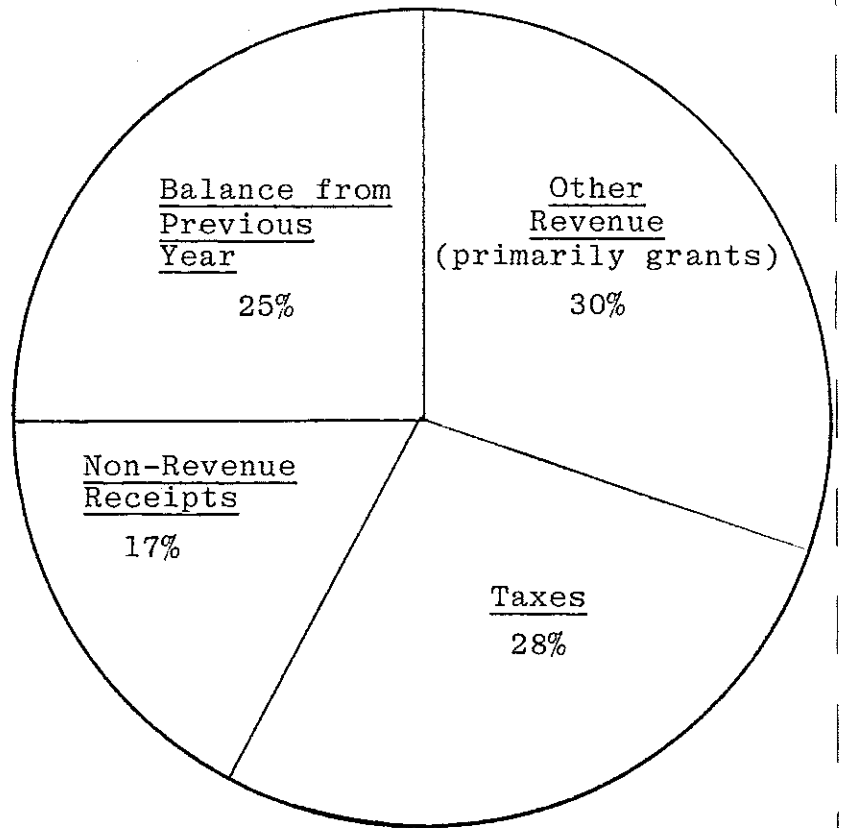
SOURCE: West Shenango Township and Crawford County Records.

The Township's expenditure patterns closely parallel the major responsibilities of the governing body. As indicated by Table 18, highway expenditures constitute the most significant element of overall Township expenditures during the five year period. It is expected that the expenditure demands of road maintenance will continue to make up a significant component of total expenditures.

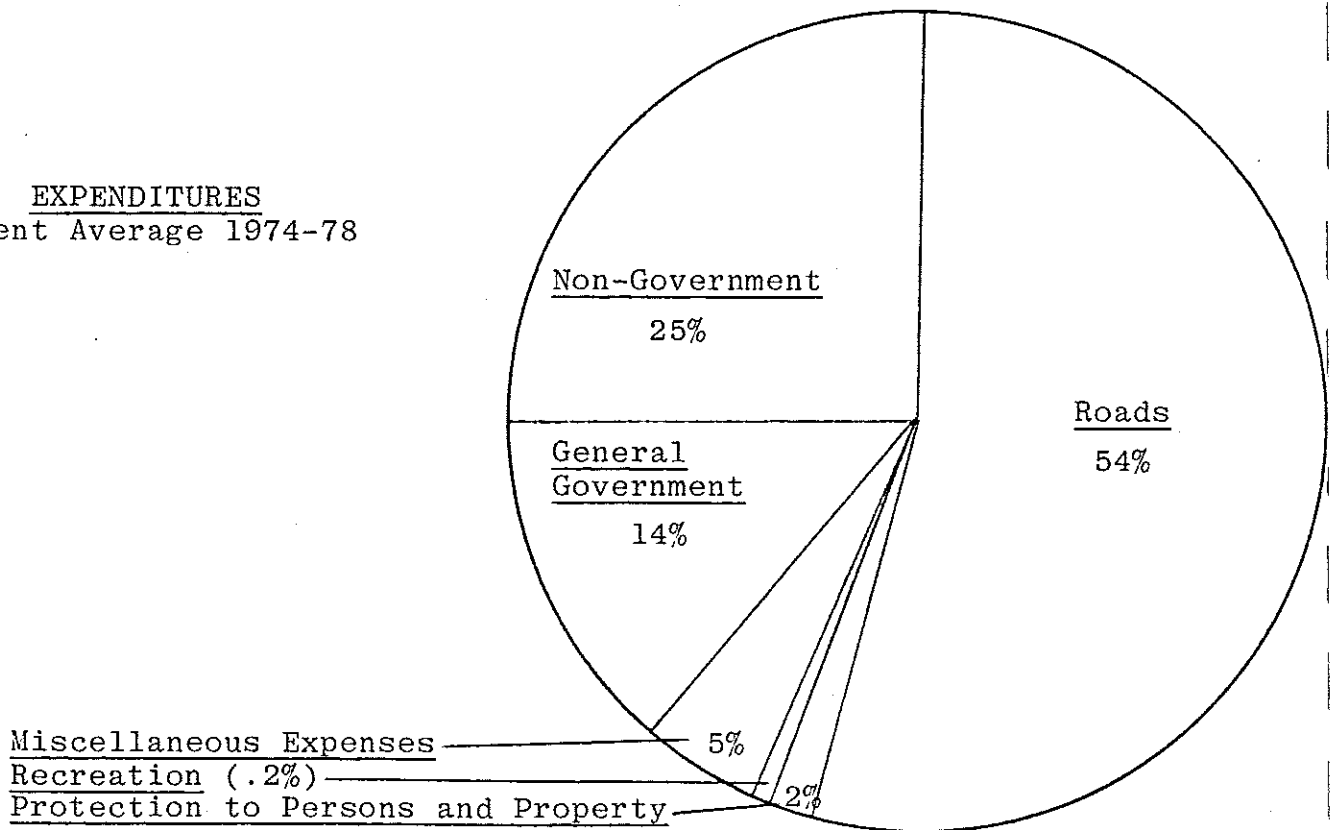
The pie charts which appear on the next page graphically illustrate the data which is provided in Table 18. These charts provide an easy method for understanding the relative significance of one type of revenue or expenditure to another.

FIGURE 4
 AVERAGE REVENUES AND EXPENDITURES, 1974-1978
 WEST SHENANGO TOWNSHIP

REVENUE RESOURCES
 Percent Average 1974-78



EXPENDITURES
 Percent Average 1974-78



ASSESSED VALUATION TRENDS

As mentioned, Table 18 also lists the assessed valuation for the Township between 1974 and 1978. During this time, the assessed valuation of the Township has increased approximately 10 percent from \$679,900 in 1974 to \$747,850 in 1978. The highest single increase during the five years occurred in 1976, when the Township's assessed valuation increased 3.4 percent.

BORROWING CAPACITY

The Local Government Unit Debt Act of 1972 changed the basis for non-electoral debt limits, from a percentage of assessed valuation to a percentage of total revenue. The new non-electoral limit is calculated by determining the total annual revenue received by the Township, excluding:

- Subsidies or reimbursements from the United States Government or from the Commonwealth of Pennsylvania measured by the cost of, or given or paid on account of, a particular project financed by debt.
- Revenues, rates, receipts, user charges, special assessments and special levies which are or will be pledged or budgeted for specific self-liquidating debt, but such portion thereof as may be returned to the local government unit by the pledgee for any general operating purpose shall not be excluded.
- Interest on monies in sinking funds, reserves, and other funds pledged or budgeted for the payment or security of outstanding debt, and interest on bond or note proceeds.
- Grants and gifts-in-aid of, or measured by, the construction or acquisition of specified projects.
- Proceeds from the disposition of capital assets, and other non-recurring items including bond or note proceeds not considered income under generally accepted municipal accounting principles.

Two additional factors need to be mentioned. First of all, the debt limit refers only to debt not approved by the electorate. The law places no restrictions on debts approved by referendum. The second point is that the basic debt limit can be raised if indebtedness is incurred for specific eligible projects. An additional one hundred percent of the borrowing base may be utilized to finance the cost of capital facilities for projects related to public health services, pollution control, sewage and refuse collection, and public transportation - providing the County has not assumed responsibility for the function.

The "borrowing base", upon which the debt limit is established, is an average of the three previous years' eligible revenue totals. The debt limit for West Shenango is indicated in Table 20, along with the steps used to determine the total.

TABLE 20
 1978 BASIC NON-ELECTORAL DEBT LIMIT
 WEST SHENANGO TOWNSHIP

	1975	1976	1977
Borrowing Base (Total Eligible Revenue)	\$36,548	\$34,091	\$37,375
Three Year Average =	\$36,005		
Basic Debt Limit = 3 year average x 250% =	\$90,011		
SOURCE:	West Shenango Township Records		

OPPORTUNITIES AND PROBLEMS

In addition to the inventory and analysis of the various man-made and natural systems contained in this report, it is also necessary to take a look at opportunities which enhance living conditions within the community (or have the potential for doing so), as well as problems which may serve to detract from the area's desirability, amenity or safety. The identification of these community opportunities and problems has been accomplished through various observations made during field surveys, analyses of data contained herein, and meetings with the Planning Commission. It is the purpose of the Land Use and Facilities Plans to take advantage of and strengthen the opportunities identified, and prescribe methods for resolving community problems.

Following is a list of statements which are meant to describe opportunities and problems identified in West Shenango Township. This list, however, is not intended to be complete and should be changed and added to as conditions warrant.

- OPPORTUNITY: The resort-recreational aspects of Pymatuning State Park.
- OPPORTUNITY: The majority of West Shenango is characterized as being rural, with an interesting and attractive landscape.
- OPPORTUNITY: The scenic beauty of Snodgrass Hollow.
- OPPORTUNITY: An excellent inter-municipal recreation program is available to Township residents of all ages.
- OPPORTUNITY/
PROBLEM: Potential impacts of U. S. Steel proposal to construct a steel-making complex along the Lake Erie shoreline near Conneaut, Ohio.
- PROBLEM: The lack of maintenance and/or abandonment of many seasonal homes has resulted in a blighting influence on the surrounding community.
- PROBLEM: In some instances, the inappropriate location and careless installation of mobile homes has served to detract from the attractiveness of the Township and reduce surrounding property values.
- PROBLEM: The plotting of large allotments in the past, with no coordinated development plan or control, has resulted in large areas of undeveloped subdivided land.
- PROBLEM: The holding of large amounts of land by out-of-town owners for recreational, retirement, or speculative purposes.

- PROBLEM: The Township lacks a sufficient revenue base to provide such services as police protection, or new programs involving heavy capital outlays for staff or 'hardware' items.
- PROBLEM: Most of the Township's soil is unsuitable for the operation of normal on-lot sewage systems and, as such, poses a critical constraint on new development.
- PROBLEM: PennDOT's road system, particularly L.R. 20002, is not maintained in a way which is adequate to meet the safety and convenience needs of Township and area residents.
- PROBLEM: Advertising signs along U. S. 322 are, in many instances, excessive and serve to litter the landscape.

THE PLAN

LAND USE PLAN

INTRODUCTION

The Land Use Plan prepared for West Shenango has been created to reflect the long-range development policies of the Township. These policies provide the basis for the implementation of the Plan by identifying basic principles related to the planned and coordinated growth of the Township; the preservation of environmentally sensitive areas; and the establishment of controls to protect and enhance the unique and desirable character of the community for future residents. Thus, the Land Use Plan for West Shenango represents a series of goals which encourage the optimum use of buildable land, as well as the protection of those lands within the Township which are either subject to building hazard or which possess unique, aesthetic or agricultural value.

The major purpose of this Land Use Plan is that it serve as an effective guide to the Township Supervisors and Planning Commission, not only in attempting to influence the location of new development, but also in holding down the costs of providing municipal services through land use regulation. In addition, the Plan has sought a close relationship between the use of land within the Township and the land use policy of surrounding communities - working to achieve an efficient and mutually acceptable pattern of land use throughout the region.

The following discussions present the growth and development policies established by West Shenango to govern land development and conservation. These policies are born out of lengthy discussions as to how the Township should manage its land to achieve its objectives for controlling growth; the primary objective being to preserve the rural/agricultural character of the Township, while encouraging new growth to locate in areas which are best suited for concentrated residential and commercial development. In some instances, programs and/or projects have been identified which prescribe specific means for extending policy into action. Where appropriate, these programs/projects are described in conjunction with the policies they seek to achieve. A summary is provided at the end of the discussion of policies which details the specific recommendations of the Plan, as illustrated on the "Land Use Plan" map. (See the cover jacket of this report).

LAND USE POLICIES

The land use policies form the basis for developing the Land Use Plan and, as such, establish the principles upon which future development proposals should be reviewed. In addition, these policies seek to achieve the Township's objective of encouraging growth which is

'structured' in terms of its location and its relationship to existing development and natural features. The policies established to guide land use decisions in West Shenango are as follows:

Future development shall be encouraged to locate in the appropriate use areas as delineated by the West Shenango Land Use Plan. This plan designates areas for agriculture, rural and concentrated residential development, commercial development, conservation, and State Park.

The Land Use Plan for West Shenango delineates specific areas of the Township for certain uses, based upon detailed analyses of existing uses, land and facility constraints and future needs. As such, the Plan seeks to eliminate land use conflicts by grouping uses according to their activity or function. The Planning Commission and Township Supervisors shall, to the greatest extent possible, encourage new development to locate in the appropriate areas, as recommended by the Plan. Following are several more specific policy statements which address different use areas.

Non-farm land uses shall be discouraged in areas where productive agriculture exists.

A substantial area in the western portion of the Township is farmed on a full-time basis. This area, which lies primarily along Bush Road, is expected to remain a strong farming area and, as such, the Township should manage its road system and all other facility improvements so as to discourage new non-farm related growth in this area.

In addition, there are also several areas of the Township which are utilized for farming on a part-time, or "second income" basis. These areas are encouraged to remain in agricultural production as the primary use of the land, but could also accommodate the development of housing on very large lots (e.g., 10 to 20 acres or larger). The purpose for recommending these large lots is to minimize the impact of any residential development on farm activity.

Future large scale subdivision of land for residential purposes shall be encouraged to locate in areas designated for concentrated residential development.

The Land Use Plan designates areas for "concentrated" residential and commercial development based upon existing development patterns, proximity to fire protection and improved roads, and proximity to

active farming operations. This concentration of development will, in addition to protecting farmland, establish a concentrated service area for the possible future provision of public services and utilities (for example, a sewerage system) in a cost effective manner.

As discussed in the Existing Land Use section of the report, most of the existing subdivided land within the Township is located in the vicinity of Turnersville. It is the recommendation of the Plan that future subdivision of land also be concentrated in this area - or, more specifically, between the Conrail right-of-way and Pymatuning State Park.

Lands which have no concentration of active farm operations, and where the potential for concentrated development does not exist, shall be encouraged to develop for low density uses in keeping with constraints on development implicit in the land itself.

Many areas of West Shenango are no longer actively used for farming, yet are located either amidst active farms or away from the area recommended for public utilities. Considering the poor soils which are located throughout the Township, in terms of their suitability for on-lot septic systems, it is recommended that these areas be encouraged to develop primarily for low density residential uses on lots which can safely support on-lot sewage disposal (2 to 10 acres or larger). In addition, much of the land designated for this use is located along Snodgrass Hollow Road and, as such, serves the dual purpose of discouraging extensive development in this unique scenic area.

PROGRAM: The West Shenango Planning Commission shall undertake a comprehensive review of all existing development control ordinances to evaluate their effectiveness and consistency. Based upon this review, the Planning Commission shall forward revised and/or totally new ordinances to the Township Supervisors for their review and adoption.

The Planning Commission recognizes the critical need to review the Township's existing ordinances affecting the quality of new development - as the first step after completing this Comprehensive Plan. Once this has been accomplished, the Township can more fully evaluate the need for additional development management regulations to aid in achieving the objectives of the Land Use Plan.

Pymatuning State Park is recognized as a critical environmental resource to the Township, region and state. As such, the Planning Commission and Supervisors shall discourage new development which would have a negative impact upon the park and its facilities.

Because West Shenango contains a portion of Pymatuning State Park, the Township has a certain 'responsibility' to accommodate seasonal residential and commercial uses. In accommodating such uses, however, the Planning Commission and Supervisors have a negative view towards developments which would serve to degrade the State Park's and, consequently, the Township's scenic resources.

It is important to note that the natural beauty of the Township is a very important factor in maintaining a successful tourist industry. As such, future development will be strongly urged to blend into the natural setting, rather than impose itself upon it.

Land subject to the hazards of flooding shall be managed by the Township under the guidelines established by state and federal regulations in order to curtail new development in these hazard areas.

West Shenango Township shall regulate its flood prone areas in accordance with the State of Pennsylvania's new Flood Plain Management Act (Act 166 of 1978) which requires full participation in the National Flood Insurance Program. Areas within the Township which are subject to flooding are delineated on the Land Use Plan map, and are designated for conservation.

Commercial uses shall be encouraged to locate in the Township, contingent upon careful review to insure compliance with high design standards.

West Shenango Township encourages commercial uses to locate and expand within the community, and shall regulate such uses more on the basis of their site design than their proposed location. The Township shall review proposals to insure that they take measures to minimize traffic conflict, provide adequate parking, and provide landscape and other buffers so as to eliminate adverse impacts on existing uses in the surrounding area.

The "Land Use Plan" map, however, designates two specific areas where concentrated commercial development uses are to be encouraged. These areas have good visibility and provide the opportunity for clustering businesses so as to share parking and road access. These areas are located: 1.) in Turnersville, between the railroad tracks and U. S. 322, bounded by L.R. 20002 and Adams Road; and 2.) along U. S. 322 in the far southeastern corner of the Township. Where possible, both of these areas should be encouraged above all others for the development of commercial uses.

With respect to industry, West Shenango has not adopted a policy of actively encouraging industrial development within the Township. However, if a specific proposal were brought before the Planning Commission, it would be reviewed upon its merits.

The Township's subdivision regulations shall be carefully enforced so as to provide responsible regulation of land surveying and mapping, and to insure environmentally sensitive development. The standards set forth in these regulations are minimum standards consistent with health, safety and general welfare. Standards which are higher than these minimums shall be encouraged so as to preserve woodlands, views, and other natural features and amenities of the land.

In light of some of the existing problems with subdivisions in the Township, the Board of Supervisors, at the advisement of the Planning Commission, adopted a subdivision ordinance approximately one year ago - giving the Township review and approval power over the future subdivision of land. In reviewing subdivisions, however, the Township shall rely upon the technical assistance of the Crawford County Planning Commission, as this assistance is recognized as being invaluable to the Township Planning Commission in making responsible decisions.

SUMMARY

As stated earlier, the Land Use Plan serves as a guide to local officials in helping them influence development so as to best benefit the community. The "Land Use Plan" map illustrates how the policies discussed above relate specifically to the land in West Shenango. Generally, this map recommends that concentrated residential and commercial uses be encouraged to locate north of the Conrail right-of-way - with the area south of the right-of-way being reserved for agriculture and rural development (single family homes on large lots).

In terms of Pymatuning State Park, this Plan recommends no additional expansion of the Park's land holdings. As pointed out earlier, the State already occupies approximately forty percent of the land area of West Shenango, and its facilities in the Township are perhaps the most "all-inclusive" of any community on Pymatuning Reservoir. It is recommended, however, that West Shenango, and surrounding communities which border on the State Park, seek to establish a better line of communication with the State - specifically related to assistance in reducing adverse Park-related impacts.

FACILITIES PLAN

INTRODUCTION

The Facilities Plan for West Shenango Township has been developed as an extension of the Land Use Plan, in that it identifies additional - and in some instances, more 'tangible' - methods for achieving land use policy. The policies and programs which are presented in this discussion focus specifically on what public officials in West Shenango can do, in terms of public investment, to influence the location of new development in the Township. A major emphasis in the Facilities Plan is placed upon road management; i.e., maintaining the Township road system so as to promote or discourage growth in specific areas of the Township. It must be mentioned, however, that all of the policies and programs discussed in both the Land Use and Facilities Plans are interrelated - working collectively to achieve the Township's objectives for controlling growth.

ROAD MANAGEMENT

The objective of road management in West Shenango is to maintain a safe, efficient and attractive road system which is functionally consistent with the recommendations of the Land Use Plan. The following policies establish a basis for accomplishing this objective.

The Federal Functional Classification System shall be accepted as the appropriate system for the classification of roads in the Township.

The Federal Functional Classification System, as discussed in the background information on roads, establishes a hierarchy for classifying roads throughout the nation according to their function. The Crawford County Planning Commission has further refined the Federal 'Local' classification to differentiate between roads designated as local by the Federal System which provide continuity and actually serve a collector function, and those roads which serve no other function than to provide access to abutting properties. This refinement is necessary because the majority of road mileage in Crawford County falls within the Local classification and, as such, is undifferentiated on the basis of more specific functional criteria. As such, West Shenango endorses the use of the Federal system, as refined by the County Planning Commission, for the purpose of classifying roads in the Township.

The travel way width, surface treatment and degree of maintenance of all Township roads shall be based upon their functional classification category. Where appropriate, the Township shall recommend changes in the functional classification of certain roads so as to insure compatibility with the objectives of the Land Use Plan.

The road recommendations for West Shenango designate the desired functional classifications for roads within the Township - indicating which roads should be encouraged for light, moderate, or heavy use through road maintenance policy. The functional classifications recommended may, in some instances, differ from the official classification as now established. These changes are made so as to recommend that certain roads receive improved maintenance, while others, perhaps, should receive less. The primary purpose of these recommendations is to establish a road management program which works toward achieving the objectives of the Land Use Plan. For example, Township roads which traverse areas of the community that are primarily in active agricultural use should be maintained at minimum standards designed to sustain a good quality road bed and minimize dust; the intent being to discourage, through the Township's primary form of capital investment, the encroachment of development into agricultural areas. In contrast, Township roads which provide access to, and collect traffic from, subdivided areas of the community - as well as Township roads within the allotments themselves - should be maintained to higher standards intended to encourage concentrated growth in these specified areas.

However, this policy must be tempered by the Township's financial capacity to upgrade roads. At the present time, the Township maintains roads in the Holiday Park and Frontier Acres Allotments - all of which are maintained as gravel roads and are expected to remain so until such time as development increases and makes it economically feasible to pave them.

As a basis for relating road maintenance to functional classification, the following table recommends standards to govern travel-way widths and surface treatment based upon the function of different roads.

TABLE 21
ROAD MAINTENANCE CRITERIA
WEST SHENANGO TOWNSHIP

FUNCTIONAL CLASSIFICATION	TRAVEL-WAY WIDTH	SURFACE TREATMENT
Minor Arterial	22-24 feet	Paved
Major Collector	22-24 feet	Paved
Minor Collector	20 feet	Paved
Collector	20 feet	Gravel/Paved ¹
Local Access	18 feet	Gravel/Paved ¹

¹ NOTE: Dependent on present surfacing and location within the Township.

L.R. 20006 across the Spillway, East Lake Road (L.R. 20003/20138) in North and South Shenango Townships, and U.S. 322 in Jamestown and West Shenango. This "loop" road would serve to distribute Park-oriented traffic directly to the facilities offered at different areas of the Park - a task which is not presently well provided for.

The map on the following page provides an illustration of this idea, which primarily utilizes existing roadways and improved signing at key intersections. The only major road improvement recommended for this loop is a realignment of L.R. 20003, north of Pa. 285, so that it connects with L.R. 20006 at the southern end of the Spillway (see the map). Also, as mentioned, improved signing is needed to more efficiently direct visitors to Park facilities - not only on the Park's periphery, but also on a regional scale. As such, this Plan also recommends the identification of a regional "feeder" road network for Park-oriented traffic - the goal of which is to direct people to the general area of the Park which interests them. Then, utilizing the loop road, direct them to specific facilities available within the area. For example, from Conneaut Lake, traffic destined for Pymatuning State Park could be dispersed in three directions, depending upon the facilities desired:

1. Southwest, via U.S. 322, to the facilities in the Jamestown area;
2. West, via Pa. 285, to the Causeway and other facilities in the Espyville area; or
3. Northwest, via U.S. 6, to the facilities in the Linesville area.

Once traffic is routed to one of these three general areas of the Park, it can, with improved signing, be directed to the specific facilities.

- Countyline Road (T.R. 301) and U.S. 322 The facilities Plan recommends that the intersection of Countyline Road and U.S. 322 be improved to allow better sight distance west from Countyline Road, and to increase the angle of the intersection. At present, Countyline Road intersects U.S. 322 at a twenty-three degree angle - which, when combined with limited sight distance, creates a potentially hazardous situation. It is felt that the development of a "Y" intersection at this point would be the least costly and most effective way to alleviate the existing problem. This improvement would facilitate turning movements for traffic both entering and exiting Countyline Road. In addition, the removal of some of the trees located west of the intersection would resolve the sight distance problem.

PROGRAM: The Township shall communicate its road classification recommendations to PennDOT, and shall work with the State to change the official designations - bringing them into harmony with Township policy.

The State should be made aware that West Shenango intends to manage its road system to help control the location of growth. The major change in classification which the Township must convince PennDOT to accept is that which relates to L.R. 20002.

West Shenango Township shall maintain close coordination with the Board of County Commissioners and the Crawford County Planning Commission in connection with the determination of PennDOT's Twelve Year Highway Improvement Program, and the listing of qualifying projects for funding under the Federal Off-Systems Road Program.

Major reconstruction and new construction projects, such as would be required for L.R. 20002, must be listed on the State Twelve Year Highway Program in order to be funded. These are projects which normally require detailed engineering plans and the purchase of right-of-way. PennDOT utilizes county planning commissions to coordinate and obtain local comment on what projects should be in this program. The Crawford County Planning Commission in turn has organized a Highway Advisory Committee which is a forum for expressing local municipal needs in connection with this program. The Board of Township Supervisors is a member of this Advisory Committee. The Board should make sure that the County Planning Commission has a listing of all major highway improvements for state maintained roads which the Township believes should be scheduled for construction over the next twelve years.

The Off-Systems Road Program has the ability to deliver federal dollars for the improvement of township roads. Qualifying projects should be listed with the County and with PennDOT. These projects should be prioritized by the Township.

The Township encourages the preservation and "filling in" of tree line plantings at or near road right-of-way lines, particularly in new developments.

The strong lines of shade tree plantings which enhance areas of Countyline Road, L.R. 20001, Bush Road and others, are recognized as a major asset to West Shenango's scenic quality. As such, this policy, encouraging the preservation and "filling in" of these tree lines, is intended to maintain and further enhance the Township's rural and developed areas.

HOUSING PLAN

INTRODUCTION

The Housing Plan seeks to identify some of the methods available to West Shenango in dealing responsibly with the housing problems which exist in the Township. Realistically, however, this is an area which must be more thoroughly addressed in future planning cycles in order to present meaningful alternatives for action. With this in mind, the following policies represent the position of West Shenango relative to its most immediate needs in resolving housing problems.

HOUSING POLICIES

West Shenango Township shall enforce its building and development codes so as to maintain and improve existing residential neighborhoods, to insure sound new residential construction, and to protect the housing consumer.

The Township shall, to the best of its ability, enforce ordinances which are intended to eliminate health and safety hazards associated with dilapidated and abandoned housing in the Township. As stated earlier, a project of high priority to the Township is the review of all existing development control ordinances to improve their effectiveness in dealing - not only with new development - but also in resolving existing development problems.

PROJECT: A housing conditions survey should be undertaken to identify concentrations of dilapidated and/or abandoned housing within West Shenango Township.

As a first step in dealing responsibly with housing problems in the Township, a structural conditions survey and analysis should be undertaken to evaluate West Shenango's housing stock. This survey and analysis would then serve as the basis for a comprehensive program aimed toward improving housing in the Township.

West Shenango shall encourage the Board of County Commissioners to reactivate the County Housing Authority in order to channel federal aid into housing rehabilitation loan programs in the Township.

West Shenango Township is not able to participate directly in housing rehabilitation loan programs. It must work through a county-wide authority in order to make low interest-rate rehabilitation loans available to its residents. The County created a housing authority in years past, but currently it has no appointed members and is not functioning.

Good community planning is a continuing activity; it is not a "once done then over" situation. The Township Planning Commission, the Supervisors and Township citizens are urged to use this document hard, to mold and shape it so that it is always important and useful in Township affairs. The Planning Commission has the key role and responsibility in keeping the Plan "alive", and they should undertake a major reassessment of this document and the Land Use Plan map at least once every five years.

APPENDIX 1

SUPPORTING MATERIAL

Following is a list of narrative and mapped studies developed as background to the Plan, which could not be entirely included in this document. This material, however, is on file either with West Shenango Township officials or in the offices of the Crawford County Planning Commission.

1. Current Well Inventory, West Shenango Township, 1978 (map)
2. Existing Land Use - West Shenango Township, Survey dated September, 1978 (colored map version)
3. Federal Insurance Administration Flood Hazard Boundary Map, Township of West Shenango, Pa., January 17, 1975
4. Groundwater Resources, West Shenango Township, 1978 (map)
5. Identification of Full and Part-time Active Farms, West Shenango Township, 1979 (map overlay)
6. Soil Conservation Service Map of Existing and Potential Agricultural Land, West Shenango Township, 1979
7. Soil Suitability for Agriculture, West Shenango Township, 1978 (map overlay)
8. Soil Suitability for On-Lot Sewage, West Shenango Township, 1978 (map overlay)
9. West Shenango Township Property Lines Base Map, January, 1977
10. West Shenango Township Property Line Base Map, showing the land ownership, Fall, 1978

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