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Harborcreek Township

Draft Background Analysis

prepared by
the
Harborcreek Township Officials
and the
Erie County Department of Planning

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1994 BACKGROUND ANALYSIS
FOR THE
HARBORCREEK TOWNSHIP COMPREHENSIVE PLAN

A REPORT OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES TO THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION PURSUANT TO NOAA AWARD NO. - NA370Z0351

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1994 BACKGROUND ANALYSIS
FOR THE
HARBORCREEK TOWNSHIP COMPREHENSIVE PLAN

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INTRODUCTION

Local comprehensive planning is not new to the community of Harborcreek Township. This planning effort represents the third time in 30 years that the municipality will develop a background analysis of the study area, formalize the community development goals and objectives, and finalize the plan elements. The first planning endeavor was in the 1960's; the second plan document was adopted in 1980; with this endeavor resulting in the Harborcreek Township Background Analysis-1994 and the Harborcreek Township Comprehensive Plan-1995.

This Comprehensive Plan will assist the elected officials in developing a policy to guide decisions in regard to the physical development of the community. It is important to understand that the Comprehensive Plan, and its various elements, is not a legally binding document, and it does not take the form of an ordinance. When a community decides to adopt a comprehensive plan, it is accepting by resolution that the recommendations within the plan are the guidelines for future development and related government actions of municipal officials.

The various elements of this Plan should be reviewed on a periodic basis in the future, and revised when unforeseen conditions occur which reflect on the social, economic and physical makeup of Harborcreek Township and its immediate adjacent area. The goals and objectives of the Plan and the policies upon which the Plan is based, should be regarded as a more permanent part of the document. It is intended that the goals and objectives of the plan represent the official philosophy of the governing body of the municipality and its planning commission.

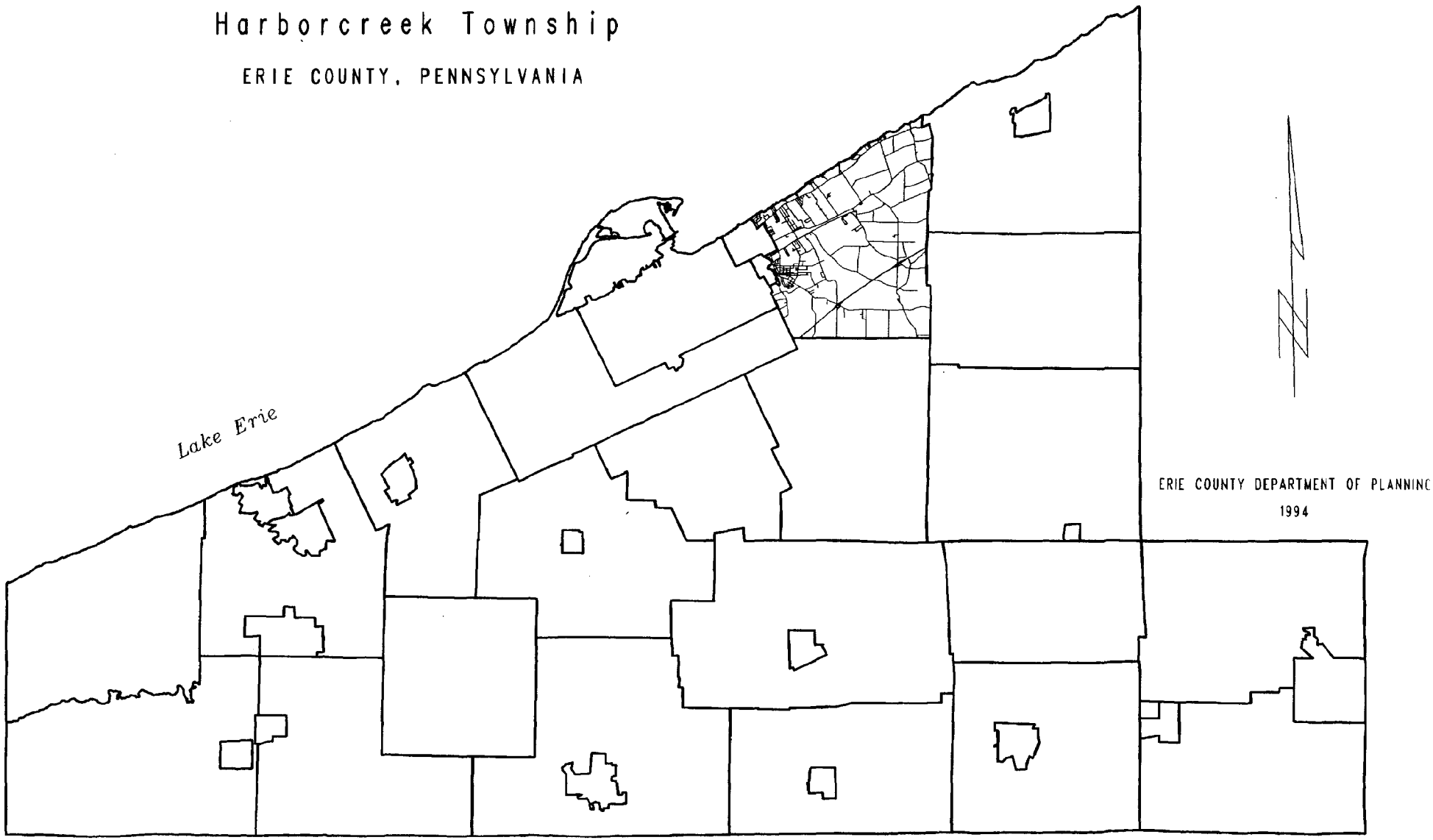
The elected and appointed officials of Harborcreek Township are inescapably involved in questions of physical development. At nearly every meeting of the Board of Supervisors and the Planning Commission development decisions must be made concerning zoning, subdivisions, utilities, facilities and so on. Public officials must plan for future demands on community services and fiscal outlays by which improvements to these services can be made. These officials need an instrument by which to inventory the community's resources and liabilities, and establish short and long range policies for the physical development of the community in a coordinated, unified manner that can be continually referred to in order to intelligently make these decisions. Such is the intent behind the Harborcreek Township Comprehensive Plan.

Probably the most difficult goal facing any community is the development of a means for promoting and controlling orderly growth. This Plan is an integral part of the municipal effort toward reaching that goal. Although other studies, together with ordinances and regulations, are or may become important to achieving the desired goals, the Harborcreek Township Comprehensive Plan should be the basis upon which those other documents are founded.

REGIONAL LOCATION MAP

Harborcreek Township

ERIE COUNTY, PENNSYLVANIA



CHAPTER 1

HISTORY

Introduction

The following information was taken from a paper developed by Judy Wieczorek, Chairperson of the Harborcreek Township Historical Society and local historian, specifically for this study.

Early History

Harborcreek Township in the last several decades of the eighteenth century was a wilderness. It is likely that the area now comprising Harborcreek Township was at various times inhabited by native Americans consisting of, for example, the Eriez, usually referred to as the Cat Nation. The much disputed Erie Triangle, which included what would become Harborcreek Township, was transferred from the Federal government to Pennsylvania on April 23, 1792. The Pennsylvania Population Company, which had 390 warrants on land located within the Triangle, hired Thomas Rees in 1792 to survey the Triangle. The compensation given to Rees for acting as agent for the Pennsylvania Population Company was 30,000 acres for one dollar an acre. Fifteen thousand acres are of particular relevance, for it is within this very large body of real estate that a significant portion of Harborcreek is contained. The Rees reserve was laid out and surveyed between 1797 and 1799. In 1802 Rees moved to Harborcreek, laid out his land in farms, sold them off except for one parcel which he retained for himself, and ended his days on May 1, 1848 at the age of 55. He is buried in Gospel Cemetery with other family members. Other early Harborcreek family names were Chambers, Saltsman, Prindle, Elliot and Moorhead.

Some of these early settlers, notably Thomas Rees and Thomas Moorhead, brought with them slaves. Two African-Americans, Robert McConnell and James Titus, ages four and one respectively, arrived with the household of Rees. A woman who was known only as Phoebe and her son Ceasar Augustus were members of the Moorhead household. After their 28 years of service some of Rees' slaves apparently were freed and given land by their former owner. At the time of his death in Harborcreek in 1871, McConnell had eight children most of whom were married. Thus, Harborcreek, one of the original 16 Townships established in Erie County, became home to the largest African-American population in the County at that time.

Topography, Transportation and Economy

Harborcreek Township today, consisting of 33.7 square miles, is bounded by Lake Erie on the north giving the Township a lake frontage of about seven miles. North East and Greenfield Townships constitute the eastern limits of Harborcreek, while it is bounded on the south by Greene Township. Originally, Millcreek Township formed the western border of Harborcreek. Through time, however, changes occurred modifying the western limits of Harborcreek. Wesleyville, one of three villages in the Township, was a thriving, entrepreneurial community by 1890. In 1912 the Borough of Wesleyville

was established as a separate political entity. Then in the 1920's, on the heels of World War I, the General Electric plant located in what had been the northeastern part of Millcreek. Today Lawrence Park Township, just east of GE, forms the northernmost section of Harborcreek's eastern border. Continuing southward Wesleyville Borough is another section of the eastern border, then Erie City for about two miles and finally Millcreek Township forms the southernmost eastern boundary.

Historically, it appears the lake frontage of Harborcreek experienced little systematic planning and/or development. Presently, the lake front consists of residential, business and agricultural zones. A short distance from the lake shore a gradual ascent begins, eventually forming two principle land forms - lakeplain and the upland. The lakeplain, which parallels Lake Erie, extends inland three to four miles reaching a ridge between 900 and 1,000 feet elevation. Early in the Township's existence this area was used to cultivate fruits, berries, grapes and melons, meeting with a high degree of success. More recently, this area has been used for growing cash crops such as grapes, sour cherries, tomatoes and peaches. Of note, Harborcreek and Northeast Townships form the largest concentration of concord grape land in the United States. The upland area, between the first and second ridges, has been and continues to be suitable for farming. South of this area the land is used for grazing and grain. It is obvious that Harborcreek historically has been an agrarian community. There is little doubt that it continues to be, recent development notwithstanding. For example, in 1980 45% of the Township was used for agricultural purposes. Evidence of the Township's strong determination to retain its rural character was the passage in 1992 of an Agricultural Security Area providing protection from encroaching urban development.

In its early history, some of the inland waterways figured significantly in the Township's economy. The Cooper Grist, Saw and Cider Mill along Fourmile Creek near the foot of Wintergreen Gorge was once a famous landmark of the lake shore region. Troop's Basket Factory and Cider Mill were located at Harbor Creek Station on Sevenmile Creek, and the historically important Cass Woolen Mill stood at the headwaters of Sixmile Creek in the southeastern section of the Township. Technologically advanced sources of power eventually made these mills obsolete.

The railroads were another feature of Harborcreek's economy. The Lake Shore and Nickel Plate Railroads passed through the Township from east to west. Stations for these railroads were located in the Villages of Wesleyville, Harborcreek and Moorheadville. The Philadelphia and Erie Railroad traveled through the western part of the Township in a semi-circular direction at the gully of Fourmile Creek. This railroad was a flag station at Shannon's Crossing.

East Lake (State Route 5), Buffalo (U.S. Route 20) and Station (State Route 430) Roads were the main roads of the Township in the 1860's and continue to be to this day. The first two are in the northern section and run east to west. Route 5 provides direct access to shoreline and lakefront properties. Both Routes 5 and 20 continue

eastward into New York State and westward into Ohio. In 1813 Station Road was laid out from Colt's Station in Greenfield Township to Mayville, New York. No later than 1865 Station Road extended northwesterly into Wesleyville. It now parallels Route 17 in Pennsylvania and western New York State. A benefit to Harborcreek was realized in 1957 when Interstate 90 was laid out running east to west. Two exits (#9 and 10) provide access to Harborcreek from this principal arterial. Presently there are approximately 120 miles of State and Township owned/maintained roads. The tradition of very well maintained roads continues to be observed.

Recent History

In keeping with its history and growth, Harborcreek continues to provide its citizenry with a comprehensive spectrum of goods, services and activities. There are shopping plazas, day care centers, parks, sports fields, restaurants, residences. Penn State-Erie, The Behrend College provides a cultural series and a new library complex. Harborcreek also is home to a community YMCA, as well as an AARP Chapter. In all, Harborcreek today has at least 50 trades, occupations, professions and agencies of one kind or another to serve Harborcreek residents and others outside of the Township.

The Harborcreek Area Chamber of Commerce was originally formed in 1961 but had waned by the mid-eighties. It was reactivated and revitalized in 1989. In addition to its purpose of promoting the business community, it now sponsors the widely acclaimed Harborfest. This event is a family oriented festive celebration lasting several days each year that attracts visitors from the whole region.

Much of the growth of Harborcreek has been dependent upon the availability of potable water and sewer systems. In 1964, nearly 90% of Harborcreek residents had their own wells, and all residents depended upon septic systems to handle sewage. The first sewer project was begun in 1971 and completed in 1974. Gradually, water and sewer lines were and continue to be extended, and have both serviced existing development in need, and encouraged new growth. In 1940, before water and sewer facilities were available, Harborcreek's population was 3,600. After World War II in 1950, there were nearly 7,500 residents. In 1960 the population had risen to over 10,000. The decade of the sixties saw the beginning of water and sewer facilities. In addition, as Erie, like other large cities, began to experience urban disorganization, out-migration became a common pattern of mobility. As a result, Harborcreek has been a primary beneficiary of out-migration from the City of Erie. Between 1950 and 1990 Erie's population had declined nearly 17%. Harborcreek's population has increased by over 100% in the same time period. Harborcreek's current population is estimated to be nearly 16,000. An interesting characteristic of the in-migration to Harborcreek is that it has cut across socio-economic classes and ethnic groups. Racial groups, however, are disproportionate in the Township. In 1990, 97.7% of the population was listed as White and 2.3% represented all other races. Also in 1990, 81% of the housing units in Harborcreek were single family dwellings and 19% were all other forms of housing.

CHAPTER 2

PHYSICAL FEATURES

Introduction

The physical nature of the earth, its topography, slope, geological composition, and type of soil structure, is a primary influence in determining how a community may be developed. The character of the land varies from one location to another as may be easily observed on the surface. Together these characteristics play an important role in determining a logical use of the land. The following data is a presentation of the physical and water features, and the general soils development potential as they exist within Harborcreek Township. It is not the intent of this section to develop and analyze the problems that may arise due to the existence of these natural features for future development in the rural areas of Harborcreek.

Soils

Soil types play a very important role in determining the development patterns of a community. While one location may be readily suitable for urban development, another may have certain hidden limitations which must be made recognizable and taken into account. The decision as to whether or not a soil will be used for a specific purpose, regardless of the limitation, is beyond the scope of this document. It also indicates those soils which have been determined to have the greatest potential for agriculture, mineral extraction, and areas most suitable for general development.

Prime Agricultural Soils:

Not all soils are well suited for agriculture. Stoniness, steep slopes, shallow soil and high water tables are conditions which restrict agricultural productivity. Soils which have the highest potential for productivity are usually known as prime agricultural soils. Such soils are typically deep, fertile, well to moderately well drained and are found on slopes which usually measure less than ten percent. The water holding capacity, texture and nutrients within these soils are conducive to high agricultural productivity, and being relatively level and well drained, a wide variety of crops can be efficiently grown as well. These soils are frequently found in floodplains and valleys where adequate moisture provides for good plant growth. A combination of lakeplain soils and lake effect climate are highly conducive to the production of vine and tree fruit along the northern third of the Township.

The accompanying Prime and Unique Agricultural Soils Map for Harborcreek does not make allowances for those locations where existing development may already be situated. Instead, the map outlines all of the land where prime agricultural soils currently exist or had existed before development. The source of this map is the Erie County Environmental Protection Plan.

Mineral Resources:

Within Harborcreek Township, the possibility exists for the extraction of two resources, natural gas and gravel. Natural gas is most likely to be found within two areas of Harborcreek: the northeast corner and the center of the Township. These pools are situated in such a manner that geologic formations have proven that gas production could occur. These two gas pools have proven to be economically feasible as a number of gas wells do exist within the pools in Harborcreek. However, within most of Erie County, there are few new wells due to a depressed national market. The potential for gravel extraction also exists in Harborcreek as soil types conductive to production are prevalent in several locations. There is one active gravel operation located in the center of the Township.

Soil Capability for General Development:

Components of the plan such as residential, commercial and industrial areas, transportation facilities, and public utilities are greatly influenced as to the extent and location of development by the basic capability of the land to support development.

Slope - This is the rise and fall of the land and is measured in feet per hundred (percent) and is rated for general development as follows:

Level or nearly level, 0-3% slope - excellent
Gently rolling, 3-8% slope - good
Rolling, 8-15% slope - moderate
Steep, 13-25% slope - poor
Very steep, 25-35% slope - unsuitable

Escarpments and Steep Slopes - In general, escarpments and steep slopes are areas which range from 25 percent to vertical as a result of stream erosion. The degree of slope involved coupled with a trend of insufficient development practices have caused these areas to be considered unsuitable for general development.

Floodplains - These are low-lying areas found within the numerous stream valley corridors which are prone to flooding during high water periods. These areas are considered unsuitable for general development, but can be utilized for outdoor recreational activities.

Buildable Land - Soil properties affect the location, construction and maintenance of buildings. The soils are rated in terms of the degree of limitation - slight, moderate, or severe. The degree of limitation indicates the severity of problems expected to be encouraged. The ratings are for buildings of three stories or less with basements (homesites).

Physical and Water Features

Land utilization, to varying degrees, becomes affected by the naturally occurring physical and water features that exist within the scope of a community. Steep slopes, flood prone areas and wetlands all play a role in determining the type or extent of development that may be economically feasible. It therefore becomes necessary

to look at these natural characteristics. A physical and water features map was developed to outline those natural areas that may have a direct impact on a community's growth. The source of the accompanying Sensitive Environmental Areas Map for Harborcreek is the Erie County Environmental Protection Plan.

Topographically, the Township varies in elevation from 572 feet at the Lake Erie shoreline to 1400 feet above sea level. The lower areas are primarily along the lakeplain gradually increasing in elevation to the southwestern corner of Harborcreek. This relatively consistent rise to the land generally does not cause problems for development. However, there are a number of steep slopes and escarpments located primarily along the Lake Erie shoreline and where streams have directly-cut deeply into the land.

The main water feature associated with Harborcreek is of course Lake Erie and its shoreline which comprises the entire northern border of the community. The major water features in the Township are: the extensive floodplain and escarpment networks of Fourmile Creek along the western side of the Township between Lawrence Park Township and Interstate 90 known as the Wintergreen Gorge; and Sixmile Creek south of Route 20 south to the end of the Township. Smaller floodplains are located along a number of streams emptying into Lake Erie.

Flood prone lands in Harborcreek Township have been determined through the use of the U.S. Department of Housing and Urban Development's Federal Insurance Agency (FIA) Flood Hazard Maps and also through topographic mapping done by the United States Geological Survey (U.S.G.S.) relating to flood prone areas. These agencies have determined the 100 Year Flood Level to be the greatest flood that will occur over a 100 year period. Since development is generally considered to be unsuitable in these areas, a substantial portion of land becomes consumed.

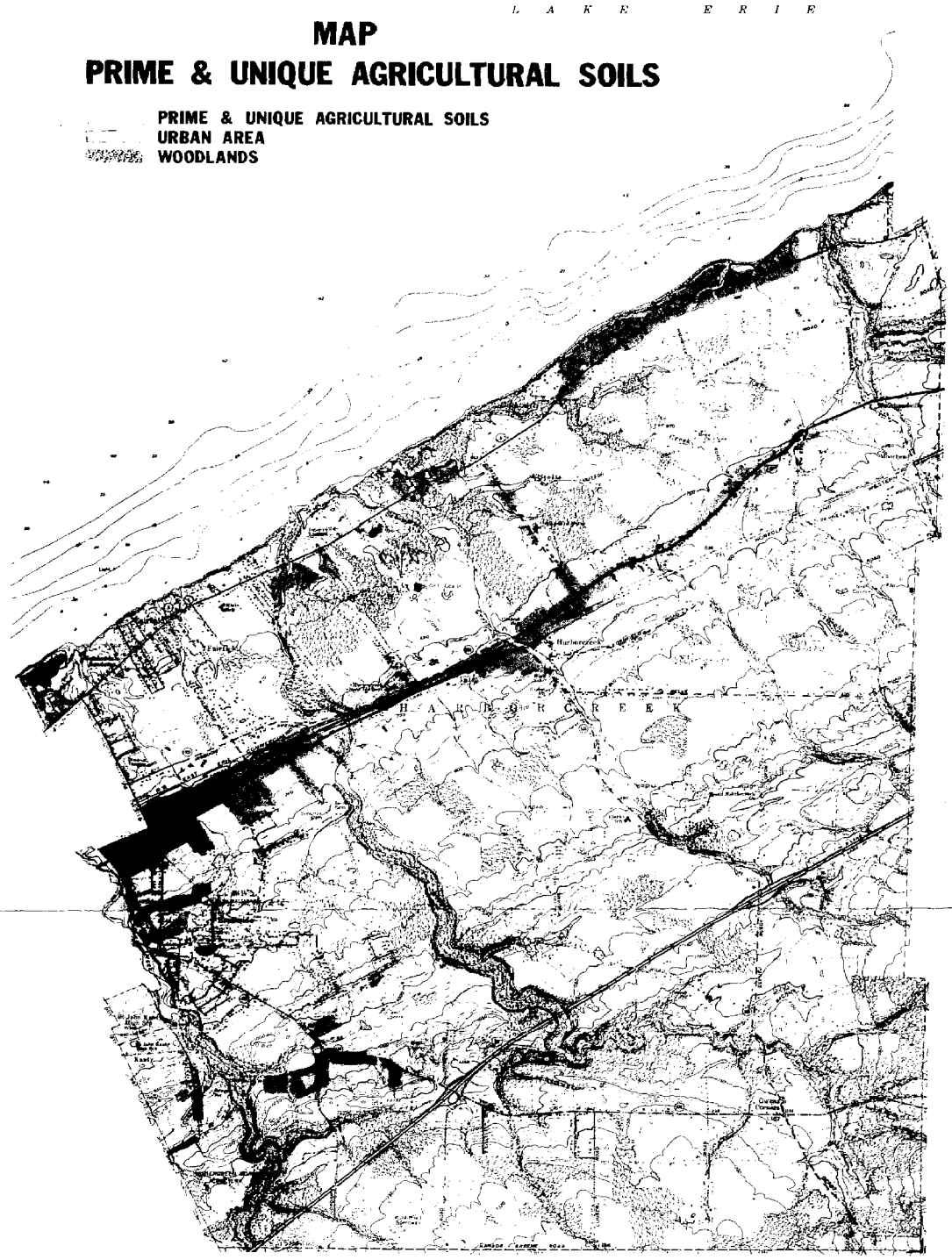
The majority of the wetlands are also located in the areas encompassed by the floodplains as this is generally characteristic of relatively low flatlands. These wetlands provide a source of water supply for the portions of Harborcreek that are not served by public water supply. Water features also play a very important role in determining the quantity and quality of water that is available to the rural portion of Harborcreek and also act as a significant part of the wildlife ecosystem.

Climate

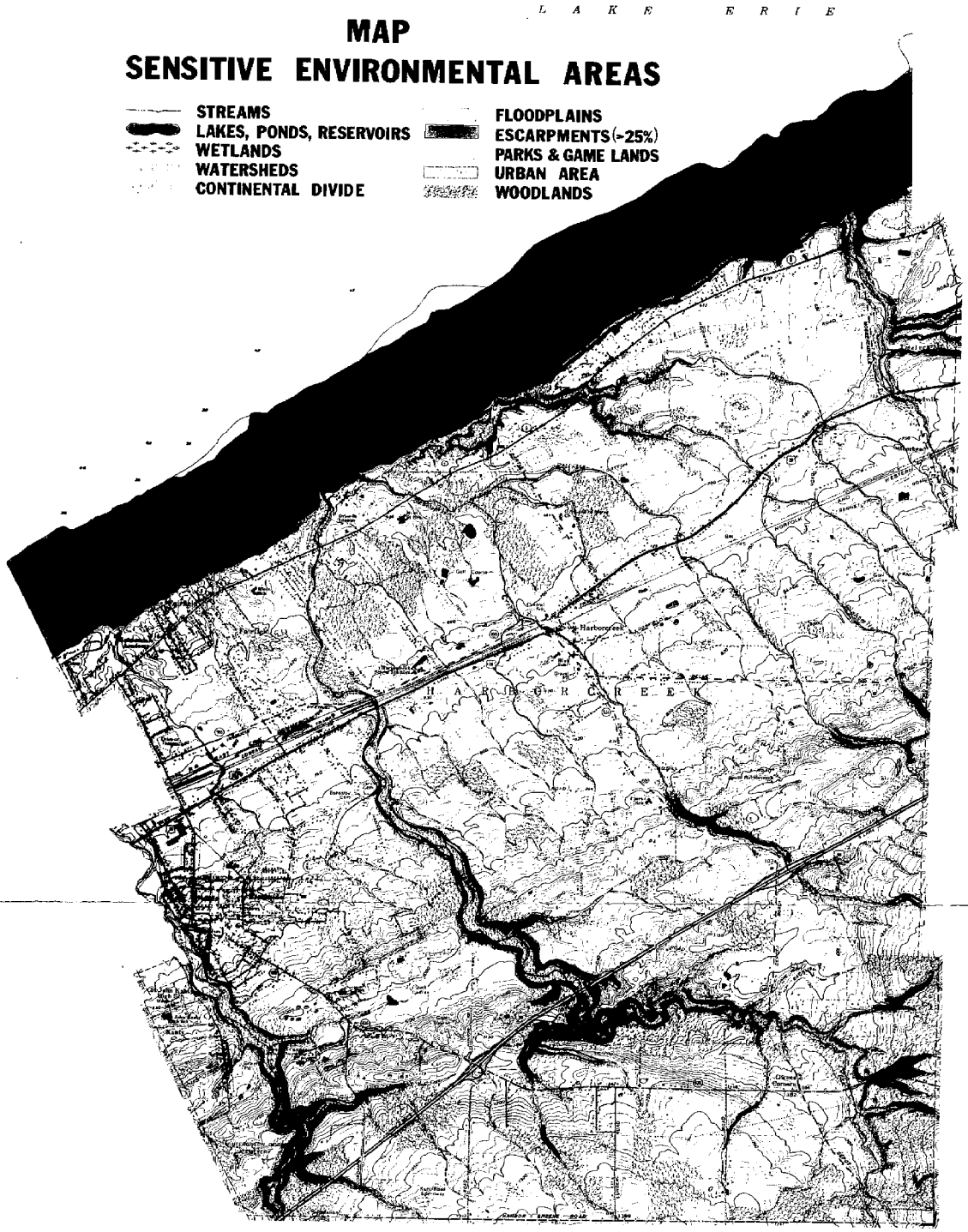
Harborcreek Township has a temperate continental climate with moderate to severe winters and evenly distributed precipitation. Its weather patterns are directly influenced by the Great Lakes, predominantly Lake Erie. Based on National Weather Service figures from the Erie Weather Station, the average annual precipitation is 37.3 inches. The average annual snowfall is 100 inches with the portion of Harborcreek south of Interstate 90 being in, what has become known as, the "snowbelt" area south of Lake Erie in the tri-state region. Temperatures range from an annual average of 50 degrees Fahrenheit to a high average of 53 degrees and a low average of 38 degrees. The hottest month is July, averaging in the lower 70's, and the coldest month is February, averaging in the high 20's.

MAP
PRIME & UNIQUE AGRICULTURAL SOILS

PRIME & UNIQUE AGRICULTURAL SOILS
URBAN AREA
WOODLANDS



MAP
SENSITIVE ENVIRONMENTAL AREAS



CHAPTER 3

POPULATION ANALYSIS

Introduction

An analysis of the character, composition and distribution of population along with knowledge of household composition and educational attainment of the residents of the community are pre-requisites for any planning program. Population data helps to determine the needs of a community in relation to education, highways, housing, commerce, industry, recreation and public improvements. In addition, recent trends serve as indicators for projecting future growth and development. The study of the population is primarily concerned with future changes and as such it should be used as a base tool for local decision making.

Population Composition

In order to analyze the various subgroups of the population, it is important to know which groups are growing or declining. Since each group will have different needs and impacts within the community, it is necessary to study the characteristics of these sub-groups.

The number of persons in each age group is constantly fluctuating. These fluctuations, which may be quite extensive in some cases, are brought about by three basic factors: births, deaths, and migration. Changes in the birth rate affect the number of persons, and the percentage of persons in the youngest age group. Although the immediate affect of birth rate changes is only on the 0-4 age group, within five years the change impacts the next age group and so on. Death rates, on the other hand, can be a factor in any of the age groups, but obviously have their major affect on the older groups.

Migration, either into or out of Harborcreek Township, will affect all age groups. Harborcreek is especially influenced by migration. The Township contains end portions of several larger demographic regions of Erie County, namely the eastern edge of the Erie Urbanized Area, the western edge of the lakeplain specialized agricultural region, and part of the northern edge of the upland general agricultural "snowbelt" region. All three regions attract different portions of the population sub-groups. The predominant change due to migration occurs in the more mobile age groups, such as young adults, first-time suburban home buyers, or those who have reached retirement age.

The analysis of the Harborcreek age and gender structure is one of the more important aspects of the population study because it provides a basis for determining the makeup of the community's population in the future. This analysis will also aid in the determination of the potential labor force, school age population, requirements for needed community facilities, and future housing requirements. For example, a decrease in the school-age population may affect the size and cost of proposed school improvements. Also, an increase in the number of senior citizens would necessitate additional facilities for the elderly. All of these factors put

together serve as indicators in determining the future economic, social, and cultural stability of the community.

As noted previously, each age group has its own particular needs and these needs vary as individuals pass from one age group to the next. For example, the basic need for the school age population is for the provision of adequate recreational and educational facilities. These will provide ample opportunity for social and physical development for both the individual as well as the group as a whole.

Individuals in their twenties and thirties have a different set of needs. The primary need for people in this age group is for employment opportunities. A secondary need, particularly as these individuals marry and begin to raise families, is that of housing in terms of quality, income range, and size to meet varying needs and/or preferences. It should be noted that individuals in this group, as well as their families, are extremely mobile, basically in search of better employment opportunities.

Middle-aged individuals comprise a more stable element within the total population. Members of this age group are more likely to be the civic leaders, political decision makers, and managers in the local economy. Their numbers and characteristics are of extreme importance to the well being of the community.

The number of senior citizens in most communities has been increasing over the last two decades, particularly as a result of advances in the field of medicine. This has resulted in more people living longer. Recognition of older individuals and appropriate consideration for their needs can turn what some might consider a liability into an asset for the community. The basic needs of the people within this age group are the provision of safe and adequate housing that is proportional to their limited income level and convenient access to necessary services.

Population Projections

Population growth (or lack of growth) is a basic element of a community's comprehensive development plan. A reasonable projection of the anticipated growth in population for a community is needed in order to properly determine the nature and extent of future services that may be necessary to best accommodate a community's future requirements.

Many factors completely beyond the control of the local government can also change the rate of growth such as natural disasters, quality of the local job market, overall economy of the County, and even national recession/boom periods. These factors could produce a major alteration in the population growth potential.

The effects of outside regulatory agencies will continue to have noteworthy effects on the population growth as well. Current enforcement of State on-site septic regulations have limited the construction of new homes and businesses outside the publicly served areas. Soils within the rural upland area are generally characterized by slow permeability and/or high groundwater tables, thereby making siting for on-lot septic sewage systems difficult.

Another factor that can affect the population growth is the availability of group water/sewer facilities. This would occur, either by the extension of public lines, or involve the construction of package treatment plants and group water well systems. Isolated systems will most likely serve clustered developments such as multi-family residential complexes, single-family subdivisions and mobile home parks in the rural area. Any such residential development using group systems in the future will contribute towards significant population increases.

Demographic Report

Due to the diverse nature of Harborcreek Township, a combination analysis of U.S. Census related socio-economic information was completed for background purposes. This "study within a study" is known as the Harborcreek Township Demographic Analysis and Population Projections Report and is located at the end of the Background Analysis.

The following research, tables and graphs pertaining to the population analysis portion are integrated within the Demographic Report.

Municipal trends from 1950 to 1990 are analyzed and compared to neighboring municipalities and the County as a whole. The key to this analysis is an attempt to discern why changes occurred. This analysis addresses a number of factors, including natural increase, housing starts, and institutional group quarter changes. The final product is a detailed examination of why local changes occurred. Sub-municipal changes are analyzed using census track data. Social characteristics govern the nature of the community. They include a comparative analysis of generalized age profiles. When combined with gender, this age breakdown facilitates comparison to other municipalities, the County, and the State. Next, age data is examined by five-year cohorts. This is particularly valuable for understanding school, workforce, and the community service needs base. Race/ethnic data is examined. Changes in household size and structure, family size and type, and group quarters are examined. Data from these sections, supplemented with Pennsylvania Health Data Center material, is then utilized to develop a series of population projections. These projections analyze how population age, fertility, and mortality could potentially combine with migration trends to show the municipality's population in 2000 and 2010. There are three population scenarios that were developed and explained. See the accompanying Appendix.

CHAPTER 4

ECONOMIC ANALYSIS

Introduction

An analysis of the local economy will provide useful information necessary to understand the economic growth (or lack of it) within the community. The economic climate is analyzed through examination of present and current trends within the community as evidenced by employment and labor force data, retail, selected services, wholesale and manufacturing statistics and the status of agricultural activity. The purpose of this section is to examine where growth has occurred and to present date for the possibilities of new growth in the community.

Employment Areas

Traditionally, Harborcreek Township's principle economic activity had been agriculture, primarily located in the northeastern quadrant of the Township. Harborcreek is second only to North East Township in Erie County in the production of grapes. Although a large amount of land is devoted to the various fruit, crop, nursery and pasture agricultural activities in the community, a naturally small number of persons are employed in such activities.

Industrial development is currently limited to a handful of establishments. The majority of Harborcreek residents, employed in manufacturing, work outside of the Township, primarily in the remainder of the Erie Urbanized Area. Of note, the largest single site for employment in Erie County is the one square mile complex of the General Electric Company located just one mile west of the northwestern border of Harborcreek. This GE Plant produces locomotives. Within Harborcreek Township, the larger industrial employment is provided by the following manufacturers: Port Erie Plastics (custom and co-injection molding) on Troupe Road; Dorries Scharmann (lathes and vertical boring mills) on Iroquois Avenue; and Thermoclad (heat fusible powders, primers and paints) on Iroquois Avenue.

Commercial activity has grown substantially recently and is primarily located along Buffalo Road from Wesleyville to Hannon Road. This commercial district is anchored by three plaza complexes: Eastway, K-Mart and Giant Eagle. This portion of the Township can be considered a "full service" business district, as it now provides at least one of everything normally associated with a suburban commercial strip district. The large number of commercial businesses and services located in this area clearly indicates that far more than the residents of Harborcreek are being accommodated. The dozen closest municipalities in Erie County and western New York extensively utilize the Harborcreek Buffalo Road commercial district as well. There is also less concentrated commercial activity on: the western portion of East Lake Road; in Harborcreek Village; and at the two Interstate 90 Interchanges.

Employers

An inventory of the major employers within the community gives a good indication for determining the future economic, social and cultural stability of the community. In Harborcreek Township, the following larger single site employers are primarily located in the west central and central portion of the community: Penn State-Erie (college), Giant Eagle Supermarket, K-Mart East, Brevillier Village (elderly care service), Port Erie Plastics (manufacturer), Harborcreek Junior-Senior High School, Eastside YMCA, Rolling Ridge Elementary School, Gannondale (girls care service), Erie Infants and Youth Home, Harborcreek Youth Service (boys care service), Quality Market, and Dorries Scharmann (manufacturer). A detailed description of various public and institutional employers in Harborcreek can be seen in the following Community Facilities Chapter.

Through the efforts of the Township officials, an extensive inventory of employers has been assembled, and is delineated in the accompanying table, Employers and Employment in Harborcreek Township in 1994. The table includes the full range of employers in the Township from the large institutional, industrial and commercial sites down to the self-employed operating our of home sites. Of note, the number of employees listed are estimates representing the total persons that were employed for that enterprise in 1994 (multiple shifts and locations, part-time, replaced employees, etc. included), not the average daily employment at the establishment. The table lists over 360 employers employing over 5,600 persons in 1994.

Demographic Report

Due to the diverse nature of Harborcreek Township, a combination analysis of U.S. Census related socio-economic information was completed for background purposes. This "study within a study" is known as the Harborcreek Township Demographic Analysis and Population Projections Report and is located at the end of the Background Analysis.

The following research, tables and graphs pertaining to the economic analysis portion are integrated within the Demographic Report.

This section serves as a supplement to the economic analysis. It focuses upon generalized and detailed income statistics. Both U.S. Census of 1990 and HUD low-moderate income data are utilized for comparison. The central feature of this section is local household income change from 1979 to 1989, analyzed by constant dollars or changes in the Consumer Price Index. See the accompanying Appendix.

EMPLOYERS AND EMPLOYMENT IN HARBORCREEK TOWNSHIP-1994

Name of Employer	No. of Employees
A & B Screw Machine Products	2
A.J. Construction	1
Abbey's Auto Service	4
Abel Contractors	1
Akerly Concrete	2
Alex Roofing	1
Allen, Donald	2
Allison, Robert D.O.	4
AMF Management, Inc.	4
Aqualand Plus, Inc.	10
Arby's Restaurant	97
Art's Auto Service Center	3
Associated Accountants	1
Automotion Electronics	1
Automotive Paint & Supply	2
B & M Electronics	1
Bait Shop	1
Barb's Care Alot	20
Bean Construction	1
Beatty Diesel, Inc.	10
Beckman Brothers	11
Beckwith Machinery	29
Blaine, Bell, M.D.	17
Benetwood Corporation	4
Berkheimer Associates	1
Big Lots	46
Bigfoot Pest Control	4
Blanchfields	1
Bob's Excavating	1
Brevillier Village	184
Brinkley Trucking	1
Brooks Landscaping	26
Brookside Inn	3
Burger King	43
Bush Locksmith	3
Cade Electric	7
Calico Patch Shop	1
Callahan's Beauty Shop	1
Camp Glinodo	16
Canales Tree Service	3
Card Gallery	8
Carter Lumber	22
Carter Plumbing & Heating Company	12
Cass, George	1
Cass & Cass Construction	4
Cedarcrest Chiropractic	3
China Moon Restaurant	1
China Inn	7
Christian Life Campus	1
Clothes Bin	5
Commonwealth of PA Liquor Store	4

Name of Employer	No. of Employees
Complete Sports	1
Conway & O'Malley	6
Continental Bakery	12
Corey Construction	9
Cottrell Builder	1
Country Fair #32	15
Country Fair #48	19
Country Fair #56	18
Crain Eggs	7
Cruise Connection	1
Czarnecki Notary	1
D & K Store	12
Dahlkempers Department Store	49
Dailey's Plumbing	1
Dale Ceramics	1
Dance Company	2
Data Track Accounting Service	1
Dave's Auto Body	2
Davis Aqua Propeller Service	4
Dee's Painting	1
Del Mar Motel	1
Ditch Witch	1
DJ's Village Dairy	13
Don's CB Sales & Service	1
Dorries Scharmann, Inc.(RD & D)	75
DOTS, Inc.	30
Dougan, Terrill	1
Downing Golf Course	20
Dunar's Lakeshore Feeds	2
East Erie County Emergency Communication	17
Eaglens Hardware	1
Early Years Learning Center	10
East Erie Moose Club #593	4
East Erie Assembly of God Church	1
Eastway Billiards	2
Eastway Twin Theatre	15
Eastway Bowling Lanes	12
Eastway Sunoco	4
Eastway Emergi-Center	12
Elite Treats Ice Cream	1
Emling Farms	1
Erie Allied Industries	25
Erie Gymnastics	11
Erie City Memorials	1
Erie Infants & Youth Home	95
Erie Fire Equipment	6
Evans Acres Tack Shed	1
Evergreen Trailer Court	1
Ewaik Remodeling	1
Exit 9 Sunoco Station	7
Fabin's Trailer Sales	7
Fairfield Sunoco	2
Fairfield Beer Distributor	1
Fairfield Hose Company Club	20

Name of Employer	No. of Employees
Faith Lutheran Church	3
Faith Reformed Church	1
Family Dental Care	6
Fantastic Sam's	7
Fashion Bug	27
Fellowship Baptist Church	2
Fiddle Inn	3
Finnel Farms	3
Finazzo Construction	2
Fireside Lounge	7
First Presbyterian Church	8
Fish, Attorney Burton	1
FORMU-3 of Northern Ohio	3
Fournier Construction	6
Fruit Farms, Inc.	5
Gadomski Electrical Contractor	3
GameTime	1
Gannondale	104
Ganzer Equipment	6
Gary's Superette	8
Gas Oil Distribution System	9
Giant Eagle Supermarket	220
Grace Bible Church	1
Grossman's Lumber	30
Guehring Automation, Inc.	1
H & R Block East	9
Haircrafters	5
Hallgren, Ted	1
Harbor Care	20
Harborcreek Auto Sales	1
Harborcreek Baptist Church	4
Harborcreek Chamber of Commerce	2
Harborcreek Evangelical Church	1
Harborcreek Hairlines and Tanning	7
Harborcreek Manor	2
Harborcreek Sample Service	1
Harborcreek School District	407
Harborcreek Shurfine	18
Harborcreek Township Government	46
Harborcreek Township Sewer Authority	4
Harborcreek Township Tax Office	1
Harborcreek Youth Service	97
Harcourt Insurance	3
Hedlund Insurance Broker	1
Heise Rebuilding	2
Hi Fi Hospital	1
Hi Tech Collision	1
Hilltop Beer Distributor	7
Hinkler Construction	3
Hinspeter Roofing	1
Holiday Hair	10
Hollarn Insurance	3
Holly Shop	7
Home Video Exchange	3

Name of Employer	No. of Employees
Hoover Sand & Gravel	28
Hoover Excavating	4
Hoover Trucking, Inc.	11
Huskie Auto Service	1
Huskie Beer Distributor	3
Innovation Design Service	2
Iron Age Corporation	2
Iroquois Medical Center	2
J. W. Sharpening	3
JAB Enterprises	17
Jackson Plumbing	3
Jackson, Ed	1
Janicki Drywall	16
Jaskiewicz, Carrie	1
Jaworek Trailer Court	1
Jeanne's Flower Shop	2
Jemko Petroleum Equipment, Inc.	12
JoAnn Fabric	12
Johannes Chiropractor	1
Johnson Personnel Computer	10
Jones, Robert	1
Jozefczyk, Jody	1
Jud, Inc.	3
June's Hair Fashion	2
K-Mart East	197
Kaufman, Brenda	1
Kazmaier Contracting	1
Kegler Lounge	21
Kelly's Market	4
Kentucky Fried Chicken	35
Keystone Rehabilitation Systems	3
Kindland, Fred	1
Krystal Klear Ice	13
Kuholski Excavating	4
Kulisek, Kathleen	4
Kwik-Fill	35
Laidlaw Transit, Inc.	63
Lake Erie Systems	15
Lake Shore Bus, Inc.	1
Lakeshore Towing	1
Lake Shore Auto Body	2
Lakeside Motel	1
Lakeview Motel	2
Langdon Produce	1
Langdon, Mary	2
Langer, Richard	1
Larson Texts	60
Leech, Ronald	2
Little Caesars Pizza	24
Lochbaum Rehabilitation Center	17
Machintosh Antiques	1
Magee, Robert	1
Mainline Mechanical Contractors, Inc.	21
Malinowski, Theresa	1

Name of Employer	No. of Employees
Margosian & Sons Plumbing	1
Marine Bank	7
Martin's Country Clean	13
Martin's Service Station	1
Master Tech Auto Body	4
Maxwells Hobby Shop	1
Maynard Construciton	2
McDaniels Machinery	9
McDonald's Restaurant	112
Melody's Day Care	1
Mellon Bank North	7
Midway Inn	1
Mighty Fine Doughnuts	9
Miles Meldisco Taxes	5
Miller Travel Service	3
Mindek Brothers Fur Farm	4
Ministries To The World	16
Monroe Muffler	8
Moorhead, John	11
Moorhead Vineyards, Inc.	5
Mott, Pierre	5
Mount Saint Benedict	35
Mr. Mobile Lube	1
My Dad's Pizza	5
Myers Plumbing	1
Makoski District Justice	1
National Bank of North East	9
Nelson's Farm	8
Nelson Fruit Farm	1
Newcome, Cheryl	1
New Horizon Realtors	1
Nine Hundred Ninety Variety	7
North American Compound	8
Northwest Savings Bank (Mall)	5
Northwest Savings Bank (Plaza)	9
Nutech Custom Counter Top	1
Ollinger Plumbing & Heating	21
Our Lady of Mercy Church	9
Palloto Rentals	1
Paris Company	4
Partner's Tavern	2
Patrick's Restaurant	72
Payless Shoes	8
PCA National, Inc.	6
Penn State University	730
Perkins Restaurant	138
Peters Welding	1
Piazza Horseshoeing	1
Pickway Shoes	12
Pizza Hut Restaurant	51
PNC Bank	14
Polatas, Robert	2
Pomorski Construction	1
Ponderosa Restaurant	43

Name of Employer	No. of Employees
Port Erie Plastics, Inc.	179
Prather, Edward	1
Precision Sharpening	10
Prichard, Scott	1
Prichard, Loren	4
Prischak & Godzac, Optometrist	9
Pulakos Candy	2
Putt Putt Golf	5
Qual-Krom	1
Quality Market	100
Quick Oil & Lube Center	13
Quick Photo	2
Radio Shack	5
Rag Shops, Inc.	22
Rainbow Motel	2
Randolph Masonry	9
Rathman Plumbing	7
Ravine Motel	1
Ray Norris Enterprises	2
Ray's Auto Body	1
RCR Screw Machine	6
Reel Entertainment Video	7
Regional Health Service	13
Rex TV & Appliances	3
Richter Farms	7
Rick Heating & Air Conditioning	4
Ron's Construction	1
Rose Construction	13
S & S Rentals, Inc.	1
S.E. Erie Industrial Federal Credit Union	2
Savoia's Auto Body Shop	1
Schmitt Custom Tooling	2
Senior Citizen Home Maintenance	1
Shaffer & Son, Inc.	4
Shannon Shooting Suuplies	2
Shorehaven	10
Skateway	16
Skindell's Towing Service	1
Smith Construction	2
Snow, David	3
Snoozies Pub	1
Sound Trak Enterprises	1
South Haborcreek United Methodist Church	2
Sparkle Wash of Erie	1
Spectrum Office Products	7
Spiegel Realtors	2
Stafford Sign Systems	2
Stan's Garden Center	40
Star Tech	2
Steele, Dennis	1
Stinson Auto	1
Streicher, Donald D.D.S.	3
Suburban Container Service	4
Subway Sandwich Shop	13

Name of Employer	No. of Employees
Suddarth & Son	1
Sue's Daycare	1
Sul Fruit Farm	3
Suzi's Chocolates & Supplies	4
Szewczyk & Son Plumbing	4
Szklenski Farms	23
T-N-T Carpet Center	1
Taco Bell Restaurant	36
Taylor, Sima, Loftus	1
Tele Communications, Inc.	32
Thermoclad Company	40
Thrift Drug	10
TK's Lake Breeze Tavern	1
Tom Sanner's T-Prints	1
Tom's Tire Service	2
Tracy's Excavating	3
Travel Ports of America	11
Tresler Construction	2
Tri-County Bus Equipment	9
Tri County Intermediate Unit	14
Tri-State Metal Cleaning	2
Tupperware	7
Twinbrook Veterinary Hospital	15
U-Haul of Pennsylvania	13
Val Pak	4
Video U.S.A., Limited	24
Vip Cleaners	18
Wallywood	1
Waterfall Restaurant	84
Waterhouse Supply	2
Wendy's Restaurant	73
Wheels Auto Parts	8
Whitney Farms	3
Wilczanski, Helena	2
Wintergreen Gorge Cemetery	2
Wolbert, Debra	1
Wolfe's Fireworks	1
Wood Farms	11
Woodring Builders	5
YMCA, Eastside	104
Young & Sons	15
Yount Alarm Systems	9
Zelazny, Edward	1
Zimmerman Tool & Equipment	1
Zukowski Photo	1

CHAPTER 5

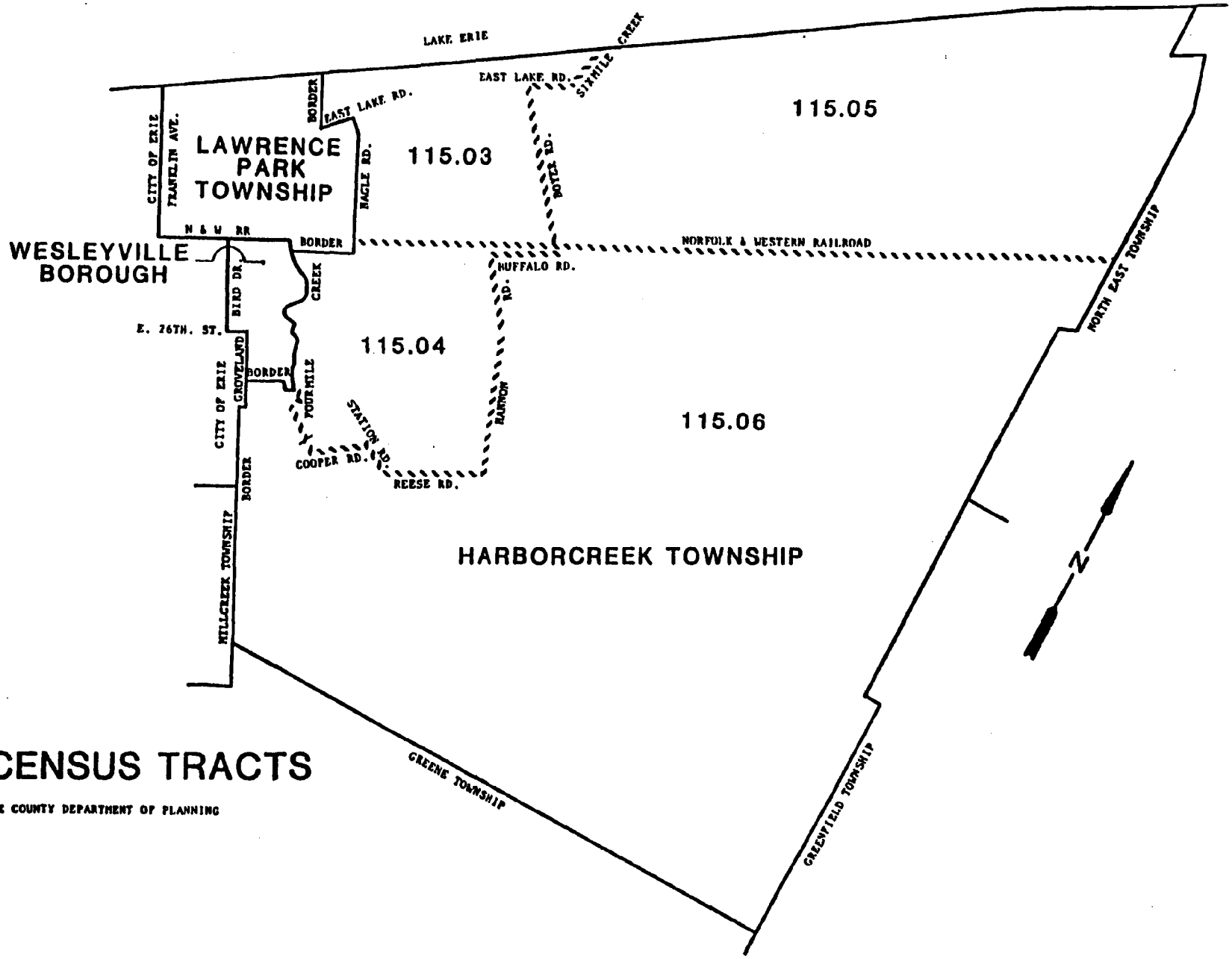
HOUSING ANALYSIS

Introduction

The quality of housing has a definite influence on the welfare of a community and the well being of its residents. Housing is essentially the sheltering of people. It also provides a sense of place and a sense of individual and social identity. The quality of housing can command pride and respect or create an atmosphere of despair and unrest. Adequate housing is basic to our quality of life. Housing that is overcrowded, dilapidated or lacking in plumbing and other facilities does not provide a suitable living environment. Beside fulfilling the basic human needs for which it was designed, housing condition is an important factor in the general well being of a community and its tax base. This section will examine the current supply, condition and future housing needs for the community.

The housing analysis is an important element in the planning process. The data gathered here is necessary to develop goals and recommendations that will help the community to best achieve proper development patterns and adequate quality in existing and future housing units. By inventorying the housing related characteristics of the community, problems and/or needs can be identified. Correlation and analysis of the information will reveal obstacles relative to the existing and future housing situation. The findings of the housing analysis will be used toward improving and/or maintaining the quality of existing units as well as to provide for orderly development of new residential areas and structures.

The statistical data for this section was gathered from U.S. Census data, and an extensive field survey undertaken by the staff of the Erie County Department of Planning and the Erie County Redevelopment Authority. Sub-municipal information is provided at the Census Tract level. See the accompanying Census Tract Map.



1990 CENSUS TRACTS

ERIE COUNTY DEPARTMENT OF PLANNING

Housing Market

The U.S. Bureau of the Census defines housing units as single-family homes, mobile homes, and units within housing structures (such as apartments, flats and single rooms), whether occupied or vacant but intended for occupancy. The 1990 Census revealed that there were 5,158 total housing units within Harborcreek Township. This represented an increase of 416 units over the 1980 housing supply of 4,742 units. During this same 10 year period, the Erie County housing supply increased 4.7 percent. Of the total 1990 housing supply in the Township, 5,028 units were year-round units, and 130 units were seasonal, primarily located near the Lake Erie shoreline. Of note, 62% of the housing units were located in the Erie Urbanized Area portion of Harborcreek (Census Tracts 115.03 and 115.04). The accompanying table illustrates the change in the number of housing units in Harborcreek and in Erie County as a whole from 1980 to 1990.

TOTAL HOUSING UNITS 1980 AND 1990

		Total Units 1980	Total Units 1990	1980-1990 % Change
Harborcreek Township		4,742	5,158	+8.8
by Census Tract				
1980	1990			
	115.03		1,263	
	115.05		1,234	
115.01	TOTAL	2,308	2,497	+8.2
	115.04		1,522	
	115.06		1,139	
115.02	TOTAL	2,435	2,661	+9.3
Erie County				+4.7

Source: 1990 Census, STF #3

Mobile Homes

Another element of the housing supply is the availability of mobile homes and mobile home parks. In recent years, this type of dwelling has come to play an important role in the housing supply, mainly because the cost when compared to site-built housing is lower. For this reason, this type of housing has become an economically feasible source of housing for low, moderate and even middle income families. As illustrated in the accompanying table, the supply of mobile homes in Harborcreek increased by 37 units between 1980 and 1990.

MOBILE HOME SUPPLY 1980 and 1990

		1980 Total	1990 Total	1980-1990 % Change
Harborcreek Township		185	222	+20.0
by Census Tract				
1980	1990			
	115.03		39	
	115.05		55	
115.01	TOTAL	44	94	+113.6
	115.04		109	
	115.06		19	
115.02	TOTAL	141	128	-9.2
Erie County				+46.9

Source: 1990 Census, STF #3

According to the 1980 Census, there were 185 mobile homes in Harborcreek. In 1993, there were 176 mobile home units. The reduction is attributed to the conversion of mobile homes to conventional housing along the Lake Erie shoreline. It can be assumed that the relative attractiveness of mobile homes to low-to-moderate income persons will increase as the cost of new conventional housing units increases. The community can expect the rate of mobile home placements to rise in the future.

There are six mobile home parks within Harborcreek with a total of 128 units. The following table indicates the locations and capacity of these mobile home parks. The remaining 48 mobile homes are intermixed with conventional housing primarily located near the Lake Erie shoreline.

MOBILE HOME PARKS 1994

Name of Mobile Home Park	Census Tract Location	Existing Units	Estimated Capacity
Lakeside Mobile Home Park	115.03	22	Full
Bargain Mobile Home Park	115.04	7	Full
Evergreen Trailer Park	115.04	17	Full
Springcreek Mobile Home Park	115.04	65	Full
Shorewood Trailer Park	115.05	6	Full
Waite Trailer Court	115.05	11	Full

Source: Erie County Assessment Bureau

In the past decade, design and construction techniques have significantly improved the appearance and livability of mobile homes. In fact, the newer overall sizes have made it almost impractical to move the units from place to place, leading to the improvement of the unit itself through permanent foundations and landscaping. The Township has regulations designed to keep these units and park locations up to minimum standards and in line with community housing policies.

Housing Tenure and Supply

In terms of tenure, the Harborcreek housing stock is predominantly owner-occupied. According to the 1990 Census, 3,948 of the total 5,158 occupied units are owner-occupied. Rental units comprise 964 units of the total housing stock. In comparison, Erie County's supply of rental housing units is 29.3 percent. Rental housing demand could increase within the Township in future years as more families become priced out of the site built housing market. Mobile homes, modular design, and multi-family housing represent viable alternatives to this potential rental demand. The Penn State-Erie, the Behrend College impact on rental housing should eliminate most vacancies currently existing, and naturally increase the building of new multi-family housing and the conversion of some single-family housing.

There are two ways of examining the supply of housing in a community, by type and by ownership or occupancy. Occupancy is an important characteristic of the housing market within any community. The accompanying table illustrates occupancy statistics from the 1990 Census for Harborcreek.

OWNER & RENTER OCCUPANCY CHARACTERISTICS 1990

	Total Units	Owner Occupied	Rental	Vacant	Occupancy Rate
Harborcreek Township	5,158	76.5%	18.7%	4.8%	95.2%
by Census Tract					
115.03	1,263	69.1%	28.6%	2.3%	97.7%
115.04	1,522	80.9%	15.7%	3.4%	96.6%
115.05	1,234	70.0%	19.2%	10.8%	89.2%
115.06	1,139	86.0%	11.2%	2.8%	97.2%
Erie County		64.2%	29.3%	6.5%	93.5%

Source: 1990 Census, STF #3

Housing Occupancy

As a whole, the average occupancy rate within Harborcreek is 95.2 percent, which slightly exceeds the Erie County occupancy rate of 93.5 percent. These rates indicate that there is adequate housing in Harborcreek at this time. The additional population generated by Penn State-Erie, the Behrend College, who choose to live close to the facility, will be absorbed within the Township and the western adjacent three municipalities. Currently, the main concern facing Harborcreek is being prepared to accept new housing starts and the type and expense of the housing that will be built by the expansion of the Erie Urbanized Area. Of course, the options available to the Township vary by the use of land use controls and building guidelines. The level of preparedness also depends upon infrastructure, mainly public water and sanitary sewer. The Township is fortunate to have the low vacancy rate of 246 units, which shows that market conditions are receptive to absorb housing when it is available for sale or rent.

Home ownership is generally viewed by many people as a beneficial condition. The popular conception that home owners have a high degree of community concern and are responsible citizens does much to promote this belief. With the exception of federally subsidized housing, the general trend within Erie County has been toward an increasing rate of home ownership, and Harborcreek is definitely following this trend to an even greater degree.

Housing Structure Conditions

In order to determine the quality of the existing housing stock in Harborcreek Township, a parcel by parcel field survey was conducted in mid-1994 by the Erie County Department of Planning with the Erie County Housing and Redevelopment Authority. Each dwelling structure (not each dwelling unit) within the Township was classified as follows:

Sound - Housing which has no defects or only slight defects which are normally corrected during the course of regular maintenance. Examples include:

- minor lack of paint maintenance
- slight damage to porches or steps
- small cracks in walls, foundations, or chimneys
- broken gutters or drainspouts.

Deteriorating - Housing which needs more repair than would be provided in the course of regular maintenance. It has one or more defects of an intermediate nature that must be corrected if the dwelling unit is to continue to provide safe and adequate shelter. Such defects are signs of neglect which lead to serious structural damage if not corrected. In addition to the minor defects associated with the sound condition, further examples of the deteriorating condition include:

- shaky or unsafe foundations, porches, or steps
- small holes, open cracks or missing material on walls or roof
- rotted windowsills or frames
- deep wear on stairs or doorsills
- broken or loose stair treads or missing rail supports.

Dilapidated - Housing which does not provide safe or adequate shelter. It has one or more critical defects or has a combination of intermediate defects in sufficient number to require extensive repair or rebuilding. Critical defects are those which indicate continued neglect and serious damage to the structure. Inadequate original construction would also cause a structure to be listed as dilapidated. This includes structures built of makeshift materials and inadequately converted cellars, or garages not originally intended for living quarters. In addition to the serious defects associated with the deteriorating condition, further examples of the dilapidated condition include:

- large holes, open cracks, or missing material on walls or roof
- structural sag in the walls or roof.

The condition of each structure is classified on the basis of a visual exterior survey of the current situation and projected through to five years in the future. No evaluation was made of interior deficiencies such as plumbing, heating, wiring or other conditions which in themselves could pose health and safety hazards. The final results of the survey are tabulated in the accompanying table.

HOUSING STRUCTURE CONDITION SURVEY 1994
(EXTERNAL FEATURES)

	Structures	Sound	Deteriorating	Dilapidated
Harborcreek Township	5,056	82.0%	16.7%	1.3%

Source: Erie County Planning Department and Redevelopment Authority 1994 Field Survey

This survey indicates that 4,146 housing structures in Harborcreek are in sound condition, 842 are deteriorating, and only 67 are dilapidated. Of note, even though a building is deemed to be in sound condition, it does not mean that no cost is involved in maintaining it. The individual housing surveys indicated that up to $1,000 may be needed to be spent within the next 5 years on the average "sound" housing structure in Harborcreek to keep the structures in sound condition. For deteriorating housing structures, an average cost could be four times higher than that to bring them up to sound condition. This indicates that the community may need to consider minimum code standards in order to prevent blighted areas from occurring in the future.

Housing Units Per Structure

The accompanying table depicts housing units by the number of units in each structure. When looking at direct Harborcreek Township comparisons with Erie County, the Township falls below County averages for structures which have two or more units. This indicates a need to provide more varied housing types as an alternative to the standard detached single family home.

HOUSING UNITS IN STRUCTURE 1990

	Total Units	*1 Unit	*2 Units	*3&4 Units	*5 or More Units	** Other
Harborcreek Township	5,158	86.0%	3.2%	1.5%	7.4%	2.2%
by Census Tract						
115.03	1,263	71.9%	1.4%	0.6%	20.3%	5.8%
115.04	1,522	91.6%	4.5%	2.4%	0.7%	0.9%
115.05	1,234	84.7%	3.6%	2.3%	6.7%	2.7%
115.06	1,139	93.8%	4.0%	1.1%	0.0%	1.1%
Erie County		72.2%	11.1%	5.7%	9.8%	1.2%

* Units in structures that contain ...
** Housing units in commercial or institutional structures.

Source: 1990 Census, STF #3

Single family units continue to dominate the housing market in the suburban and rural areas of Erie County. However, multi-unit dwellings should become more prevalent as costs in the housing industry and private on-site utilities continue to rise outside the public service areas. The most predominant type of housing available within Harborcreek Township is single family dwellings, including mobile homes. According to 1990 Census figures, 4,434 units of the total housing stock are categorized as one unit structures in the Township. In comparison, only 72.2 percent of the County's housing stock is classified as single family dwellings. 946 units of the total housing stock in the Township are multi-unit structures.

Housing Age

The age of housing within the community can often be an indicator of housing conditions. Generally, a community which has a large percentage of old homes can expect to have a higher blight rate than a community in which most of the housing is relatively new. However, there are many exceptions to this assumption. Therefore, each municipality must be reviewed in light of its actual housing conditions.

HOUSING AGE 1939-1989

	1939 & Older	1940 to 1949	1950 to 1959	1960 to 1969	1970 to 1979	1980 to 1989
Harborcreek Township	13.5%	13.7%	20.7%	12.7%	24.3%	15.1%
by Census Tract						
115.03	4.8%	6.9%	13.5%	15.2%	39.4%	20.1%
115.04	10.1%	13.6%	23.7%	11.3%	30.1%	11.2%
115.05	23.4%	16.9%	27.3%	11.8%	8.3%	12.3%
115.06	17.0%	17.8%	17.4%	13.0%	17.2%	17.6%
Erie County	32.3%	11.1%	15.4%	11.0%	18.5%	11.5%

Source: 1990 Census, STF #3

Housing Need

Housing need is determined by utilizing the population and persons per household figures from the accompanying Harborcreek Demographic Analysis and Population Projections Report. If the "most likely" population projections from that Report are realized, then 800 new households will be accommodated in Harborcreek in some form of housing by the year 2000, and 750 more households by the year 2010.

CHAPTER 6

LAND USE ANALYSIS

Introduction

An important part of any comprehensive plan is the survey, analysis, and study of the land use patterns which exist within the community. Without a thorough knowledge of the existing land use patterns and how they developed, it is nearly impossible to plan for the future use of the land, and to properly develop achievable goals and a valid plan of action.

It is important to remember that land use decisions are nearly always irreversible. Once residential land is developed for commercial or industrial use, it is seldom changed back to its prior use. Likewise, farm land which is used for residential purposes will probably never revert back to an agricultural use.

In order to develop a realistic land use plan of alternative land uses for the community, existing patterns must first be determined. The existing uses will partially guide the formation of land use districts and become a foundation for future development. This section provides an overview of the existing land use patterns in the community and forms a visual baseline for future planning efforts.

As is traditional in physical planning, new community-wide base and property line maps were developed to delineate the land use information collected. Utilizing the new maps, an extensive visual land use field survey of all structures, facilities and lands was conducted in the third quarter of 1994 in Harborcreek Township. Detailed parcel by parcel land uses were then delineated on 17 large scale property maps corresponding to aerial orthophotos covering the entire Township. For the purpose of this study, a small scale composite was then completed and can be seen as the accompanying Generalized Present Land Use Map.

Classifications

The following land use classifications are utilized in this section and throughout the Background Analysis:

Single Family Residential - This classification denotes land used for single family detached dwellings.

Other Residential - This classification includes land used for housing structures for more than one family, and includes single-family attached dwellings (such as duplexes, townhouses and condominiums), apartment buildings, and similar uses.

Institutional - This classification includes facilities that provide mental, spiritual, and physical development, but does not include facilities which are basically recreational in nature. Included are government buildings and facilities, schools and colleges, places of worship, libraries, hospitals, cemeteries, fire and police stations, and similar uses.

Recreational - This classification denotes land which is used or set aside for use as playgrounds, parks, outdoor sport areas, and similar uses. It also includes Pennsylvania Game Lands.

Commercial - This classification refers to land used for the purpose of supplying commodities or services to the general public. Included are uses relating to both retail and wholesale trade, professional and personal services, general office facilities, sales and service, entertainment, restaurants, motels or hotels, and similar uses.

Industrial - This classification denotes land which contains facilities for the mechanical or chemical transformation of substances into new products. This includes manufacturing, processing, packaging, storage, warehousing, power plants, treatment or filtration plants, research laboratories, and similar uses.

Agricultural - This classification includes land which is used for the cultivation of fruits, crops, grazing of livestock, or the growing of nursery and forest products.

Open Space - This designation refers to areas of land with no active current use. Open space includes streams, wetlands, brushland, woodland, steep slopes, and idle land suitable for crops or development.

Land Use Patterns

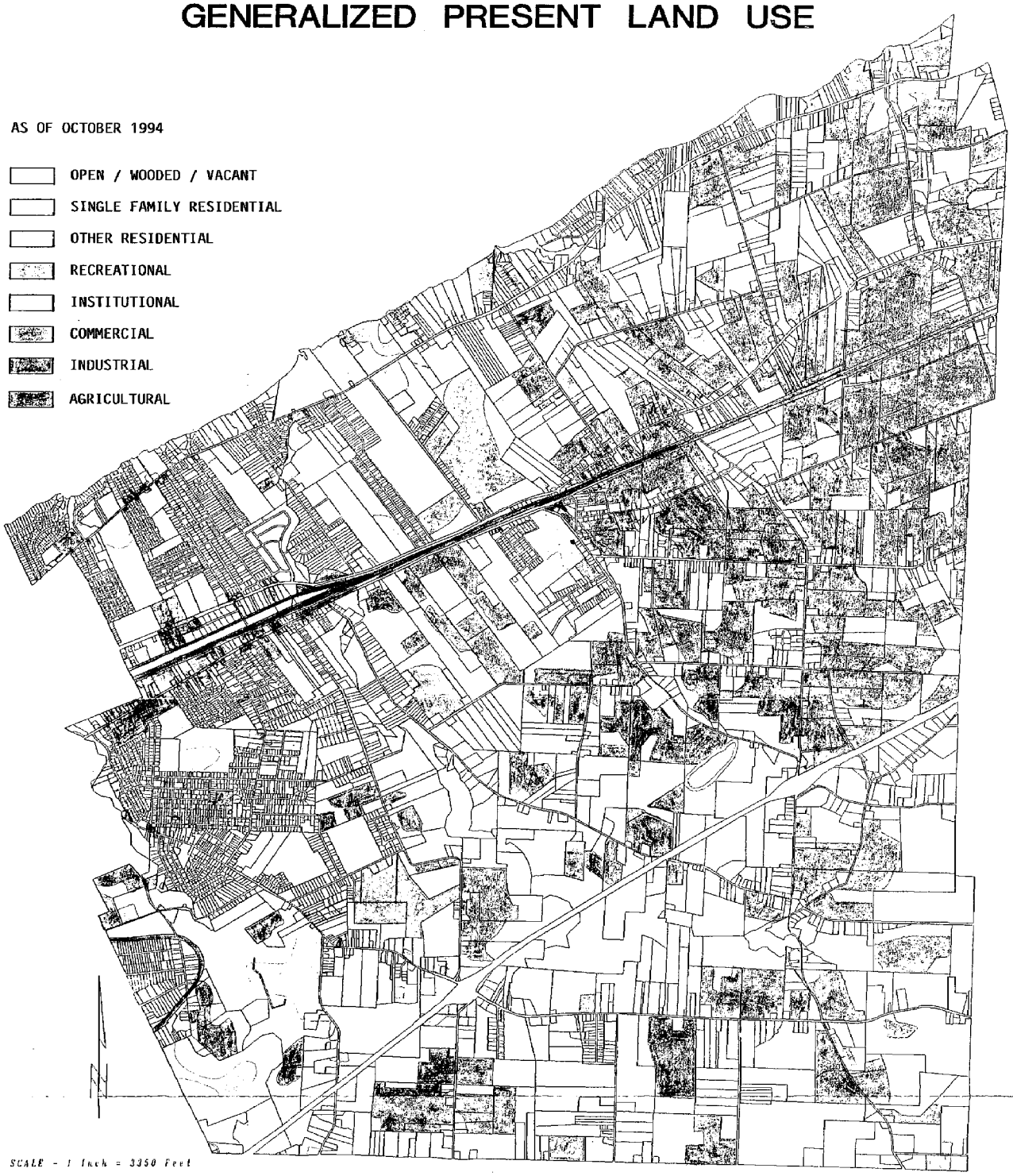
When compared to the last extensive land use analysis completed in 1980, the current basic land use patterns for Harborcreek are essentially the same even to this day. On the surface, a highly similar pattern scenario seems to conflict with the high level of present residential development (and to a lesser extent commercial) activity that is occurring in quite a number of locations in the Township concurrently at this time.

The primary development influences at work in Harborcreek today have been firmly established. The strong influences of soils, topography and climate (described and mapped in the previous Physical Features Chapter), together with the employment areas and employers (described in the previous Economic Analysis Chapter), together with an active agricultural community seeking to preserve itself (see the accompanying Protected Agricultural Lands Map) have combined to lay out a distinctive and resilient land use pattern. This pattern in the Township is present regardless of population/economic growth or decline periods (unlike many other areas of Erie County).

These basic land use patterns are: the Erie Urbanized Area is pressuring expansion into western Harborcreek; the agricultural industry is solidifying its area in the eastern portion of the Township; and the cottage development area along the Lake Erie shoreline is converting from seasonal and scattered housing to more permanent and concentrated uses. Essentially what is being witnessed today in Harborcreek comes down to a matter of timing. It is now Harborcreek's "turn" for development activity that, up until recently, was going to other portions of the Erie Urbanized Area and Lake shore.

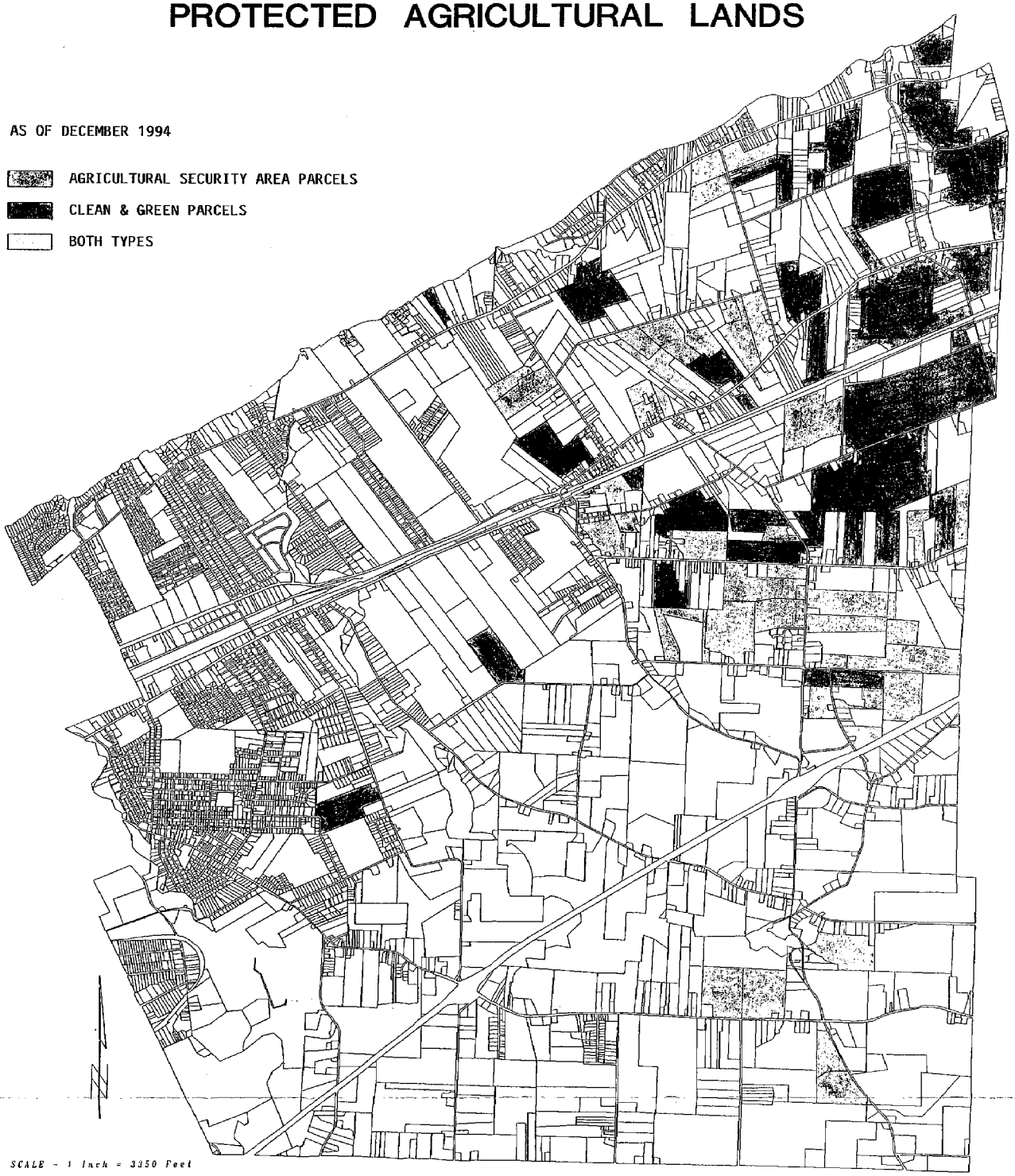
Harborcreek Township

GENERALIZED PRESENT LAND USE



Harborcreek Township

PROTECTED AGRICULTURAL LANDS



CHAPTER 7

TRANSPORTATION ANALYSIS

Introduction

An efficient land transportation system is critical to the maintaining and improving of the quality of life of a community. The future development of Harborcreek Township must be properly managed through the implementation of a practical transportation plan. A carefully planned and maintained system of roads and highways is necessary in order to ensure the efficient and safe movement of persons, products and services to their respective destinations. The ease and efficiency by which traffic is able to move through and within Harborcreek Township affects the immediate concern for life and property as well as the economic development of the region. The development of an adequate and sustainable transportation system should, therefore, be considered to be a critical priority for Harborcreek Township.

Pursuant to this objective, a detailed inventory has been completed of the Township's transportation system. Included in the inventory are roadway classifications, traffic volumes and current and pending maintenance and improvement projects and programs. The inventory facilitates the identification and analysis of transportation-related concerns throughout the Township.

Highway System

The highway system in Harborcreek Township play a vital role in the economic stability of the community. Residents must have access to employment opportunities, commercial and residential districts, and recreation areas. The highway system throughout the Township may be analyzed by classifying the various roads according to usage.

The categorizing of the highway system in the Harborcreek Township is based on the Federal concept of functional classification which is the process by which roads, streets and highways are grouped into classes, according to the character of the service (not necessarily volume) that they provide. Also basic to functional classification is the concept of the proportion of a road that serves traffic mobility versus land access; the higher the mobility, the higher the classification. The official Erie County highway system is known as the Functional Classification System, which was updated in 1993 statewide by PennDOT. The highway system of Harborcreek is divided into five classes which are described below:

Principal Arterial - This class of highways is devoted primarily to traffic movement (high mobility) and performs little land service function. These expressways are characterized by a high degree of access control. Expressways accommodate large volumes of traffic and are primarily intended to serve trips of some distance through the tri-state region.

Minor Arterial - This class of highways brings traffic to and from the expressways and from a significant number of urban and suburban areas. These roads serve those major traffic movements predominantly through, as well as within, Harborcreek not served by the expressways. Minor arterials mainly serve to move traffic, but serve an incidental land service function.

Major Collector - This class of highways serves a middling function within the highway network. These roads serve both traffic movement and land service. Major collectors receive traffic from lesser streets as well as provide interconnection and support to minor arterials. They generally connect Harborcreek with the immediately surrounding area.

Minor Collector - This class of streets serves the internal movement of the highway network. This classification does not generally handle through trips, but supplies abutting property with access, while at the same time providing local traffic movement.

Local - The primary function of this classification is to provide direct access to immediately adjacent land. These roads carry a small proportion of the vehicle miles of travel but make up a large percentage of the total street mileage within Harborcreek.

The primary transportation routes in and through Harborcreek Township are Interstate 90, Station Road from Interstate 90 to the Wesleyville Borough municipal boundary, and Buffalo Road from the Wesleyville Borough municipal boundary to Hannon Road. The accompanying Table shows the classification of all State and local roads in the Township. See the accompanying Highway System Map.

Traffic Volumes

The utilization of, or traffic demand on, a road is measured in terms of average daily traffic (ADT) volume. The ADT represents the number of vehicles traveling on a given roadway segment over an averaged 24 hour period. It is critical to maintain an inventory of current traffic volumes on the highway system to evaluate both existing and projected needs.

Both the Pennsylvania Department of Transportation (PennDOT) and the Erie County Department of Planning are involved in the acquisition of traffic volume data. Actual field data are obtained by using portable traffic counters. Additionally, computer models may be used to generate projected traffic volumes by anticipating future development conditions. See the accompanying Traffic Volumes Table and Map.

HARBORCREEK TOWNSHIP HIGHWAY SYSTEM

CLASSIFICATION	ROAD NAME	FROM	TO
Principal Arterial			
	Interstate 90	Greene Twp.	Greenfield Twp.
	Station Rd.	Wesleyville	Interstate 90
	Buffalo Rd.	Wesleyville	Hannon Rd.
Minor Arterial			
	Station Rd.	Interstate 90	Greenfield Twp.
	Buffalo Rd.	Hannon Rd.	North East Twp.
	East Lake Rd.	Lawrence Park	Troupe Rd.
	Iroquois Ave.	Lawrence Park	Buffalo Rd.
	Depot Rd.	Buffalo Rd.	Interstate 90
	E. 38th St.	Shannon Rd.	City of Erie
	Hannon Rd.	Station Rd.	Buffalo Rd.
	Walbridge Rd.	Buffalo Rd.	East Lake Rd.
	Nagle Rd.	Station Rd.	Buffalo Rd.
	Shannon Rd.	Norcross Rd.	Wesleyville
	Norcross Rd.	Shannon Rd.	Millcreek Twp.
Major Collector			
	East Lake Rd.	Troupe Rd.	North East Twp.
	Depot Rd.	Interstate 90	Station Rd.
	Kuhl Rd.	Station Rd.	Greene Twp.
	Reese Rd.	Station Rd.	Hannon Rd.
	Cooper Rd.	Shannon Rd.	Station Rd.
	Saltsman Rd.	Station Rd.	Buffalo Rd
	Ridge Parkway	Nagle Rd.	Hannon Rd.
	Nagle Rd.	Buffalo Rd.	East Lake Rd.
	Boyer Rd.	Iroquois Ave.	East Lake Rd.
	Troupe Rd.	Iroquois Ave.	East Lake Rd.
	Bartlett Rd.	Buffalo Rd.	East Lake Rd.
Minor Collector			
	Wales Rd.	Station Rd.	Greene Twp.
	Moorheadville Rd.	East Lake Rd.	Moorheadville Rd.
	Clark Rd.	Depot Rd.	Buffalo Rd.
	Davison Rd.	Depot Rd.	Buffalo Rd.
	Belle Rd.	Depot Rd.	North East Twp.

NOTE: All roads not listed above are classified as Local Roads.

TRAFFIC VOLUMES TABLE

Road Mileage

The Harborcreek Township highway system consists of 119.13 miles of public roads. This figure may be further broken down as 80.30 miles of Township-owned roadways and 38.83 miles of highway owned by the Commonwealth of Pennsylvania. The Township Officials have accepted road dedications from new developments over the past several years. It is anticipated that with the projected future growth will come new roads and rights-of-way.

Signing and Signalization

Basic to the safety and convenience of the traveling public using the transportation system is the proper signing and signalization provided throughout the system. Various signs, such as speed limit, advisory, street name, directional, etc., and traffic signals (fixed time signals and flashing beacons) are located throughout the Township to accommodate site-specific concerns. See the accompanying Signalization Map.

At the present time there are eight (8) intersections controlled by a fixed time traffic signal. These intersections are as follows:

- Buffalo Road at Eastway Plaza West Entrance/Eastway Lanes
- Buffalo Road at Nagle Road
- Buffalo Road at Giant Eagle Plaza Entrance/Cook Avenue
- Buffalo Road at Saltsman Road
- Buffalo Road at Walbridge Road
- Station Road at Saltsman Road
- East Lake Road at Nagle Road
- Iroquois Avenue at Walbridge Road

Flashing beacon signals are located at the following seven (7) intersections:

- Buffalo Road at Depot Road
- Buffalo Road at Iroquois Avenue
- Buffalo Road at Bartlett Road
- East Lake Road at Lowry Road
- East Lake Road at Walbridge Road
- East Lake Road at Bartlett Road
- Shannon Road at E. 38th Street/Cooper Road

Also basic to the convenience and efficiency at which motorists travel is the posting of street name signs. Harborcreek Township maintains a uniform street name sign program whereby all State and local roadways are properly posted.

There are five (5) at grade railroad crossings in Harborcreek Township. There is a great disparity between the types of signing and signalization at these crossings. The at-grade railroad crossings of King and Shannon Roads are simply signed, which have no signals and no gates. The crossings located on Davison, Moorheadville and Walbridge Roads are properly signed with signals and gates. It should be noted that the former at-grade railroad crossing at Nagle Road remains closed to traffic by order of the Pennsylvania Public Utility Commission.

Pending Improvement Projects

Harborcreek Township, as well as the County of Erie, has an organized program to identify, prioritize and implement transportation improvements. The local Metropolitan Planning Organization recognized by PennDOT is known as the Erie Area Transportation Study (EATS) Committee. The EATS Committee assembles to represent and prioritize the transportation needs of Erie County. On a Statewide basis, PennDOT maintains a Twelve Year Highway and Bridge Program which is the planning tool for State and local transportation projects. The Twelve Year Program may be viewed as a needs list which is updated on a biannual cycle. Projects appearing on the current Twelve Year Program which will have an impact upon transportation in Harborcreek Township are as follows:

Project Name	Description
East Side Access Study Port Access Road to I-90	Design and construction of new 4 lane highway
Station Road Interstate 90 to Buffalo Road	Widen existing highway to 24 feet
Station Road: Behrend Jordan Road - Behrend Campus	Design and construction of turning land
Depot Road Interstate 90 to Buffalo Road	Widen existing highway to 24 feet
East Lake Road Bridge Over Elliotts Creek	Design and construction of bridge replacement
Southern Tier Expressway Interstate 90 to Route 89	Design and construction of additional 2 lanes
U.S. Route 20 Bridge Over Sevenmile Creek	Design and construction of bridge replacement
Buffalo Road Knoll Avenue to Clark Road	Design and construction of turning lane
Lawrence Parkway Buffalo Road to East Lake Road	Reconstruct to 36 feet
Shannon and Cooper Roads Road Intersection	Design and construction of turning lanes
Boyer Road Bridge Over Sixmile Creek	Design and construction of bridge replacement
Depot Street Bridge Over Sevenmile Creek	Design and construction of bridge replacement
Bartlett Road Bridge Over Sevenmile Creek Branch	Design and construction of bridge replacement

Roadway Maintenance

Roadway maintenance programs, both typical summer and winter maintenance, are implemented by PennDOT and Harborcreek Township personnel. PennDOT is responsible for the proper maintenance of Interstate 90 and all State-owned highways located in Harborcreek Township. These duties are managed from PennDOT's Erie County Maintenance garage on State Route 89 in North East Township.

Harborcreek Township maintains the local roadway system with its municipal employees. All equipment and materials necessary are located at the Harborcreek Township garage adjacent to the Municipal Building on Buffalo Road.

During the spring and summer months, the Township Officials place an emphasis on drainage and roadway maintenance. Typical projects would consist of storm sewer and drainage related construction, bituminous seal coating and asphalt paving. Harborcreek Township has eliminated all unimproved local roads (e.g. gravelled roads) in favor of bituminous and concrete pavements. The bituminous pavements (i.e. bituminous seal coat and asphalt) require more frequent maintenance, although the maintenance required on concrete pavements would be more extensive.

During the autumn months, Harborcreek Township performs a variety of preventative maintenance activities. Leaves and yard wastes are collected as a service to residents. This service also tends to minimize the maintenance effort required to keep the storm sewers and drainage ditches free from debris. Additionally, materials are stockpiled and all winter maintenance equipment is inspected and prepared for service.

Winter maintenance activities typically consist of snow removal and related safety enhancements (e.g. spreading of salt and anti-skid materials). Harborcreek Township personnel are responsible for winter maintenance of all Township roads and a number of State-owned highways in accordance with contracts between the Township and PennDOT. Additionally, Harborcreek Township provides winter maintenance on roadways located within new developments which will eventually be dedicated to the Township.

Harborcreek Township is not obligated to provide winter maintenance on State-owned or new development roads. However, the Township Officials believe that residents are entitled to a high level of service which, in these cases, is best provided by the Township.

Mass Transit

The Erie Metropolitan Transit Authority (EMTA) provides bus service to the western portion of Harborcreek Township. EMTA has experimented over the years with various routes and schedule adjustment in order to maximize service and, ultimately ridership.

The bus service provided by the EMTA appears to be adequate at this time. High demand regions of the Township are presently served. Examples of these areas include Penn State-Erie, The Behrend College; Buffalo Road commercial district; Brookside community; Harborcreek Mall; Ball Pavillion; Benetwood Apartments and the Eastside YMCA.

The LIFT Service

"The LIFT" program is the name of the County's shared ride advance request transportation system for eligible persons living beyond the bus routes or who are unable to take advantage of its regularly scheduled service. Transportation services are provided under contract to the County's Department of Human Services by Erie Transportation Services. The vehicles under this program are marked "The LIFT" and/or "Erie Yellow Cab." All vehicles have disability accessibility and can accommodate most, if not all, accessibility devices. Services provided by "The Lift" are available to all organizations and residents of the County and are available Monday through Friday from 6:30 AM until 5:30 PM, except holidays. Hours may be extended if there is adequate demand.

Air Service

Full commercial air service is provided at the Erie International Airport which is a small hub airport located in the western portion of the Erie Urbanized Area. The highway travel distance from the center of Harborcreek Township to the Airport terminal is approximately 15 miles. Erie International Airport is the major airport serving northwestern Pennsylvania and the immediately adjacent counties in New York and Ohio.

Rail System

As can be seen on the accompanying Rail Systems Map, Harborcreek Township has within its boundaries four railroad rights-of-way. Three of these are parallel to one another in a corridor running east and west adjacent to U.S. Route 20. The fourth right-of-way is located in the southwestern portion of the Township adjacent to Millcreek Township and the City of Erie.

The east-west rail corridor contains the main line freight and passenger trackage of the Conrail Railroad and the main line freight track of the Norfolk Southern Railroad. These two lines pass through the entirety of Erie County and continue on to cities such as Buffalo, New York and Cleveland, Ohio. Also included in the corridor is the East Erie Commercial Railroad which begins in Lawrence Park Township and dead ends just east of Troupe Road in the Township. This line is utilized primarily for testing locomotives and mass transit cars manufactured at the General Electric Plant in Lawrence Park Township. A fourth line located in the southwestern portion of the Township, is a small portion of the north-south Allegheny Railroad track which connects bayfront facilities in the City of Erie to Union City Borough and the City of Corry in the southeastern portion of Erie County and beyond.

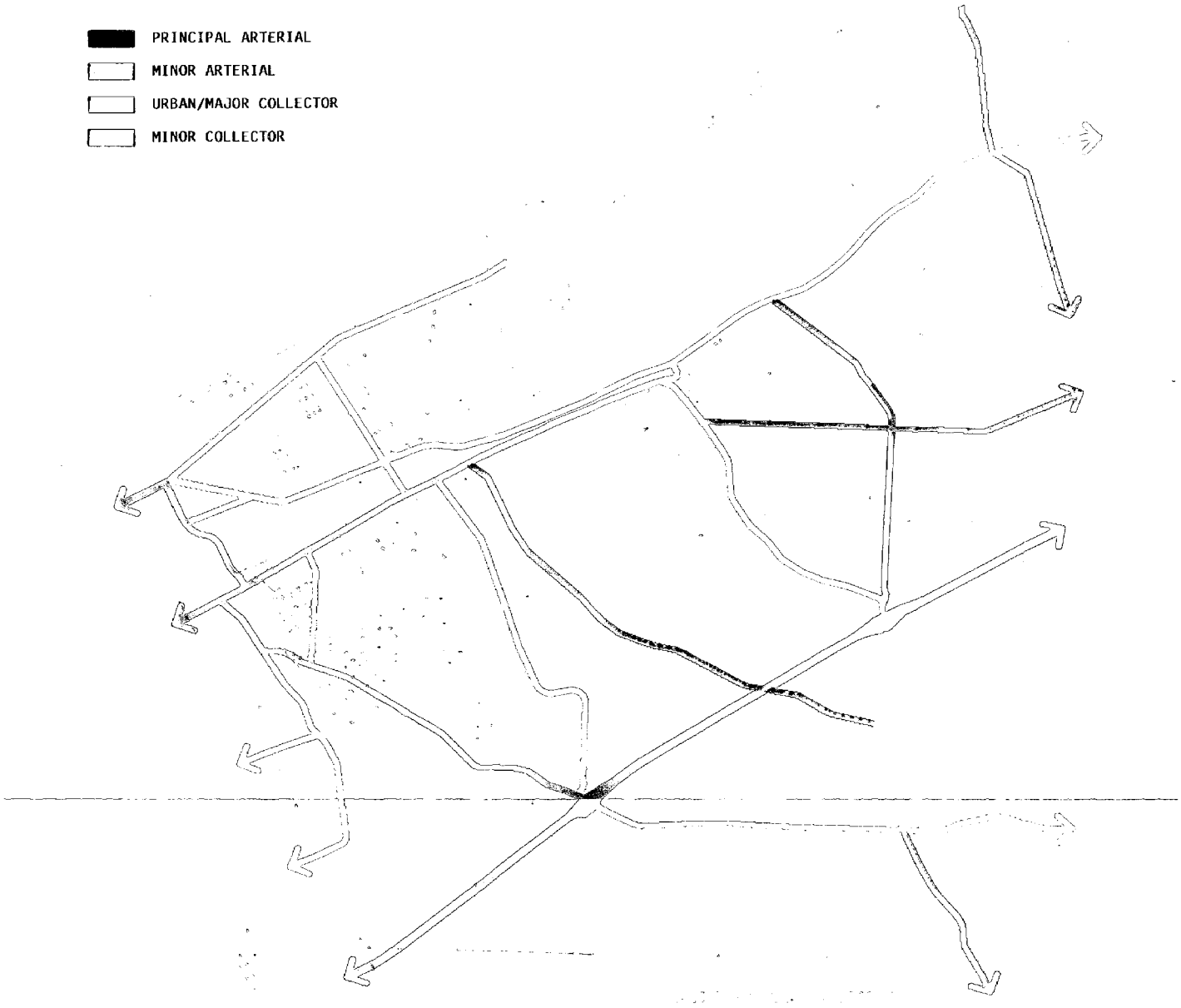
Although substantial trackage lays within Harborcreek Township, there is practically no on-site rail service provided at this time. There are no sidings currently in use in the Township. This situation relegates the Township to a mere custodian of a number of railroad tracks which inherently interfere with the convenience and safety of the highway system. Thus, the Township has not had the opportunity to take advantage of any of the economic amenities that these several rail systems could provide.

Included on the Rail Systems Map are the locations of all the at-grade rail crossings. There are nine locations where the rail lines intersect with the highway system within the Township. They are: Shannon Road with a single track crossing; and Walbridge, Davison, King and Moorheadville Roads. The spacing of the two sets of track is pronounced enough at the latter four roads that two separate at-grade crossings actually occur at each of these locations.

HIGHWAY SYSTEM

STATE FUNCTIONAL CLASSIFICATION

- PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- URBAN/MAJOR COLLECTOR
- MINOR COLLECTOR



SIGNALIZATION AND RAIL SYSTEMS MAP

CHAPTER 8

COMMUNITY FACILITIES

Introduction

Community facilities are those services and institutions whose primary purpose is to satisfy the basic physical and social community needs that fall under the direct or indirect auspices of local government. Communities depend upon these services which are necessary for the continued comfort, convenience, social welfare and protection of life and property. The character of a community and the nature of future land development is determined to a large degree by the availability and adequacy of community facilities. These facilities ordinarily involve substantial expenditures of public funds and are intended for public use and benefit. These facilities may include buildings, equipment and services in educational institutions, health services, police and fire protection, recreational facilities, libraries, solid waste and a number of other facilities required for appropriate living conditions. In fact, the demand for more and better public facilities and services is commonplace today. Local governments are increasingly being pressured to expand and improve their public facilities and services. The effects of growing demand and increased use are clear. Existing facilities and services are heavily strained and local governments are hard pressed to keep pace with the new demands. This section will inventory and evaluate existing community facilities for adequacy in meeting present needs and probable future effectiveness in achieving the facilities' intended purposes.

Included at the end of this Chapter is the Ownership Patterns Map for Harborcreek Township. The map indicates property owned by various community facilities discussed in this Chapter, and the property owned by the public utilities discussed in the following Chapter of this study. This map differs from the map in the Land Use Chapter which indicates the amount of property being utilized for public and institutional purposes at this time.

Schools

Harborcreek School District:

The Harborcreek Township School District currently operates and maintains three elementary school and a combined junior-senior high school. Due to the large land area which the Township encompasses, nearly all of the students are bused to school.

The present school property tax is assessed at 115.5 mills. A $15.00 per capita tax is also levied, $10.00 of which goes to the school district. The school district also receives 50% of Harborcreek Township's 1.0% income tax, and 50% of the Township's $10.00 Occupational Privilege Tax. The buildings which comprise the physical plant of the Harborcreek Township School District are all adequate for current needs. Additional information concerning the adequacy and life span of the various district schools will follow as each individual school is discussed.

Klein Elementary School - Built in 1954 with substantial renovations and additions made in 1965 and again in 1990, Klein School is one of the older schools in the Harborcreek Township School District. It is a one story brick building located on East Lake Road and houses grades Kindergarten through six. Current enrollment for the 1994-95 school year is 489 pupils, and the school is adequate in size for present use as the capacity is 600 pupils. The building is considered to be in good physical condition.

Eighteen (18) classrooms, in addition to administrative facilities, a kitchen, library, faculty room, several storage rooms, and a speech and reading room are contained in Klein School. The 12.5 acre site, of which five acres are utilized for recreational purposes, allows sufficient room for additional expansion. Klein School currently maintains a staff of 37.

Clark Elementary School - Located on Depot Road in the central portion of the Township, Clark School is one of the newer school district facilities. The one story brick building was constructed in 1960, expanded in 1968 and renovated in 1990. Like Klein School, it also includes grades Kindergarten through six. This school is in very good physical condition.

Recreational facilities (including playground equipment) comprise two acres of the 14.1 acre site, and ample space for further expansion of the school is available. The 1994-95 enrollment is 338 which is significantly under the school's present capacity of 438 pupils.

In addition to 13 regular classrooms, Clark School also provide a kindergarten room, administrative rooms, a kitchen, medical suite, multi-purpose rooms, library, combined music/art room, faculty room, art storage, general storage and book storage, as well as a seminar and elementary curriculum room. Clark School currently employs a total of 32 people.

Rolling Ridge School - Situated on approximately 60 acres of land on Ridge Parkway in the western portion of Harborcreek Township. Opened for use in the Fall of 1970, it is the newest elementary school facility maintained by the school district. In addition to 26 regular classrooms, the school also houses six small seminar rooms, a library, cafeteria, gymnasium, a large group instruction room which seats approximately 150 students, as well as faculty rooms, health services facilities and administrative offices. The school is considered to be in excellent condition. Rolling Ridge School currently employs 48 people.

The approximate capacity of 840 students allows some room for growth in that the current school year enrollment is 562 pupils. Of the total site acreage, approximately four acres is devoted to recreational use consisting of playground facilities and open space.

Junior-Senior High School - The Harborcreek Township Junior-Senior High School is a brick structure located on Buffalo road and Depot Road. Originally constructed in 1941, additions and one building replacement have enlarged and modernized the facility. The first two additions were completed in 1952 and 1959. In 1973, an addition was constructed, adding approximately 15 classrooms as well as a swimming pool, a remedial gymnasium, a large group instruction room and a new cafeteria in addition to enlarging and improving other miscellaneous facilities. In 1991 the section housing the Junior High School was demolished and replaced. The school now includes, in addition to the above, 25 classrooms, a 900 seat auditorium, a double gymnasium, a library, administrative offices, guidance and counseling offices, faculty rooms, storage rooms, nurses facilities, agricultural, wood and metal shops, home economic facilities, a commercial suite, science laboratories, arts and crafts facilities, and music and drivers education rooms. Twenty acres of the 40 acre site are devoted to recreational use with football, baseball and track fields being the dominant facilities.

The present 1994-95 enrollment is 1,369 students which is well below the building's present capacity of 2,575 students. One hundred and twenty-nine employees, or more than one-half of all the school district's 246 employees, work at the Junior-Senior High School.

Enrollment Trends:

From the 1979-80 school year to the present, as depicted on the accompanying graph, "School Enrollment Trends," Harborcreek Township School District enrollment has decreased by just over 300 students. As may be noted from the above-mentioned chart, total enrollment decreased relatively rapidly from the 1979-80 school year to the 1982-83 school year. From the 1982-83 school year to the 1984-85 school year, the downward trend slowed significantly, only to accelerate downward by 90 students in the 1985-86 school year. Since that time, enrollment has been fairly stable, with an increase of approximately 140 students by the 1994-95 school year.

HARBORCREEK SCHOOL DISTRICT ENROLLMENT TRENDS TABLE

Other Educational Facilities:

Although not under local school district control, there are other school facilities within Harborcreek Township which deserve mention in this section of the plan.

Harborcreek Youth Services and Gannondale School for Girls - Located on Iroquois Avenue and East Lake Road respectively, these school are maintained under the auspices of the Catholic Diocese of Erie. They are residential treatment centers for court-referred juveniles and provide a variety of services designed to aid residents in coping more effectively with living in the community.

There are currently 60 boys participating in the on-grounds residential living program at Harborcreek and approximately 60 more are located in small group homes throughout Erie county. The capacity of the school is 137 boys. The Gannondale School for Girls currently has 45 girls participating in the residential program and is the only facility of its type in the Township.

Daycare and Preschool Centers:

The accompanying list shows the names and addresses of the five daycare/preschool centers which are located within Harborcreek Township. These centers can accept a total of 340-350 infants and children ranging from 6 weeks to 12 years of age.

Harbor Care Christian Child Care Center
7895 Buffalo Road
Harborcreek, PA 16421
75 children, 6 weeks-12 years, daycare & preschool

Early Years Learning Center
4403 Iroquois Avenue
Erie, PA 16511
40-50 children, 6 weeks-6th grade, daycare & preschool

Barb's Care Alot Day Care
5163 Buffalo Road
Erie, PA 16510
65 children, 6 weeks-12 years, daycare & preschool, security system

YMCA Eastside Family Branch
2101 Nagle Road
Erie, PA 16510
40 children, 6 weeks-6th grade, daycare & preschool, summer program

Penn State Behrend Child Care Center
Station Road
Erie, PA 16510
120 children, 6 weeks-6 years, daycare & preschool

Technical Schools:

There are a number of technical schools in Erie County offering practical courses of study in such diverse areas as welding, women's and men's hair styling, barbering, photography, mechanical repair and drafting courses. Nursing, business, secretarial and computer courses are also offered at the technical schools.

Universities and Colleges:

There are a number of Universities and Colleges located in Erie County: Gannon University, City of Erie; Mercyhurst College, City of Erie with a branch in North East Township; Edinboro University of Pennsylvania, Edinboro Borough with a branch in Millcreek Township; and the Behrend College of Penn State University in Harborcreek Township. The following is a brief history and general description of the Behrend College taken from a recent Penn State University course catalogue.

Penn State Erie, The Behrend College, is a four-year and graduate college of Penn State. The College's campus was donated to the University in 1948 by Mary Behrend in memory of her husband, Ernst, co-founder (with his father and brother) of the Hammermill Paper Company, now a part of International Paper. In donating her family's Glenhill Farm Estate to Penn State, Mrs. Behrend was responding to the need, expressed by a committee of prominent Erie residents, for a public, coeducational, non-sectarian university presence in Erie.

In 1948, 152 students enrolled at what was known as The Behrend Center. Those first students could complete only their freshman year at the Center. When Penn State reorganized in 1959, the Commonwealth Campus System was established and The Behrend Center became The Behrend Campus of Penn State. Both the enrollments and the physical expanse of the campus grew throughout the 1960's and early 1970's. By 1971, over 1,200 students were enrolled.

On January 20, 1973, the Penn State Board of Trustees granted four-year college and graduate status to Penn State-Behrend. With that decision, Penn State-Behrend became the first Penn State campus outside of University Park to achieve such status.

Today, 3,100 students attend classes in original buildings from the Glenhill Farm Estate and in the more recently constructed academic buildings. Over 1,100 students are now housed in residence halls and student apartments on campus.

The College offers baccalaureate and associate degrees in business, engineering, the humanities, the social sciences, science and engineering technology, as well as the Penn State MBA program and other special topics graduate courses. Penn State-Behrend awards honors degrees to students who have successfully completed the requirements of the University Scholars Program, Penn State's University-wide honors program.

Penn State-Behrend has recorded increasing enrollments for 23 semesters and is continuing to expand its facilities. An $11 million library/academic building and an engineering and engineering technology laboratory complex are the newest additions to the campus.

Recreation

Harborcreek Township residents are fortunate to have a number of recreational facilities provided by the Township and the school district. Many of these facilities are used by both students and members of the community.

One excellent park facility known as the Harborcreek Community Park is located just south of the Municipal Building. A detailed inventory of facilities for this park and the other parks is listed at the end of this section.

Harborcreek Community Park supports a very large amount of warm weather activity for youth and adults, as well as a number of other organized activities such as the four day long Harborfest festival, sponsored by the Harborcreek Area Chamber of Commerce. A sampling of organized activities is listed below:

- Little League baseball and softball programs for 800 boys and girls;
- Youth and adult soccer programs;
- Softball and soccer clinics;
- Local church softball leagues;
- Hosts the Lakeshore Modified Adult American Softball Association (ASA) Approved Softball League (the largest ASA approved softball league in Pennsylvania);
- Tri-Community Little Gridders Football Program in conjunction with Lawrence Park Township and Wesleyville Borough;
- Boy Scout camp outings;
- Harborcreek Fire Department activities.

In addition to Harborcreek Community Park, Harborcreek Township owns and maintains three other parks: Whitford Park on Iroquois Avenue in the vicinity of Sixmile Creek; Rolling Ridge Park at Tanglewood and Brierwood Roads in the west central portion of the Township; and Slade Road Ball Park which is located approximately 1.5 miles west of North East Township. One Erie County Park, Sixmile Creek Park, is located within the Township.

Wesleyville Borough also owns Memorial Park which is adjacent to the Borough in the western portion of Harborcreek Township. This park is a 4.5 acre parcel which contains playground facilities and a general purpose field. in addition, the City of Erie maintains Downing Golf Course, a 195 acre, 18 hole golf course, between East Lake Road and Iroquois Avenue along Troupe Road in the north central portion of the Township.

The Slade Road Ball Park ball fields, which are located in the eastern portion of the Township, are maintained by Harborcreek for use by Township residents.

The Eastside YMCA, which is located at 2101 Nagle Road, was constructed in 1976. This facility has two gymnasiums, an indoor track, a sauna and whirlpool, baseball equipment, exercise equipment, and two indoor pools which were constructed in 1989. The YMCA property, which consists of 21 acres, adjoins the Tri-Community Pool facility. This facility consists of two outdoor pools, and is managed by YMCA staff. The Tri-Community Pool facility is a joint cooperative venture between Harborcreek Township, Lawrence Park Township and Wesleyville Borough. Management of this facility, along with an increase in regular YMCA activities over the years, has boosted current employment to 21 full-time and 91 part-time employees, up from 3 full-time and 29 part-time employees in 1980. Present membership is approximately 7,400, while in 1980 the membership figure was 5,800.

In addition to the above-mentioned public facilities, there are also many private or semi-private recreational areas in Harborcreek Township. Behrend College utilizes a portion of its 420 acre site for recreational facilities which include baseball and soccer fields, tennis courts, an outdoor swimming pool, and rope-tow ski slope. Camp Glinodo, owned by the Benedictine Sisters of Erie maintains 25 of its total 124 acres as recreational including a swimming pool and volley ball court. In addition, Gannondale Academy includes approximately one acre for recreational purposes including playground facilities, while Harborcreek Youth Services maintains approximately five acres for recreational use.

Other private recreational facilities in the Township include the Gospel Hill Golf course, an 18 hole facility maintained by Gospel Hill Golf Club Incorporated which is located on Reese Road, and a public boat ramp located at the end of Shorewood Road.

EXISTING RECREATIONAL FACILITIES

Police Protection

Harborcreek Township has no municipal police force at the present time and relies on the Troop E Headquarters of the Pennsylvania State Police (PSP), located at 4320 Iroquois Avenue in Lawrence Park Township, for all needed police protection. This barracks of the PSP not only patrols Harborcreek Township, but also patrols nine other Townships and four Boroughs in the central and eastern portions of Erie County. Additionally, Troop E covers Crawford, Venango and Warren Counties in northwestern Pennsylvania. The Troop E Headquarters is one of the three stations in Erie County, the other two being located in Wayne Township and Girard Township. This station is presently staffed by more than 65 employees: 1 station commander, 10 supervisors (Sergeants and Corporals), 47 troopers and 5 civilians. The following specialty personnel also work for the Erie barracks: a Fire Marshall, Polygraph Examiner, Weight Detail, Garage Inspector and 3 troopers who process crime scenes. The State Police provide a seven day, 24 hour service. The Troop E Headquarters has 30 radio equipped vehicles and a helicopter available for duty. In addition to this standard equipment additional emergency equipment is available from other State Police stations when needed.

The State Police Crime Laboratory is located next door to the Troop E Headquarters. It is responsible for analyzing many kinds of evidence for the various police departments in northwestern Pennsylvania.

The municipalities of Lawrence Park Township, Wesleyville Borough and Millcreek Township, although located adjacent to the western border of Harborcreek Township, do not provide police protection to any portion of the Township. However, in an extreme emergency situation the police departments in these municipalities could be called upon to assist the State Police in Harborcreek Township. Harborcreek Township does have a contract with the Lawrence Park Township Police Department which provides for patrols of the parking lots of the Eastway, K-Mart and Giant Eagle Plazas. These patrols deal exclusively with parking violations.

Fire and Emergency Protection

Fire protection for Harborcreek Township is furnished by three volunteer fire departments located in four stations. The Harborcreek Fire Department currently has two stations in operation. The first station, built in 1948, is located on Buffalo Road in Harborcreek Village in the central portion of the Township. The second station, built in 1989, is located at the intersection of Highmeyer and East Lake Roads. The older station may be replaced within the next five years. The Fairfield Fire Department operates one station located at the intersection of East Lake and Walbridge Roads. This station, which was constructed in the 1950's, will be replaced by a new structure in the summer of 1995. The Brookside Fire Department operates one station which is located on Athens Road in the west central part of the Township. This station was constructed in 1975.

The personnel and equipment inventories for these stations are as follows:

Harborcreek Fire Department
(Two Stations)

Officers:

- (2) Chiefs
- (1) Assistant Chief
- (1) Captain
- (2) Lieutenants

Firemen:

- (26) Active Members
- (26) Reserve Members

Equipment:

- Engine 223 - 1994 Ford Pierce Pumper
  1,250 gallon per minute pump with 750 gallon tank
  1,400 feet of 4 inch diameter hose

- Engine 224 - 1990 Ford Pierce Pumper
  1,250 gallon per minute pump with 1,000 gallon tank
  1.400 feet of 4 inch diameter hose

- Engine 225 - 1979 Ford Hamerly Tanker
  450 gallon per minute pump with 1,800 gallon tank
  600 feet of 3 inch diameter hose

- Ambulance 227 - 1992 Ford Horton Modular Type

- Rescue 228 - 1994 International KME Rescue Vehicle
  with hurst tool, light tower with 25,000 watt generator,
  12 ton winch and rescue equipment

Fairfield Fire Department
(One Station)

Officers:

- (1) Chief
- (1) Assistant Chief
- (1) Captain
- (3) Lieutenants

Firemen:

- (29) Active Members
- (20) Reserve Members

Equipment:

- Engine 262 - 1970 Maxium Pumper
  1,250 gallon per minute pump with 750 gallon tank
  1,500 feet of 4 inch diameter hose

- Engine 265 - 1986 Volvo
  450 gallon per minute pump with 2,000 gallon tank
  1,100 feet of 2 1/2 inch diameter hose

- Engine 268 - 1977 Chevrolet Pumper
  1,000 gallon per minute pump with 400 gallon tank
  1,500 feet of 4 inch diameter hose

- Ambulance 267 - 1990 Ford Econoline with full equipment

Brookside Fire Department
(One Station)

Officers:

- (1) Chief
- (1) Assistant Chief
- (1) Captain
- (2) Lieutenants

Firemen:

- (21) Active Members
- (24) Reserve Members

Equipment:

- Engine 244 - 1992 Emergency One Pumper
  1,500 gallon per minute pump with 750 gallon tank
  1,500 feet of 4 inch diameter hose

- Engine 245 - 1985 GMC Tanker
  450 gallon per minute pump with 1,800 gallon tank

- Car 246 - 1990 Chevrolet Suburban
  transport vehicle with rope rescue equipment

- Ambulance 247 - 1989 Sentinal - fully equipped

- Ambulance 248 - 1988 Horton - fully equipped

- Ladder 249 - 1976 Oshkosh Ladder Truck
  100 foot LTL ladder with 1,000 gallon per minute pump
  NFPA rated ladder truck

The three departments jointly service all of Harborcreek Township. The departments receive approximately 320 fire calls per year, 850 emergency medical service calls, 170 motor vehicle accident calls and approximately 80 calls of other types. Annual funding of each department is raised through a variety of activities including Harborfest, Harborcreek Township's summer festival; fund drives; raffles; bingo games; donations; Fireman's Relief Fund activities, and special dinners. The annual budget for all three department exceeds $300,000. One hundred and eighty-six fire hydrants are located across much of the Township, but are concentrated primarily in the western urbanized portion of the Township.

Emergency Medical Service is also provided by each of the fire departments for all Harborcreek Township residents. Each department has at least eight State certified Emergency Medical Technicians, in keeping with State standards. In addition to the basic life support services provided by the three fire departments, advanced life support services are provided in the Township by Emergycare, Inc. a private ambulance service jointly operated by three Erie area hospitals. This ambulance service is located in the Harborcreek Fire Department station on East Lake Road, and services a number of municipalities in eastern Erie County. The East Erie County Emergency Communications Center, Inc., which is located in the Harborcreek Township Municipal Building, provides Enhanced 911 (E-911) dispatch service not only to residents of Harborcreek Township, but also to residents in a number of adjacent communities. Police units dispatched through the 911 center service Wesleyville Borough, Lawrence Park Township, North East Borough and Township, and The Behrend Campus of Penn State University. The fire and emergency medical service units dispatched through this 911 center service Wesleyville Borough, Lawrence Park Township, North East Township and Borough, and Greenfield Township. This 911 operation also serves as a backup dispatch center for Millcreek Township. To protect the East Erie County Emergency Communications Center from power failures, the Township installed a 20,000 watt natural gas powered emergency electrical generator in 1991.

Accidents involving hazardous waste are handled by the Erie County Hazardous Materials Response Team which is based in the City of Erie. This team is made up of volunteer firefighters from throughout Erie County as well as volunteers from various private companies that have experience in dealing with hazardous materials.

Municipal Services and Facilities

Harborcreek Township is governed by a Board of Supervisors. The three Supervisors are elected for overlapping six year terns, one Supervisor being elected every two years. The governing powers of the Supervisors are broad and extensive, covering virtually the entire range of municipal government functions. Their decisions take form in ordinances and resolutions, and must be passed by a simple majority of votes.

The Supervisors of Harborcreek Township have appointed various personnel and boards to assist them in government: a five member Planning Commission; three member Zoning Hearing Board; seven member Parks Commission; five member Sewer Authority; four member Insurance Committee; a Zoning Administrator; a Township Secretary/Controller; Tax Collector; an Engineer and two Solicitors.

The Harborcreek Township Municipal Building, located at 5601 Buffalo Road, is a relatively modern structure which was constructed in 1972 on a 10 acre parcel of Township-owned land situated approximately 1.6 miles east of Lawrence park Township. The building currently houses the offices of the Township Supervisors, general administrative support offices, the zoning administration and code enforcement offices, the Engineering Office, and the income tax and 1% wage tax offices. In addition, the building houses the recently established office of the Harborcreek Township Historical Society and the office of the East Erie County Emergency Communications Center, Inc., as well as the office of the Harborcreek Township Chamber of Commerce. The Township also rents space to the American Association of Retired Persons (AARP) which holds monthly meetings in a large basement room in the facility. A group known as the Merry Mixers also utilizes the Township Building for a variety of monthly activities.

The Township Garage, located behind the Municipal Building, is also a relatively new structure, having been built in 1971. A number of internal improvements have been made to this structure, but no additions have been necessary. Other buildings and property owned by Harborcreek Township include a 30 foot by 40 foot maintenance building located in Rolling Ridge Park, where all park equipment repairs are done, and a former weigh station south of I-90 on Station Road. The Station Road property is currently leased to a trucking company and is used as a trailer terminal.

Hospitals/Medical Facilities

No hospital facilities are located within Harborcreek Township itself. However, seven hospitals are located within Erie County, five of which are located in the Erie Metropolitan Are. One walk-in medical facility, the Eastway Emergi-Center, handles minor medical emergencies for area residents. This facility is located at 4234 Buffalo Road in Harborcreek Township.

The accompanying table provides some relative data as to the capacity and patient load of the seven hospitals which service Harborcreek Township.

HOSPITALS INVENTORY 1994
((WITHIN ERIE COUNTY)

	Profit/ Non-Profit	Treatment In-Patient Days	Out-Patient Visits	Bed Capacity
Corry Memorial Hospital, City of Corry	Non-Profit	2,302	24,051	82
Metro Health Center, City of Erie	Non-Profit	19,771	37,764	150
Millcreek Community Hospital, Millcreek Township	Non-Profit	60,851	34,864	101
Hamot Medical Center, City of Erie	Non-Profit	118,650	138,625	536
Veteran's Administration Hospital, City of Erie	Non-Profit	38,126	59,181	120
St. Vincent Health Center, City of Erie	Non-Profit	124,104	186,640	511
Union City Memorial Hospital, Union City Borough	Non-Profit	5,009	16,119	35

Source: Area Hospital Administrators June 1994

Libraries

Harborcreek Township residents have access to two libraries: the Penn State Behrend Library, located on the Behrend Campus of the Pennsylvania State University; and the Lawrence Park branch of the Erie County Library System.

The Penn State Behrend Library is a new facility, having opened in August of 1993. This library has a collection of 75,000 books and approximately 5,000 bound periodicals, and has significant room for additions to the collection. The Penn State Behrend Library is open 8:00 a.m. to 11:00 p.m. Monday through Thursday, 8:00 a.m. to 5:00 p.m. on Friday, 10:00 a.m. to 5:00 p.m. on Saturday, and 12:00 p.m. to 11:00 p.m. on Sunday, for a total of 87 hours per week.

The Lawrence Park branch of the Erie County Library System is located at 4212 Iroquois Avenue, less then one-half mile west of the boundary between Lawrence Park and Harborcreek Townships. This library branch was established in 1949, and currently has a collection of 40,000 books and 26 bound periodicals. According to a recent study of library patronage patterns done by the County Library System staff, approximately 148,000 books were checked out at the Lawrence Park branch in 1991. Of this total, 42% or roughly 62,250 books were checked out by Harborcreek Township residents. This is approximately equal to four books for each of Harborcreek Township's 15,100+ residents. Hours of operation for the Lawrence Park branch are 10:00 a.m. to 8:00 p.m. on Monday and Tuesday, 12:00 p.m. to 8:00 p.m. on Thursday, and 10:00 a.m. to 5:00 p.m. on Friday and Saturday, for a total of 42 hours per week.

Churches

Harborcreek Township has a representative mix of religious denominations and places of worship. A total of twelve churches are located in Township. The name and addresses of these churches are as follows.

East Erie Assembly of God
2653 Saltsman Road
Erie, PA 16510

Fellowship Baptist church
2420 Cumberland Road
Erie, PA 16510

Harborcreek Baptist Church
4719 Buffalo Road
Erie, PA 16510

North Harborcreek Baptist Church
8800 Buffalo Road
Harborcreek, PA 16421

Our Lady of Mercy Church
837 Bartlett Road
Harborcreek, PA 16421

Harborcreek Evangelical Free Church
1061 Bartlett Road
P.O. Box 136
Harborcreek, PA 16421

Christian Life Church and Campus
5019 Buffalo Road
Erie, PA 16510

Faith Lutheran Church
5414 East Lake Road
Erie, PA 16511

Faith Reformed Church
2953 Saltsman Road
Erie, PA 16510

Harborcreek First Presbyterian Church
6722 Buffalo Road
Harborcreek, PA 16421

South Harborcreek United Methodist Church
7929 McGill Road
Harborcreek, PA 16421

Grace Bible Church
5200 Yale Drive
Erie, PA 16510

Historic Sites

A number of historic sites of local interest can be found throughout Harborcreek Township. These landmarks are examples of the architectural design of varying types of structures which have existed throughout the Township's past and reflect the original development pattern as well. Such buildings and sites contribute to the variety and character of the Township. They form an important part of the community's historic and cultural heritage. This does not mean that a building must be saved because it is old. It does mean that a municipality, as part of its comprehensive planning program, should make a thorough inventory of its resources and take the necessary steps to preserve all landmarks that are found to contribute significantly to its physical and cultural heritage. The following list denotes those sites which have major historical significance, although none are currently listed on the National Register for Historic Preservation:

Harborcreek Township Site #1

Map 1
Name of Site: John Dodge House
Site Classification: Architectural Dwelling
Location: North side of Route 20, west Bartlett Road

This brick U-shaped structure has a hip roof with a square hip roof frame cupola. Paired brackets support a cornice which extends from the roof. Stone lintels decorate each window. The house was built in 1854 by the Dodge family who also owned 600 acres adjacent to Lake Erie.

Harborcreek Township Site #2

Map 1
Name of Site: Joseph M. Moorhead House
Site Classification: Architectural Dwelling
Location: 8014 East Lake Road

This house was probably constructed in the 1830's. (See Harborcreek Township Site #4.)

Harborcreek Township Site #3

Map 1
Name of Site: Joseph M. Moorhead House
Site Classification: Architectural Dwelling
Location: South side of Route 20, east of King Road

This residence is reported to have been constructed in 1832 by the same man who constructed Harborcreek Township Site #2. (See Harborcreek Township Site #4.)

Harborcreek Township Site #4

Map 1
Name of Site: J.Y. Moorhead House
Site Classification: Architectural Dwelling
Location: Southwest corner of Route 20 and Moorheadville Road

Five Moorhead brothers came here from Lancaster County, Pennsylvania in the years between 1801 and 1805 and cleared this property, one of the earliest clearings in the County. The house was erected in 1832. A natural gas well, supposedly the first in the County, provides light and heat.

Communications

Communications have become a vital part of our society in our personal and business lives as well as being an important factor in assuring health and safety. The media that serves a community provides a vital service of communicating facts, ideas and community events. Without this exchange of information any community would soon become isolated from outside events and ideas.

Telephone Facilities:

Telephone service is offered to Harborcreek Township residents by the General Telephone Company of Pennsylvania. The telephone cable network servicing Harborcreek Township residents originates at a central switching center located on Buffalo Road (U.S. Route 20) between Riverside Drive and Water Street in Wesleyville Borough. Customer calls are handled by a computerized switching system put into service in August of 1979. Harborcreek Township residents are fortunate to have such a large base calling area, as they may call the communities of North East, Wattsburg, Waterford, Edinboro, Fairview, Girard, McKean and Erie without paying toll charges.

Television and Radio:

Harborcreek Township is currently served by five Erie television stations: WICU (NBC-12), WJET (ABC-24), WSEE (CBS-35), WQLN (Public-54), and WETG (FOX-66).

Depending on the weather conditions, the Township is also served by most of the radio stations operating in Erie County: WRIE (1260 AM), WFLP (1330 AM), WLKK (1400 AM), WQLN (91.3 FM), WFGO (94.7 FM), WXTA (97.9 FM), WXKC (99.9 FM), WRKT (100.9 FM), WJET (102.3 FM), WMXE (103.7 FM), WRTS (104 FM), and WCTL (106.3 FM). In addition, Harborcreek Township can also receive broadcasts by WREO (97.1 FM) from Astabula, Ohio.

Cable Television Facilities:

Cable television services in Harborcreek Township are provided by TCI of Pennsylvania, Inc. The densely populated areas within the Township are generally fully serviced. The extension of cable television facilities by TCI of Pennsylvania, Inc. will likely continue to occur pursuant to demand. See accompanying Cable Television Facilities Map.

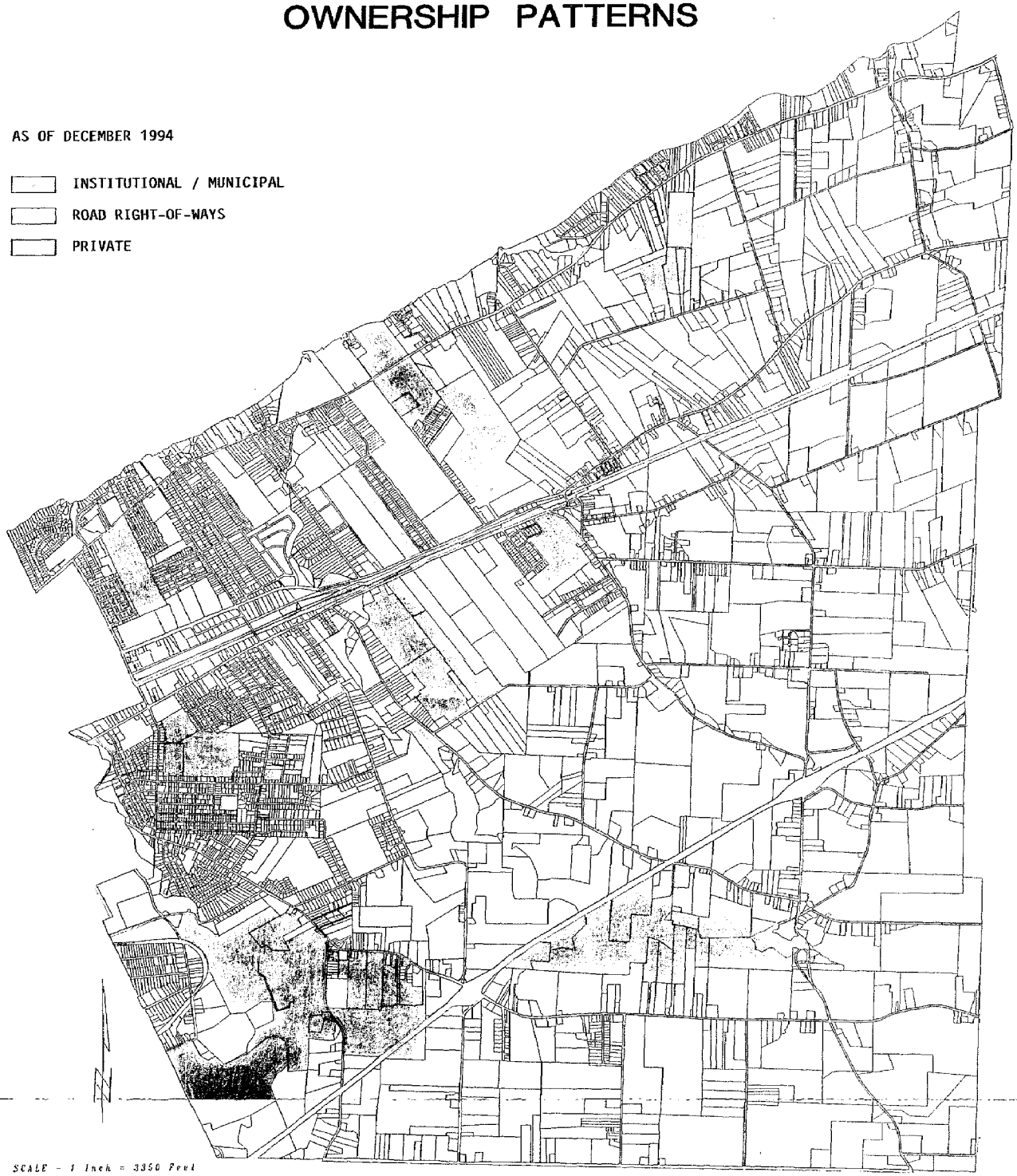
Newspapers:

Harborcreek Township is served by two newspapers: the Erie Times-News and the North East Breeze, a Brown-Thompson newspaper. The North East Breeze is published weekly and serves approximately 1,500 customers in northeastern Erie County. Of this total, approximately 100 newspapers are either home delivered or purchased over the counter in Harborcreek Township. The Erie Time-News publishes two daily papers as well as a Sunday edition. All editions are circulated throughout Harborcreek Township. These papers carry County-wide news as well as international, national and State wire-service coverage.

CABLE SERVICE SYSTEM MAP

Harborcreek Township

OWNERSHIP PATTERNS



CHAPTER 9

PUBLIC UTILITIES

Introduction

The availability of public utilities is a prime determinant in relation to the location, character, and intensity of land development. Future development is more likely to occur in those areas that offer water distribution, sanitary sewage disposal, and storm sewers. Included at the end of the last Chapter is the Ownership Patterns Map for Harborcreek Township. The map indicates property owned by various community facilities discussed in the last Chapter, and the property owned by the public utilities discussed in this Chapter of this study.

An inventory of the public utilities existing in Harborcreek Township has been completed. For purposes of this planning document, public utilities include municipal water, sanitary sewer and storm sewer systems as well as electric and natural gas services. Since the existence of public utility facilities provides the foundation for land use intensity and future development, the inventory of such facilities is viewed as having major importance.

Water Facilities

The existing public water system located in and serving Harborcreek Township is operated and maintained by the Erie City Water Authority. This system, formerly operated by the City of Erie Water Bureau, was transferred to the Erie City Water Authority in 1992 in an attempt to improve service and to develop and implement a critical capital improvements program. See the accompanying Public Water Distribution System Map.

The existing public water system encompasses the entire northwestern quadrant of Harborcreek Township. As a result, approximately one third of the Township's 33.7 square miles has public water service availability.

Based on information provided by the Erie City Water Authority, there are approximately 3,100 residential customers in Harborcreek Township. Thus, it is estimated that two-thirds of the Township's population is served by the Erie City Water Authority. Additionally, the Authority services 152 commercial, 23 public and 4 manufacturing customers (January 1994 figures).

The Harborcreek Township Board of Supervisors plays an active role in the extension of public water service. In fact, the most recent water line extension project was completed by the Board in 1994. The Harborcreek Township Water Authority continues to exist as an advisory and recommending body to the Board of Supervisors. Despite not being an operating authority, the Harborcreek Township Water Authority acts as a useful liaison between the Board of Supervisors and the general public.

The remaining one-third of the Township's population must rely on individual private water wells for potable water. The quantity and quality of the water supplied by individual wells vary considerably throughout the Township.

It is believed that many of the relatively shallow dug wells located in the northern portion of the Township are of inconsistent quantity and quality. Water quantity varies on a seasonal basis. However, there have been reports of widespread contamination of these shallow wells.

On the other hand, the southern portion of Harborcreek Township is supported by relatively stable acquifers. These wells are typically deeper drilled wells and are more consistent than the shallow wells located along Lake Erie.

Sanitary Sewer Facilities

The collection, conveyance, treatment and disposal of sanitary wastes (i.e. sewage) in Harborcreek Township may be classified as three distinct methods. The three classifications may be described as the municipal system, private systems and individual on-lot septic systems. Each of these classifications will be described and discussed herein.

The municipal system (i.e. public sanitary sewer system is the most recently developed and serves approximately 60 percent of the Township's population. This service area is generally consistent with that of the public water system, excluding the northeastern portion of the water service area. Municipal sanitary sewer facilities are found in the more densely populated area of northwestern Harborcreek Township adjacent to Lawrence Park Township and Wesleyville Borough. The Harborcreek Sewer Authority was created in 1970 and is responsible for all of the public sewer facilities within Harborcreek Township.

There were no public sewer facilities located in Harborcreek Township prior to 1971. Construction of the present sewer system began in November of 1971 and was completed in January of 1974. The system was designed so that all sewage flows northerly toward East Lake Road (State Route 5) and is pumped via four sewage lift stations into Lawrence Park Township and ultimately to the Erie Wastewater Treatment Plant. See the accompanying Public Sewer Collection System Map.

There are a number of private sewage treatment facilities located in Harborcreek Township. Two of these private systems were constructed prior to the installation of public sewer facilities and, in effect, supplement the municipal system. One such private system is owned, operated and maintained by the South Shore Service Company. This system is located in the extreme northwestern portion of the Township between East Lake Road and Lake Erie. Approximately 965 residents are served by this system. Homes on Lowry, South Shore, Harbor, Micah and Aaron Drives, the South Shore Apartments located on Joshua Street and the Harborcreek Mall are served by this system. All sewage from this service area is directed to a private treatment plan located along Fivemile Creek near its mouth at Lake Erie.

The second such private system services Penn State-Erie, The Behrend College which had a 1994 enrollment of approximately 3,100 students. In addition to faculty and other staff persons, there are approximately 1,100 students which live on campus in the dormitories or on-campus apartments.

In recent years, a number of individual and community small flow treatment facilities have been approved and constructed in Harborcreek Township. In the case of the several individual treatment plants (i.e. single residence sewage treatment plants), the system is owned, operated and maintained by the property owner. A community system, however, would typically be owned and operated by a non-profit corporation, such as a property owners association.

Due to the existence of relatively poor soils for on-lot septic systems in the non-served portions of the Township, it is anticipated that there will be an increase in the construction of such private treatment facilities. These systems, however, must still go through a regulatory review and approval process and are considered by the Harborcreek Officials to be an appropriate method of sewage disposal.

The remaining areas of the Township in which the development is relatively sparse must rely on individual on-lot sewage disposal systems. The effectiveness of the on-lot septic systems depends upon the local soil conditions as well as the groundwater table in the area. There is no evidence that large areas of malfunctioning on-lot septic systems as approved by the Pennsylvania Department of Environmental Resources and the Erie County Health Department will be acceptable.

Storm Drainage Facilities

The existing storm drainage facilities located in Harborcreek Township are owned and maintained by the Township. These facilities are located in various areas throughout the Township since there is no comprehensive storm drainage plan.

The existing facilities are generally located in the western portion of Harborcreek Township. Additionally, the new developments which have recently been completed all include storm drainage systems.

The Harborcreek Township Stormwater Management Ordinance was adopted in 1993. The provisions of this Ordinance require that stormwater runoff be properly managed and controlled in conjunction with new development such as residential subdivisions, commercial establishments, etc. In addition to storm drainage collection and conveyance systems, stormwater retention facilities will frequently be required. It is the intention of the Harborcreek Officials that relatively large retention facilities serving residential development will ultimately be owned and maintained by the Township. Conversely, the stormwater management systems, including retention facilities, supporting commercial and other non-residential developments should be owned and maintained by the individual property owners.

Generally, storm drainage concerns are addressed as they arise. Isolated areas of concern must be resolved on a very local basis. A stormwater management plan is currently under development for Harborcreek as a part of a countywide effort at this time.

Electric Facilities

Residents in Harborcreek Township receive electric service from the Pennsylvania Electric Company (Penelec). This service is available throughout the entire Township.

Penelec also has three high voltage power transmission line rights-of-way which cross portions of the southern part of the Township. They meet at a substation just northwest of the intersection of Harborgreen and Jordan Roads. From this point, the three lines branch out in various directions. One goes west along Harborgreen Road into Millcreek Township. Another follows Fourmile Creek northwesterly into the City of Erie, and the third line goes easterly between Harborgreen and Station Roads into Greenfield Township. Power from these lines is not directly accessible to residents of Harborcreek Township.

Natural Gas Facilities

Natural gas services in Harborcreek Township are provided by the National Fuel Gas Corporation (National Fuel). The densely developed areas within the Township are generally served and have been for many years. The extension of natural gas facilities by National Fuel will likely continue to occur pursuant to demand. See the accompanying Natural Gas Distribution System Map.

PUBLIC WATER DISTRIBUTION SYSTEM MAP

PUBLIC SEWER COLLECTION SYSTEM MAP

NATURAL GAS DISTRIBUTION SYSTEM MAP

APPENDIX

TO THE
1994 BACKGROUND ANALYSIS
FOR THE
HARBORCREEK TOWNSHIP COMPREHENSIVE PLAN

HARBORCREEK TOWNSHIP

DEMOGRAPHIC ANALYSIS
AND
POPULATION PROJECTIONS
REPORT

OCTOBER 1994

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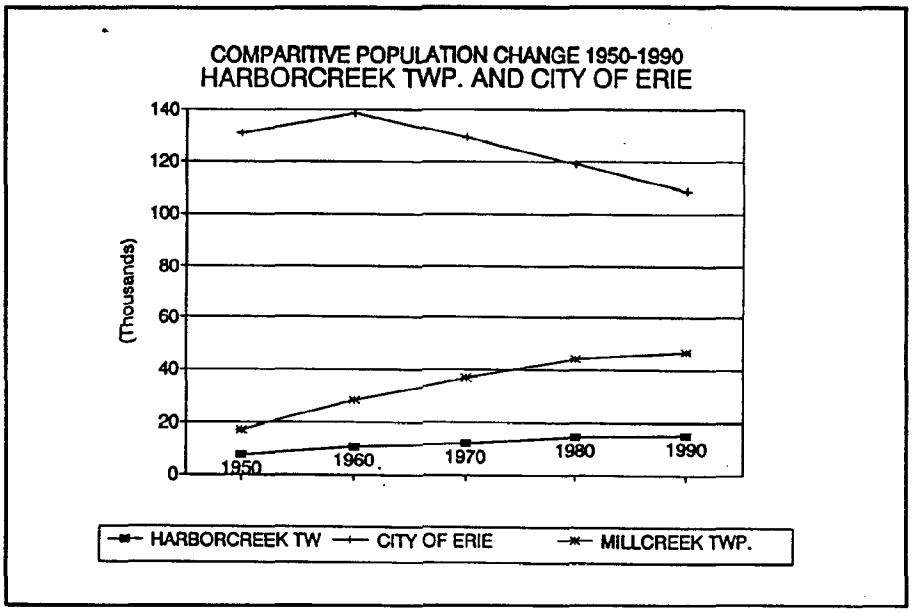
HARBORCREEK TOWNSHIP DEMOGRAPHICS

I. HISTORIC TRENDS

Unlike many places in Northwestern Pennsylvania, Harborcreek Township has experienced continuous growth since 1930. Much of this growth is related to the Township's strategic position within the Erie Metropolitan Area. Since 1950, Harborcreek has been a primary beneficiary of out-migration from the City of Erie. In 1950, the City of Erie had 130,803 persons, while Harborcreek Township had 7,475 persons. By 1990, the City had declined to 108,718 persons (-16.9%), while Harborcreek had expanded to include 15,108 persons (+102.1%). A comparison of this is depicted in the chart.



Obviously, Harborcreek was not the sole beneficiary of out-migration from the City of Erie. Millcreek Township has seen suburban growth. However, even traditionally high growth communities were affected by the regional economic problems of the early 1980s. Places like Harborcreek, which had seen 7 to 20 percent, growth between each Census only experienced 2 to 3 percent from 1980 to 1990. Traditionally, declining municipalities had accelerated losses.

TABLE 1
COMPARATIVE GROWTH RATES - 1980-1990
HARBORCREEK TOWNSHIP AND SURROUNDING MUNICIPALITIES

	1980	1990	% Change
City of Erie	119,123	108,718	-8.7%
Millcreek Township	44,303	46,820	+5.7%
Harborcreek Township	**14,644**	**15,108**	**+3.2%**
Lawrence Park Township	4,584	4,310	-6.0%
Wesleyville Borough	3,998	3,665	-8.6%
North East Township	5,750	6,283	+9.3%
Greenfield Township	1,677	1,770	+5.5%
Greene Township	5,238	4,759	-5.3%

Source: U.S. Census Bureau, 1980-1990

As a result of 1990 Census analysis, Erie City remains the Commonwealth's third largest municipality. Harborcreek is the twenty-first largest. However, in the context of Erie County, Harborcreek is the third largest community, following only Millcreek and the City of Erie. Spatially, this explains Harborcreek's truly suburban role in the County, with truly urbanized places to the west and rural communities to the east and south.

Sub-Municipal Analysis: It is difficult to examine census tract population in Harborcreek prior to 1990 because of delineation changes. In 1980, Harborcreek was divided into two census tracts. For the 1990 Census, the number of tracts was increased to four. Population estimates of the pre-1990 population of each tract are included in Section IV.

Harborcreek has indeed had significant growth over the past 40 years. Yet, this growth slowed dramatically during the 1980s. There is an obvious link between economics and demographics in this case.

The post-World War II years represented a time of transition in American urban structure. The automobile allowed middle-class households great flexibility in choosing a place to live. Once given a choice, families chose the newer homes and larger yards of the suburbs. It is this trend that began to cause the growth of Harborcreek's population and the corresponding decline in the City of Erie.

The outstanding element of this migration is that it often cut across economic class and ethnic lines. Millworkers were as likely to join this migration as businessmen. All who could afford to relocate were anxious to live in places like Harborcreek.

The early 1980s brought double-digit unemployment and major restructuring of industry in the Erie area. This changed migration patterns radically. Many persons left Northwestern Pennsylvania in search of jobs elsewhere. This regional trend affected Harborcreek by slowing in-migration. There was simply a smaller pool of persons with both the means and inclination to live in Harborcreek.

It is hoped that the population trends of the 1980s were a temporal anomaly. This assumption has been made and will be discussed further in the Population Projections section.

II. SOCIAL CHARACTERISTICS

Age and Gender: Because of a common life-span disparity between men and women, these two social characteristics are often linked. Generally, populations with more older persons will also have more females. This is also true in the inverse, with younger populations having greater number of males.

The aforementioned trend is more important because a general aging of the population has been noted in Pennsylvania. However, it is interesting to note that Harborcreek and Erie County, as a whole, have not paralleled the State in this trend.

TABLE 2
COMPARATIVE AGE BY PROPORTION
SELECTED PENNSYLVANIA PLACES

	Age Groups		
Place	0-17	18-64	65+
Pennsylvania	23.5	61.1	15.4
Erie County	25.9	60.3	13.8
Harborcreek Township	**25.3**	**62.0**	**12.7**

Source: Penn State Data Center

In real numbers, these proportions give Harborcreek 3,827 school-aged children, 9,368 working age adults, and 1,913 retirement-age adults. This data would seem to indicate a more even gender split, as is shown in the next table.

TABLE 3
MALE/FEMALE POPULATION BY PROPORTION
SELECTED PENNSYLVANIA PLACES - 1990

	Female	Male
Pennsylvania	52.1	47.9
Erie County	51.7	48.3
Harborcreek Township	**50.2**	**49.8**

Source: Penn State Data Center

Finally, for micro-planning purposes and the development of population projections, age and gender, by 5-year cohorts, is presented.

TABLE 4
HARBORCREEK TOWNSHIP: 1990 POPULATION BY AGE/SEX

Age of Cohort	1990 Total	1990 Male	1990 Female	% of Total	1980-90 Change Total	1980-90 Change Male	1980-90 Change Female
0-4	798	415	383	5.3%	(223)	(113)	(110)
5-9	1,120	560	560	7.4%	(28)	(35)	7
10-14	1,173	602	571	7.8%	(189)	(84)	(105)
15-19	1,704	893	811	11.3%	(155)	(80)	(75)
20-24	1,240	761	479	8.2%	62	129	(67)
25-29	759	352	407	5.0%	(355)	(179)	(176)
30-34	1,097	535	562	7.3%	88	44	44
35-39	1,264	628	636	8.4%	286	120	166
40-44	1,051	505	546	7.0%	322	163	159
45-49	917	487	430	6.1%	172	116	56
50-54	665	311	354	4.4%	(188)	(93)	(95)
55-59	645	318	327	4.3%	(135)	(74)	(61)
60-64	762	359	403	5.0%	129	31	98
65-69	648	321	327	4.3%	210	122	88
70-74	524	228	296	3.5%	209	98	111
75-79	342	131	211	2.3%	129	51	78
80-84	223	65	158	1.5%	72	17	55
85+	176	51	125	1.2%	58	12	46
Totals	15,108	7,522	7,586	100.0%	464	245	219
Percent	**100.0%**	**49.8%**	**50.2%**	N.A.	**100.0%**	**52.8%**	**47.2%**

Source: Consultants' computations from 1990 Census data

Table 4 shows fewer parallels to Statewide trends. The number of elderly persons grew, but simply not at the accelerated rate experienced by the State. The number of children and young adults declined, but less so than was true for the whole of Pennsylvania. Because of these changes, Harborcreek Township remains a much younger and more gender balanced community than the Statewide norm.

Race and Ethnicity: Many demographers believe that the ethnic and racial diversity which have historically characterized the United States will continue to broaden. Overall, the numbers of racial minorities have expanded in recent years across the nation. However, many rural or suburban places remain predominantly White. As of 1990, 14,746 (97.7%) of the Township's residents are White, while 362 (2.3%) are racial minorities. A comparison of 1980 and 1990 racial counts is depicted below, by proportion.

TABLE 5
HARBORCREEK TOWNSHIP - 1980-1990
POPULATION PROPORTION BY RACE

	1980	1990
White	98.4%	97.7%
Black	1.0%	1.6%
Asian/Pacific Islander	0.2%	0.4%
American Indian/Aleut	0.2%	0.0%
Other Race	0.2%	0.3%
Total	100.0%	100.0%

Source: U.S. Bureau of the Census, STF-1 Files

It should be noted that these numbers are not strictly comparable, particularly in terms of the "Other Race" category, due to changes in social definition by the Census Bureau. In spite of this, there is an overall constancy in racial distribution through the 1980s. The slight rise in Black and Asian populations parallels the national trends of suburbanization of the Black middle class and increased immigration from Asia. The decline in American Indians represents a typical problem with self-identification of racial or ethnic groups. The Census Bureau believes there is substantial over-reporting for American Indian descent. For example, it is not uncommon for persons with a single Indian ancestor to identify strongly with that racial group.

In a similar manner, Hispanic groups present a delineation problem. Technically, "Hispanic" identifies linguistic, ethnic, and national groups. There are Hispanic persons representing all races. However, many persons of this group regard it as their race as well. To try to fully tabulate these persons, the Census Bureau asks specifically whether persons are of Hispanic origin. In 1980, 31 persons in Harborcreek answered "yes." By 1990, this had risen to 83. This increase equates to a nationwide increase of Hispanic persons. This population is comprised primarily of Puerto Ricans.

When ancestry issues beyond race and Hispanic origin are addressed, the sea of data becomes even more muddled. There was also a major change in tabulation methods between 1980 and 1990, making direct comparison very difficult. At best, some generalities can be drawn from 1990 data.

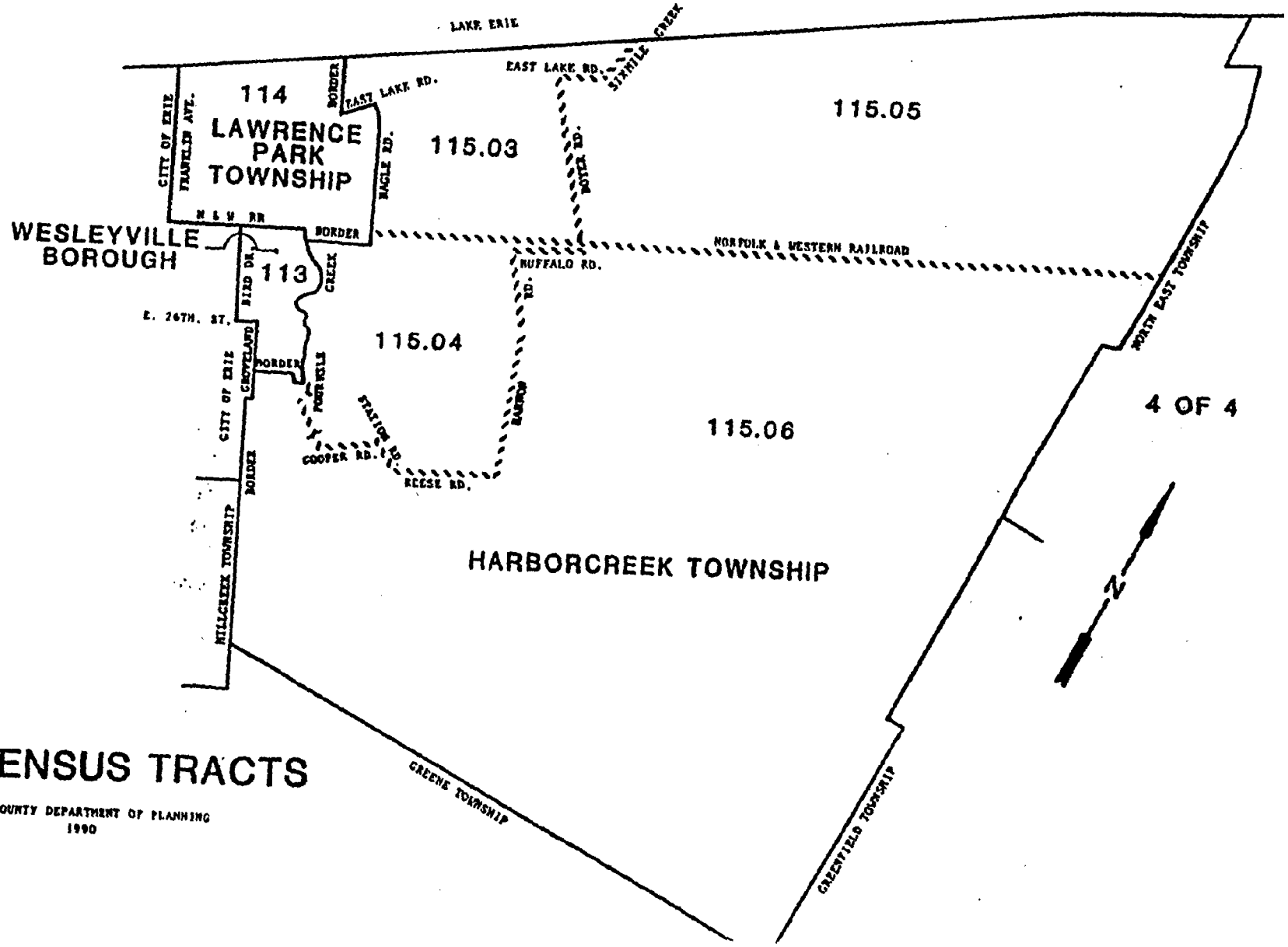
Overall, the most common ancestry claimed was German. Over 9,100 Township residents claimed at least some German blood. Other major ancestries included Polish (4,126 claimants), Irish (3,480 claimants), English (2,358 claimants), and Italian (2,370 claimants). Virtually, every other ethnic group has at least a handful of representatives in the Township. In a typical suburban pattern, there are no discernable racial or ethnic enclaves or settlement patterns.

This lack of discernable pattern is most visible by examining this data by census tract. A map of census tracts in 1990 is also attached. The 1980 Census Tracts were split to create the 1990 Tracts. Thus, 115.03 and 115.04 were a single tract in 1980, as were 115.05 and 115.06.

TABLE 6
HARBORCREEK TOWNSHIP
CENSUS TRACTS: RACE BY PROPORTION

	C.T. 115.03	C.T. 115.04	C.T. 115.05	C.T. 115.06	Range
White	97.92%	99.01%	98.01%	96.31%	± 1.35%
Black	1.23%	0.83%	1.06%	2.60%	± 0.88%
Native American	0.06%	0.09%	0.19%	0.14%	± 0.06%
Asian/Pacific Islander	0.60%	0.05%	0.13%	0.63%	± 0.29%
Other Race	0.18%	0.02%	0.61%	0.32%	± 0.29%
Total	100.00%	100.00%	100.00%	100.00%	N.A.

Source: U.S. Census of 1990 and consultants' computations



1990 CENSUS TRACTS

ERIE COUNTY DEPARTMENT OF PLANNING
1990

Overall, there is very little difference in the racial breakdown between each census tract. This seems to indicate that race does not play a factor in the Township's internal settlement patterns.

Households and Families: Humans typically live in social units. A knowledge of the nature of these social units assists planners in understanding impacts on housing and economics.

Nationwide, household and family size has been falling. Households of one or two persons were much more common in 1990 than 1980.

TABLE 7
HARBORCREEK TOWNSHIP - 1980-1990
HOUSEHOLD NUMBER AND PERSONS PER HOUSEHOLD

Year	Number of Households	Number of Persons	Persons Per Households
1980	4,483	14,644	3.07*
1990	4,912	15,108	2.80*

*Calculated as population - group quarters/number of households

Source: 1980 and 1990 Census, STF-1

Table 7 shows that total population in Harborcreek rose modestly (3.2%) in the 1980s. However, the number of households grew a dramatic 9.5 percent. This simply means that fewer persons will require more housing units.

Clues to this trend can be found in a number of household structural characteristics. The Township had 3,692 family households in 1980. This increased to only 3,790 in 1990. Therefore, there was an identifiable increase in the proportion of non-family households. Further structural analysis is detailed in Table 8.

TABLE 8
HOUSEHOLD STRUCTURE FOR SELECTED HOUSEHOLD TYPES
HARBORCREEK TOWNSHIP - 1980-1990

	1980	1990	No. Change
Householder Living Alone	692	992	+300
Married Couples Without Children	1,466	1,692	+226
Married Couples With Children	1,801	1,652	+149
Single Parents With Children	224	239	+15
Non-Family, Multi-Person Household	99	130	+31

Source: U.S. Census, STF-1, 1980-1990

It is readily discernable that the smaller form of households grew. This is due to aging of the population, divorce trends, and the decline in births that followed the baby boom, and a general decline in the traditional extended family or large nuclear family households. In the future, this trend will probably continue, though with less dramatic momentum.

Some Township residents occupy group quarters rather than households. Group quarters can include a variety of institutional and non-institutional facilities. Growth in group quarters population can be arbitrary and completely divorced from other trends in a community. This can be seen by comparing 1980 and 1990 residents of group quarters by type. The influence of Behrend College is obvious from the figure in Table 9.

TABLE 9
GROUP QUARTERS
HARBORCREEK TOWNSHIP - 1980-1990

Type of Group Quarters	1980	1990	Change
Mental Hospital	84	0	-84
Nursing Home	118	109	-9
Juvenile Detention	0	100	+100
College Dormitory	567	1,014	+447
Other Group Quarters	96	131	+35
Total	865	1,354	+489

Source: U.S. Census Bureau, STF-1

Overall, the number of group quarter residents can be expected to grow over the next 10 to 20 years. Nursing home and college dormitories, capacity will probably see specific expansions.

III. ECONOMIC CHARACTERISTICS

Median household income (MHI) represents one of the most basic indicators of local economic performance. Like many suburban places, Harborcreek Township enjoys a relatively high median. The 1989 median household income for the Township was $32,670 per year; $10,000 higher than the Erie City median of $22,032. It is also significantly higher than the Countywide median of $26,581 per annum. The Township has even surpassed the Statewide figure of $29,069 per year. The Table inflates the 1979 median household income to 1989 values using a factor based upon the Consumer Price Index. The results are a little surprising.

In spite of this encouraging trend, the median income in Harborcreek Township did not remain at pace with inflation from 1980 to 1990.

TABLE 10
HOUSEHOLD INCOME IN HARBORCREEK TOWNSHIP
COMPARED USING THE CONSUMER PRICE INDEX (CPI)

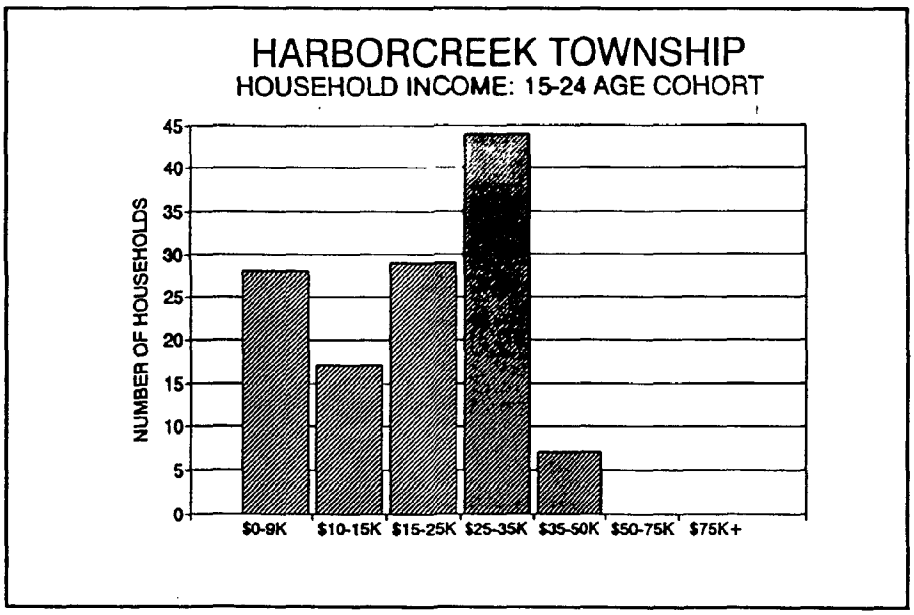
Actual 1979 MHI	Adjusted 1979 MHI	Actual 1989 MHI	Actual Difference	Percent Difference	Non-Adjusted Difference
$20,029	$33,569	$32,670	-$899	-2.7%	+63.1%

Source: Consultants' computations

Table 9 shows the 1979 median household income in terms of constant dollar buying power (adjusted 1979 MHI). This number is actually higher than the 1989 MHI. The implication is that even though the median income rose 63.1 percent, the real buying power of these dollars is significantly less than was found in the 1980 Census.

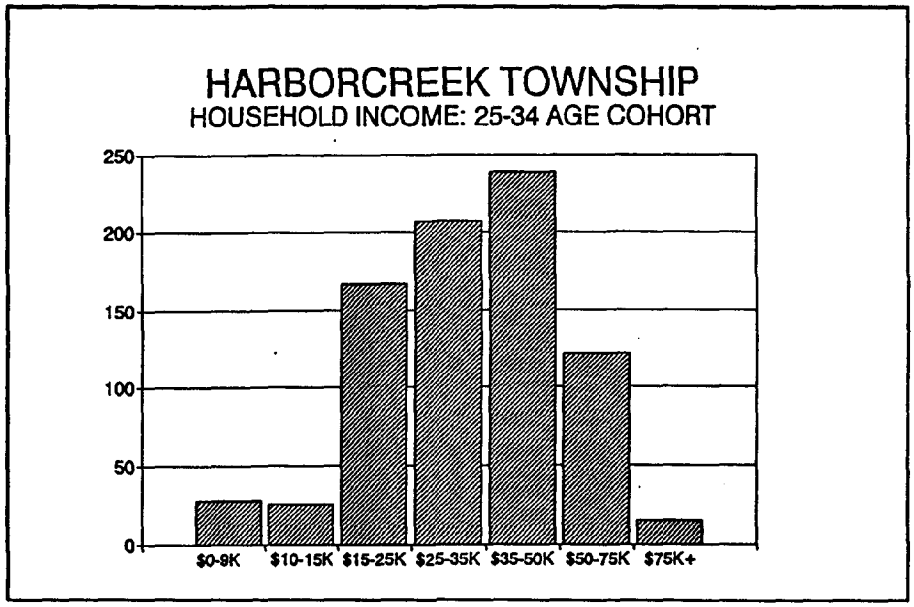
The household income of Harborcreek Township residents vary by the age of householders. Overall, very young or very old heads of household are more likely to have lower incomes. Middle-age households tend to have higher incomes. It is very possible that this was a factor in the charted decline in buying power.

Among households headed by someone age 15-24, none enjoyed an income greater than $50,000 per year. This pattern is very common form younger wage earners.

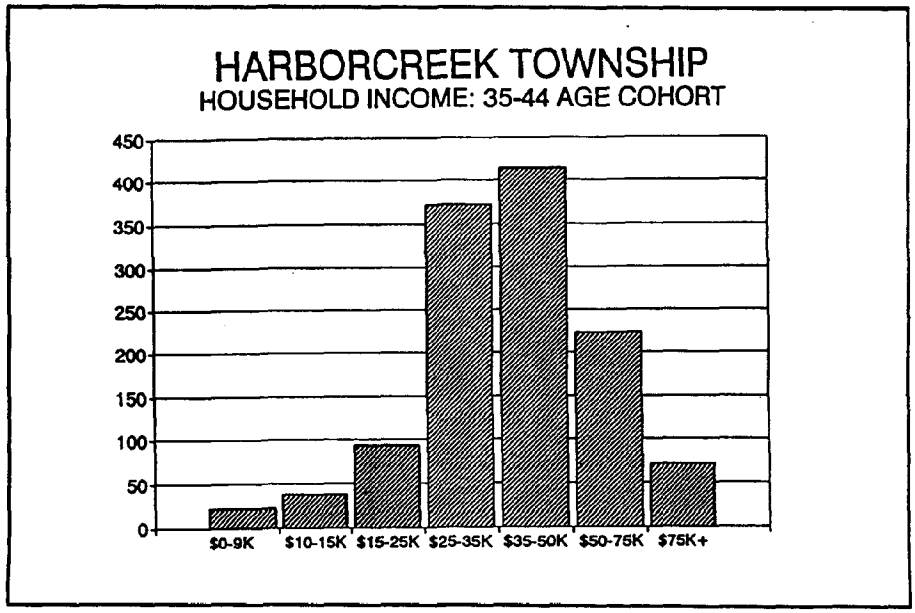


A majority of persons in this young age cohort have annual incomes of less than $25,000 per year.

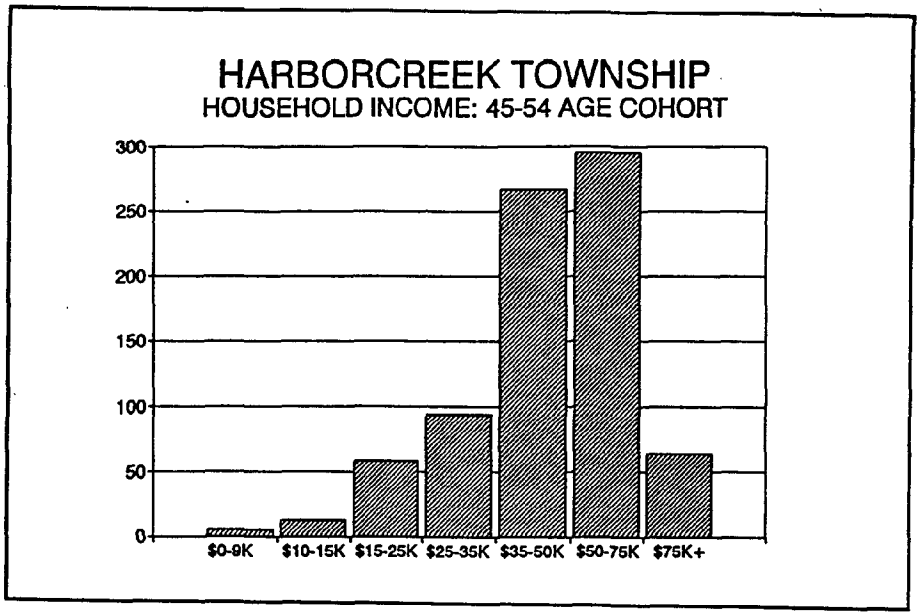
Persons 25-34 are shown as beginning to break into upper income levels. However, 27 percent of this cohort still have incomes under $25,000 per annum.



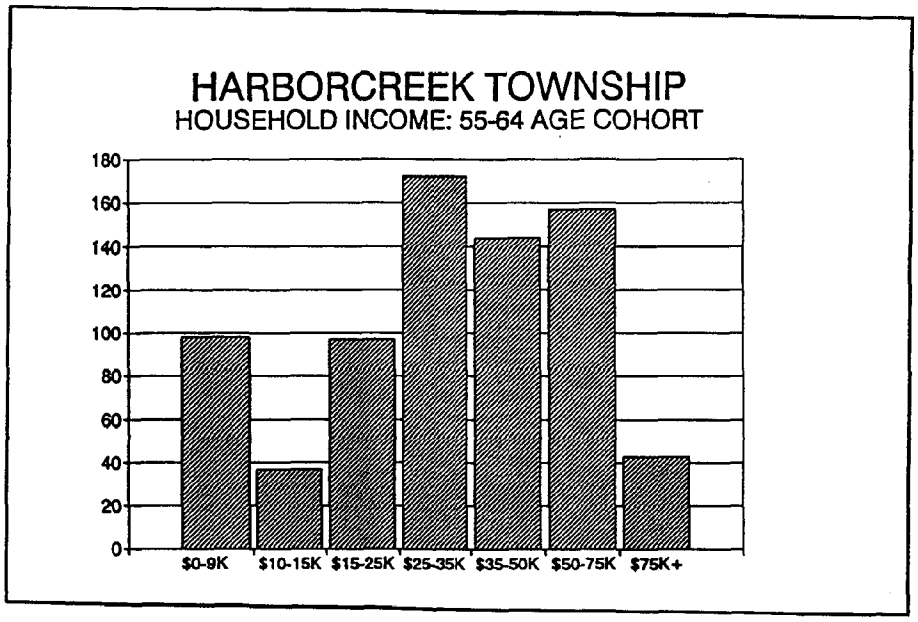
The 35-44 age group closely mirrors the 25-34 cohort, though more 35-44 householders have achieved high incomes.



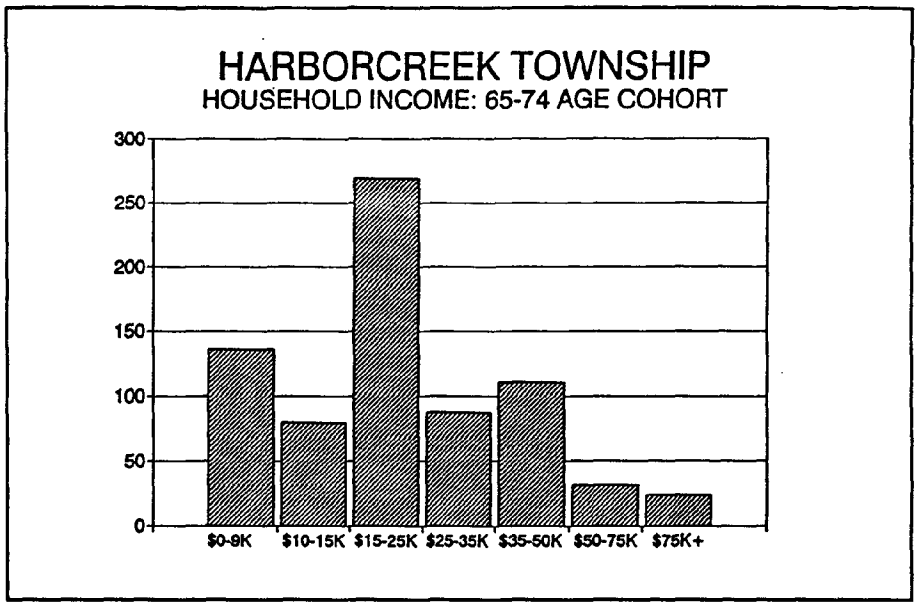
The 45-54 householders begin to show maximum income levels. Only 9 percent of these households have incomes below $25,000 per year.



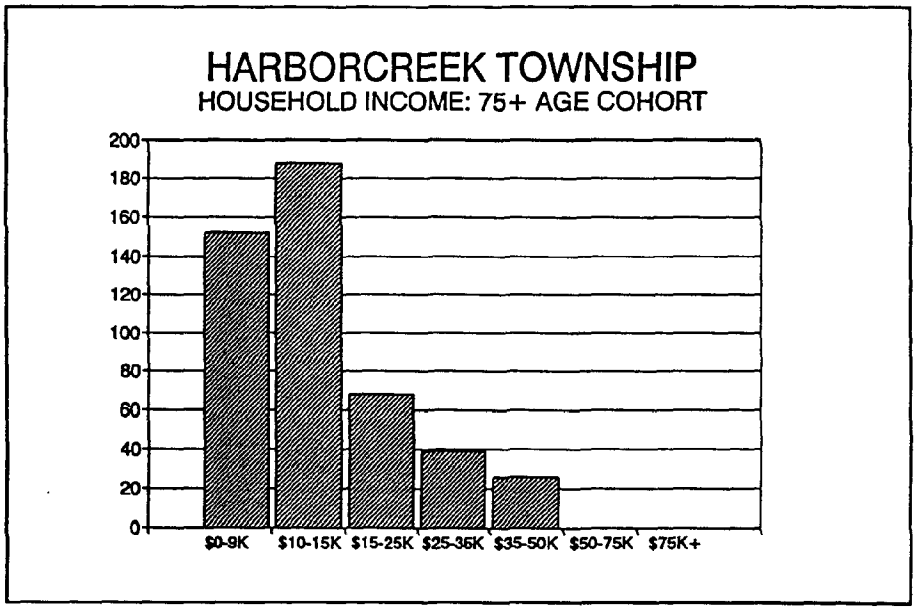
As heads of household approach retirement, incomes begin to fall. This probably reflects a number of early retirees.



This trend is more visible among householders age 65-74.



Finally, among the elderly (75+), income levels mirror those of very young householders.



Income in Harborcreek Township is quite pyramidal. Young households earn less money, but earnings increase with age to a middle age apex. As persons reach traditional retirement age, income declines significantly.

Finally, to deduce any spacial trends, the HUD LMI (low-moderate income) statistics were consulted. This statistic is a central feature of the CDBG Program and can be used as an index of sub-municipal economic performance. To qualify as low or moderate income, the household must fall below the current income limits shown in Table 11.

TABLE 11
HUD LMI LIMITS IN ERIE COUNTY

Persons Per Household	Income Limits
1	$20,000
2	$22,850
3	$25,700
4	$28,550
5	$30,850
6	$33,150
7	$35,400
8 or More	$37,700

Source: Pennsylvania Department of Community Affairs

Township-wide, only 23.76 percent of Harborcreek residents fall below these limits. Tract analysis information in Table 12 shows no significant concentration of LMI households.

TABLE 12
LMI CONCENTRATION BY CENSUS TRACT
HARBORCREEK TOWNSHIP

Tract Number	LMI Proportion
115.03	27.26%
115.04	20.55%
115.05	28.34%
115.06	23.17%

Source: Pennsylvania Department of Community Affairs

IV. POPULATION PROJECTIONS

One of the main objectives in collecting demographic data is to attempt a forecast of future population. Population projections are not crystal balls; they are merely an attempt to logically carry past and current trends into the future.

Certain key demographic data are essential for projections. An understanding of the age structure of the population is used to forecast mortality. Gender analysis can determine both mortality and the population's potential for natural increase through child birth. Past migration trends are also helpful to understand underlying factors of community change.

The full analysis of population projections is made on five-year age/sex cohorts. Because it typically involves about 50 pages of spreadsheet calculations, the full projection printout is not included in this report. A full copy of the projection series calculations is available from Harborcreek Township.

The first population projection is based upon a zero net migration scenario. This scenario simply assumes that the 1990 population would reproduce and die, without any in- or out-migration.

TABLE 13
HARBORCREEK TOWNSHIP
ZERO NET MIGRATION - 1960-2010

Year	Population	Change	% Change
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000	15,114	6	0.0%
2010	14,831	(283)	-1.9%

Source: Consultants' computations

As this scenario plays out, it shows that the Township's population would be almost completely static from 1990 to 2000, and declines slightly from 2000 to 2010. This decline is due to a general aging of the population and a lowering of birth rates.

As the historic data shows, the 1970 to 1980 decade was a time of significant growth for the Township. Table 14 shows if that high rate of in-migration were applied to the post-1990 population.

TABLE 14
HARBORCREEK TOWNSHIP
POPULATION PROJECTION: HIGH SCENARIO

Year	Population	Change	% Change
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000	18,523	3,415	22.6%
2010	22,201	3,678	19.9%

Source: Consultants' computations

In this scenario, the 1980 to 1990 decade appears as an anomaly. The 3.2 percent population growth was only a slight interruption in a long-term pattern of higher growth. If the economic factors which slowed in-migration in the 1980s were applied to the future, population would resemble the numbers in Table 15.

TABLE 15
HARBORCREEK TOWNSHIP
POPULATION PROJECTION: LOW SCENARIO

Year	Population	Change	% Change
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,312	464	3.2%
2000	15,312	(204)	1.3%
2010	14,938	(374)	-2.4%

Source: Consultants' computations

If the economic devastation of 1980 returned in the years 1990-2010, the Township would experience a slight population loss. However, the final project scenario in Table 16 attempts to account for migration trends over a 20-year average. This longer term analysis tends to be a balancing factor, dulling extreme fluctuations.

TABLE 16
HARBORCREEK TOWNSHIP
POPULATION PROJECTION: LONG-TERM SCENARIO

Year	Population	Change	% Change
1960	10,569	N.A.	N.A.
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000	17,360	2,252	14.9%
2010	19,440	2,079	12.0%

Source: Consultants' computations

From a purely statistical vantage, the long-term scenario is most likely. However, when each decade is examined upon its own merit, it becomes readily apparent that 1980-1990 period interrupted the general pattern of growth. When this analysis is combined with building permit data and similar growth indicators, it is readily apparent that the Township's historic growth will probably continue.

Tract Level Projection Analysis: Regardless of the projection scenario employed, it appears that Harborcreek Township will experience population growth into the next century. However, the divergence of each tract indicates that tract level refinement of this data may be in order. However, it should be noted that the previously mentioned difficulty with historical tract level comparisons is still applicable. Specifically, the delineation of tracts has changed since 1980. Therefore, the consultants were forced to make an estimate of pre-1980 data for the projection. Otherwise, these scenarios parallel the process used in developing the Township-wide projections. An attempt was made to link this mathematical material with known trends in residential building permits and expansion programs envisioned by major group quarter providers (especially Behrend College). In spite of this, tract-level refinements can account for expected events in the Township's future. In this case, projected Behrend College enrollment and growth patterns from building permits were considered in developing the projection series. With this in mind, the tract level projections are shown in Table 17.

TABLE 17
HARBORCREEK TOWNSHIP
TRACT LEVEL POPULATION PROJECTIONS

	Historical:				Projected:			
Tract	1960	1970	1980	1990	1995	2000	2005	2010
115.03	2,719*	3,000*	3,400*	3,320	3,573	3,830	3,900	3,980
115.04	3,550*	3,800*	4,301*	4,239	4,533	4,830	5,030	5,230
115.05	2,000*	2,300*	3,043*	3,112	3,260	3,400	3,590	3,780
115.06	2,300*	2,938*	3,900*	4,421	4,610	5,300	5,380	6,450

*Estimated

Source: Consultants' computations

Tract 115.03 is the northwest section of the Township. Building permit data for this area indicates continued residential growth at a relatively dense level. There is also a large nursing home facility which will remain constant and possibly experience slight growth to 2010. Tract 115.04 will probably experience even more growth in single-family, detached housing. Tract 115.05 is highly developed and may have less space to accommodate future growth. Tract 115.06 is the home of Behrend Campus of Penn State. It is estimated their dormitories will add group quarters for 250 students by 2000 and another 750 by 2010.

The tract level analysis also serves as a cross check for the validity of the municipal level projections. When the pure mathematical projections were refined to reflect expected future development, the tract analysis mirrors the most likely or long-term projection series.

TABLE 18
COMPARATIVE POPULATION PROJECTION
HARBORCREEK TOWNSHIP - 1990-2010

	1990	2000	2010
All Tracts	15,108	17,360	19,440
Township	**15,108**	**17,360**	**19,440**

Source: Consultants' computations

The main tract level consists of the addition of 1,000 persons in Tract 115.06. This addition is wholly dependent upon an enrollment expansion by Behrend College. It is expected that the bulk of this increase will not be reflected in census counts until 2010. Even without the proposed expansion program by Behrend College, it is obvious that Harborcreek Township has a high potential for future growth. Its implications will be examined in the final section.

V. POLICY IMPLICATIONS

The implications of the preceding demographic data are far reaching, but can be summarized as follows:

- Harborcreek Township has seen a consistent trend of historic growth. The growth has been largely due to in-migration rather than natural increase. The Township should work to preserve those features of the community which have made it a popular place to locate.

- Fewer retirement-age persons lessens the immediate need for specific services oriented toward the elderly. However, there are large numbers of working age adults within 10 to 20 years of retirement. Proper preparations will increase the chance that many of these persons remain to retire in the Township.

- In spite of declines, significant numbers of children remain in the Township. With about one fourth of Harborcreek residents under 18, there is a ready market for youth-oriented services (playgrounds, parks, teen centers). The capacity of current facilities should be carefully examined.

- The number of persons living in a group-quarter setting will probably continue to expand in the future.

- Household sizes and types are changing. Local regulations should be examined to determine their adequacy for facilitating the smaller household types that are becoming more common. In particular, minimum unit sizes and densities should be examined.

- The Township will probably continue to grow through further in-migration. Because of this impending growth, a number of policies are recommended. First, the Township should take advantage of the planning process to make policy decisions about the location, intensity, and timing of future growth. Specifically, portions of the Township could be reserved to accommodate growth while others could be reserved for traditional rural, low-density uses.

APPENDIX A

DETAIL DATA OF THE PROJECTION SERIES FOR THE HARBORCREEK TOWNSHIP DEMOGRAPHIC ANALYSIS AND POPULATION PROJECTIONS REPORT

HARBORCREEK DATE: 10/11/94

POPULATION PROJECTIONS LOW SERIES FIGURES ROUNDED

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	601	311	290	3.9%	(197)	(104)	(93)
5-9	875	454	422	5.7%	(245)	(106)	(138)
10-14	917	480	437	6.0%	(256)	(122)	(134)
15-19	1,912	972	940	12.5%	208	79	129
20-24	1,322	571	751	8.6%	82	(190)	272
25-29	696	330	366	4.5%	(63)	(22)	(41)
30-34	1,137	729	408	7.4%	40	194	(154)
35-39	860	447	413	5.6%	(404)	(181)	(223)
40-44	1,143	540	603	7.5%	92	35	57
45-49	1,184	615	569	7.7%	267	128	139
50-54	959	463	495	6.3%	294	152	141
55-59	793	418	375	5.2%	148	100	48
60-64	594	288	306	3.9%	(168)	(71)	(97)
65-69	536	231	305	3.5%	(112)	(90)	(22)
70-74	641	245	396	4.2%	117	17	100
75-79	500	192	308	3.3%	158	61	97
80-84	367	102	265	2.4%	144	37	107
85 +	275	74	201	1.8%	99	23	76
TOTALS	15,312	7,461	7,851	100.0%	204	(61)	265
PERCENT	100.0%	45.2%	54.8%	NA	100.0%	-30.0%	130.0%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	601	3.9%
5-19	3,704	24.2%
20-34	3,155	20.6%
35-64	5,533	36.1%
65 +	2,319	15.1%
TOTALS	15,312	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	(197)	-24.6%
5-19	(293)	-7.3%
20-34	59	1.9%
35-64	229	4.3%
65 +	406	21.2%
TOTALS	204	1.3%

*LOW SERIES POPROI

DATE: 10/11/94

FIGURES ROUNDED

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	510	264	246	3.4%	(91)	(47)	(44)
5-9	779	404	375	5.2%	(96)	(50)	(46)
10-14	691	360	331	4.6%	(226)	(120)	(106)
15-19	1,789	930	859	12.0%	(123)	(42)	(81)
20-24	1,344	698	646	9.0%	22	127	(105)
25-29	679	313	366	4.5%	(17)	(17)	(0)
30-34	998	566	432	6.7%	(139)	(163)	24
35-39	789	420	370	5.3%	(71)	(27)	(43)
40-44	1,184	736	448	7.9%	41	196	(155)
45-49	807	439	368	5.4%	(377)	(175)	(201)
50-54	1,042	495	547	7.0%	83	32	52
55-59	1,025	528	497	6.9%	231	110	121
60-64	856	428	429	5.7%	262	139	123
65-69	657	305	352	4.4%	121	74	47
70-74	497	197	299	3.3%	(144)	(48)	(96)
75-79	415	136	279	2.8%	(85)	(55)	(29)
80-84	457	111	346	3.1%	90	10	81
85 +	419	110	309	2.8%	143	36	107
TOTALS	14,938	7,439	7,498	100.0%	(374)	(22)	(352)
PERCENT	100.0%	45.2%	54.8%	NA	100.0%	5.8%	94.2%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	510	3.4%
5-19	3,259	21.8%
20-34	3,020	20.2%
35-64	5,703	38.2%
65 +	2,445	16.4%
TOTALS	14,938	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	(91)	-15.1%
5-19	(445)	-12.0%
20-34	(134)	-4.3%
35-64	170	3.1%
65 +	126	5.4%
TOTALS	(374)	-2.4%

*LOW SERIES

POPROI

HARBORCREEK DATE: 10/11/94

POPULATION PROJECTION MOST LIKELY SERIES FIGURES ROUNDED

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	734	380	353	4.4%	(64)	(35)	(30)
5-9	960	489	471	5.7%	(160)	(71)	(89)
10-14	1,074	559	515	6.4%	(99)	(43)	(56)
15-19	1,956	991	965	10.1%	252	98	154
20-24	1,327	750	577	6.4%	87	(11)	98
25-29	1,081	509	572	6.4%	322	157	165
30-34	1,491	911	580	8.8%	394	376	18
35-39	1,043	526	517	6.2%	(221)	(102)	(119)
40-44	1,263	602	661	7.5%	212	97	115
45-49	1,326	682	644	7.9%	409	195	214
50-54	1,086	523	563	6.4%	421	212	209
55-59	891	469	422	5.3%	246	151	95
60-64	630	299	331	3.7%	(132)	(60)	(72)
65-69	558	256	302	3.3%	(90)	(65)	(25)
70-74	664	257	408	3.9%	140	29	112
75-79	570	229	341	3.4%	228	98	130
80-84	404	119	286	2.4%	181	54	128
85 +	301	83	218	1.8%	125	32	93
TOTALS	17,360	8,634	8,727	100.0%	2,252	1,112	1,141
PERCENT	100.0%	45.2%	54.8%	NA	100.0%	49.4%	50.6%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	734	4.2%
5-19	3,990	23.0%
20-34	3,899	22.5%
35-64	6,239	35.9%
65 +	2,498	14.4%
TOTALS	17,360	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	(64)	-8.1%
5-19	(7)	-0.2%
20-34	803	25.9%
35-64	935	17.6%
65 +	585	30.6%
TOTALS	2,252	14.9%

*MOST LIKELY POPROI

DATE: 10/11/94

FIGURES ROUNDED

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	723	375	348	3.9%	(11)	(6)	(5)
5-9	994	506	488	5.4%	35	18	17
10-14	992	515	478	5.4%	(82)	(44)	(38)
15-19	1,969	1,010	959	8.0%	13	19	(6)
20-24	1,492	733	759	5.4%	165	(17)	182
25-29	1,091	496	595	5.9%	10	(13)	23
30-34	1,301	751	550	7.1%	(190)	(160)	(30)
35-39	1,494	763	730	8.1%	451	238	213
40-44	1,715	1,030	685	9.3%	453	428	25
45-49	1,100	573	527	6.0%	(226)	(108)	(118)
50-54	1,311	626	685	7.1%	225	103	121
55-59	1,295	660	635	7.0%	404	191	213
60-64	1,035	506	529	5.6%	404	206	198
65-69	771	380	391	4.2%	213	124	89
70-74	551	215	336	3.0%	(113)	(42)	(71)
75-79	500	127	373	2.7%	(70)	(102)	32
80-84	530	148	382	2.9%	125	29	96
85 +	577	288	288	3.1%	275	205	70
TOTALS	19,440	9,701	9,739	100.0%	2,079	1,067	1,012
PERCENT	100.0%	45.2%	54.8%	NA	100.0%	51.3%	48.7%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	723	3.7%
5-19	3,955	20.3%
20-34	3,884	20.0%
35-64	7,949	40.9%
65 +	2,929	15.1%
TOTALS	19,440	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	(11)	-1.5%
5-19	(34)	-0.9%
20-34	(15)	-0.4%
35-64	1,709	27.4%
65 +	430	17.2%
TOTALS	2,079	12.0%

*MOST LIKELY

POPROI

HARBORCREEK DATE: 10/11/94

POPULATION PROJECTION HIGH SERIES FIGURES ROUNDED

2000* POPULATION BY AGE/SEX

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	830	429	401	4.6%	32	14	18
5-9	992	514	478	5.5%	(128)	(46)	(82)
10-14	1,177	616	560	6.5%	4	14	(11)
15-19	1,900	1,091	809	9.2%	196	198	(2)
20-24	1,266	665	601	5.6%	26	(96)	122
25-29	1,425	676	749	7.9%	666	324	342
30-34	1,779	1,140	638	9.9%	682	605	76
35-39	1,175	610	564	6.5%	(89)	(18)	(72)
40-44	1,314	621	694	7.3%	263	116	148
45-49	1,398	726	672	7.8%	481	239	242
50-54	1,156	559	597	6.4%	491	248	243
55-59	941	496	445	5.2%	296	178	118
60-64	631	306	325	3.5%	(131)	(53)	(78)
65-69	548	236	312	3.0%	(100)	(85)	(15)
70-74	650	249	401	3.6%	126	21	105
75-79	610	234	377	3.4%	268	103	166
80-84	420	117	303	2.3%	197	52	145
85 +	311	83	228	1.7%	135	32	103
TOTALS	18,523	9,368	9,155	100.0%	3,415	1,846	1,569
PERCENT	100.0%	45.2%	54.8%	NA	100.0%	54.1%	45.9%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	830	4.5%
5-19	4,068	22.0%
20-34	4,470	24.1%
35-64	6,615	35.7%
65 +	2,539	13.7%
TOTALS	18,523	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	32	4.1%
5-19	71	1.8%
20-34	1,374	44.4%
35-64	1,311	24.7%
65 +	626	32.7%
TOTALS	3,415	22.6%

*HIGH SERIES POPROI

DATE: 10/11/94

FIGURES ROUNDED

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	888	459	429	4.2%	57	30	28
5-9	1,117	579	538	5.3%	126	65	61
10-14	1,233	642	591	5.8%	56	26	30
15-19	1,972	1,027	945	6.9%	72	(64)	136
20-24	1,527	808	719	4.8%	261	143	118
25-29	1,390	641	749	6.6%	(36)	(35)	(1)
30-34	1,440	816	623	6.8%	(339)	(324)	(15)
35-39	2,221	1,180	1,041	10.5%	1,046	570	476
40-44	2,142	1,332	810	10.1%	828	711	116
45-49	1,304	710	594	6.2%	(93)	(15)	(78)
50-54	1,455	691	764	6.9%	299	133	167
55-59	1,444	744	700	6.8%	503	248	255
60-64	1,108	553	555	5.2%	477	247	230
65-69	800	371	429	3.8%	252	135	117
70-74	537	213	324	2.5%	(112)	(35)	(77)
75-79	529	173	356	2.5%	(81)	(60)	(21)
80-84	525	128	397	2.5%	105	11	94
85 +	567	149	418	2.7%	256	66	190
TOTALS	22,201	11,219	10,981	100.0%	3,678	1,851	1,827
PERCENT	100.0%	50.5%	49.5%	NA	100.0%	50.3%	49.7%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	888	4.0%
5-19	4,322	19.5%
20-34	4,356	19.6%
35-64	9,675	43.6%
65 +	2,959	13.3%
TOTALS	22,201	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	57	6.9%
5-19	254	6.2%
20-34	(114)	-2.5%
35-64	3,061	46.3%
65 +	420	16.5%
TOTALS	3,678	19.9%

*HIGH SERIES

POPROI

HARBORCREEK

DATE: 10/11/94

A/G/A ZERO NET MIGRATION

YEAR	POP.	CHANGE	% CHNG
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	15,114	6	0.0%
2010*	14,831	(283)	-1.9%

A/G/A HIGHEST

YEAR	POP.	CHANGE	% CHNG
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	18,523	3,415	22.6%
2010*	22,201	3,678	19.9%

A/G/A MOST LIKELY

YEAR	POP.	CHANGE	% CHNG
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	17,360	2,252	14.9%
2010*	19,440	2,079	12.0%

A/G/A LOWEST

YEAR	POP.	CHANGE	% CHNG
1960	10,569	282	7.8%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	15,312	204	1.3%
2010*	14,938	(374)	-2.4%

APPENDIX B

GENERAL DATA OF THE BACKGROUND AND PROJECTION SERIES FOR THE HARBORCREEK TOWNSHIP PORTION OF THE ERIE COUNTY DEMOGRAPHIC ANALYSIS REPORT

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

HARBORCREEK 1970 POPULATION BY AGE/SEX

5-YEAR OF BIRTH	AGE OF COHORT	1970 TOTAL*	1970 MALE*	1970 FEMALE*	% OF TOTAL
1966-70	0-4	984	492	492	8.2%
1961-65	5-9	1,343	690	653	11.2%
1956-60	10-14	1,448	749	699	12.0%
1951-55	15-19	1,419	747	672	11.8%
1946-50	20-24	763	349	414	6.3%
1941-45	25-29	673	312	361	5.6%
1936-40	30-34	648	314	334	5.4%
1931-35	35-39	719	342	377	6.0%
1926-30	40-44	826	389	437	6.9%
1921-25	45-49	809	410	399	6.7%
1916-20	50-54	709	355	354	5.9%
1911-15	55-59	552	285	267	4.6%
1906-10	60-64	398	200	198	3.3%
1901-05	65-69	240	117	123	2.0%
1896-00	70-74	207	100	107	1.7%
1891-95	75-79	145	64	81	1.2%
1886-90	80-84	95	35	60	0.8%
1860-85	85 +	60	25	35	0.5%
	TOTALS	12,038	5,975	6,063	100.0%
	PERCENT	100.0%	49.6%	50.4%	NA

AGE OF COHORT	1970 TOTAL	1970 %
0-4	984	8.2%
5-19	4,210	35.0%
20-34	2,084	17.3%
35-64	4,013	33.3%
65 +	747	6.2%
TOTALS	12,038	100.0%

YEAR	POP.	CHANGE	% CHNG
1900	1,687	NA	NA
1910	2,074	387	22.9%
1920**	2,212	138	6.7%
1930	2,890	678	30.7%
1940	3,602	712	24.6%
1950	7,475	3,873	107.5%
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1975	13,341	1,303	10.8%
1980	14,644	1,303	9.8%
1985	14,876	232	1.6%
1990	15,108	232	1.6%

SOURCE: U.S. CENSUS 1970

*ERIE CO. POPULATION ANALYSIS ('72).

** WELSEYVILLE B. FROM MILLCREEK & HARBORCREEK - 1912

POPROI

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

HARBORCREEK 1980 POPULATION BY AGE/SEX

AGE OF COHORT	1980 TOTAL	1980 MALE	1980 FEMALE	% OF TOTAL	1970-80 CHANGE TOTAL	1970-80 CHANGE MALE	1970-80 CHANGE FEMALE
0-4	1,021	528	493	7.0%	37	36	1
5-9	1,148	595	553	7.8%	(195)	(95)	(100)
10-14	1,362	686	676	9.3%	(86)	(63)	(23)
15-19	1,859	973	886	12.7%	440	226	214
20-24	1,178	632	546	8.0%	415	283	132
25-29	1,114	531	583	7.6%	441	219	222
30-34	1,009	491	518	6.9%	361	177	184
35-39	978	508	470	6.7%	259	166	93
40-44	729	342	387	5.0%	(97)	(47)	(50)
45-49	745	371	374	5.1%	(64)	(39)	(25)
50-54	853	404	449	5.8%	144	49	95
55-59	780	392	388	5.3%	228	107	121
60-64	633	328	305	4.3%	235	128	107
65-69	438	199	239	3.0%	198	82	116
70-74	315	130	185	2.2%	108	30	78
75-79	213	80	133	1.5%	68	16	52
80-84	151	48	103	1.0%	56	13	43
85 +	118	39	79	0.8%	58	14	44
TOTALS	14,644	7,277	7,367	100.0%	2,606	1,302	1,304
PERCENT	100.0%	49.7%	50.3%	NA	100.0%	50.0%	50.0%

AGE OF COHORT	1980 TOTAL	1980 %
0-4	1,021	7.0%
5-19	4,369	29.8%
20-34	3,301	22.5%
35-64	4,718	32.2%
65 +	1,235	8.4%
TOTALS	14,644	100.0%

AGE OF COHORT	1970-80 CHANGE	1970-80 % CHNG
0-4	37	3.8%
5-19	159	3.8%
20-34	1,217	58.4%
35-64	705	17.6%
65 +	488	65.3%
TOTALS	2,606	21.6%

SOURCE: U.S. CENSUS 1980 POPROI

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

HARBORCREEK TOWNSHIP 1990 POPULATION BY AGE/SEX

AGE OF COHORT	1990 TOTAL	1990 MALE	1990 FEMALE	% OF TOTAL	1980-90 CHANGE TOTAL	1980-90 CHANGE MALE	1980-90 CHANGE FEMALE
0-4	798	415	383	5.3%	(223)	(113)	(110)
5-9	1,120	560	560	7.4%	(28)	(35)	7
10-14	1,173	602	571	7.8%	(189)	(84)	(105)
15-19	1,704	893	811	11.3%	(155)	(80)	(75)
20-24	1,240	761	479	8.2%	62	129	(67)
25-29	759	352	407	5.0%	(355)	(179)	(176)
30-34	1,097	535	562	7.3%	88	44	44
35-39	1,264	628	636	8.4%	286	120	166
40-44	1,051	505	546	7.0%	322	163	159
45-49	917	487	430	6.1%	172	116	56
50-54	665	311	354	4.4%	(188)	(93)	(95)
55-59	645	318	327	4.3%	(135)	(74)	(61)
60-64	762	359	403	5.0%	129	31	98
65-69	648	321	327	4.3%	210	122	88
70-74	524	228	296	3.5%	209	98	111
75-79	342	131	211	2.3%	129	51	78
80-84	223	65	158	1.5%	72	17	55
85 +	176	51	125	1.2%	58	12	46
TOTALS	15,108	7,522	7,586	100.0%	464	245	219
PERCENT	100.0%	49.8%	50.2%	NA	100.0%	52.8%	47.2%

AGE OF COHORT	1990 TOTAL	1990 %
0-4	798	5.3%
5-19	3,997	26.5%
20-34	3,096	20.5%
35-64	5,304	35.1%
65 +	1,913	12.7%
TOTALS	15,108	100.0%

AGE OF COHORT	1980-90 CHANGE	1980-90 % CHNG
0-4	(223)	-21.8%
5-19	(372)	-8.5%
20-34	(205)	-6.2%
35-64	586	12.4%
65 +	678	54.9%
TOTALS	464	3.2%

SOURCE: U.S. CENSUS 1990 POPROI

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

YEAR	NUMBER BIRTHS	BIRTH RATE*	NUMBER DEATHS	DEATH RATE*	BIRTHS-DEATHS	% DEATHS OF BIRTHS
1970	166	13.8%	83	6.9%	83	50.0%
1971**	177	14.7%	80	6.6%	97	45.2%
1972**	144	12.0%	86	7.1%	58	59.7%
1973**	136	11.3%	79	6.6%	57	58.1%
1974**	151	12.5%	88	7.3%	63	58.3%
1975**	150	11.2%	90	6.7%	60	60.0%
1976**	163	12.2%	100	7.5%	63	61.3%
1977**	152	11.4%	77	5.8%	75	50.7%
1978**	173	13.0%	86	6.4%	87	49.7%
1979**	144	10.8%	90	6.7%	54	62.5%
1980	156	10.7%	101	6.9%	55	64.7%
1981**	163	11.1%	92	6.3%	71	56.4%
1982**	155	10.6%	97	6.6%	58	62.6%
1983**	155	10.6%	99	6.8%	56	63.9%
1984**	166	11.3%	123	8.4%	43	74.1%
1985**	141	9.5%	116	7.8%	25	82.3%
1986**	110	7.4%	122	8.2%	(12)	110.9%
1987**	94	6.3%	115	7.7%	(21)	122.3%
1988**	103	6.9%	115	7.7%	(12)	111.7%
1989**	126	8.5%	117	7.9%	9	92.9%
1990	109	7.2%	113	7.5%	(4)	103.7%
1970-89	2,925	NA	1,956	NA	969	66.9%

	1970-79 AVG. BIRTHS	1980-89 AVG. BIRTHS	%CHANG AVG. BIRTHS	1970-89 AVG. BIRTHS	AVG. DEATHS/ BIRTHS
	155.6	136.9	-12.0%	146.3	66.9%
	DEATHS	DEATHS	DEATHS	DEATHS	
	85.9	109.7	27.7%	97.8	

	NATURAL CHANGE CHANGE	% CHNG		MIGRATION 1970-90 CHANGE	RATE
1970-79	697	5.8%	1970-80	1,909	15.9%
1980-89	272	1.9%	1980-90	192	1.3%

*STATE DATA CENTER (RATES PER 1,000)

**RATES ARE BASED ON A/G/A ESTIMATED POPULATION POPROI

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5-YEAR SURVIVAL RATES

AGE OF COHORT BIRTHS	MALE RATES*	FEMALE RATES*
	0.9853	0.9879
0-4	0.9975	0.9979
5-9	0.9988	0.9991
10-14	0.9964	0.9988
15-19	0.9925	0.9978
20-24	0.9912	0.9971
25-29	0.9915	0.9965
30-34	0.9902	0.9953
35-39	0.9859	0.9924
40-44	0.9776	0.9874
45-49	0.9633	0.9802
50-54	0.9424	0.9699
55-59	0.9099	0.953
60-64	0.8623	0.9275
65-69	0.7975	0.889
70-74	0.7134	0.8304
75-79	0.6109	0.7386
80-84	0.4896	0.6061
85 +	0.319	0.3916

1990 FERTILITY RATE***

COHORT	MALE	FEMALE
0-4	0.101441	0.097463

FEMALE COHORT	1990 BIRTHS	1990 %	FERT. RATE#
10-14	0	0.0%	0.0%
15-19	10	9.2%	12.3%
20-24	27	24.8%	56.4%
25-29	34	31.2%	83.5%
30-34	27	24.8%	48.0%
35-39	9	8.3%	14.2%
40-44	2	1.8%	3.7%
45-49	0	0.0%	0.0%
UNKWN	0	0.0%	0.0%
TOTAL	109	100.0%	24.5%

AGE OF COHORT	1990 DEATHS	% 1990 DEATHS	DEATH RATE#
0-4	2	1.8%	2.5%
5-19	1	0.9%	0.4%
20-24	1	0.9%	0.3%
25-34	1	0.9%	0.5%
35-44	3	2.7%	1.3%
45-54	6	5.3%	3.8%
55-64	13	11.5%	9.2%
65-74	28	24.8%	23.9%
75-84	34	30.1%	60.2%
85+	24	21.2%	136.4%
TOTAL	113	100.0%	7.5%

#PER 1,000 FERTILE FEMALES

AGE COHORT	1970 FEMALE	1980 FEMALE	1990 FEMALE	2000** FEMALE	2010** FEMALE	1970-90 % CHNG	1990-10 % CHNG
5-39	3,510	4,232	4,026	3,586	3,448	14.7%	-14.4%
10-44	3,294	4,066	4,012	3,751	3,553	21.8%	-11.4%

*CAPP POPULATION PROGRAM (KLOSTERMAN)
**ZERO NET MIGRATION
***SMALL TOWN PLANNING HANDBOOK FORMULA

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POPULATION PROJECTION *

HARBORCREEK 1995* POPULATION BY AGE/SEX

AGE OF COHORT	1995 TOTAL	1995 MALE	1995 FEMALE	% OF TOTAL	1990-95 CHANGE TOTAL	1990-95 CHANGE MALE	1990-95 CHANGE FEMALE
0-4	798	407	391	5.3%	(0)	(8)	8
5-9	796	414	382	5.3%	(324)	(146)	(178)
10-14	1,119	559	559	7.4%	(54)	(43)	(12)
15-19	1,170	600	570	7.7%	(534)	(293)	(241)
20-24	1,696	886	809	11.2%	456	125	330
25-29	1,232	754	478	8.1%	473	402	71
30-34	755	349	406	5.0%	(342)	(186)	(156)
35-39	1,089	530	559	7.2%	(175)	(98)	(77)
40-44	1,250	619	631	8.3%	199	114	85
45-49	1,033	494	539	6.8%	116	7	109
50-54	891	469	421	5.9%	226	158	67
55-59	636	293	343	4.2%	(9)	(25)	16
60-64	601	289	312	4.0%	(161)	(70)	(91)
65-69	683	310	374	4.5%	35	(11)	47
70-74	547	256	291	3.6%	23	28	(5)
75-79	408	163	246	2.7%	66	32	35
80-84	236	80	156	1.6%	13	15	(2)
85 +	193	48	145	1.3%	17	(3)	20
TOTALS	15,133	7,520	7,612	100.0%	25	(2)	26
PERCENT	100.0%	49.7%	50.3%	NA	100.0%	-7.3%	107.3%

AGE OF COHORT	1995 TOTAL	1995 %
0-4	798	5.3%
5-19	3,085	20.4%
20-34	3,682	24.3%
35-64	5,500	36.3%
65 +	2,067	13.7%
TOTALS	15,133	100.0%

AGE OF COHORT	1990-95 CHANGE	1990-95 % CHNG
0-4	0	0.0%
5-19	(912)	-22.8%
20-34	586	18.9%
35-64	196	3.7%
65 +	154	8.1%
TOTALS	25	0.2%

* ZERO NET MIGRATION

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POPULATION PROJECTION*

HARBORCREEK 2000* POPULATION BY AGE/SEX

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1995-00 CHANGE TOTAL	1995-00 CHANGE MALE	1995-00 CHANGE FEMALE
0-4	801	408	392	5.3%	3	1	1
5-9	796	406	390	5.3%	0	(8)	8
10-14	795	413	382	5.3%	(324)	(146)	(178)
15-19	1,116	557	559	7.4%	(54)	(43)	(11)
20-24	1,164	595	569	7.7%	(531)	(291)	(240)
25-29	1,685	879	807	11.2%	453	124	329
30-34	1,224	748	476	8.1%	469	399	70
35-39	749	346	404	5.0%	(340)	(184)	(156)
40-44	1,077	522	555	7.1%	(173)	(97)	(76)
45-49	1,228	605	623	8.1%	196	112	84
50-54	1,004	476	528	6.6%	113	6	107
55-59	851	442	409	5.6%	214	149	65
60-64	594	267	327	3.9%	(7)	(23)	16
65-69	539	250	289	3.6%	(145)	(60)	(85)
70-74	579	247	332	3.8%	32	(9)	42
75-79	424	183	241	2.8%	16	20	(4)
80-84	281	99	182	1.9%	45	19	26
85 +	206	55	151	1.4%	13	6	6
TOTALS	15,114	7,497	7,617	100.0%	(18)	(23)	5
PERCENT	100.0%	49.6%	50.4%	NA	100.0%	125.1%	-25.1%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	801	5.3%
5-19	2,708	17.9%
20-34	4,074	27.0%
35-64	5,504	36.4%
65 +	2,028	13.4%
TOTALS	15,114	100.0%

AGE OF COHORT	2000-05 CHANGE	2000-05 % CHNG
0-4	3	0.3%
5-19	(378)	-12.2%
20-34	392	10.6%
35-64	4	0.1%
65 +	(39)	-1.9%
TOTALS	(18)	-0.1%

* ZERO NET MIGRATION

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK 2005* POPULATION BY AGE/SEX

AGE OF COHORT	2005* TOTAL	2005* MALE	2005* FEMALE	% OF TOTAL	2000-05 CHANGE TOTAL	2000-05 CHANGE MALE	2000-05 CHANGE FEMALE
0-4	746	381	366	5.0%	(55)	(28)	(27)
5-9	799	407	392	5.3%	3	1	1
10-14	795	405	390	5.3%	0	(8)	8
15-19	793	412	381	5.3%	(323)	(145)	(177)
20-24	1,111	553	558	7.4%	(54)	(42)	(11)
25-29	1,158	590	567	7.7%	(528)	(288)	(239)
30-34	1,675	871	804	11.2%	451	123	328
35-39	1,214	741	474	8.1%	465	395	70
40-44	741	341	401	4.9%	(336)	(182)	(155)
45-49	1,059	511	548	7.1%	(170)	(95)	(75)
50-54	1,194	583	611	8.0%	190	107	82
55-59	961	448	513	6.4%	110	6	104
60-64	792	402	390	5.3%	198	136	62
65-69	533	230	303	3.6%	(5)	(20)	14
70-74	456	199	257	3.0%	(123)	(48)	(75)
75-79	452	176	276	3.0%	28	(7)	35
80-84	290	112	178	1.9%	9	12	(3)
85 +	235	66	169	1.6%	30	12	18
TOTALS	15,004	7,428	7,577	100.0%	(110)	(70)	(40)
PERCENT	100.0%	49.5%	50.5%	NA	100.0%	63.4%	36.6%

AGE OF COHORT	2005* TOTAL	2005* %
0-4	746	5.0%
5-19	2,388	15.9%
20-34	3,943	26.3%
35-64	5,961	39.7%
65 +	1,967	13.1%
TOTALS	15,004	100.0%

AGE OF COHORT	2000-05 CHANGE	2000-05 % CHNG
0-4	(55)	-6.8%
5-19	(320)	-11.8%
20-34	(130)	-3.2%
35-64	457	8.3%
65 +	(62)	-3.0%
TOTALS	(110)	-0.7%

* ZERO NET MIGRATION POPROI

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POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2005-10 CHANGE TOTAL	2005-10 CHANGE MALE	2005-10 CHANGE FEMALE
0-4	713	364	350	4.8%	(33)	(17)	(16)
5-9	744	380	365	5.0%	(55)	(28)	(27)
10-14	798	407	391	5.4%	3	1	1
15-19	793	404	389	5.3%	0	(8)	8
20-24	789	409	381	5.3%	(321)	(144)	(177)
25-29	1,104	548	556	7.4%	(53)	(42)	(11)
30-34	1,151	585	565	7.8%	(525)	(286)	(239)
35-39	1,663	862	800	11.2%	449	122	327
40-44	1,200	730	470	8.1%	459	389	70
45-49	729	333	396	4.9%	(330)	(178)	(153)
50-54	1,029	492	537	6.9%	(165)	(91)	(74)
55-59	1,142	549	592	7.7%	181	101	80
60-64	896	408	488	6.0%	104	6	99
65-69	708	347	361	4.8%	175	117	58
70-74	453	183	270	3.1%	(3)	(16)	13
75-79	355	142	213	2.4%	(97)	(34)	(63)
80-84	311	108	204	2.1%	22	(4)	26
85 +	250	76	174	1.7%	15	10	5
TOTALS	14,831	7,327	7,504	100.0%	(174)	(101)	(73)
PERCENT	100.0%	49.4%	50.6%	NA	100.0%	58.0%	42.0%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	713	4.8%
5-19	2,336	15.8%
20-34	3,044	20.5%
35-64	6,659	44.9%
65 +	2,078	14.0%
TOTALS	14,831	100.0%

AGE OF COHORT	2005-10 CHANGE	2005-10 % CHNG
0-4	(33)	-4.4%
5-19	(52)	-2.2%
20-34	(899)	-22.8%
35-64	698	11.7%
65 +	112	5.7%
TOTALS	(174)	-1.2%

* ZERO NET MIGRATION

POPROI

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HARBORCREEK TOWNSHIP 1990 TO 2010* POPULATION CHANGE

AGE OF COHORT	1990-10 CHANGE TOTAL	1990-10 CHANGE MALE	1990-10 CHANGE FEMALE	1990-10 % CHNG TOTAL	1990-10 % CHNG MALE	1990-10 % CHNG FEMALE
0-4	(85)	(51)	(33)	-10.6%	-12.3%	-8.7%
5-9	(376)	(180)	(195)	-33.5%	-32.2%	-34.8%
10-14	(375)	(195)	(180)	-32.0%	-32.4%	-31.5%
15-19	(911)	(489)	(422)	-53.4%	-54.8%	-52.0%
20-24	(451)	(352)	(98)	-36.3%	-46.3%	-20.6%
25-29	345	196	149	45.5%	55.8%	36.6%
30-34	54	50	3	4.9%	9.4%	0.6%
35-39	399	234	164	31.5%	37.3%	25.8%
40-44	149	225	(76)	14.2%	44.6%	-13.9%
45-49	(188)	(154)	(34)	-20.5%	-31.6%	-8.0%
50-54	364	181	183	54.8%	58.2%	51.8%
55-59	497	231	265	77.0%	72.8%	81.2%
60-64	134	49	85	17.6%	13.6%	21.2%
65-69	60	26	34	9.3%	8.1%	10.5%
70-74	(71)	(45)	(26)	-13.5%	-19.6%	-8.9%
75-79	13	11	2	3.9%	8.4%	1.1%
80-84	88	43	46	39.6%	65.5%	29.0%
85 +	74	25	49	42.1%	48.4%	39.5%
TOTALS	(277)	(195)	(82)	-1.8%	-2.6%	-1.1%
PERCENT	100.0%	70.3%	29.7%	100.0%	141.3%	59.1%

AGE OF COHORT	1990-10 TOTAL	1990-10 %**
0-4	(85)	30.5%
5-19	(1,661)	598.7%
20-34	(52)	18.7%
35-64	1,355	-488.4%
65 +	165	-59.5%
TOTALS	(277)	100.0%

AGE OF COHORT	1990-10 CHANGE	1990-10 % CHNG
0-4	(85)	-10.6%
5-19	(1,661)	-41.6%
20-34	(52)	-1.7%
35-64	1,355	25.5%
65 +	165	8.6%
TOTALS	(277)	-1.8%

*ZERO NET MIGRATION
**REPRESENTS A PERCENTAGE OF THE TOTAL CHANGE POPROI

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AGE CHARACTERISTICS

AGE OF COHORT	1970 TOTAL	1970 %
0-4	984	8.2%
5-19	4,210	35.0%
20-34	2,084	17.3%
35-64	4,013	33.3%
65 +	747	6.2%
TOTALS	12,038	100.0%

AGE OF COHORT	1980 TOTAL	1980 %
0-4	1,021	7.0%
5-19	4,369	29.8%
20-34	3,301	22.5%
35-64	4,718	32.2%
65 +	1,235	8.4%
TOTALS	14,644	100.0%

AGE OF COHORT	1990 TOTAL	1990 %
0-4	798	5.3%
5-19	3,997	26.5%
20-34	3,096	20.5%
35-64	5,304	35.1%
65 +	1,913	12.7%
TOTALS	15,108	100.0%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	801	5.3%
5-19	2,708	17.9%
20-34	4,074	27.0%
35-64	5,504	36.4%
65 +	2,028	13.4%
TOTALS	15,114	100.0%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	713	4.8%
5-19	2,336	15.8%
20-34	3,044	20.5%
35-64	6,659	44.9%
65 +	2,078	14.0%
TOTALS	14,831	100.0%

*ZERO NET MIGRATION

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AGE BY SEX

AGE OF COHORT	1970 TOTAL	1970 %	1970 MALE	1970 %	1970 FEMALE	1970 %
0-14	3,775	31.4%	1,931	51.2%	1,844	48.8%
15-24	2,182	18.1%	1,096	50.2%	1,086	49.8%
25-34	1,321	11.0%	626	47.4%	695	52.6%
35-44	1,545	12.8%	731	47.3%	814	52.7%
45-54	1,518	12.6%	765	50.4%	753	49.6%
55-64	950	7.9%	485	51.1%	465	48.9%
65-74	447	3.7%	217	48.5%	230	51.5%
75+	300	2.5%	124	41.3%	176	58.7%
TOTALS	12,038	100.0%	5,975	49.6%	6,063	50.4%

AGE OF COHORT	1980 TOTAL	1980 %	1980 MALE	1980 %	1980 FEMALE	1980 %
0-14	3,531	24.1%	1,809	51.2%	1,722	48.8%
15-24	3,037	20.7%	1,605	52.8%	1,432	47.2%
25-34	2,123	14.5%	1,022	48.1%	1,101	51.9%
35-44	1,707	11.7%	850	49.8%	857	50.2%
45-54	1,598	10.9%	775	48.5%	823	51.5%
55-64	1,413	9.6%	720	51.0%	693	49.0%
65-74	753	5.1%	329	43.7%	424	56.3%
75+	482	3.3%	167	34.6%	315	65.4%
TOTALS	14,644	100.0%	7,277	49.7%	7,367	50.3%

AGE OF COHORT	1990 TOTAL	1990 %	1990 MALE	1990 %	1990 FEMALE	1990 %
0-14	3,091	20.5%	1,577	51.0%	1,514	49.0%
15-24	2,944	19.5%	1,654	56.2%	1,290	43.8%
25-34	1,856	12.3%	887	47.8%	969	52.2%
35-44	2,315	15.3%	1,133	48.9%	1,182	51.1%
45-54	1,582	10.5%	798	50.4%	784	49.6%
55-64	1,407	9.3%	677	48.1%	730	51.9%
65-74	1,172	7.8%	549	46.8%	623	53.2%
75+	741	4.9%	247	33.3%	494	66.7%
TOTALS	15,108	100.0%	7,522	49.8%	7,586	50.2%

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AGE BY SEX

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
0-14	2,392	15.8%	1,228	51.3%	1,164	48.7%
15-24	2,281	15.1%	1,153	50.5%	1,128	49.5%
25-34	2,909	19.2%	1,626	55.9%	1,283	44.1%
35-44	1,827	12.1%	868	47.5%	959	52.5%
45-54	2,233	14.8%	1,081	48.4%	1,152	51.6%
55-64	1,445	9.6%	709	49.1%	736	50.9%
65-74	1,118	7.4%	496	44.4%	621	55.6%
75+	911	6.0%	337	37.0%	574	63.0%
TOTALS	15,114	100.0%	7,497	49.6%	7,617	50.4%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
0-14	2,256	15.2%	1,150	51.0%	1,106	49.0%
15-24	1,583	10.7%	813	51.4%	770	48.6%
25-34	2,255	15.2%	1,133	50.3%	1,121	49.7%
35-44	2,863	19.3%	1,593	55.6%	1,270	44.4%
45-54	1,758	11.9%	825	46.9%	933	53.1%
55-64	2,038	13.7%	957	47.0%	1,081	53.0%
65-74	1,161	7.8%	530	45.7%	631	54.3%
75+	917	6.2%	325	35.5%	592	64.5%
TOTALS	14,831	100.0%	7,327	49.4%	7,504	50.6%

*ZERO NET MIGRATION

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OLDER CITIZENS

AGE OF COHORT	1970 TOTAL	1970 %	1970 MALE	1970 %	1970 FEMALE	1970 %
65-69	240	32.1%	117	48.8%	123	51.3%
70-74	207	27.7%	100	48.3%	107	51.7%
75-79	145	19.4%	64	44.1%	81	55.9%
80-84	95	12.7%	35	36.8%	60	63.2%
85 +	60	8.0%	25	41.7%	35	58.3%
TOTALS	747	100.0%	341	45.6%	406	54.4%

AGE OF COHORT	1980 TOTAL	1980 %	1980 MALE	1980 %	1980 FEMALE	1980 %
65-69	438	35.5%	199	45.4%	239	54.6%
70-74	315	25.5%	130	41.3%	185	58.7%
75-79	213	17.2%	80	37.6%	133	62.4%
80-84	151	12.2%	48	31.8%	103	68.2%
85 +	118	9.6%	39	33.1%	79	66.9%
TOTALS	1,235	100.0%	496	40.2%	739	59.8%

AGE OF COHORT	1990 TOTAL	1990 %	1990 MALE	1990 %	1990 FEMALE	1990 %
65-69	648	33.9%	321	49.5%	327	50.5%
70-74	524	27.4%	228	43.5%	296	56.5%
75-79	342	17.9%	131	38.3%	211	61.7%
80-84	223	11.7%	65	29.1%	158	70.9%
85 +	176	9.2%	51	29.0%	125	71.0%
TOTALS	1,913	100.0%	796	41.6%	1,117	58.4%

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

OLDER CITIZENS

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
65-69	539	26.6%	250	46.3%	289	53.7%
70-74	579	28.6%	247	42.6%	332	57.4%
75-79	424	20.9%	183	43.1%	241	56.9%
80-84	281	13.8%	99	35.4%	182	64.6%
85 +	206	10.1%	55	26.5%	151	73.5%
TOTALS	2,028	100.0%	833	41.1%	1,195	58.9%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
65-69	708	34.1%	347	49.0%	361	51.0%
70-74	453	21.8%	183	40.5%	270	59.5%
75-79	355	17.1%	142	39.9%	213	60.1%
80-84	311	15.0%	108	34.6%	204	65.4%
85 +	250	12.0%	76	30.3%	174	69.7%
TOTALS	2,078	100.0%	856	41.2%	1,223	58.8%

*ZERO NET MIGRATION

REPORT A HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION CHANGE 1920-2010

YEAR	POP.	CHANGE	% CHNG	YEAR	POP.	CHANGE	% CHNG
1920	2,212	138	6.7%	1920	2,212	138	6.7%
1930	2,890	678	30.7%	1930	2,890	678	30.7%
1940	3,602	712	24.6%	1940	3,602	712	24.6%
1950	7,475	3,873	107.5%	1950	7,475	3,873	107.5%
1960	10,569	3,094	41.4%	1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%	1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%	1980	14,644	2,606	21.6%
1990	15,108	464	3.2%	1990	15,108	464	3.2%
2000*	15,114	6	0.0%	2000@	18,134	3,026	20.0%
2010*	14,831	(284)	-1.9%	2010@	21,765	3,632	20.0%
1960-10	14,831	4,262	40.3%	1960-10	21,765	11,196	105.9%

EX. OF TOTAL POPULATIONS IF PAST % CHANGES WERE TO OCCURE AGAIN.

YEAR	1930-40 % CHNG TOTAL	1940-50 % CHNG TOTAL	1950-60 % CHNG TOTAL	1960-70 % CHNG TOTAL	1970-80 % CHNG TOTAL	1980-90 % CHNG TOTAL	TOTAL@
2000	18,830	31,353	21,361	17,208	18,379	15,587	18,134
2010	23,469	65,064	30,203	19,600	22,357	16,081	21,765

YEAR	1920-40 % CHNG TOTAL	1930-50 % CHNG TOTAL	1940-60 % CHNG TOTAL	1950-70 % CHNG TOTAL	1960-80 % CHNG TOTAL	1970-90 % CHNG TOTAL	TOTAL**
2010	24,602	39,077	44,330	24,330	20,933	18,961	21,408

RANGE OF POPULATION CHANGES

	2000	2010	RANGE AMOUNT	RANGE %
LOWEST	15,587	16,081		
HIGHEST	31,353	65,064	49,477	327.5%

*ZERO NET MIGRATION
@1950 - 1990 AVERAGE DECENIAL PERCENTAGE CHANGE
**1950-1990 20 YEAR AVERAGE PERCENTAGE CHANGE
END OF REPORT A POPROI

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

REPORT B IS USED TO DETERMINE THE 1980 - 1990 NET MIGRATION RATES.

5-YEAR SURVIVAL RATE

AGE OF COHORT BIRTHS	MALE RATES*	MALE RATES*
0-4	0.9853	0.9879
5-9	0.9975	0.9979
10-14	0.9988	0.9991
15-19	0.9964	0.9988
20-24	0.9925	0.9978
25-29	0.9912	0.9971
30-34	0.9915	0.9965
35-39	0.9902	0.9953
40-44	0.9859	0.9924
45-49	0.9776	0.9874
50-54	0.9633	0.9802
55-59	0.9424	0.9699
60-64	0.9099	0.953
65-69	0.8623	0.9275
70-74	0.7975	0.889
75-79	0.7134	0.8304
80-84	0.6109	0.7386
85 +	0.4896	0.6061
	0.319	0.3916

YEAR	BIRTHS	BIRTH RATE#	DEATHS	DEATH RATE#
1980	156	10.7%	101	6.9%
1981	163	11.1%	92	6.3%
1982	155	10.6%	97	6.6%
1983	155	10.6%	99	6.8%
1984	166	11.3%	123	8.4%
1985	141	9.5%	116	7.8%
1986	110	7.4%	122	8.2%
1987	94	6.3%	115	7.7%
1988	103	6.9%	115	7.7%
1989	126	8.5%	117	7.9%
TOTAL	1,369	NA	1,097	NA

1980 - 1990 NATURAL CHANGE

	CHANGE	% CHNG
1980-90	272	1.9%

1980 TO 1990 NET MIGRATION

	NUMBER	RATE
1980-90	192	1.3%

1980 FERTILITY RATE@

COHORT	MALE	FEMALE
0-4	0.128064	0.123042

FERTILE FEMALES

AGE COHORT	1970 FEMALE	1980 FEMALE	1990** FEMALE	2000*** FEMALE	2010*** FEMALE	1980-90 % CHNG	1990-00 % CHNGx
5-39	3,510	4,232	4,219	3,417	3,103	-0.3%	-15.1%
10-44	3,294	4,066	4,231	3,571	3,242	4.1%	-11.0%

*CAPP

**PROJECTED BASED ON 1980 ZERO NET MIGRATION

***PROJECTED BASED ON 1980 - 1990 NET MIGRATION RATE

@SMALL TOWN PLANNING HANDBOOK FORMULA

#PER 1,000 x1990 ACTUAL NUMBER OF FEMALES POPROI

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS TO FIND MIGRATION RATES*

HARBORCREEK TOWNSHIP 1985* POPULATION BY AGE/SEX

AGE OF COHORT	1985* TOTAL	1985* MALE	1985* FEMALE	% OF TOTAL	1980-85 CHANGE TOTAL	1980-85 CHANGE MALE	1980-85 CHANGE FEMALE
0-4	1,021	521	500	6.8%	0	(7)	7
5-9	1,019	527	492	6.8%	(129)	(68)	(61)
10-14	1,147	594	553	7.6%	(215)	(92)	(123)
15-19	1,359	684	675	9.0%	(500)	(289)	(211)
20-24	1,850	966	884	12.3%	672	334	338
25-29	1,171	626	544	7.8%	57	95	(39)
30-34	1,107	526	581	7.3%	98	35	63
35-39	1,002	486	516	6.6%	24	(22)	46
40-44	967	501	466	6.4%	238	159	79
45-49	716	334	382	4.7%	(29)	(37)	8
50-54	724	357	367	4.8%	(129)	(47)	(82)
55-59	816	381	435	5.4%	36	(11)	47
60-64	726	357	370	4.8%	93	29	65
65-69	566	283	283	3.8%	128	84	44
70-74	371	159	212	2.5%	56	29	27
75-79	246	93	154	1.6%	33	13	21
80-84	147	49	98	1.0%	(4)	1	(5)
85 +	129	36	93	0.9%	11	(3)	14
TOTALS	15,085	7,479	7,606	100.0%	441	202	239
PERCENT	100.0%	49.6%	50.4%	NA	100.0%	45.8%	54.2%

AGE OF COHORT	1985* TOTAL	1985* %
0-4	1,021	6.8%
5-19	3,524	23.4%
20-34	4,128	27.4%
35-64	4,952	32.8%
65 +	1,460	9.7%
TOTALS	15,085	100.0%

AGE OF COHORT	1980-85 CHANGE	1980-85 % CHNG
0-4	0	0.0%
5-19	(845)	-19.3%
20-34	827	25.1%
35-64	234	5.0%
65 +	225	18.2%
TOTALS	441	3.0%

*1980 ZERO NET MIGRATION

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS TO FIND MIGRATION RATES*

HARBORCREEK TOWNSHIP 1990* POPULATION BY AGE/SEX

AGE OF COHORT	1990* TOTAL	1990* MALE	1990* FEMALE	% OF TOTAL	1985-90 CHANGE TOTAL	1985-90 CHANGE MALE	1985-90 CHANGE FEMALE
0-4	1,063	542	521	6.9%	42	21	20
5-9	1,019	519	499	6.6%	0	(7)	7
10-14	1,018	526	492	6.6%	(129)	(68)	(61)
15-19	1,144	592	552	7.4%	(215)	(91)	(123)
20-24	1,352	678	674	8.7%	(498)	(287)	(210)
25-29	1,839	957	881	11.9%	668	331	337
30-34	1,164	621	543	7.5%	56	95	(38)
35-39	1,100	521	578	7.1%	98	35	63
40-44	991	479	512	6.4%	24	(22)	45
45-49	950	490	461	6.1%	234	155	78
50-54	697	322	375	4.5%	(27)	(35)	8
55-59	692	337	356	4.5%	(124)	(44)	(80)
60-64	761	346	415	4.9%	35	(10)	45
65-69	651	308	343	4.2%	85	25	60
70-74	477	226	251	3.1%	106	67	39
75-79	290	113	176	1.9%	43	20	23
80-84	170	57	113	1.1%	23	8	15
85 +	131	35	96	0.8%	2	(1)	3
TOTALS	15,507	7,670	7,837	100.0%	422	191	231
PERCENT	100.0%	49.5%	50.5%	NA	100.0%	45.3%	54.7%

AGE OF COHORT	1990* TOTAL	1990* %
0-4	1,063	6.9%
5-19	3,180	20.5%
20-34	4,354	28.1%
35-64	5,191	33.5%
65 +	1,719	11.1%
TOTALS	15,507	100.0%

AGE OF COHORT	1985-90 CHANGE	1985-90 % CHNG
0-4	42	4.1%
5-19	(344)	-9.8%
20-34	226	5.5%
35-64	239	4.8%
65 +	259	17.8%
TOTALS	422	2.8%

*1980 ZERO NET MIGRATION POPROI

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

DIFFERENCE BETWEEN 1990 ACTUAL POPULATION & 1990 PROJECTED POPUL.

AGE OF COHORT	1990-90* DIFF. TOTAL	1990-90* DIFF. MALE	1990-90* DIFF. FEMALE	1990-90* % DIFF. TOTAL	1990-90* % DIFF. MALE	1990-90* % DIFF. FEMALE
0-4	(265)	(127)	(138)	-24.9%	-23.4%	-26.4%
5-9	101	41	61	9.9%	7.8%	12.2%
10-14	155	76	79	15.3%	14.4%	16.2%
15-19	560	301	259	49.0%	50.8%	47.0%
20-24	(112)	83	(195)	-8.3%	12.2%	-28.9%
25-29	(1,080)	(605)	(474)	-58.7%	-63.2%	-53.8%
30-34	(67)	(86)	19	-5.7%	-13.9%	3.6%
35-39	164	107	58	15.0%	20.5%	10.0%
40-44	60	26	34	6.1%	5.4%	6.7%
45-49	(33)	(3)	(31)	-3.5%	-0.5%	-6.6%
50-54	(32)	(11)	(21)	-4.5%	-3.4%	-5.5%
55-59	(47)	(19)	(29)	-6.8%	-5.6%	-8.0%
60-64	1	13	(12)	0.1%	3.6%	-2.9%
65-69	(3)	13	(16)	-0.4%	4.4%	-4.7%
70-74	47	2	45	9.8%	1.1%	17.7%
75-79	52	18	35	18.1%	15.7%	19.6%
80-84	53	8	45	31.1%	14.7%	39.2%
85 +	45	16	29	33.8%	44.1%	30.1%
TOTALS	(399)	(148)	(251)	-2.6%	-1.9%	-3.2%
PERCENT	100.0%	37.1%	62.9%	100.0%	75.1%	124.4%

AGE OF COHORT	1990-90* CHANGE TOTAL	1990-90* CHANGE %**
0-4	(265)	66.3%
5-19	817	-204.6%
20-34	(1,258)	315.2%
35-64	113	-28.3%
65 +	194	-48.6%
TOTALS	(399)	100.0%

AGE OF COHORT	1990-90* CHANGE	1990-90* % CHNG
0-4	(265)	-33.2%
5-19	817	20.4%
20-34	(1,258)	-40.6%
35-64	113	2.1%
65 +	194	10.1%
TOTALS	(399)	-2.6%

*1980 ZERO NET MIGRATION
**REPRESENTS A PERCENTAGE OF THE TOTAL CHANGE

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS BASED ON 1980-1990 MIGRATION RATES

HARBORCREEK TOWNSHIP 2000* POPULATION BY AGE/SEX

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	601	313	289	4.1%	(197)	(102)	(94)
5-9	875	438	438	5.9%	(245)	(122)	(122)
10-14	917	473	444	6.2%	(256)	(129)	(127)
15-19	1,662	840	821	11.2%	(42)	(53)	10
20-24	1,072	668	405	7.2%	(168)	(93)	(74)
25-29	696	323	373	4.7%	(63)	(29)	(34)
30-34	1,137	644	493	7.7%	40	109	(69)
35-39	860	416	444	5.8%	(404)	(212)	(192)
40-44	1,143	550	592	7.7%	92	45	46
45-49	1,184	602	582	8.0%	267	115	152
50-54	959	459	499	6.5%	294	148	145
55-59	793	417	376	5.4%	148	99	49
60-64	594	276	318	4.0%	(168)	(83)	(85)
65-69	536	260	276	3.6%	(112)	(61)	(51)
70-74	641	250	391	4.3%	117	22	95
75-79	500	211	289	3.4%	158	80	78
80-84	367	114	253	2.5%	144	49	95
85 +	275	79	197	1.9%	99	28	72
TOTALS	14,812	7,335	7,477	100.0%	(296)	(187)	(109)
PERCENT	100.0%	49.5%	50.5%	NA	100.0%	63.3%	36.7%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	601	4.1%
5-19	3,454	23.3%
20-34	2,905	19.6%
35-64	5,533	37.4%
65 +	2,319	15.7%
TOTALS	14,812	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	(197)	-24.6%
5-19	(543)	-13.6%
20-34	(191)	-6.2%
35-64	229	4.3%
65 +	406	21.2%
TOTALS	(296)	-2.0%

*1980 - 1990 NET MIGRATION RATE

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2005* POPULATION BY AGE/SEX

AGE OF COHORT	2005* TOTAL	2005* MALE	2005* FEMALE	% OF TOTAL	2000-05 CHANGE TOTAL	2000-05 CHANGE MALE	2000-05 CHANGE FEMALE
0-4	710	362	348	4.9%	109	50	59
5-9	600	312	288	4.1%	(275)	(126)	(150)
10-14	874	437	437	6.0%	(42)	(36)	(6)
15-19	915	471	443	6.3%	(747)	(369)	(378)
20-24	1,654	834	819	11.3%	581	166	415
25-29	1,065	662	403	7.3%	370	339	31
30-34	692	320	371	4.7%	(446)	(324)	(122)
35-39	1,129	638	491	7.7%	268	222	47
40-44	851	410	441	5.8%	(292)	(140)	(152)
45-49	1,123	538	585	7.7%	(61)	(64)	3
50-54	1,150	580	570	7.9%	192	121	71
55-59	917	433	484	6.3%	124	15	108
60-64	738	380	358	5.1%	144	103	41
65-69	533	238	295	3.7%	(3)	(22)	19
70-74	453	208	245	3.1%	(188)	(42)	(146)
75-79	503	178	325	3.5%	3	(33)	36
80-84	342	129	213	2.3%	(24)	15	(40)
85 +	324	94	230	2.2%	49	16	34
TOTALS	14,573	7,225	7,348	100.0%	(239)	(109)	(130)
PERCENT	100.0%	49.6%	50.4%	NA	100.0%	45.7%	54.3%

AGE OF COHORT	2005* TOTAL	2005* %
0-4	710	4.9%
5-19	2,389	16.4%
20-34	3,411	23.4%
35-64	5,908	40.5%
65 +	2,155	14.8%
TOTALS	14,573	100.0%

AGE OF COHORT	2000-05 CHANGE	2000-05 % CHNG
0-4	109	18.1%
5-19	(1,065)	-30.8%
20-34	505	17.4%
35-64	375	6.8%
65 +	(163)	-7.0%
TOTALS	(239)	-1.6%

*ZERO NET MIGRATION

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2005-10 CHANGE TOTAL	2005-10 CHANGE MALE	2005-10 CHANGE FEMALE
0-4	680	347	333	4.8%	(31)	(16)	(15)
5-9	709	361	347	5.0%	109	49	59
10-14	599	312	288	4.2%	(275)	(126)	(150)
15-19	872	436	437	6.1%	(42)	(36)	(6)
20-24	910	468	442	6.4%	(744)	(366)	(377)
25-29	1,644	827	817	11.5%	579	165	414
30-34	1,058	656	402	7.4%	367	336	31
35-39	687	317	369	4.8%	(442)	(321)	(121)
40-44	1,116	629	487	7.8%	265	218	46
45-49	836	401	435	5.9%	(287)	(137)	(150)
50-54	1,092	518	573	7.6%	(59)	(62)	3
55-59	1,100	547	553	7.7%	183	114	69
60-64	855	394	462	6.0%	117	14	103
65-69	660	328	332	4.6%	127	89	38
70-74	452	190	262	3.2%	(1)	(18)	17
75-79	352	148	203	2.5%	(151)	(30)	(121)
80-84	349	109	240	2.4%	6	(20)	27
85 +	313	93	219	2.2%	(12)	(1)	(11)
TOTALS	14,283	7,080	7,203	100.0%	(291)	(146)	(145)
PERCENT	100.0%	49.6%	50.4%	NA	100.0%	50.1%	49.9%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	680	4.8%
5-19	2,180	15.3%
20-34	3,612	25.3%
35-64	5,686	39.8%
65 +	2,125	14.9%
TOTALS	14,283	100.0%

AGE OF COHORT	2005-10 CHANGE	2005-10 % CHNG
0-4	(31)	-4.3%
5-19	(209)	-8.7%
20-34	202	5.9%
35-64	(223)	-3.8%
65 +	(31)	-1.4%
TOTALS	(291)	-2.0%

*ZERO NET MIGRATION POPROI

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS BASED ON 1980-1990 MIGRATION RATES

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	510	265	245	3.7%	(91)	(47)	(44)
5-9	779	390	390	5.6%	(96)	(48)	(48)
10-14	691	357	334	5.0%	(226)	(117)	(109)
15-19	1,299	657	642	9.3%	(362)	(184)	(179)
20-24	835	525	314	6.0%	(238)	(143)	(90)
25-29	679	304	377	4.9%	(17)	(19)	5
30-34	998	565	416	7.2%	(140)	(79)	(77)
35-39	789	382	406	5.7%	(71)	(34)	(38)
40-44	1,183	663	520	8.5%	41	112	(73)
45-49	807	399	406	5.8%	(377)	(203)	(176)
50-54	1,042	500	542	7.5%	83	41	42
55-59	1,024	516	509	7.4%	231	99	133
60-64	856	408	448	6.1%	262	132	131
65-69	657	342	317	4.7%	121	81	41
70-74	497	192	308	3.6%	(144)	(57)	(83)
75-79	415	171	243	3.0%	(85)	(40)	(45)
80-84	457	125	334	3.3%	90	11	81
85 +	418	134	285	3.0%	143	56	89
TOTALS	13,938	6,895	7,038	100.0%	(874)	(439)	(440)
PERCENT	100.0%	49.5%	50.5%	NA	100.0%	50.2%	50.3%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	510	3.7%
5-19	2,770	19.9%
20-34	2,511	18.0%
35-64	5,702	40.9%
65 +	2,444	17.5%
TOTALS	13,938	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	(91)	-15.1%
5-19	(684)	-19.8%
20-34	(394)	-13.6%
35-64	169	3.1%
65 +	126	5.4%
TOTALS	(874)	-5.9%

*1980 - 1990 NET MIGRATION RATE POPROI

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

1990-2010 POPULATION CHANGE
(BASED ON 1980 - 1990 NET MIGRATION)

AGE OF COHORT	1990-10 CHANGE TOTAL	1990-10 CHANGE MALE	1990-10 CHANGE FEMALE	1990-10 % CHNG TOTAL	1990-10 % CHNG MALE	1990-10 % CHNG FEMALE
0-4	(288)	(150)	(138)	-27.1%	-27.6%	-26.5%
5-9	(341)	(170)	(170)	-33.5%	-32.8%	-34.1%
10-14	(482)	(245)	(237)	-47.4%	-46.7%	-48.2%
15-19	(405)	(236)	(169)	-35.4%	-39.9%	-30.6%
20-24	(401)	(236)	(165)	-29.6%	-34.8%	-24.4%
25-29	(78)	(48)	(30)	-4.2%	-5.0%	-3.4%
30-34	(115)	30	(146)	-9.9%	4.9%	-26.8%
35-39	(476)	(246)	(230)	-43.2%	-47.2%	-39.7%
40-44	131	158	(26)	13.2%	32.9%	-5.1%
45-49	(112)	(88)	(24)	-11.8%	-18.0%	-5.2%
50-54	377	189	188	54.2%	58.8%	50.2%
55-59	380	198	182	54.9%	58.8%	51.1%
60-64	94	49	45	12.4%	14.2%	10.9%
65-69	11	21	(10)	1.6%	6.8%	-3.0%
70-74	(24)	(36)	12	-4.9%	-15.9%	4.9%
75-79	73	40	32	25.1%	35.7%	18.3%
80-84	236	60	176	138.6%	105.5%	155.1%
85 +	244	83	160	185.4%	235.7%	166.9%
TOTALS	(1,175)	(627)	(548)	-7.6%	-8.2%	-7.0%
PERCENT	100.0%	53.3%	46.7%	100.0%	107.8%	92.3%

AGE OF COHORT	1990-10 TOTAL	1990-10 %**
0-4	(288)	24.5%
5-19	(1,228)	104.6%
20-34	(594)	50.5%
35-64	395	-33.7%
65 +	539	-45.9%
TOTALS	(1,175)	100.0%

AGE OF COHORT	1990-10 CHANGE	1990-10 % CHNG
0-4	(288)	-36.0%
5-19	(1,228)	-30.7%
20-34	(594)	-19.2%
35-64	395	7.5%
65 +	539	28.2%
TOTALS	(1,175)	-7.8%

*1980 - 1990 NET MIGRATION RATE
**REPRESENTS A PERCENT OF THE TOTAL CHANGE

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

AGE CHARACTERISTICS

AGE OF COHORT	2000* TOTAL	2000* %	AGE OF COHORT	2010* TOTAL	2010* %
0-4	601	4.1%	0-4	510	3.7%
5-19	3,454	23.3%	5-19	2,770	19.9%
20-34	2,905	19.6%	20-34	2,511	18.0%
35-64	5,533	37.4%	35-64	5,702	40.9%
65 +	2,319	15.7%	65 +	2,444	17.5%
TOTALS	14,812	100.0%	TOTALS	13,938	100.0%

AGE BY SEX

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
0-14	2,393	16.2%	1,224	51.1%	1,170	48.9%
15-24	2,734	18.5%	1,508	55.2%	1,226	44.8%
25-34	1,833	12.4%	967	52.8%	866	47.2%
35-44	2,003	13.5%	967	48.3%	1,036	51.7%
45-54	2,143	14.5%	1,061	49.5%	1,081	50.5%
55-64	1,387	9.4%	694	50.0%	694	50.0%
65-74	1,177	7.9%	510	43.3%	667	56.7%
75+	1,142	7.7%	404	35.4%	738	64.6%
TOTALS	14,812	100.0%	7,335	49.5%	7,477	50.5%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
0-14	1,980	14.2%	1,012	51.1%	969	48.9%
15-24	2,134	15.3%	1,182	55.4%	956	44.8%
25-34	1,676	12.0%	869	51.9%	794	47.3%
35-44	1,973	14.2%	1,045	53.0%	926	48.1%
45-54	1,849	13.3%	899	48.6%	948	51.8%
55-64	1,881	13.5%	924	49.1%	957	33.2%
65-74	1,154	8.3%	534	46.3%	625	74.8%
75+	1,291	9.3%	431	33.4%	863	66.8%
TOTALS	13,938	100.0%	6,895	49.5%	7,038	50.5%

*1980 - 1990 NET MIGRATION RATE

REPORT B HARBORCREEK TOWNSHIP DATE: 7/26/94

OLDER CITIZENS

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
65-69	536	23.1%	260	48.6%	276	51.4%
70-74	641	27.6%	250	39.0%	391	61.0%
75-79	500	21.6%	211	42.3%	289	57.7%
80-84	367	15.8%	114	31.1%	253	68.9%
85 +	275	11.9%	79	28.6%	197	71.4%
TOTALS	2,319	100.0%	914	39.4%	1,405	60.6%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
65-69	657	26.9%	342	52.0%	317	48.2%
70-74	497	20.3%	192	38.7%	308	62.1%
75-79	415	17.0%	171	41.3%	243	58.6%
80-84	457	18.7%	125	27.3%	334	73.1%
85 +	418	17.1%	134	32.1%	285	68.2%
TOTALS	2,444	100.0%	965	39.5%	1,488	60.9%

POPULATION CHANGE 1900 - 2010

YEAR	POP.	CHANGE	%
1900	1,687	NA	NA
1910	2,074	387	22.9%
1920	2,212	138	6.7%
1930	2,890	678	30.7%
1940	3,602	712	24.6%
1950	7,475	3,873	107.5%
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	14,812	(296)	-2.0%
2010*	13,938	(874)	-5.9%
1960-10	13,938	3,369	31.9%

*1980 - 1990 NET MIGRATION RATE

END OF REPORT B

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

REPORT C IS USED TO DETERMINE THE 1970 - 1980 NET MIGRATION RATES.

5-YEAR SURVIVAL RATES

AGE OF COHORT BIRTHS	MALE RATES*	FEMALE RATES*
0-4	0.9853	0.9879
5-9	0.9975	0.9979
10-14	0.9988	0.9991
15-19	0.9964	0.9988
20-24	0.9925	0.9978
25-29	0.9912	0.9971
30-34	0.9915	0.9965
35-39	0.9902	0.9953
40-44	0.9859	0.9924
45-49	0.9776	0.9874
50-54	0.9633	0.9802
55-59	0.9424	0.9699
60-64	0.9099	0.953
65-69	0.8623	0.9275
70-74	0.7975	0.889
75-79	0.7134	0.8304
80-84	0.6109	0.7386
85 +	0.4896	0.6061
	0.319	0.3916

YEAR	BIRTHS	BIRTH RATE#	DEATHS	DEATH RATE#
1970	166	13.8%	83	6.9%
1971	177	14.7%	80	6.6%
1972	144	12.0%	86	7.1%
1973	136	11.3%	79	6.6%
1974	151	12.5%	88	7.3%
1975	150	11.2%	90	6.7%
1976	163	12.2%	100	7.5%
1977	152	11.4%	77	5.8%
1978	173	13.0%	86	6.4%
1979	144	10.8%	90	6.7%
1970-79	1,556	NA	859	NA

1970 - 1980 NATURAL CHANGE

	CHANGE	% CHNG
1970-79	697	5.8%

1970 - 1980 NET MIGRATION

	NUMBER	RATE
1970-80	1,909	15.9%

1970 FERTILITY RATE@

COHORT	MALE	FEMALE
0-4	0.15235	0.146375

FERTILE FEMALES

AGE COHORT	1970 FEMALE	1980** FEMALE	2000*** FEMALE	2010*** FEMALE	1970-80 % CHNG	1990-00 % CHNGx	2000-10 % CHNG
5-39	3,510	3,758	4,013	4,141	7.1%	-0.3%	3.2%
10-44	3,294	3,607	4,216	4,365	9.5%	5.1%	3.5%

*CAPP

**PROJECTED BASED ON 1970 ZERO NET MIGRATION

***PROJECTED BASED ON 1990 - 1980 NET MIGRATION RATE

@SMALL TOWN PLANNING HANDBOOK FORMULA

#PER 1,000 x1990 ACTUAL NUMBER OF FEMALES POPROI

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS TO FIND MIGRATION RATES*

HARBORCREEK TOWNSHIP 1975* POPULATION BY AGE/SEX

AGE OF COHORT	1975* TOTAL	1975* MALE	1975* FEMALE	% OF TOTAL	1970-75 CHANGE TOTAL	1970-75 CHANGE MALE	1970-75 CHANGE FEMALE
0-4	984	502	482	7.8%	0	10	(10)
5-9	982	491	491	7.8%	(361)	(199)	(162)
10-14	1,342	689	652	10.6%	(106)	(60)	(47)
15-19	1,444	746	698	11.4%	25	(1)	26
20-24	1,412	741	671	11.2%	649	392	257
25-29	759	346	413	6.0%	86	34	52
30-34	669	309	360	5.3%	21	(5)	26
35-39	643	311	332	5.1%	(76)	(31)	(45)
40-44	711	337	374	5.6%	(115)	(52)	(63)
45-49	812	380	431	6.4%	3	(30)	32
50-54	786	395	391	6.2%	77	40	37
55-59	678	335	343	5.4%	126	50	76
60-64	514	259	254	4.1%	116	59	56
65-69	356	172	184	2.8%	116	55	61
70-74	203	93	109	1.6%	(4)	(7)	2
75-79	160	71	89	1.3%	15	7	8
80-84	99	39	60	0.8%	4	4	(0)
85 +	75	25	50	0.6%	15	0	15
TOTALS	12,629	6,243	6,385	100.0%	591	268	322
PERCENT	100.0%	49.4%	50.6%	NA	100.0%	45.4%	54.6%

AGE OF COHORT	1975* TOTAL	1975* %
0-4	984	7.8%
5-19	3,768	29.8%
20-34	2,840	22.5%
35-64	4,144	32.8%
65 +	893	7.1%
TOTALS	12,629	100.0%

AGE OF COHORT	1970-75 CHANGE	1970-75 % CHNG
0-4	0	0.0%
5-19	(442)	-12.5%
20-34	756	18.3%
35-64	131	2.6%
65 +	146	10.0%
TOTALS	591	3.9%

*ZERO NET MIGRATION POPROI

HARBCREK A/G/A POPULATION PROJECTIONS PAGE 3C

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS TO FIND MIGRATION RATES*

HARBORCREEK TOWNSHIP 1980* POPULATION BY AGE/SEX

AGE OF COHORT	1980* TOTAL	1980* MALE	1980* FEMALE	% OF TOTAL	1975-80 CHANGE TOTAL	1975-80 CHANGE MALE	1975-80 CHANGE FEMALE
0-4	1,049	535	514	7.9%	65	33	32
5-9	982	501	481	7.4%	(0)	10	(10)
10-14	981	490	491	7.4%	(361)	(199)	(162)
15-19	1,338	687	652	10.1%	(106)	(60)	(47)
20-24	1,437	741	697	10.9%	25	(1)	26
25-29	1,403	735	669	10.6%	645	389	256
30-34	754	343	411	5.7%	85	34	52
35-39	664	306	358	5.0%	21	(5)	26
40-44	636	307	330	4.8%	(75)	(31)	(44)
45-49	699	330	369	5.3%	(113)	(51)	(62)
50-54	789	366	423	6.0%	3	(29)	32
55-59	752	372	379	5.7%	74	38	36
60-64	632	304	327	4.8%	118	45	73
65-69	460	224	236	3.5%	104	51	52
70-74	301	138	163	2.3%	98	44	54
75-79	157	67	91	1.2%	(3)	(5)	2
80-84	109	44	66	0.8%	10	4	6
85 +	83	27	56	0.6%	8	2	6
TOTALS	13,227	6,515	6,712	100.0%	598	271	327
PERCENT	100.0%	49.3%	50.7%	NA	100.0%	45.4%	54.6%

AGE OF COHORT	1980* TOTAL	1980* %
0-4	1,049	7.9%
5-19	3,301	25.0%
20-34	3,595	27.2%
35-64	4,172	31.5%
65 +	1,110	8.4%
TOTALS	13,227	100.0%

AGE OF COHORT	1975-80 CHANGE	1975-80 % CHNG
0-4	65	6.6%
5-19	(467)	-12.4%
20-34	755	26.6%
35-64	28	0.7%
65 +	217	24.3%
TOTALS	598	4.7%

*ZERO NET MIGRATION POPROI

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

DIFFERENCE BETWEEN 1980 ACTUAL POPULATION & 1980 PROJECTED POPULA

AGE OF COHORT	1980-80* DIFF. TOTALS	1980-80* DIFF. MALE	1980-80* DIFF. FEMALE	1980-80* % DIFF. TOTAL	1980-80* % DIFF. MALE	1980-80* % DIFF FEMALE
0-4	(28)	(7)	(21)	-2.6%	-1.3%	-4.0%
5-9	166	94	72	16.9%	18.9%	14.9%
10-14	381	196	185	38.9%	39.9%	37.8%
15-19	521	286	234	38.9%	41.7%	36.0%
20-24	(259)	(109)	(151)	-18.0%	-14.7%	-21.6%
25-29	(289)	(204)	(86)	-20.6%	-27.7%	-12.8%
30-34	255	148	107	33.8%	43.2%	25.9%
35-39	314	202	112	47.2%	65.8%	31.3%
40-44	93	35	57	14.5%	11.6%	17.3%
45-49	46	41	5	6.6%	12.6%	1.2%
50-54	64	38	26	8.1%	10.3%	6.2%
55-59	28	20	9	3.8%	5.3%	2.3%
60-64	1	24	(22)	0.2%	7.7%	-6.8%
65-69	(22)	(25)	3	-4.7%	-11.0%	1.3%
70-74	14	(8)	22	4.7%	-5.5%	13.3%
75-79	56	13	42	35.4%	20.2%	46.5%
80-84	42	4	37	38.3%	10.1%	56.9%
85 +	35	12	23	42.1%	43.6%	41.4%
TOTALS	1,417	762	655	10.7%	11.7%	9.8%
PERCENT	100.0%	53.8%	46.2%	100.0%	109.2%	91.1%

AGE OF COHORT	1980-80 CHANGE TOTAL	1980-80 CHANGE %**
0-4	(28)	-1.9%
5-19	1,068	75.4%
20-34	(294)	-20.8%
35-64	546	38.5%
65 +	125	8.8%
TOTALS	1,417	100.0%

AGE OF COHORT	1980-80* CHANGE	1980-80* % CHANGE
0-4	(28)	-2.6%
5-19	1,068	33.6%
20-34	(294)	-6.8%
35-64	546	10.5%
65 +	125	7.3%
TOTALS	1,417	9.1%

*1970 ZERO NET MIGRATION
**REPRESENTS A PERCENTAGE OF THE TOTAL CHANGE

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS BASED ON 1970-1980 MIGRATION RATES RATES

HARBORCREEK TOWNSHIP 2000* POPULATION BY AGE/SEX

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	780	403	377	4.6%	(18)	(12)	(6)
5-9	931	483	448	5.5%	(189)	(77)	(112)
10-14	1,105	579	526	6.5%	(68)	(23)	(45)
15-19	1,549	790	760	9.2%	(155)	(103)	(51)
20-24	954	508	446	5.6%	(286)	(253)	(33)
25-29	1,338	635	704	7.9%	579	283	297
30-34	1,670	1,071	599	9.9%	573	536	37
35-39	1,103	573	530	6.5%	(161)	(55)	(106)
40-44	1,234	583	651	7.3%	183	78	105
45-49	1,312	681	631	7.8%	395	194	201
50-54	1,085	524	561	6.4%	420	213	207
55-59	884	466	418	5.2%	239	148	91
60-64	592	287	305	3.5%	(170)	(72)	(98)
65-69	515	222	293	3.0%	(133)	(99)	(34)
70-74	610	233	377	3.6%	86	5	81
75-79	573	219	354	3.4%	231	88	143
80-84	394	109	285	2.3%	171	44	127
85 +	292	78	214	1.7%	116	27	89
TOTALS	16,922	8,445	8,478	100.0%	1,814	923	892
PERCENT	100.0%	49.9%	50.1%	NA	100.0%	50.9%	49.1%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	780	4.6%
5-19	3,585	21.2%
20-34	3,962	23.4%
35-64	6,211	36.7%
65 +	2,384	14.1%
TOTALS	16,922	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	(18)	-2.3%
5-19	(412)	-10.3%
20-34	866	28.0%
35-64	907	17.1%
65 +	471	24.6%
TOTALS	1,814	12.0%

*1970 - 1980 NET MIGRATION RATE POPROI

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS

HARBORCREEK TOWNSHIP 2005* POPULATION BY AGE/SEX

AGE OF COHORT	2005* TOTAL	2005* MALE	2005* FEMALE	% OF TOTAL	2000-05 CHANGE TOTAL	2000-05 CHANGE MALE	2000-95 CHANGE FEMALE
0-4	839	428	411	5.0%	59	24	34
5-9	778	402	376	4.6%	(153)	(80)	(73)
10-14	930	482	448	5.6%	(175)	(97)	(78)
15-19	1,102	577	526	6.6%	(447)	(213)	(234)
20-24	1,542	784	758	9.2%	588	276	312
25-29	948	503	445	5.7%	(390)	(131)	(259)
30-34	1,331	629	701	7.9%	(339)	(441)	102
35-39	1,657	1,060	597	9.9%	554	487	67
40-44	1,091	565	526	6.5%	(143)	(18)	(125)
45-49	1,213	570	643	7.2%	(100)	(112)	12
50-54	1,275	656	618	7.6%	189	132	57
55-59	1,038	494	544	6.2%	155	29	126
60-64	822	424	398	4.9%	230	136	93
65-69	531	248	283	3.2%	16	26	(10)
70-74	437	177	260	2.6%	(173)	(56)	(116)
75-79	479	166	313	2.9%	(94)	(53)	(41)
80-84	395	134	261	2.4%	1	25	(24)
85 +	335	79	256	2.0%	43	0	43
TOTALS	16,742	8,378	8,364	100.0%	(180)	(67)	(114)
PERCENT	100.0%	50.0%	50.0%	NA	100.0%	37.0%	63.0%

AGE OF COHORT	2005* TOTAL	2005* %
0-4	839	5.0%
5-19	2,810	16.8%
20-34	3,821	22.8%
35-64	7,095	42.4%
65 +	2,177	13.0%
TOTALS	16,742	100.0%

AGE OF COHORT	2000-05 CHANGE	2000-05 % CHNG
0-4	59	7.5%
5-19	(775)	-21.6%
20-34	(142)	-3.6%
35-64	885	14.2%
65 +	(207)	-8.7%
TOTALS	(180)	-1.1%

*ZERO NET MIGRATION

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2005-10 CHANGE TOTAL	2005-10 CHANGE MALE	2005-10 CHANGE FEMALE
0-4	798	407	391	4.8%	(40)	(21)	(20)
5-9	837	427	410	5.1%	59	24	34
10-14	777	402	375	4.7%	(153)	(80)	(73)
15-19	928	480	448	5.6%	(174)	(96)	(78)
20-24	1,097	572	524	6.6%	(445)	(212)	(234)
25-29	1,533	777	756	9.3%	585	273	311
30-34	942	499	443	5.7%	(388)	(130)	(258)
35-39	1,321	623	698	8.0%	(336)	(437)	101
40-44	1,637	1,045	592	9.9%	546	480	66
45-49	1,072	552	519	6.5%	(141)	(17)	(124)
50-54	1,179	549	630	7.1%	(96)	(108)	12
55-59	1,218	618	600	7.4%	180	124	56
60-64	968	450	519	5.9%	146	26	120
65-69	735	365	370	4.4%	204	118	87
70-74	449	198	251	2.7%	12	21	(9)
75-79	342	126	216	2.1%	(137)	(40)	(97)
80-84	333	102	231	2.0%	(63)	(32)	(30)
85 +	349	91	259	2.1%	14	12	2
TOTALS	16,516	8,283	8,232	100.0%	(227)	(95)	(132)
PERCENT	100.0%	50.2%	49.8%	NA	100.0%	41.8%	58.2%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	798	4.8%
5-19	2,542	15.4%
20-34	3,572	21.6%
35-64	7,395	44.8%
65 +	2,208	13.4%
TOTALS	16,516	100.0%

AGE OF COHORT	2005-10 CHANGE	2005-10 % CHNG
0-4	(40)	-4.8%
5-19	(269)	-9.6%
20-34	(249)	-6.5%
35-64	300	4.2%
65 +	31	1.4%
TOTALS	(227)	-1.4%

*ZERO NET MIGRATION POPROI

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS BASED ON 1970-1980 MIGRATION RATES

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	777	402	375	4.2%	(2)	(1)	(1)
5-9	978	507	471	5.3%	47	25	23
10-14	1,079	562	517	5.8%	(26)	(16)	(9)
15-19	1,289	680	608	6.9%	(261)	(109)	(151)
20-24	899	488	411	4.8%	(55)	(20)	(35)
25-29	1,217	561	659	6.6%	(122)	(73)	(44)
30-34	1,261	715	558	6.8%	(409)	(356)	(41)
35-39	1,945	1,034	916	10.5%	842	460	386
40-44	1,875	1,166	694	10.1%	641	583	43
45-49	1,142	622	526	6.2%	(170)	(60)	(105)
50-54	1,274	605	669	6.9%	189	81	108
55-59	1,264	651	614	6.8%	381	186	195
60-64	970	485	483	5.2%	378	197	178
65-69	700	325	374	3.8%	186	103	82
70-74	470	187	285	2.5%	(140)	(47)	(92)
75-79	463	152	317	2.5%	(110)	(68)	(37)
80-84	460	112	362	2.5%	66	3	78
85 +	497	130	366	2.7%	205	52	152
TOTALS	18,561	9,384	9,207	100.0%	1,639	940	729
PERCENT	100.0%	50.6%	49.6%	NA	100.0%	57.3%	44.5%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	777	4.2%
5-19	3,346	18.0%
20-34	3,376	18.2%
35-64	8,471	45.6%
65 +	2,591	14.0%
TOTALS	18,561	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	(2)	-0.3%
5-19	(239)	-6.7%
20-34	(586)	-14.8%
35-64	2,260	36.4%
65 +	207	8.7%
TOTALS	1,639	9.7%

1970 - 1980 NET MIGRATION RATE POPROI

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

1990-2010 POPULATION CHANGE
(BASED ON 1980 - 1990 NET MIGRATION)

AGE OF COHORT	2010-90 CHANGE TOTAL	2010-90 CHANGE MALE	2010-90 CHANGE FEMALE	2010-90 % CHNG TOTAL	2010-90 % CHNG MALE	2010-90 % CHNG FEMALE
0-4	0	(8)	8	0.0%	-1.6%	1.7%
5-9	(283)	(133)	(150)	-28.9%	-27.2%	-30.5%
10-14	(396)	(200)	(196)	-29.5%	-29.1%	-30.0%
15-19	(776)	(413)	(363)	-53.7%	-55.3%	-52.1%
20-24	(143)	(189)	45	-10.2%	-25.5%	6.8%
25-29	774	425	349	102.0%	122.8%	84.5%
30-34	(155)	(36)	(119)	-23.1%	-11.6%	-33.0%
35-39	57	(5)	62	8.9%	-1.5%	18.6%
40-44	586	540	46	82.4%	160.2%	12.3%
45-49	155	65	89	19.0%	17.2%	20.7%
50-54	514	238	276	65.4%	60.2%	70.6%
55-59	573	300	273	84.6%	89.8%	79.5%
60-64	206	91	116	40.1%	35.0%	45.4%
65-69	87	44	43	24.4%	25.7%	23.2%
70-74	(75)	(30)	(45)	-37.0%	-32.6%	-40.7%
75-79	0	(5)	5	0.3%	-6.5%	5.7%
80-84	110	37	73	110.8%	93.9%	121.9%
85 +	173	40	134	230.6%	158.1%	267.0%
TOTALS	1,408	761	646	11.1%	12.2%	10.1%
PERCENT	100.0%	54.1%	45.9%	100.0%	109.4%	90.8%

AGE OF COHORT	1990-10 TOTAL	1990-10 %**
0-4	0	0.0%
5-19	(1,455)	-103.4%
20-34	476	33.8%
35-64	2,091	148.6%
65 +	295	21.0%
TOTALS	1,408	100.0%

AGE OF COHORT	1990-10 CHANGE	1990-10 % CHNG
0-4	0	0.0%
5-19	(1,455)	-36.4%
20-34	476	15.4%
35-64	2,091	39.4%
65 +	295	15.4%
TOTALS	1,408	9.3%

*1970 - 1980 NET MIGRATION RATE
**REPRESENTS A PERCENT OF THE TOTAL CHANGE

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

AGE OF COHORT	2000* TOTAL	2000* %	AGE OF COHORT	2010* TOTAL	2010* %
0-4	780	4.6%	0-4	777	4.2%
5-19	3,585	21.2%	5-19	3,346	18.0%
20-34	3,962	23.4%	20-34	3,376	18.2%
35-64	6,211	36.7%	35-64	8,471	45.6%
65 +	2,384	14.1%	65 +	2,591	14.0%
TOTALS	16,922	100.0%	TOTALS	18,561	100.0%

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
0-14	2,816	16.6%	1,464	52.0%	1,351	48.0%
15-24	2,503	14.8%	1,298	51.8%	1,206	48.2%
25-34	3,008	17.8%	1,705	56.7%	1,303	43.3%
35-44	2,337	13.8%	1,156	49.5%	1,181	50.5%
45-54	2,398	14.2%	1,206	50.3%	1,192	49.7%
55-64	1,476	8.7%	753	51.0%	723	49.0%
65-74	1,125	6.6%	455	40.5%	669	59.5%
75+	1,259	7.4%	407	32.3%	852	67.7%
TOTALS	16,922	100.0%	8,445	49.9%	8,478	50.1%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
0-14	2,835	15.3%	1,471	51.9%	1,364	48.1%
15-24	2,187	11.8%	1,169	53.4%	1,020	46.6%
25-34	2,477	13.3%	1,276	51.5%	1,217	49.1%
35-44	3,820	20.6%	2,200	57.6%	1,610	31.3%
45-54	2,416	13.0%	1,227	50.8%	1,195	45.4%
55-64	2,235	12.0%	1,136	50.8%	1,097	29.5%
65-74	1,171	6.3%	512	43.7%	659	89.2%
75+	1,420	7.7%	394	27.8%	1,045	73.6%
TOTALS	18,561	100.0%	9,384	50.6%	9,207	49.6%

*1970 - 1980 NET MIGRATION RATE

REPORT C HARBORCREEK TOWNSHIP DATE: 7/26/94

OLDER CITIZENS

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
65-69	515	21.6%	222	43.1%	293	56.9%
70-74	610	25.6%	233	38.3%	377	61.7%
75-79	573	24.0%	219	38.3%	354	61.7%
80-84	394	16.5%	109	27.8%	285	72.2%
85 +	292	12.2%	78	26.8%	214	73.2%
TOTALS	2,384	100.0%	863	36.2%	1,521	63.8%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
65-69	700	27.0%	325	46.4%	374	53.4%
70-74	470	18.2%	187	39.7%	285	60.6%
75-79	463	17.9%	152	32.8%	317	68.3%
80-84	460	17.8%	112	24.4%	362	78.8%
85 +	497	19.2%	130	26.2%	366	73.7%
TOTALS	2,591	100.0%	906	35.0%	1,704	65.8%

POPULATION CHANGE 1900 - 2010

YEAR	POP.	CHANGE	%
1900	1,687	NA	NA
1910	2,074	387	22.9%
1920	2,212	138	6.7%
1930	2,890	678	30.7%
1940	3,602	712	24.6%
1950	7,475	3,873	107.5%
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	16,922	1,814	12.0%
2010*	18,561	1,639	9.7%
1960-10	18,561	7,992	75.6%

*1970 - 1980 NET MIGRATION

END OF REPORT C

REPORT D HARBORCREEK TOWNSHIP DATE: 7/26/94

REPORT D AVG.THE 1970-80 & THE 1980-90 MIG.RTS.TO ARRIVE AT FUTURE POP.

1970 - 1990 NET MIGRATION RATE

AGE OF COHORT	1970-90 % CHNG TOTAL	1970-90 % CHNG MALE**	1970-90 % CHNG FEMALE**
0-4	-13.8%	-12.3%	-15.2%
5-9	13.4%	13.3%	13.6%
10-14	27.1%	27.2%	27.0%
15-19	43.9%	46.3%	41.5%
20-24	-13.2%	-1.3%	-25.3%
25-29	-39.7%	-45.5%	-33.3%
30-34	14.0%	14.6%	14.8%
35-39	31.1%	43.2%	20.6%
40-44	10.3%	8.5%	12.0%
45-49	1.5%	6.0%	-2.7%
50-54	1.8%	3.4%	0.3%
55-59	-1.5%	-0.1%	-2.9%
60-64	0.1%	5.7%	-4.8%
65-69	-2.5%	-3.3%	-1.7%
70-74	7.3%	-2.2%	15.5%
75-79	26.7%	17.9%	33.0%
80-84	34.7%	12.4%	48.1%
85 +	38.0%	43.9%	35.7%
TOTALS	4.1%	4.9%	3.3%
AVG.	10.0%	9.9%	9.8%

1970 - 1990 NET MIGRATION

1970-80	1,909	15.9%
1980-90	192	1.3%

1990 FERTILITY RATE***

COHORT	MALE	FEMALE
0-4	0.101441	0.097463

FERTILE FEMALES

AGE COHORT	1970 FEMALE	1980 FEMALE	1990 FEMALE	2000* FEMALE	2010* FEMALE	1970-90 % CHNG	1990-10 % CHNG
5-39	3,510	4,232	4,026	3,715	2,845	14.7%	-29.3%
10-44	3,294	4,066	4,012	3,894	3,000	21.8%	-25.2%

*1970 - 1990 AVERAGE NET MIGRATION RATES
**ONLY THE MALE/FEMALE COLUMNS THROUGH 85+ ARE USED FOR PROJ.
***SMALL TOWN PLANNING HANDBOOK FORMULA POPROI

REPORT D HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2000* POPULATION BY AGE/SEX

AGE OF COHORT	2000* TOTAL	2000* MALE	2000* FEMALE	% OF TOTAL	1990-00 CHANGE TOTAL	1990-00 CHANGE MALE	1990-00 CHANGE FEMALE
0-4	691	358	333	4.4%	(107)	(57)	(50)
5-9	903	460	443	5.7%	(217)	(100)	(117)
10-14	1,011	526	485	6.4%	(162)	(76)	(86)
15-19	1,606	815	791	10.1%	(98)	(78)	(20)
20-24	1,013	588	425	6.4%	(227)	(173)	(54)
25-29	1,017	479	538	6.4%	258	127	131
30-34	1,404	857	546	8.8%	307	322	(16)
35-39	982	495	487	6.2%	(282)	(133)	(149)
40-44	1,188	566	622	7.5%	137	61	76
45-49	1,248	642	606	7.9%	331	155	176
50-54	1,022	492	530	6.4%	357	181	176
55-59	839	442	397	5.3%	194	124	70
60-64	593	282	311	3.7%	(169)	(77)	(92)
65-69	525	241	284	3.3%	(123)	(80)	(43)
70-74	625	241	384	3.9%	101	13	88
75-79	537	215	321	3.4%	195	84	110
80-84	381	112	269	2.4%	158	47	111
85 +	284	78	205	1.8%	108	27	80
TOTALS	15,867	7,890	7,978	100.0%	759	368	392
PERCENT	100.0%	49.7%	50.3%	NA	100.0%	48.4%	51.6%

AGE OF COHORT	2000* TOTAL	2000* %
0-4	691	4.4%
5-19	3,520	22.2%
20-34	3,434	21.6%
35-64	5,872	37.0%
65 +	2,351	14.8%
TOTALS	15,867	100.0%

AGE OF COHORT	1990-00 CHANGE	1990-00 % CHNG
0-4	(107)	-13.5%
5-19	(477)	-11.9%
20-34	338	10.9%
35-64	568	10.7%
65 +	438	22.9%
TOTALS	759	5.0%

*1970 - 1990 AVERAGE NET MIGRATION RATE POPROI

REPORT D HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2005* POPULATION BY AGE/SEX

AGE OF COHORT	2005* TOTAL	2005* MALE	2005* FEMALE	% OF TOTAL	2000-05 CHANGE TOTAL	2000-05 CHANGE MALE	2000-05 CHANGE FEMALE
0-4	774	395	379	4.9%	84	37	47
5-9	689	357	332	4.4%	(214)	(103)	(111)
10-14	902	460	443	5.7%	(109)	(66)	(42)
15-19	1,008	524	484	6.4%	(597)	(291)	(306)
20-24	1,598	809	789	10.1%	585	221	363
25-29	1,007	583	424	6.4%	(10)	104	(114)
30-34	1,011	475	536	6.4%	(393)	(383)	(10)
35-39	1,393	849	544	8.8%	411	354	57
40-44	971	488	483	6.2%	(217)	(79)	(139)
45-49	1,168	554	614	7.4%	(80)	(88)	8
50-54	1,212	618	594	7.7%	190	126	64
55-59	978	464	514	6.2%	139	22	117
60-64	780	402	378	5.0%	187	120	67
65-69	532	243	289	3.4%	6	2	5
70-74	445	192	253	2.8%	(180)	(49)	(131)
75-79	491	172	319	3.1%	(46)	(43)	(2)
80-84	369	132	237	2.3%	(12)	20	(32)
85 +	430	107	323	2.7%	146	28	118
TOTALS	15,758	7,822	7,936	100.0%	(110)	(68)	(42)
PERCENT	100.0%	49.6%	50.4%	NA	100.0%	61.7%	38.3%

AGE OF COHORT	2005* TOTAL	2005* %
0-4	774	4.9%
5-19	2,600	16.5%
20-34	3,616	22.9%
35-64	6,502	41.3%
65 +	2,266	14.4%
TOTALS	15,758	100.0%

AGE OF COHORT	2000-05 CHANGE	2000-05 % CHNG
0-4	84	2.4%
5-19	(920)	-26.8%
20-34	182	3.1%
35-64	630	26.8%
65 +	(85)	-0.5%
TOTALS	(110)	-0.7%

*ZERO NET MIGRATION

REPORT D HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTION*

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2005-10 CHANGE TOTAL	2005-10 CHANGE MALE	2005-10 CHANGE FEMALE
0-4	739	377	362	4.8%	(36)	(18)	(17)
5-9	773	394	379	5.0%	84	37	47
10-14	688	357	332	4.5%	(214)	(103)	(111)
15-19	900	458	442	5.8%	(108)	(66)	(42)
20-24	1,003	520	483	6.5%	(594)	(289)	(306)
25-29	1,588	802	787	10.3%	582	219	362
30-34	1,000	578	423	6.5%	(11)	103	(114)
35-39	1,004	470	534	6.5%	(389)	(379)	(10)
40-44	1,377	837	539	8.9%	406	349	56
45-49	954	477	477	6.2%	(214)	(77)	(137)
50-54	1,135	533	602	7.4%	(77)	(85)	7
55-59	1,159	582	577	7.5%	181	119	62
60-64	912	422	490	5.9%	132	20	112
65-69	697	346	351	4.5%	166	103	62
70-74	451	194	257	2.9%	6	1	4
75-79	347	137	210	2.2%	(144)	(35)	(109)
80-84	341	105	235	2.2%	(28)	(26)	(2)
85 +	369	98	270	2.4%	(61)	(8)	(53)
TOTALS	15,437	7,688	7,749	100.0%	(321)	(134)	(187)
PERCENT	100.0%	49.8%	50.2%	NA	100.0%	41.7%	58.3%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	739	4.8%
5-19	2,361	15.3%
20-34	3,592	23.3%
35-64	6,540	42.4%
65 +	2,204	14.3%
TOTALS	15,437	100.0%

AGE OF COHORT	2005-10 CHANGE	2005-10 % CHNG
0-4	(36)	-1.4%
5-19	(239)	-6.6%
20-34	(24)	-0.4%
35-64	39	1.7%
65 +	(62)	-0.4%
TOTALS	(321)	-2.0%

*ZERO NET MIGRATION

REPORT D HARBORCREEK TOWNSHIP DATE: 7/26/94

POPULATION PROJECTIONS*

HARBORCREEK TOWNSHIP 2010* POPULATION BY AGE/SEX

AGE OF COHORT	2010* TOTAL	2010* MALE	2010* FEMALE	% OF TOTAL	2000-10 CHANGE TOTAL	2000-10 CHANGE MALE	2000-10 CHANGE FEMALE
0-4	637	330	307	3.9%	(53)	(28)	(26)
5-9	877	447	430	5.4%	(27)	(14)	(13)
10-14	875	454	421	5.4%	(136)	(72)	(64)
15-19	1,295	670	625	8.0%	(310)	(145)	(165)
20-24	875	514	361	5.4%	(138)	(74)	(64)
25-29	962	437	524	5.9%	(55)	(42)	(14)
30-34	1,147	662	485	7.1%	(256)	(195)	(61)
35-39	1,317	673	644	8.1%	335	178	157
40-44	1,512	908	604	9.3%	324	341	(17)
45-49	970	505	464	6.0%	(278)	(136)	(142)
50-54	1,156	552	604	7.1%	133	60	74
55-59	1,142	582	560	7.0%	303	140	163
60-64	912	446	466	5.6%	319	164	155
65-69	680	335	345	4.2%	155	94	61
70-74	486	190	297	3.0%	(139)	(52)	(87)
75-79	441	162	279	2.7%	(96)	(54)	(42)
80-84	467	118	349	2.9%	86	7	80
85 +	508	142	367	3.1%	225	63	162
TOTALS	16,258	8,125	8,133	100.0%	391	236	155
PERCENT	100.0%	50.0%	50.0%	NA	100.0%	60.3%	39.7%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	637	3.9%
5-19	3,046	18.7%
20-34	2,984	18.4%
35-64	7,008	43.1%
65 +	2,582	15.9%
TOTALS	16,258	100.0%

AGE OF COHORT	2000-10 CHANGE	2000-10 % CHNG
0-4	(53)	-7.7%
5-19	(473)	-13.4%
20-34	(450)	-13.1%
35-64	1,136	19.4%
65 +	231	9.8%
TOTALS	391	2.5%

*1970 - 1990 AVERAGE NET MIGRATION RATE POPROI

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1990 - 2010 POPULATION CHANGE

AGE OF COHORT	1990-10 CHANGE TOTAL	1990-10 CHANGE MALE	1990-10 CHANGE FEMALE	1990-10 % CHNG TOTAL	1990-10 % CHNG MALE	1990-10 % CHNG FEMALE
0-4	(161)	(85)	(76)	-20.1%	-20.4%	-19.9%
5-9	(243)	(113)	(130)	-21.7%	-20.3%	-23.2%
10-14	(298)	(148)	(150)	-25.4%	-24.6%	-26.3%
15-19	(409)	(223)	(186)	-24.0%	-25.0%	-22.9%
20-24	(365)	(247)	(118)	-29.5%	-32.5%	-24.6%
25-29	203	85	117	26.7%	24.2%	28.9%
30-34	50	127	(77)	4.6%	23.8%	-13.7%
35-39	53	45	8	4.2%	7.2%	1.2%
40-44	461	403	58	43.9%	79.8%	10.7%
45-49	53	18	34	5.8%	3.8%	8.0%
50-54	491	241	250	73.8%	77.4%	70.6%
55-59	497	264	233	77.0%	82.9%	71.2%
60-64	150	87	63	19.7%	24.2%	15.7%
65-69	32	14	18	4.9%	4.3%	5.5%
70-74	(38)	(38)	1	-7.2%	-16.9%	0.2%
75-79	99	31	68	28.9%	23.6%	32.3%
80-84	244	53	191	109.4%	82.0%	120.7%
85 +	332	91	242	188.9%	177.7%	193.4%
TOTALS	1,150	603	547	7.6%	8.0%	7.2%
PERCENT	100.0%	52.5%	47.5%	100.0%	105.4%	94.7%

AGE OF COHORT	1990-10 TOTAL	1990-10 %**
0-4	(161)	-14.0%
5-19	(951)	-82.7%
20-34	(112)	-9.8%
35-64	1,704	148.2%
65 +	669	58.2%
TOTALS	1,150	100.0%

AGE OF COHORT	1990-10 CHANGE	1990-10 % CHNG
0-4	(161)	-20.1%
5-19	(951)	-23.8%
20-34	(112)	-3.6%
35-64	1,704	32.1%
65 +	669	35.0%
TOTALS	1,150	7.6%

*1970 - 1990 AVERAGE NET MIGRATION RATE
**REPRESENTS A PERCENT OF THE TOTAL CHANGE

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AGE CHARACTERISTICS

AGE OF COHORT	2000* TOTAL	2000* %
0-4	774	4.9%
5-19	2,600	16.5%
20-34	3,616	22.9%
35-64	6,502	41.3%
65 +	2,266	14.4%
TOTALS	15,758	100.0%

AGE OF COHORT	2010* TOTAL	2010* %
0-4	637	3.9%
5-19	3,046	18.7%
20-34	2,984	18.4%
35-64	7,008	43.1%
65 +	2,582	15.9%
TOTALS	16,258	100.0%

AGE BY SEX

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
0-14	2,366	15.0%	1,212	51.2%	1,154	48.8%
15-24	2,606	16.5%	1,333	51.1%	1,273	48.9%
25-34	2,018	12.8%	1,058	52.4%	960	47.6%
35-44	2,364	15.0%	1,337	56.6%	1,027	43.4%
45-54	2,380	15.1%	1,172	49.2%	1,208	50.8%
55-64	1,758	11.2%	865	49.2%	893	50.8%
65-74	977	6.2%	435	44.6%	541	55.4%
75+	1,289	8.2%	410	31.8%	879	68.2%
TOTALS	15,758	100.0%	7,822	49.6%	7,936	50.4%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
0-14	2,388	14.7%	1,231	51.5%	1,158	48.5%
15-24	2,170	13.3%	1,183	54.5%	987	45.5%
25-34	2,109	13.0%	1,100	52.1%	1,009	47.9%
35-44	2,829	17.4%	1,581	55.9%	1,248	44.1%
45-54	2,125	13.1%	1,057	49.7%	1,068	50.3%
55-64	2,054	12.6%	1,027	50.0%	1,026	50.0%
65-74	1,166	7.2%	524	45.0%	642	55.0%
75+	1,416	8.7%	422	29.8%	994	70.2%
TOTALS	16,258	100.0%	8,125	50.0%	8,133	50.0%

*1970 - 1990 AVERAGE NET MIGRATION RATE

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OLDER CITIZENS

AGE OF COHORT	2000* TOTAL	2000* %	2000* MALE	2000* %	2000* FEMALE	2000* %
65-69	532	23.5%	243	45.7%	289	54.3%
70-74	445	19.6%	192	43.2%	253	56.8%
75-79	491	21.7%	172	35.1%	319	64.9%
80-84	369	16.3%	132	35.7%	237	64.3%
85 +	430	19.0%	107	24.8%	323	75.2%
TOTALS	2,266	100.0%	846	37.3%	1,420	62.7%

AGE OF COHORT	2010* TOTAL	2010* %	2010* MALE	2010* %	2010* FEMALE	2010* %
65-69	680	26.3%	335	49.3%	345	50.7%
70-74	486	18.8%	190	39.0%	297	61.0%
75-79	441	17.1%	162	36.7%	279	63.3%
80-84	467	18.1%	118	25.3%	349	74.7%
85 +	508	19.7%	142	27.9%	367	72.1%
TOTALS	2,582	100.0%	946	36.6%	1,636	63.4%

*1970 - 1990 AVERAGE NET MIGRATION RATE

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1900 - 2010 POPULATION CHANGE

YEAR	POP.	NUMBER	% CHNG	CUMILITIVE % CHNG
1900	1,687	NA	NA	NA
1910	2,074	387	22.9%	22.9%
1920	2,212	138	6.7%	31.1%
1930	2,890	678	30.7%	71.3%
1940	3,602	712	24.6%	113.5%
1950	7,475	3,873	107.5%	343.1%
1960	10,569	3,094	41.4%	526.5%
1970	12,038	1,469	13.9%	613.6%
1980	14,644	2,606	21.6%	768.0%
1990	15,108	464	3.2%	795.6%
2000*	15,867	759	5.0%	840.6%
2010*	16,258	391	2.5%	863.7%
1960-10	16,258	5,689	53.8%	NA

*1970 - 1990 AVERAGE NET MIGRATION RATE

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COMPARABLE POPULATION PROJECTIONS

A/G/A ZERO NET MIGRATION

YEAR	POP.	CHANGE	% CHNG
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	15,114	6	0.0%
2010*	14,831	(284)	-1.9%

A/G/A HIGHEST

YEAR	POP.	CHANGE	% CHNG
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	16,922	1,814	12.0%
2010*	18,561	1,639	9.7%

A/G/A 1970-1990 AVG. NET MIGRATION

YEAR	POP.	CHANGE	% CHNG
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	15,867	759	5.0%
2010*	16,258	391	2.5%

A/G/A LOWEST

YEAR	POP.	CHANGE	% CHNG
1960	10,569	3,094	41.4%
1970	12,038	1,469	13.9%
1980	14,644	2,606	21.6%
1990	15,108	464	3.2%
2000*	14,812	(296)	-2.0%
2010*	13,938	(874)	-5.9%

END OF REPORT D POPROI

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