

Somerset Township

Comprehensive Plan

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Introduction

According to the Pennsylvania Municipalities Planning Code (MPC), townships are empowered to “plan their development and to govern the same by zoning, subdivision, and land development.” The comprehensive plan is created to outline and guide the future development of Somerset Township, in accordance with the MPC. It constitutes a plan including land use - residential, industrial, business, and agricultural - housing, population, recreational facilities, schools, roadways and transportation systems, environmental factors, services, community facilities and utilities as well as many others which will be needed by the next generation. The plan is necessary to pull together all these into a desirable pattern so that each adds maximum benefits to the community in the future.

As Somerset Township evolves, it is necessary for the decisions made by both the general public and by the public agencies to do so as well. The purpose of this plan is to provide a framework for the decisions so that those who are responsible for the new additions will know best where to place them, appropriate implementation of them, and how to put them into other improvements which will follow theirs. Within the framework of objective foresight, this plan attempts to avoid error and waste for both public and private decisions by allowing a better understanding and judgment of total community development.

The comprehensive plan, as a generalized statement of plan for action and growth, is concerned primarily with physical development, such as land use, the transportation system, and construction of public infrastructure improvements, the development of which should be done over time using a variety of decision-making actions with the comprehensive plan. It should be used as a policy guide for township officials to provide guidance in administrative decision-making as the location, character, and extent of future development occurs. This plan sets forth goals for the future development of Somerset Township and outlines concepts to aid in identifying policies and priorities for development. It is based upon a compilation of data supplemented by maps, charts, and text which describe the composition and influences acting on the township.

The plan is set forth with enough flexibility to allow latitude for individual decisions. Such latitude may encourage better ways of building communities than have been used in the past, and provide for innovations in community development which will be brought about by the upcoming generation. As such, this plan presents a challenge to citizens and developers to pursue excellence within an overall pattern for development. By accumulating excellence in individual building projects and tying them together by an overall pattern, Somerset should, in the future, be a reflection of the best capabilities of our society. It can evolve into a series of desirable neighborhoods in a natural setting, which makes possible a community life of substance and permanence.

Hindsight is more certain than foresight. As time passes, some of the program proposals presented here will most certainly require amendment to reflect the actual, rather than probable, unfolding of events. With this obvious limitation on long range planning it must be born in mind that continuity of effort is essential to the success of the planning objectives.

Using This Plan

This comprehensive plan is to be used as a guide for making decisions related to land use and development in the township. The decisions of the townships should be guided and developed by the recommendations included within this document. The document provides guidance for site plans, subdivision plans, community facility projects and other development-related concerns. The comprehensive plan is divided into different chapters containing many different plan elements, as required by the MPC.

Another important concept necessary to understand when using the comprehensive plan is amending the plan. This is important because a comprehensive plan is a document that should be used as a resource in long range planning as well as sometimes the daily administration of a township. However, times change, economies fluctuate and circumstances can dictate the need to modify or amend the long range vision and plan of a township. When this occurs, the comprehensive plan must be amended to reflect the new conditions so that the future decisions reflect the best possible community vision and strategy. The MPC requires the plan to be reviewed every ten years at the very least.

Another important element and concept to understand when using the plan is the interrelationship between the individual plan elements. The MPC requires that the comprehensive plan includes an explanation of how individual plan elements are interrelated and will impact one another. Because there exists an obvious interrelationship among various plan elements, such as land use and housing, transportation, community facilities and economic development, when one change is made, it inevitably affects other aspects and areas. Some of the affects can be predicted while others cannot; therefore it is impossible to describe the future impact this will have on the township as a whole.

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Chapter 1: Baseline Data

Somerset Township occupies a land area of 31.1 square miles and is located in east central Washington County. It lies midway between the cities of Washington and Monessen, and occupies an area north of the historic National Pike, U S Route 40, which was the first national highway built into the trans-Appalachian frontier. Today, Interstate Route 70 traverses the township and four interchanges of I-70 are located in Somerset.

Somerset Township is located about 22 miles south of Pittsburgh's Golden Triangle therefore it is a part of the Pittsburgh Metropolitan Region. I-70 is a major transportation facility serving the Metropolitan Region, and, in conjunction with I-79 and the Pennsylvania Turnpike, forms an outer circumferential loop for the region.

The incorporated boroughs of Ellsworth and Bentleyville lie on the eastern boundary of Somerset Township and Cokeburg is on the southern boundary. The unincorporated village of Eighty Four occupies the northwest corner of Somerset Township near the point where the Township abuts North and South Strabane Townships.

Natural resources as well as environmental factors and areas such as soil, slopes, drainage and water systems, flood plains, and landslides provide many assets to an area. These features make a community more attractive to both prospective developers and residents, but they also pose constraints to land use and development. For example, steep slopes and flood plains restrict where development can occur, and townships have a prerogative to ban all development within flood plains or on slopes with a gradient greater than 25 percent.

Geology

Somerset Township lies between the agricultural plains of the Midwest and the Appalachian Mountains to the east. Through geological history, the land of the township has undergone a series of alternate lifting and subsidence stretching over unimaginable time spans. Sometimes it is the base of an inland freshwater lake or a saltwater sea, and at other times thrust upward as a plain well above sea level. Over time the land was built through siltation and petrification of organic material, sand, lime, clay and other materials so that varying strata accumulated thicknesses totaling several thousand feet. Coal beds were formed when marshes predominated.

The last lifting raised this plain to a height of about 1,400 feet about sea level, and it was from this elevated plain that the present ridges and valleys were carved, principally by water erosion. The surface overlays a series of varying strata, each of which is fairly uniform in its thickness and composition over a large section of Western Pennsylvania and surrounding regions. The geologic strata have been classified by geologists as separate, distinct formations. The surface outcrop line of the most important geologic strata is indicated on the Geology Map.

The surface formation throughout most of Somerset Township is the Washington Formation. The formation has a thickness of 300 or 400 feet and is comprised primarily of sandstone, shale, limestone and several coal seams. The most important seams are the Washington Coal (three to eight feet) and the Waynesburg Coal (three to nine feet). The Waynesburg Coal seam marks the base of this formation.

The Greene Formation once overlaid the Washington Formation, but it has been eroded away in all but a small section of the township. It occurs only on the high ridges in the western sections of the township in the vicinity of Eighty Four. The base of the formation is distinguished by the Upper Washington Limestone seam having a variable thickness of four to 20 feet.

The Monongahela Formation, just below the Washington Formation, surfaces along the valley floors and covers about a tenth of the township's area. This formation consists of an inter-bedded sequence of limestone, sandstone, shale and coal. The base of the Monongahela Formation is the Pittsburgh Coal seam, the most uniform and most valuable coal bed in southwestern Pennsylvania. This seam, after the final lifting of the surface, had an altitude varying between 600 feet above sea level to 750 feet above sea level in Somerset Township.

The Conemaugh Formation lies below the Monongahela formation and is a residual stratum from the Appalachian plateau having a thickness of 500 to 750 feet and consists of a sequence of sandstone, shale, clay-shale, and limestone. It does not surface in Somerset Township. The limestone and coal seams within the Conemaugh formation are generally erratic and thin. The base of the Conemaugh formation is the Upper Freeport coal, a seam generally having a width of four feet more or less and occurring at an altitude about sea level of between seven hundred and nine hundred feet. The Allegheny Formation is located beneath the Conemaugh formation and the Upper Freeport coal seam. It consists of a cyclic sequence of sandstone, shale, limestone and coal, and ranges in thickness from between 250 feet to 370 feet. In addition to the Upper Freeport coal Seam which is considered to be a part of the Conemaugh Formation, the Allegheny formation contains Lower Freeport coal and Upper Kittanning coal, and Lower Kittanning, Clarion and Brookville coal. These beds, however, have not been of economic value in Somerset Township and will have little impact on its future unless a new technology for recovering deep thin veins of coal is developed

Topography

The surface of Somerset Township was created primarily by erosion from weathering and storm drainage. The original geology of the area has been changed by these natural processes which over great periods of time carved deep valleys, removing the upper formations and exposing the lower strata. Erosion removed huge quantities of the original bedrock; during this process, lighter materials such as sand and gravel were deposited in the valleys. The highest ridge tops within the region are still close to the original surface of the elevated plain, having been carved into

rolling and rounded hilltops of varying altitudes. The larger drainage areas – mostly through a process of fill by alluvia – have become relatively level with smaller drainage streams and runs dropping sharply through sometimes narrow and steep valleys.

The surface topography of Somerset Township varies by over 500 feet in altitude. The highest land in the township is just over 1420 feet above sea level, and this high ridge is located just to the south of the western boundary of the township. The lowest point is just less than 900 feet and lies at the easternmost point in the township along the stream bed of Pigeon Creek. Low lands follow the valleys of Pigeon Creek and its branches along the eastern township line and extending westward into the center of the municipality. Additionally, the valley of the Little Chartiers Creek defines the western boundary of Somerset Township. Ridge systems rise between these low valleys and these vary from 1100 to over 1400 feet in altitude.

The topography of Somerset establishes four distinctively different environments: 1) broad valleys filled with alluvial wash, such as the valleys of Pigeon Creek near Bentleyville and Ellsworth 2) narrow valleys with steeply sloping walls such as those of the runs rising from Little Chartiers Creek into the western sections of the township 3) gently rolling ridge tops such as those on Route 136 between Dunningsville and Kammerrer 4) and the steeply sloping wooded hillsides which separate the ridges from the valleys.

Generally speaking, the valley areas are the most level. The material for these valleys is outwash from erosion and weathering of higher areas, and these lands are characterized by better top soil than that on either the ridges or the hillsides. Filled by sand and gravel, these areas have better drainage characteristics than the clayey areas on the upper lands. Since they provide relatively level routes along their length, they were the earlier lands to be developed. These lands are the loci for highways, railroads, industry and housing. I-70 follows the north branch of Pigeon Creek, for instance, and the B and O rail lines follow Little Chartiers Creek valley through Eighty Four. Some of these valley areas are subject to flooding, being the lowest areas, as well as subject to rapid accumulation of storm water from the ridges and hillsides.

Ridge tops were largely undeveloped prior to the advent of the private automobile, since they were substantially less accessible and were suitable primarily for agriculture. Untroubled by flooding, these lands are subject to erosion and are characterized by fairly thin soils. Throughout the area the subsurface of high lands is characterized by clays which for the most part are nearly impervious to water.

Slope

Another way to analyze existing land forms is to describe the slope of the land. The Slope Map shows topography, not as a function of altitude above sea level, but rather by the degree of slope of the land. The Slope Map for Somerset Township is

based on maps prepared by the United States Geological Survey and translates distance between adjacent contours into percentage of slope.

Slope is measured as a percent of vertical change to horizontal change, since percentage is a more convenient measurement, than the number of degrees from horizontal would be. For example, a twenty-five percent slope is a line that is approximately fourteen degrees off horizontal. This is generally taken as the differentiation between land able to be built on and land unable to be built on. Similarly, a slope of ten percent is a drop of ten feet in elevation (from, say, 1000 feet above sea level to 990 feet) over a distance of 100 feet. Generally, land having a slope of ten percent or less is preferred for development. This slope condition usually occurs along stream terraces, tributary valley bottoms and the ridge tops.

The most important category of slope is that exceeding 25 percent. These land areas are generally considered to be unable to be developed both for economic as well as environmental purposes. By comparing the Steep Slope Map with the existing Land Use Map, one can find few areas within Somerset Township where development has occurred on steep hillsides. Such a comparison points to the fact that a significant amount of the land which is classified as vacant or wooded on the Existing Land Use Map is steeply sloping and should be removed from future development consideration. Further, other factors such as soil type, mine subsidence or flood dangers will affect the usability of some of the lands having an otherwise desirable slope.

Lands characterized by slopes of between zero and 16 percent are level to rolling areas. Barring other limitations such as flooding or mine subsidence, this slope category is generally economically developable for all large scale or intensive land uses. Lands within Somerset Township which are characterized by this slope range are located primarily on hilltops or in valley bottoms. The higher slope areas in this category may impose some restraints on intensive land development. Single family residential development however is not generally impaired. Slopes within the range of 16 and 24 percent can be utilized only with careful site planning and special attention to erosion and landslide problems. Many restrictions must be used, walls must be retained, and there will be substantial grading when developing on these slopes. These land areas should be limited to very low density residential development.

Drainage System

Erosion by weathering and storm water have carved the earth into the drainage systems which are visible today on the surface of Somerset Township. The larger drainage areas have relatively level valleys as a result of the alluvial fill. Smaller drainage runs drop more sharply to the major streams through narrow, steep valleys. Drainage basins are separated by the ridges which divide watersheds. These are shown on the Topographic Map. Major runs and streams are identified on the map. Most of the township is drained by the Pigeon Creek system. Pigeon Creek rises

near Cokeburg and flows northeast to empty into the Monongahela River at the borough of Monongahela. Most of Somerset Township lies on the northern slope of Pigeon Creek and is drained by three subsidiary creeks of Pigeon Creek: Sawmill Creek, which partly defines the eastern boundary of Somerset Township; North Branch, whose valley provides the location for Interstate 70; and Central Branch. Pennsylvania Route 136 follows the ridge which is the northern limit of the Pigeon Creek system. To the north of Route 136, storm water drains into Mingo Creek.

The western end of the township drains into the Chartiers Creek System. Little Chartiers Creek delineates in part the western boundary of Somerset Township. It rises near the village of Glyde in Amwell Township and flows almost due north to a confluence with Chartiers Creek near Morganza. Chartiers Creek in turn continues north and empties into the Ohio River just downriver from Pittsburgh's Point.

Soils

Soils are classified based on their permeability and load bearing capacity. Therefore, the qualities of soils present in an area help determine suitable land uses for that area. For example, soils that do not drain well may have water saturation levels that preclude development or restrict the placement of on-lot septic systems.

Soil conditions are important to planning because they vary so greatly in many aspects, their ability to support on-lot septic systems, their susceptibility to landslides, and their tendency to flood. The thickest soils occur in the valleys which have been filled with outwash from the hillsides and valleys. The tops of the ridges tend to have relatively thin soils, and steeper slopes have little, and in some cases, no soil coverage. Except for hard from outcroppings, it is uncommon for soils to stabilize at an angle of repose greater than 50 percent slope.

Erosions by storm water and by alternate cycles of freezing and thawing have worn down the surface layers of sandstone, limestone, siltstone, shale and coal, which were the bedrock of the area. Weathering of surface material and mixing with organic humus has created the layer of soils which overlay the bedrock.

In Somerset Township well over 50 different soil types have been identified. Of these, approximately ten cover extensive land areas: the Gilpin Silt Loam, Gilpin-Weikert Shaley Silt Loam, Gilpin-Upshur Complex, Wharton Silt Loam, Hazelton Silt Loam, and five soils classified as urban land, which have concentrations of either Culleoka or Rainsborough Soils. According to the soils report for Washington County prepared by the USDA Soil Conservation Service, virtually all the soils within Somerset Township have limitations for community development due to their inability to support on-lot septic systems.

Soils which have been classified as prone to landslide are primarily classified as Gilpin-Upshur Complex. The Gilpin-Upshur soils are moderately deep, well-drained soils formed from relatively acid shale and some sandstone inter-bedded with non-

acid red clay shale, and is found on upland slopes. Landslide hazards, however, are not only associated with certain natural soils, but also with the underlying geology and with ground water. Since water functions as a lubricant to the soil and geological materials, landslides may be activated by top slope excavation, top slope filling or loading, or alteration of the natural ground water conditions.

The Soil Conservation Service has identified three soils within the township which are subject to periodic flooding: Atkins, Huntington and Philo Silt Loams. These soils are found most extensively along stream valleys.

Some of the developed areas of Somerset Township are underlain by soils which are classified as "urban land". These soils are either trucked in for use as fill on a site or the result of cut and fill operations within the site itself. As a result, these soils can contain such materials as brick, concrete, cinders, industrial waste, junk or other materials. Most often however, the urban land classification signifies cut and fill operation which has been utilized to move existing soils on the site so as to create a more usable piece of land for development. These are soils which normally are found on upland slopes and are characterized as being moderately deep, well drained soils which are formed from shale and fine grained sandstone bedrock.

Flood Plains

There are four factors which influence the ability of the region's streams to handle storm water runoff. These are soil permeability, the amount of covering on steep slopes, the number of constriction points on each stream, and the intensity of development. Human action can have an impact on the last three factors, but man cannot alter the consistency of the soil. Once runoff begins, steep slopes accelerate the flow of water. This is the major reason for the preservation and restoration of trees and vegetation on steep slopes and hillsides.

Constrictions may be either natural debris, which is not flushed away, or manmade -- the result of inadequate controls on the use and the structures within the flood plain. Finally, the amount of land which is paved or otherwise built upon increases runoff problems. Consequently, several policies should be adopted to control flooding problems. Steep slopes of valley walls should be protected and preserved in their natural state. The recently enacted flood plain ordinance allows for the control over the use of flood plains as well as the construction to flood plains. To minimize increased rates of storm water run-off, it may, in cases, be reasonable to encourage intensive development rather than low density sprawl; providing that large amounts of each parcel are left open for the soil to absorb rainfall.

Generalized flood plains have been identified in Somerset Township and regulations limiting development in these flood plains is in effect. The identified flood plains are show on the map.

Landslide Prone Areas

Landslides are a common hazard in many different planning regions. They can be particularly dangerous to people when they block roads or threaten their homes. Development should not occur in or near landslide prone areas; and if it does there should be great consideration to slope, soil, characteristics and drainage among others. The development would also entail mitigation measures including grading and slope stabilization.

The reshaping of the natural surface of the land to accommodate building can magnify or create probabilities for landslides. The cutting of a level shelf or bench along the hillside for a road or house results in cutting earth from the higher land and moving it to fill the lower areas. This results in steeper slopes on either side of the bench, with increased vulnerability to erosion. Additionally, the weight of the fill plus the weight of structures placed on the land may be too great to be supported by sub-surface clay strata and result in landslides.

The frequency of such landslides in Western Pennsylvania has increased noticeably during recent decades. Moreover, such landslides have occurred on land developments in areas which are generally considered more conducive for development than much of the remaining undeveloped land in Somerset Township. Future development, especially in the steep slope areas, must be carefully controlled to obviate the potential hazard of landslides.

Some rock falling as well as other down slope movement has occurred where harder stone overlays a softer strata which has decomposed. Geologic strata and rock layers are essentially horizontal, but minor tilts do occur. These, combined with the steepness of the surface slope, create potential landslide areas. Greater landslide problems occur where clay beds underlay upper rock strata and may, under heavy weight or disturbed surface conditions, act as a viscous fluid allowing slippage of upper levels.

Some soils located on slopes which exceed 25 percent are not characterized as being prone to landslides. However, two soil types known as Upshur and Vandergrift are susceptible to landslides and are located extensively in steep slope areas of the township. The Upshur soils are characterized as deep, well-drained, soils formed from non-acid clay shale which occur on upland slopes. The Vandergrift soils are characterized as deep, moderately well-drained soils which are formed when material has moved downhill by gravity, soil creep, frost action, or local wash. Consequently, the Vandergrift soils accumulate on the lower slopes and at the base of slopes.

Landslide hazards however, are not only associated with certain natural soils, but also with the underlying geology and ground water. Since water functions as a lubricant to the soil and geological materials, landslides may be activated by top slope excavation, top slope filling or loading, or alteration of the natural ground

water conditions. Since landslides can be so dangerously destructive and costly, all developments proposed on or near sites having conditions associated with landslides should be studied in detail to determine safety needs.

Mining

The Pittsburgh coal seam has, for the most part, been mined where it occurs and where mining has been feasible in Somerset. The seam's thickness is generally about five to six feet in this area. It has an altitude of approximately 750 feet above sea level, so that the overburden varies from 250 to over 500 feet in thickness. In Somerset Township, accessible Pittsburgh coal has been the most productive seam, and has been mined out in the southern and eastern stretches of the Township.

The mining has left four areas of concern with respect to future development: damage to the township's ground water supply, stream pollution, subsidence, and damage to surface land from waste disposal. Water is a major concern, since in many areas of the township it is costly and difficult to obtain flowing, well providing, potable water. The collapsed mine areas have undercut the ground water aquifers and have made the supply erratic. Moreover, stream pollution from acid drainage from the mines is the major cause of stream pollution in Washington County.

Residual problems from potential subsidence of deep mined areas also exist. Subsidence is generally not a major problem where the mine was more than a 100 feet below the surface. At such depth, when the mine is collapsed the overburden establishes arches and corbels in falling, creating supports of sufficient strength so that little movement of the surface is experienced. Where less than 100 feet of overburden exists, substantial shifting may occur on the surface. However, most subsidence that is likely to result from the removal of deep coal has probably already occurred so that a reduced impact is expected from subsidence in the future.

Two state laws were enacted to protect property owners from loss due to subsidence: the Bituminous and Anthracite Insurance Fund Act of 1961 and the Bituminous Mine Subsidence and Land Conservation Act of 1966. They provide that no mining operations shall be conducted in such a way as to damage any public building, private dwelling or burial ground which was in place prior to the effective date of the Act. Moreover, builders of new structures can negotiate with the company owning coal rights and purchase pillars of coal as needed to preclude subsidence. The company is then responsible if subsidence damages occur.

Water Quality

The quality of ground water depends upon the climate, the mineral composition of the soil and the substrata, the rate of circulation of ground water and the influence of man's activities including mining, waste disposal and ground water pumping. Rain water is the source of virtually all ground water and it is not pure. It contains dissolved minerals and is usually acidic due to dissolved carbon dioxide. As it

moves across the ground and through rock and soil it assimilates additional minerals and carries them in a solution with so many variables that ground water over a given area cannot be categorized generally with any degree of reliability. Hard water containing calcium magnesium bicarbonates is relatively common within the area due to the solubility and presence of limestone and dolomite. Lesser amounts of iron and manganese, sodium, potassium, silica, chloride nitrite, fluoride and sulfate are also likely.

Surface water quality is adversely affected by coal mining. Acidic, sulfate water normally results from the leaching of water through active or abandoned mine areas. The formation of coal in Somerset – and throughout this region – was accompanied by deposition of iron sulfide and pyrites. Through a series of oxidation and reactions, these form iron and hydrogen sulfate. This process is accelerated by mining which breaks up the rock and exposes a larger surface area which increases the rate and extent of oxidation.

Some deep salt waters also occur, and combinations of these various waters arise in great variety. Ground water pumped from the alluvia and outwash represent a mixture of ground water and surface water with characteristics often very similar to the river water.

Ground water from the Conemaugh and Allegheny formations is a sodium chloride type with some potassium included from the sodium. In the Monongahela group the ground water is sodium bicarbonate type. Ground water alluvium is dominated by calcium, bicarbonate and sulfate ions. Water in the area is predominately calcium bicarbonate type with relatively few wells in the area having extremely high sulfate levels.

According to the Comprehensive Water Quality Management Plan recently completed for Southwestern Pennsylvania, creeks are adversely affected by acid mine drainage and sewage overflow. Raw sewage discharges and inadequate package treatment plants contribute to this problem. The water quality is also adversely affected by a high volume of acid mine drainage and sewage treatment deficiencies.

Chapter 2: Land Use

The Indians who first settled in the area cleared many small patches mostly in valley areas for their crops and would burn fields to enrich the soil and produce a better crop. They also established and cleared many trails which followed either ridge lines or valleys. The ridge lines were hillier but entailed fewer water crossings. Valley routes facilitated water transportation, and most Indian settlements in Pennsylvania were located in valley areas convenient to water transportation. These early trails were improved by the pioneers and became a basis for at least part of the present road pattern.

In order to encourage settlement of the frontier lands, the federal government financed a new transportation facility, the National Pike. The highway did not have universal congressional support; many felt that it would endow Baltimore with an undue commercial advantage in controlling trade in the developing lands. An argument opposing the construction insisted that the investment would be wasteful since it would take 700 to 2,000 years to populate the land west of the Appalachians. The US in 1900 did not go beyond the Mississippi, and there were only four cities with a population of over 10,000 at that time. Even with such opposition the highway was completed through Washington County in 1820. It followed ridge lines to limit the number of water crossings, and its construction engendered several villages which grew around stage-stops on the pike.

The coming of pioneers and the introduction of western civilization had a significant impact on the area. From about 1790 to 1850 there was a great deal of agriculture establishment. Also around this time trees were removed from ridge tops and broad valleys. The tree cover on the hillsides, and indeed almost everywhere in what is now Somerset Township, was removed in some cases so it could be used as raw material for manufacture. However they were mostly cut down to provide fuel for iron furnaces. The trees were cut and then transported, in the winter, to the bottom of the valley where they were converted to charcoal and then used in iron furnaces. With the depletion of the forest reserves, and the technological advances in steel manufacture, the steel industry was concentrated along the rivers and wood was replaced by coal. Railroads connecting Pittsburgh with Philadelphia were completed in 1852, and this was followed by completion of a nationwide network of rails supplemented by spurs to coal mining areas, for example, the one through Bentleyville. The Baltimore and Ohio line along Little Chartiers Creek occasioned the founding of the village Eighty Four, named for the year it was founded, 1884.

The most observable impact of human activity on the environment has occurred during the last quarter century, the period of Somerset Township's greatest growth and development. During this time, Interstate 70 was extended through Somerset Township providing one of the nation's most important east to west transportation routes. The highway has facilitated economic activities in the Township and has brought some new residential growth.

The map of a community's land use displays the intensity of development, the pattern of activity and the area distribution of settlement for that community. Land use analysis abstracts man's impact on the natural environment. When it is inter-related with other data such topography and geology it yields further insight about the community. The survey of land use compared with environmental constraints enables community planners to delineate lands within the township which are best suited to future residential, commercial or industrial growth.

This element of the comprehensive plan provides guidance on future land use and planning. Land use should be evaluated in conjunction with all the other plan elements, such as transportation, community facilities, and economics, among others. Existing land use patterns have a significant impact on the future land use plan for the township in all different ways. The future land use section is intended to be a general guideline so that necessary changes can easily be made.

Existing Land Use

The map "Somerset Township Zoning Maps" classifies use according to major functional divisions: Agricultural, industrial, business (1 and 2), single family, and residential.

Agricultural areas include lands that are cultivated or pasture and make up a large part of the land use in Somerset. The farms on residential lots contribute to the scenic pastoral landscape which are common throughout the township and make it a desirable place to live.

Residential is divided into two sup groups: single family residential and multiple family including duplexes, town houses, and all residential structures having two or more apartments. The single family residential category includes not only frame dwellings but also mobile homes.

Business uses include retail shops and stores, shopping centers, banks and financial institutions, business offices, wholesale distributors, gas stations, restaurants, personal services shops, business services, real estate and other professional offices, and related business uses.

Industrial uses are comprised not only of manufacturing plants, but also truck terminals, warehousing, coal mining, oil and gas extraction, auto salvage yards, lumber, and related uses.

Somerset Township is a rural community and the predominant land uses are agricultural and forestry. Within this framework there is considerable development which is not related to agriculture. The pattern of such development reflects the topography and other natural characteristics of the township. The majority of such development is related to the relatively level valleys where the transportation facilities were most easily installed. These include a major coal mine, development

around I-70 interchanges, and the residential, industrial and commercial development at Eighty Four and along State Route 519.

The most intensive single use is the coal washing facility and mine portal on Center Branch Pigeon Creek in the center of the township. This facility includes the mine portal, fan building and ventilating shaft, rail sidings and loading tipples, mine waste dump, washing facilities, settling ponds, water treatment plant, and management and employee offices and wash rooms. Including the mine dump, it embraces an area about one half mile wide by more than a mile long, and covers three to four hundred acres.

The four interchanges of Interstate Highway 70 with local roads serve as a focus for development, and, indeed, commercial development is now located at each intersection. Most such uses respond to the market of the interstate highway system, and include such uses as gas stations, truck stops, restaurants and motels. In Somerset they also include an adult book store utilizing an unregulated site which can be reached from more distant population centers.

Most of Somerset's housing is located on lots fronting on the rural roads and highways in the township. The pattern spreads out housing and leaves large open areas to the rear of most homes. It increases the cost of delivering services such as water, electricity, and telephone lines to these houses, since it requires more miles of the road, pipe, and wire per house than is needed in an urban or suburban pattern. The high cost of public water and sewerage systems have indeed precluded the installation of such services in Somerset Township.

There are a few exceptions to the highway frontage pattern. Housing for miners and their families at Cokeburg junction adjacent to Ellsworth, and a mobile home park in Eighty Four are exceptions.

Future Land Use

The future land use plan for Somerset Township is shown in map form and is intended to meet the broad objectives of the planning program. Its objective is to consolidate the future growth expected in Somerset Township, encourage the development of new industry and commercial growth, enhance existing tax base of the township, and to protect the wooded areas and stream valleys in the township.

There are general guides for the organization of land use. Traffic is an important guideline; the use of roads as well as the access to roads greatly affects land use. Also important guides are the separation of incompatible use districts and zoning districts. In order to separate these it is necessary to use topography to buffer differing use districts. These principles are basic to the organizational logic of the land use plan.

The land use plan locates the most intensive uses in the township along Interstate Route 70. This reflects the fact that the most intensive uses are properly located in response to traffic access. The highest points of accessibility for traffic in Somerset Township are located at the interchanges along I-70. By keeping commercial and industrial uses next to this major regional highway heavy traffic, and particularly traffic originating outside Somerset Township, is not induced onto secondary streets. Traffic congestion is thereby limited to the major circulation corridors.

The separation of incompatible land uses from one another can be done naturally with the hillsides in Somerset Township. They provide an automatic buffer which can be utilized to separate neighborhoods with differing functions. The major separation entails two environmental features: the ridge tops which are generally rolling and well suited to the informality of low density residential and agricultural uses, and valley floors having generally less area but flatter land which, especially because of the interstate and railroad locations in the valleys, are suitable for industrial uses. The land use plan takes advantage of this opportunity by locating industrial districts in appropriate locations in valley areas.

Steep hillsides should remain a conservancy district. The land use plan recommends that no land having a slope in excess of twenty-five percent should be utilized for any structure and that the removal of trees and grading of that land should be very limited and rigidly controlled.

The decision as to what location will be best suited for the construction of new industry is based on a many factors. One main factor is transportation. Transportation to these locations must be convenient as well as cost effective. Also considered in the decision for the location is available access to markets. This includes making sure these locations are accessible to the supply of materials as well as markets for the completed product distribution. The location must have adequate energy supply and there must be a relative quality of competing sites.

The interchange areas measure well against these criteria. The major public investment has already been completed in the construction of the highway. Relatively minor capitol outlay will be required to extend utilities and to prepare the land for development. Transportation as noted is very good. Rail service is not available to the site, but the lack of rail should not affect many of the potential users of this site. A capable labor force is readily available. Access to markets for industrial goods and services is very good. The long term supply of energy presents fewer problems in this area than normal and environmental factors are generally favorable.

Other factors which affect industrialization include the availability of utilities, the relative cost of land, the appropriateness of development standards to the needs of the individual industry and the labor, market and community factors which affect every industrial determination. Somerset Township can compete with other areas of

the county for many industries. It should offer a lower cost alternative to the more intensively developed sites in suburban Pittsburgh.

The plan recommends the reservation for potential future business use along I-70 which may be important to long term future economic development. The future land use map also extends the single family residential area along Johnson and Lincoln Roads.

Development policies and objectives set by the state of Pennsylvania should also influence options for development. Many of these policies are geared toward contributing to economic growth. This includes keeping our jobs secure and our business competitive, strengthening our economy through modernization, innovation and small business entrepreneurship, as well as revitalizing community facilities and services.

The land use plan for Somerset Township generally complies with these objectives. It promotes new employment opportunities for a region which has suffered from the adverse impacts of declining employment at a location which is central to the scattered population of the region, and thus endeavors to match jobs with available skills.

The township has convenient access to the markets and resources of the metropolitan area, and to the vast industrial plant located in the northeast and north central states. The opportunity to draw from and provide service to this enormous market has the potential of expanding markets for Pennsylvania products and services.

Future development will provide an environment for new entrepreneurs at costs which should be competitive with differing industrial sites. The location takes advantage of a major transportation asset at a site where new or expanded services should be provided to facilitate overall community needs.

To the extent that new employment obviates the need for residents to travel long distances to work, it will result in a marginal reduction on the reliance of imported oil. The potential for industries which may utilize nearby coal resources may further decrease such reliance.

In short, the development program should engender expanded economic activity, new jobs, conservation of communities, and operational savings of both money and energy.

Chapter 3: Transportation

The transportation plan is a critical element of a comprehensive plan because the transportation network of an area helps to determine development patterns, land use, and economic prosperity. Municipal and individual land use decisions are strongly influenced by existing or proposed transportation systems, while at the same time these decisions affect the circulation systems and the functions that the system elements are expected to perform. Existing and proposed development areas should be considered when transportation system improvements are programmed. In turn, future growth should not result in development patterns that will adversely affect the transportation system.

Transportation deals with the movement of people and goods. It is an obvious and essential element in the workings of a community which affects the wealth, safety, and well being of the people as well as the shape, extent, efficiency and productive ability of the region. It utilizes automobiles and trucks, but is not limited solely to that mode. Transportation also includes railroads, aviation, navigation, public transit, and even bicycles and walking.

Most municipal projects are related to maintenance of an extensive network of locally owned roads and bridges through their own public works department. This department is funded solely with county and other municipal tax revenues. These local projects do not appear on the transportation programs of either the State or the County.

Existing Highways and Road Conditions

The highways and roadways in Somerset Township follow regional form and topography. The Pittsburgh Region is characterized by industrial corridors that radiate outwards from Pittsburgh like spokes on a wheel. They follow rivers and streams which are the loci of railroads and are industrial-residential continuums which stretch across many municipalities. Highways have followed the corridors in the historical progression of waterway to railway to highway to super highway by-pass.

The region's form provides primary transportation facilities along the Chartiers Creek and the Mon Valley, and eastwardly from Washington connecting the county seat to the communities of the Mon Valley. Principal highways are I-79, I-70, and US Routes 40 and 19.

Somerset Township is a relatively undeveloped bridge between two such corridors, the Chartiers Creek, Washington-Canonsburg corridor and the Monongahela Valley Corridor. It also lies adjacent to one of the earliest by-pass highways, US Route 40, which ran from Brownsville to Washington to Wheeling without going near Pittsburgh.

Most of the important roads in Somerset Township run east-west between the two corridors. The most important highway is I-70 which traverses the township.

Somerset Township is boxed by the other arterials in the area; US Route 40 and Pennsylvania Routes 519, 136, and 917. PA 136 follows the ridge on the northern boundary of the township and connects Washington with Monongahela. PA 519 follows the Little Chartiers Creek along the western boundary, and provides a short route Eighty Four to Canonsburg. PA 917 follows Pigeon Creek and the eastern boundary through Bentleyville and Ellsworth to Cokeburg.

Highway construction in Somerset Township is complicated by topography. The roads follow ridges and valleys, with major roadways conforming to the east-west alignment of the natural topography. Roads follow valleys or ridges since these alignments provide the best grades in hilly country. Ridge roads include US Route 40 and PA 136.

Ridge lines are less level and normally result in greater variations in both horizontal and vertical alignments. Ridges are less protected from weather, and are subject to hazard from blowing snow and patches of ice. As a general rule major highways follow valleys where possible to avoid these problems. In Somerset roads following valley alignments include I-70, Pennsylvania Routes 519, and 917, Vanceville road, and the service roads parallel to I-70.

Valley locations usually offer better grades and straighter alignments than ridge lines, but require more stream crossings, hazards from flooding, and competition for space from rails, industry and other development. Since most major roads are in the valleys, Somerset Township has numerous bridges, many of which are old and need to be replaced.

Most of the secondary roads in Somerset Township follow secondary runs and valleys to get from a valley road to a ridge road, or to get from one valley to another. A series of generally parallel roads rise from the I-70 Valley (North Branch of Pigeon Creek) to the PA Route 136 ridge. These include McIalvaine, Sumney, Edgar, Seal and Church Roads. To the south of this valley most roads follow circuitous routes over the ridge separating the I-70 valley from the Vanceville Road valley (Center Branch Pigeon Creek). Township Shed road is typical if shorter than the others.

Except for I-70 and the numbered Pennsylvania Routes, the existing roads are minimal and are generally undifferentiated. Most have cart way widths of less than 16 feet and are limited by hills and turns to reduced speeds. Low traffic volumes and the low intensity of development mitigate against any major improvement to the local road system. All are well below any theoretical capacity, even considering their narrow paving widths and the limited horizontal and vertical alignments.

Highways have become more specialized with a hierarchy varying with function. The highway classification system consists of primary arterials, secondary arterials, and collector roads and local roads. The roads vary from the one extreme of providing primarily for access to abutting property to the other extreme of carrying through traffic without access to properties. The lower levels of roads perform the function of collecting traffic from adjacent properties and carrying it to a higher level of road.

The primary arterial system is intended for high volume traffic use on long distance trips at moderate speeds between major centers. The primary arterial system includes the interstate highway system. With the Somerset Township are the primary arterials are I-79, I-70, and US Route 40 and 19.

Interstate Route I-70 is the primary arterial highway serving Somerset Township, and, importantly, all of central Washington County. It functions most closely with I-79 and the Pennsylvania Turnpike (I-76) to provide a high order of traffic service to the Pittsburgh Metropolitan Area. Its service will be improved further with the completion of a regional circumferential route. The regional circumferential route will utilize I-70 and will improve its connections with other regional routes (US Route 119 from New Stanton to Greensburg, PA 66 North to Freeport, PA 228 to the Beaver Valley and I-79) so as to provide a high service route circling the Pittsburgh Region and tying all the outlying counties together.

US Route 40 is also classed as a primary arterial, but it is more limited in its potential than the limited access highway system. The highway is important to the region and should continue to be well maintained through the future.

The secondary arterials system is designed to be a feeder system which ties the region together and allows for fewer and shorter trips at lower speeds. Traffic safety and efficiency will be best served by designation of specified secondary arterials which will support and feed into the primary system.

The basis of the system of secondary arterials is the tertiary State Highways, Pennsylvania Routes 519, 136, and 917. They should be supplemented by additional secondary highways which provide improved access to the middle interchanges on I-70. Additional improvements should include Church Road, Township Shed Road, Sprowle and Bigler Roads, and Mclalvaine Road. Vanceville Road and Gambles Road which follows the North Branch of Pigeon Creek to an intersection with PA Route 519 near Gambles is also recommended as a part of this system.

The lowest level of roadways indicated in the Highway Classification Map is the collector roadways. These roads are designed to provide access from local roadways to the remainder of the transportation system. They accommodate lower speed traffic and lower traffic volumes. The collector system in essence becomes the major

interface between the local roadways of each community and the arterial system meant to carry trucks and higher speed traffic throughout the region and to points beyond.

Transportation Plan

This plan deals with the location, size and quality of the network of public improvements installed to accommodate transportation. It is concerned with the safety and efficiency of the operation of the network, with its ability to serve the comprehensive needs of the residents of the region and their business and institutions, with the network's impact on change and growth, and with the nature and priority of improvements and additions to the system.

The transportation network shapes the community. It is the circulatory system around which the muscle develops and grows healthy. It in turn takes its shape from the basic skeleton, the hills and valleys and natural features of the land.

The road system must become even more specialized to reflect the impact of the interstate on local traffic function. Basically, traffic flow should be oriented primarily toward the four interchanges serving Somerset Township. Relatively few traffic movements between Somerset and Washington would follow PA 136 or US Route 40 when the interstate is open. I-70 is probably faster, is certainly safer and is more likely to be open in adverse weather than the alternative routes.

Interchange locations are the major concern for future development. The interchanges remain critical because of their importance in determining the serviceability and usability of those roadways with reference to the community at large. The proper location of interchanges not only tends to amplify and encourage development but allows the Interstate Highway to more effectively mesh with the overall transportation system of the region.

The development around these interchanges can be a substantial benefit to the economic vitality and rehabilitation ambitions of the region. However, development can also impede the functioning of the Interstate Highway system. Protection of traffic flow in and around the interchange areas is an objective of planning within the region. Zoning controls and other developmental control ordinances should reflect the need to protect free flowing access into and through the interchange areas.

Future street and road construction and improvements must meet standards that ensure the roadways abilities to accommodate future traffic needs. Such standards will be specified in the Subdivision and Land Development Ordinance which stipulates conditions that Somerset Township requires for land development.

These standards occur in two basic types, those dealing with the design of the roadway and those controlling how the roadway relates to the community and topography. Distinct design criteria have been developed for arterial, collector and

local streets based upon the amount of traffic anticipated on each roadway. The Major Thoroughfares Plan classifies roadways by the amount of traffic they would carry and these standards reflect these designations. The criteria to be identified include right of way and pavement widths, vertical and horizontal alignments, curve radii, and road grades.

Chapter 4: Economics

The measures of economic activity and well being within Somerset Township indicate that the township has a moderate economic base within the regions economy. Table 1 shows the Comparative Economic Characteristics for Somerset Townships as well as the neighboring communities. Also indicated are the characteristics for Washington County and Pennsylvania. The data indicates that Somerset Township residents are not as well off as the average for the state and are fairly below the averages of North Strabane, Nottingham, and South Strabane Townships.

Income data is reported as the “median” which indicates the number that is in the middle of all of the incomes for the reported population, that is there are many persons earning less than the median income as there are earning more than the median income. An average income would be significantly higher than the median. The median family income for Somerset Township was reported at \$52,102 in 2000, a figure which is above Washington County, reported at \$47,287, and below Pennsylvania, which reported at \$58,148. The per capita income follows the same trend.

The census measured the number of persons who have incomes below a poverty level, a level which varies according to age and make up of the family. The percentage of people below the poverty line residing in Somerset Township was lower than for Washington and for the state, but higher than its surrounding communities. Of the 810 total families in Somerset Township, 57 families were classified as having incomes below poverty level. Poverty data is also depicted more specifically in table 2.

The number of adults who have completed high school is higher in Somerset Township than in both the county and the state. However the college graduate rate is less than that of the county and the state.

The labor force is predominately employed in services, with a lower proportion employed in manufacturing than in the county and state. Unemployment reported high, especially in comparison with the surrounding communities and is above any acceptable level.

Table 1: COMPARATIVE ECONOMIC CHARACTERISTICS, 2000

Somerset Township ♦ Comprehensive Plan

Somerset Township, Washington County, Pennsylvania

	Somerset Twp	North Bethlehem Twp.	North Strabane Twp	Nottingham Twp	South Strabane Twp	Wash County	PENNA
Totally Persons	2,701	1,746	10,057	2,522	7,987	202,897	12,440,621
Total Families	810	493	2,908	767	2,203	56,311	3,255,707
Per Capita Income	20,146	20,399	23,457	26,256	23,829	19,935	24,694
Median Family Income	52,102	46,250	60,141	65,991	54,729	47,287	58,148
Percent:							
Persons Below Poverty Level	9.5	8.0	4.0	5.3	6.4	9.8	13.3
Adults completed High School	84.4	81.7	85.3	89.7	86.4	82.6	84.1
Adults College Graduates	12.1	14.0	27.3	25.7	25.3	18.8	27.0
Civilian Labor Force in:							
-Services	20.8	17.6	12.2	11.5	14.7	16.4	14.8
-Retail/ Wholesale Trade	14.8	11.4	18.0	14.6	15.9	17.1	15.7
-Manufacturing	12.1	17.8	12.3	9.4	13.6	14.9	16.0
-Unemployment	2.4	1.1	1.7	1.4	2.0	3.1	3.5

Table 2: POVERTY STATUS, 2000
Somerset Township, Washington County, Pennsylvania

	Number:	Percent:
Families	57	7.0
With related children under 18 years	44	13.9
With related children under 5 years	4	4.7
Families with female householder, no husband	39	35.5
With related children under 18 years	31	62.0
With related children under 5 years	0	0.0
Individuals	254	9.5
18 years and over	150	7.0
65 years and over	22	4.9
Related children under 18 years	98	18.3
Related children 5-17	91	21.1
Unrelated individuals 15 years and over	63	19.5

Table 3 shows the changing nature of the labor force in Somerset Township. In 2000 the civilian labor force totaled 1,449 or 65 percent, of the adult population (ages 15 through 64). Historical data is also presented for 1960 through 1990. The labor force has continued to decrease following the same trend as the overall population.

During the coming decades the number of working women is expected to increase until roughly two out of every three adult women are in the labor force, or a proportion twice as high as today. The number of working men will also increase, however at a much slower rate.

**Table 3: COMPOSITION OF THE LABOR FORCE
Somerset Township, Washington County, Pennsylvania**

	1960	1970	1980	1990	2000
Population	3,283	3,319	2,127	2,247	2,701
Civilian Labor Force	1,854	1,836	1,283	1,467	1,449
-% of Total	56.1	55.3	60.3	65.3	65.5
Employed	1,651	1,787	1,176	1,393	1,391
Unemployed	203	49	107	74	54
Not in Labor Force	2,092	1,939	354	780	764

Tables 4 and 5 as well as charts 1 and 2 show the employment of residents by occupational groupings, and the number of employed persons by major industry classifications. The data is compared to Washington County.

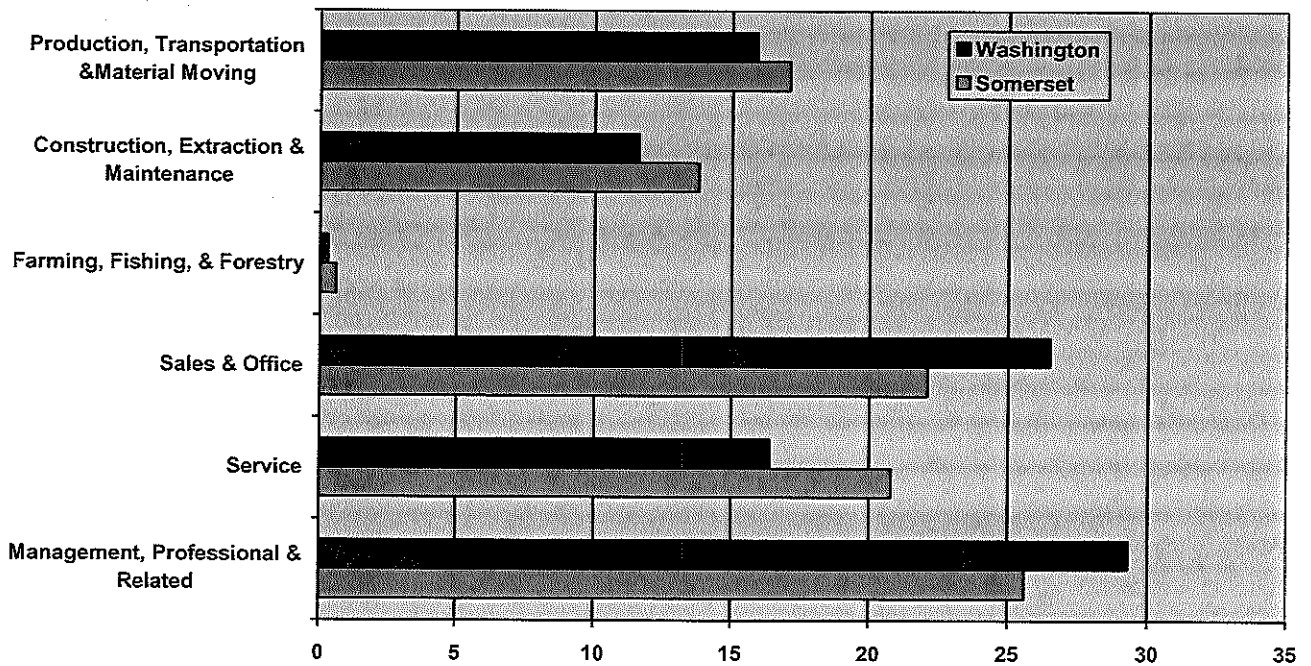
In Somerset Township, the most important occupational grouping is management, professional and related occupations employing 356. Following that are sales and office occupations, and then service occupations. In Washington County follows this same basic pattern.

The industry in both Somerset Township and Washington County which employs the most residents is educational, health, and social services. Followed by retail trade in Somerset Township and in Washington County manufacturing is the second largest industry.

Table 4: EMPLOYMENT OF RESIDENTS BY OCCUPATIONAL GROUPINGS, 2000
Somerset Township, Washington County, Pennsylvania

	Somerset Township		Washington County	
	Number	Percent	Number	Percent
Employed Civilian Pop. 16 years & over	1,391	100.00	90,861	100.00
Management, Professional & Related Occupations	356	25.6	26,658	29.3
Service Occupations	290	20.8	14,886	16.4
Sales and office occupations	307	22.1	24,103	26.5
Farming, Fishing & Forestry Occupations	8	.6	236	0.3
Construction, Extraction & Maintenance Occupations	192	13.8	10,546	11.6
Production, Transportation & Material Moving Occupations	238	17.1	14,432	15.9

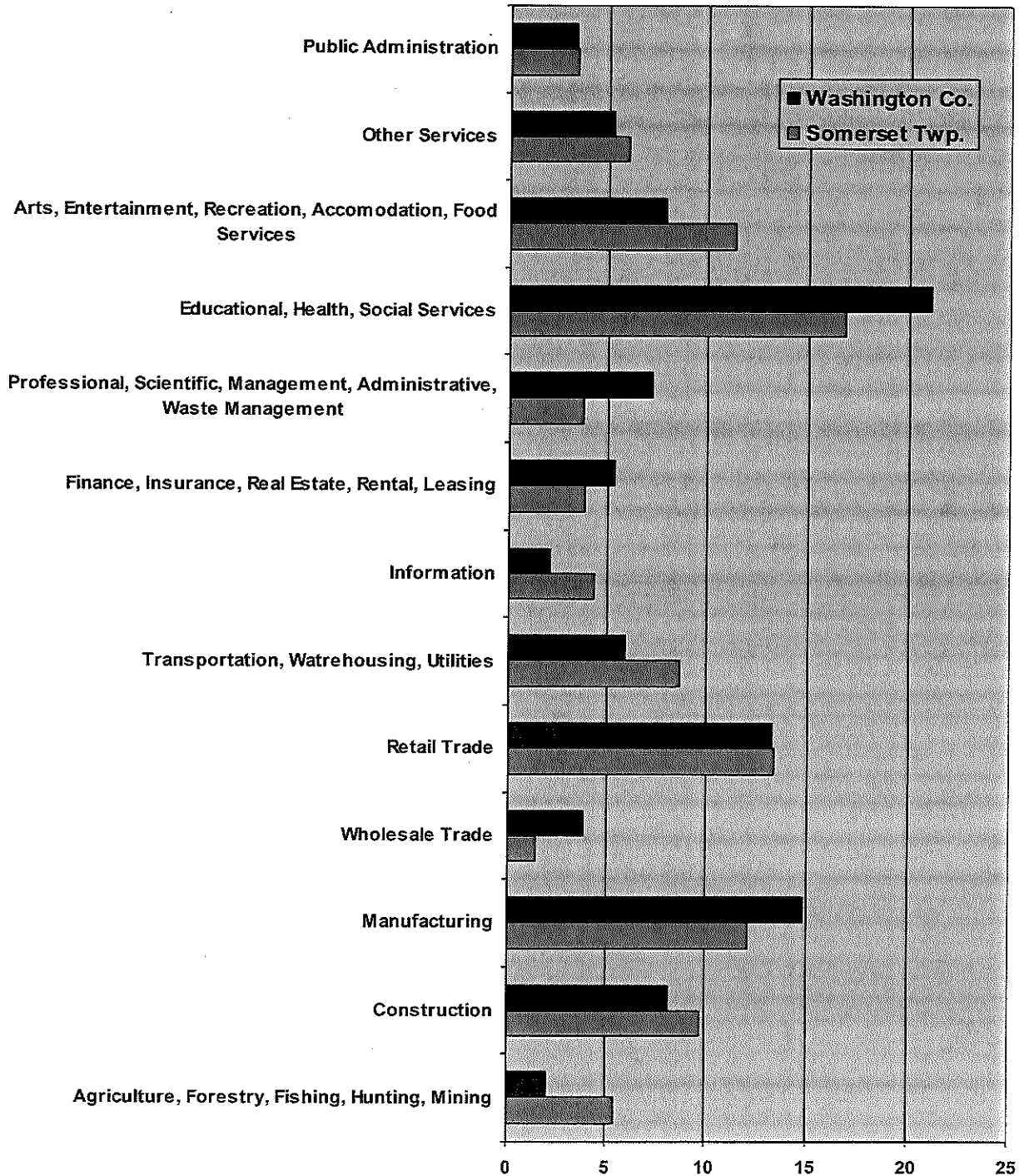
Chart 1: PERCENT OF EMPLOYED CIVILIANS (16 and older) BY OCCUPATIONAL GROUPINGS



**Table 5: EMPLOYED PERSONS BY MAJOR INDUSTRY
CLASSIFICATION, 2000
Somerset Township, Washington County, Pennsylvania**

	Somerset Township		Washington County	
	Number	Percent	Number	Percent
Employed Civilian Population 16 & over	1,391	100.00	90,861	100.00
Agricultural, Forestry, Fishing, Hunting & Mining	75	5.4	1,810	2.0
Construction	135	9.7	7,383	8.1
Manufacturing	169	12.1	13,499	14.9
Wholesale Trade	19	1.4	3,431	3.8
Retail Trade	186	13.4	12,112	13.3
Transportation & and Warehousing & Utilities	119	8.6	5,333	5.9
Information	60	4.3	1,875	2.1
Finance, Insurance, Real Estate, Rental & Leasing	53	3.8	4,841	5.3
Professional, Scientific, Management, Administrative, & Waste Management	51	3.7	6,543	7.2
Educational, Health, & Social Services	235	16.9	19,148	21.1
Arts, Entertainment, Recreation, Accommodation & Food Service	159	11.4	7,154	7.9
Other Services	83	6.0	4,758	5.2
Public Administration	47	3.4	2,974	3.3

Chart 2: EMPLOYED PERSONS BY MAJOR INDUSTRY CLASSIFICATION



Households with sufficient disposable income for purchasing goods and services are vital to the economic viability of a community. The amount of local spending in a community affects both the type and the amount of products and services available in the community. The distribution of families and households according to their annual income category is shown in table 6. Families are comprised of two or more persons, while households include single person families.

Table 6: INCOME DISTRIBUTION, 2000
Somerset Township, Washington County, Pennsylvania

	Number of:		Percentage Distribution	
	Households	Families	Households	Families
Less than \$10,000	69	28	6.5	3.4
\$10,000 to \$14,999	82	28	7.8	3.4
\$15,000 to \$24,999	152	113	14.4	13.8
\$25,000 to \$34,999	110	87	10.4	10.6
\$35,000 to \$49,999	196	134	18.5	16.4
\$50,000 to \$74,999	266	254	25.2	31.1
\$75,999 to \$99,999	119	121	11.3	14.8
\$100,000 to \$149,999	30	27	2.8	3.3
\$150,000 to \$199,999	21	13	2.0	1.6
\$200,000 or more	12	12	1.1	1.5
Total:	1,057	817	100.00	100.00
Median Annual Income	43,594	52,102		

Chapter 5: Population

Somerset Township is a growing rural community with population characteristics consistent with an expanding community. The data on population characteristics for 2000 is shown on table 7 for Somerset Township. The township is compared to some of its surrounding townships such as North Bethlehem, North Strabane, Nottingham, South Strabane, as well as Pittsburgh and the state, Pennsylvania.

**Table 7: COMPARATIVE POPULATION CHARACTERISTICS, 2000
Somerset Township, Washington County, Pennsylvania**

	SOMERSET TOWNSHIP	North Beth. Twp	North Strabane T	Nottingham Twp	South Strabane T	PGH MSA**	Penna
Total Population	2701	1746	10,057	2,522	7,987	334,563	12,281,054
Percent Black	.2	.1	2.3	.6	1.6	27.1	10
Percent Spanish Origin	0.0	0	.6	.2	.4	1.3	3.2
Percent Under 18 Years	21.3	23.3	22.2	23.4	20.7	19.9	23.8
Percent 18-64	63.2	62.7	61.6	63.5	55.6	63.7	60.6
Percent over 65	15.5	14.1	16.2	13.1	23.7	16.4	15.6
Median Age	41.8	39.4	40.2	41.1	44.8	35.6	38.0
Percent Males Married	59.4	64.2	67.8	72.1	64.7	42.0	57.4
Percent Females Married	60.9	59.7	59.5	67.8	55.3	35.0	51.5
Persons Group Quarters	3	0	313	0	225	22,634	433,301
Percent of all Persons	.1	0	3.1	0	2.8	6.8	3.5
Number of Households	1,051	1,746	3,989	983	3,320	143,752	4,111,003
Persons/Household	2.57	2.64	2.44	2.57	2.34	2.17	2.48

**Standard Metropolitan Statistical Area; Allegheny, Beaver, Washington and Westmoreland Counties

SOURCE: US Census of Population 2000

The table shows the population of Somerset is a fairly younger population because a larger percentage of the population is under the age of 65, compared to the Pittsburgh Metropolitan Statistical Area as well as the state of Pennsylvania. The average household is larger than the state and Pittsburgh Metropolitan Area as well as all of the surrounding townships except North Bethlehem. The median age is also higher than all except South Strabane Township.

Somerset Township has a minor proportion of blacks, as do the rest of the surrounding townships with a 2.3 percentage in North Strabane Township being the highest. The Pittsburgh Metropolitan Area and the state have significantly higher percentages. The percent of Spanish origin follows the same general pattern, very low percentages throughout the townships with a considerable increase in the state and Pittsburgh Metropolitan Area.

Past population growth is shown for Somerset Township and neighboring communities is shown in table 8. The data shows that from 1930 until 1980 Somerset Township was a stable community having a slow and steady increase in

population, and then hit a peak in 1980 with a population of 3,150. In the past two decades since, the population has slowly started to decrease; also the number of persons per household has decreased as well from 2.95 in 1980 to 2.57 in 2000 which follows this same pattern. This same data for Somerset and the townships that surround it is depicted in chart one below as well.

Table 8: PAST POPULATION GROWTH, Somerset Township and Comparison Populations

	1930	1940	1950	1960	1970	1980	1990	2000
Somerset Township	1,480	1,763	2,006	2,282	2,293	3,150	2,947	2,701
Fallowfield Township	3,347	3,670	4,214	5,350	5,454	5,439	4,972	4,461
North Bethlehem Township	1,413	1,679	1,725	1,715	1,736	1,897	1,864	1,746
North Strabane Township	3,690	4,219	5,465	7,322	7,578	8,490	8,157	10,057
Nottingham Township	1,072	1,165	1,013	1,463	1,862	2,270	2,303	2,522
South Strabane Township	3,251	3,538	4,019	5,872	6,555	7,389	7,676	7,987
West Pike Run Township	3,221	2,977	2,878	2,442	1,972	2,034	1,818	1,925
Washington County	204,802	210,852	209,628	217,271	210,876	217,074	204,584	20,2897
Pennsylvania (1,000's)	9,631	9,900	10,498	11,319	11,801	11,867	11,881,643	12,281,054
United States (1,000's)	123,188	132,122	151,325	179,323	203,302	226,505	248,709,873	281,421,906

SOURCE: US Census of Population 2000

Chart 3: PAST POPULATION GROWTH, Somerset Township and Comparison Populations

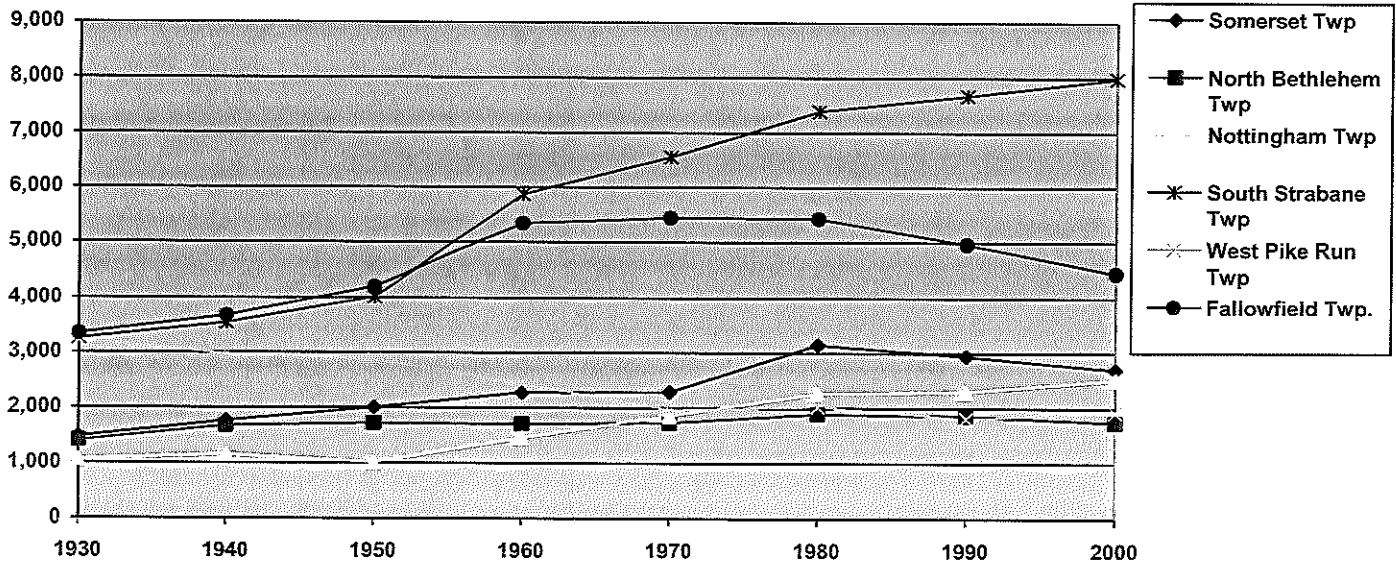


Table three shows the same data as an index, with each years population being compared to 1930 as 100.

Table 9: PAST GROWTH INDICES (1930 = 100) Somerset Twp. And Comparison Populations

	1930	1940	1950	1960	1970	1980	1990	2000
Somerset Township	100	119	136	154	155	213	199	182
Fallowfield Township	100	110	126	160	163	163	148	133
North Bethlehem Township	100	119	122	121	123	134	131	123
North Strabane Township	100	114	148	198	205	230	221	272
Nottingham Township	100	109	94	136	174	212	214	235
South Strabane Township	100	109	124	181	202	227	236	245
West Pike Run Township	100	92	89	76	61	63	56	59
Washington County	100	103	102	106	103	106	99	99
Pennsylvania (1,000's)	100	103	109	118	123	123	123	127
United States (1,000's)	100	107	123	146	165	184	201	228

A cohort is a specific group of the population identified by its age group and sex. Table 10 shows the number of males and females broken down in five year age groups. This same information is show in chart two as well.

**Table 10: POPULATION BY AGE AND SEX, 2000
Somerset Township, Washington County, Pennsylvania**

Age Cohort	Males	Females	Total
0-4	69	55	124
5-9	73	79	152
10-14	88	90	178
15-19	105	84	189
20-24	62	52	114
25-29	68	64	132
30-34	81	78	159
35-39	95	107	202
40-44	134	142	276
45-49	113	122	235
50-54	110	97	207
55-59	90	83	173
60-64	70	70	140
65-69	47	63	110
70-74	63	61	124
75+	85	101	186
Total	1,353	1,556	3,150

Chart 4: POPULATION BY AGE AND SEX, 2000
Somerset Township, Washington County, Pennsylvania

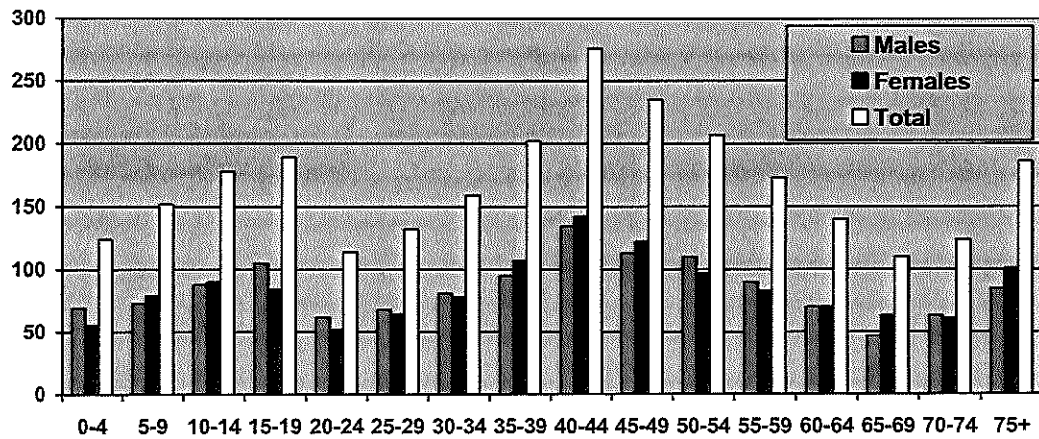
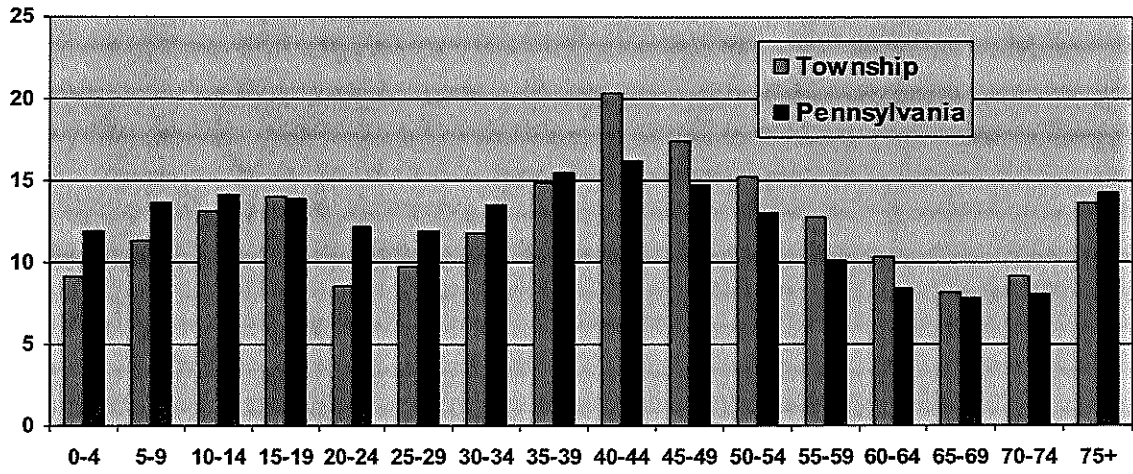


Table 11 as well as chart 5 shows the same cohort information as a percentage of the total population and compares that data with the state, Pennsylvania.

Table 11: PERCENTAGE OF POPULATION BY AGE AND SEX, 2000
Somerset Township, Washington County, Pennsylvania

Age Cohort	Males		Females		Total	
	TWP	PENNA	TWP	PENNA	TWP	PENNA
0-4	5.1	6.3	4.1	5.6	9.2	11.9
5-9	5.4	7.2	5.9	6.4	11.3	13.6
10-14	6.5	7.5	6.7	6.6	13.2	14.1
15-19	7.8	7.3	6.2	6.6	14	13.9
20-24	4.6	6.3	3.9	5.9	8.5	12.2
25-29	5.0	6.2	4.7	5.8	9.7	12
30-34	6.0	6.9	5.8	6.6	11.8	13.5
35-39	7.0	7.9	7.9	7.6	14.9	15.5
40-44	9.9	8.3	10.5	7.9	20.4	16.2
45-49	8.4	7.6	9.1	7.2	17.5	14.8
50-54	8.1	6.6	7.2	6.4	15.3	13
55-59	6.7	5.0	6.2	5.1	12.8	10.1
60-64	5.2	4.1	5.2	4.3	10.4	8.4
65-69	3.5	3.7	4.7	4.1	8.2	7.8
70-74	4.7	3.6	4.5	4.4	9.2	8
75+	6.1	5.5	7.4	9.5	13.6	14.3

Chart 5: PERCENTAGE OF POPULATION BY AGE AND SEX, 2000
Somerset Township, Washington County, Pennsylvania



Chapter 6: Housing

The housing portion of the comprehensive illustrates current housing data as well as future housing planning and preservation. Preservation includes adequate maintenance of homes, removal of hazardous and dilapidated structures, and enforcement of building codes and land development ordinances throughout the township.

Homeownership rates are high throughout the township far surpassing the county and state rates of ownership. In 2000 homeownership was 71.3 percent in the state and 77.1 percent in the county, compared with Somerset's 84.4 percent. The housing tenure for 1990 and 2000 in Somerset Township is shown in table 12.

Table 12: HOUSING TENURE, 2000
Somerset Township, Washington County, Pennsylvania

Housing Tenure	1990		2000	
	Number	Percent	Number	Percent
Total Housing Units	1,135	100	1,132	100
Occupied Housing Units	1,083	100	1,051	100
Owner-Occupied Housing Units	880	81.3	887	84.4
Renter-Owner Occupied Housing Units	203	18.7	164	15.6

Residential land use, and particularly rural residential land use, is the primary type of development in the township. One unit detached housing units account for well over half the percentage of all housing types. Single-family housing units (both attached and detached) account for 77.6 percent of all units, as depicted in table 13.

Table 13: HOUSING UNITS, 2000
Somerset Township, Washington County, Pennsylvania

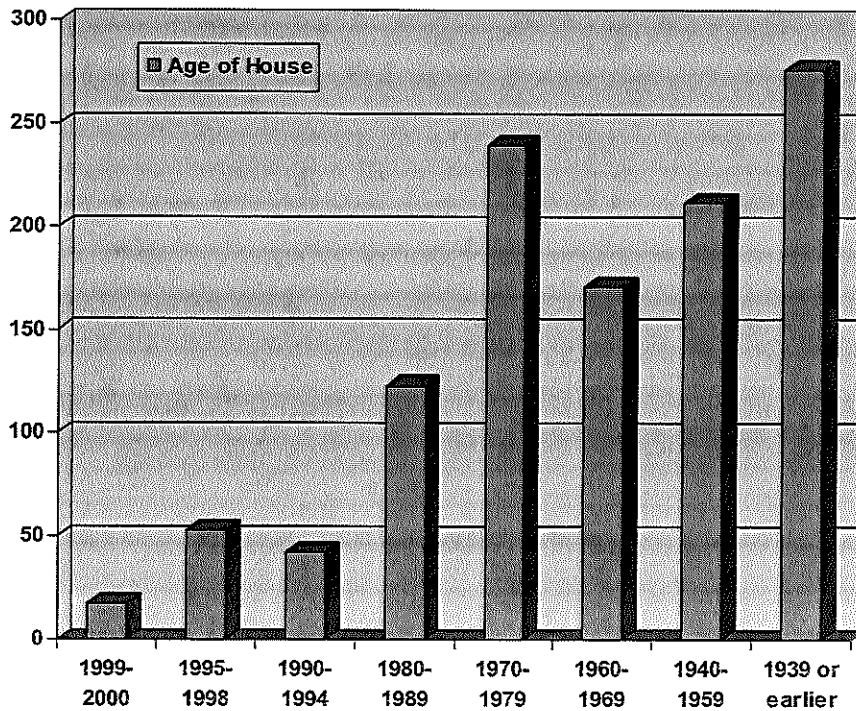
Housing Units	Number	Percent
Total Housing Units	1,132	100
1 Unit Detached	874	77.2
1 Unit Attached	4	.4
2 Units	4	.4
3 or 4 Units	19	1.7
5 to 9 Units	5	.4
10 to 19 Units	14	1.2
20 or More Units	2	.2
Mobile Home	210	18.6
Boat, RV, Van, Etc.	0	0

The age of a structure is used to show the time the unit has been in the housing inventory and the duration of time over which substantial maintenance is necessary. The age threshold commonly used to signal a potential deficiency in structural conditions is 40 years or older. Majority of the housing stock in the township was built before 1980.

Table 14: YEAR STRUCTURE BUILT, 2000
Somerset Township, Washington County, Pennsylvania

Year Structure Built	Number	Percent
Total Housing Units	1,132	100
1999 to March 2000	17	1.5
1995 to 1998	53	4.7
1990 to 1994	42	3.7
1980 to 1989	123	10.9
1970 to 1979	239	21.1
1960 to 1969	171	15.1
1940 to 1959	211	18.6
1939 or earlier	276	24.4

Chart 6: YEAR STRUCTURE BUILT, 2000
Somerset Township, Washington County, Pennsylvania



Chapter 7: Community Facilities and Utilities

Community facilities which are of concern to the comprehensive plan are those which are governmentally provided, and these include schools, parks and recreational facilities, public safety, municipal and maintenance facilities. The quality and vitality of a community is determined in part by the facilities and public services it offers to its residents. The number, accessibility and general adequacy of such facilities not only have a decided impact on the safety and welfare of present community residents, but also play a major role in attracting and sustaining growth. For these reasons a community facilities plan is an integral to the comprehensive planning.

A high quality of public education is provided to the residents of Somerset Township by the Bentworth School District. The district serves North Bethlehem and Somerset Townships as well as three boroughs, Bentleyville, Ellsworth and Cokeburg. The district operates an elementary school, a high school, and is currently constructing a new middle school. There are 541 people from Somerset Township, above the age of three enrolled in school. There are 277 people in grades one to eight, which is currently classified as elementary school until the middle school is finished. And there are 147 enrolled in the high school. Both the elementary school and high school are located right on the edge of the township.

There is a township building located on Vanceville Road in Somerset Township. The building contains a maintenance garage, meeting room, and offices. Also on the property is a second maintenance garage, which used to be the only township building, there was a newer one built in order for the meetings to be held here, more files kept, as well as office space.

There is no fire department or fire stations located in Somerset Township. The township has contracts with Valley Inn Volunteer Fire Department, Fallowfield Township Volunteer Fire Department and Ellsworth Volunteer Fire Department, who all provide fire protection to Somerset Township.

Most of the recreational facilities in Somerset Township are privately owned. These include three golf courses and a fishing lake. There is however a walking track and a community park. The walking track is located on Vanceville Road. The community park is located off of Weary Road. There is a playground, basketball courts, one ball field and a pavilion at the park.

The major recreation facility in the area is Mingo Creek County Park which is adjacent to the northern boundary of Somerset Township but actually located in Nottingham Township. The park is one of the three county parks. It provides picnic areas, bridle and hiking trails, camping areas, conservation areas and space for sports and athletic activities.

The water supply, according to the County Comprehensive Plan, is provided by private wells to many residents and agriculturally oriented pursuits with potable water. Protecting the quality and quantity of the water supplies is essential to many homes and farms in the township as well as the county.

Solid waste management is the responsibility of the county, which is required by state law to develop a solid waste plan for the proper removal of municipal, industrial, and medical wastes. According to the County Comprehensive Plan, Washington County updated its solid waste management plan in 1999. The plan determined that the current system of collection and disposal of solid waste is sufficient and offered several policy recommendations. The plan strongly encourages a more aggressive and proactive approach to recycling programs and also outlines the county's policy of providing technical expertise and coordinated activities to facilitate improvements to local solid waste plans.

Chapter 8: Goals and Development

The goals for development establish the purpose for growth management strategy. They were set after considering alternatives, evaluating such options, and considerations of the probable course of implementing various policies.

The most vital concerns for Somerset Township are, economic development, accommodation to the environment, adequacy of services and facilities, traffic access and service and the quality of development.

Economic Development Goals

Improve vitality of the planning region by achieving a strong economic base.

Encourage commercial and industrial development that is well integrated and compatible with the surrounding context and character of adjacent land uses.

Redevelop vacant or underutilized commercial and industrial land to provide jobs and enhance municipal tax bases.

Encourage planning region residents and businesses to pursue job training opportunities that will provide a workforce that meets employers present and future labor needs.

The continuing vitality and growth of the industrial, commercial and service sectors of Somerset Township shall be promoted in appropriate locations where in conformance with other objectives:

Maintain an adequate supply for land zoned for commercial and industrial uses in appropriate locations.

The Interstate 70 corridor shall be designated as the primary area in Somerset Township for economic development.

Commercial and industrial uses shall be buffered to prevent intrusion on residential environments, grouped to minimize traffic and compactly located for convenience.

Commercial and industrial development shall not proceed unless traffic access, streets and transportation facilities and necessary support facilities are installed.

Identify infrastructure improvements needed to support future residential, commercial, and industrial development.

Environmental Goals

Promote open space, greenways and farmland preservation that contributes to the desirable rural character of the township.

Protect the township's valuable farmland from future development that may remove fertile soils from production or interfere with severely restrict existing productive farm operations.

Control the form, location and timing of growth in the township while protecting the natural environment, maintaining visual quality and providing services and community facilities.

Provide for future growth in areas best suited for development that will protect and enhance the township's quality of life.

Protect significant natural resources such as floodplains, wetlands, steep slopes, woodlands and watercourses.

Allow the location of natural features to guide the type and intensity of future development.

Minimize negative environmental impacts related to growth and development.

Prioritize the preservation and protection of significant natural resource areas.

New growth and expansion of existing development will be approved only where the natural environment is adequately protected in the following respects:

Steep slopes having grades of 25 percent or more and land otherwise identified in a Conservation District shall not be utilized for development involving earth movement, tree removal or major structural improvement.

Land identified as having characteristics associated with landslides shall not be developed in any manner which would increase the probability of land movement.

Development shall be permitted only after adequate provision has been made to assure that the rate of storm water run -off will not be increased after development.

Stream beds, water courses, and adjacent valleys shall not be developed in any manner which is likely to impede normal drainage.

Areas subject to flooding shall not be developed in any manner which may result in increased hazard or damage from flooding.

Development which may cause adverse impact from air, water or noise pollution shall not be permitted.

Development will not be permitted which will cause undue removal of trees or excessive grading.

Derelict land should be reclaimed where new development meets other community goals.

Developments which provide open space, retain woodlands and protect slope areas and other features of the natural environment will be encouraged.

Encourage and support the efforts of environmental and conservation agencies, including land acquisition, conservation easements, etc. to preserve and protect natural resources.

Enact and enforce property maintenance codes and other ordinances to curtail illegal dumping and abandoned vehicles.

Housing Goals

The promotion, development and protection of safe, commodious and attractive residential areas providing a wide variety of housing to meet the varying needs of differing age, social and income groups shall be pursued by Somerset Township:

New housing developments shall be permitted only in conformance with building codes and development control ordinances to assure adequate and safe original construction.

Existing housing units will be protected through code enforcement and rehabilitation programs as appropriate to assure their long term availability and use.

Residential neighborhoods will be protected from incompatible new land use and from intrusion by excessive traffic and other adverse influences.

Natural slopes which provide buffers between residential neighborhoods and other, incompatible uses shall not be removed during the development of such new uses; and where no natural buffer exists, a new landscaped area shall be installed as a part of the new development.

Promote the public health, safety and general welfare of residents through the provision of quality housing through sound planning and appropriate enforcement of zoning, floodplain management, and storm water management.

Guide future development to designated growth areas in order to preserve valuable agricultural lands, scenic vistas, greenways and rural roads.

Historic and significant landmarks shall be preserved.

Community Systems Goals

Systems which support the health, safety and welfare of residents and the public in Somerset Township including water distribution systems, sewerage, fire and police protection and the like will be provided where economically feasible to guide and control development.

Maintain, improve, and use existing parks and recreation resources to improve the quality of life for planning region residents.

Improve the quality of life for planning residents by increasing or expanding recreational resources and opportunities.

Guide the development of the planning region in order to provide the most efficient use of existing and planned public facilities and utilities.

Foster planning and implementation initiatives for municipal services and other areas of local government.

Transportation Goals

Maintain, improve, and upgrade the existing transportation system.

Improve transportation safety. Identify and complete safety-related projects and identify and develop safer alternatives for roads with high accident rates.

A transportation system that is safe and effective will be achieved which utilizes diversified modes and which serves the community and the region.

Important thoroughfares will be identified as priority maintenance and improvement roads to most efficiently expedite traffic flow.

New developments which are heavy generators of traffic will be located close to major thoroughfares to minimize traffic flow and conflict.

Industrial uses will be located close to I-70 and traffic generated by them will be directed along major thoroughfares insofar as possible.

Development will not be permitted in locations where traffic handling facilities are inadequate until improvements can be completed.

All major developments will be reviewed to assure that adequate parking facilities are provided and that traffic access is safe and produces minimal conflict.

Develop a transportation network to meet the future needs of the township.