Summit Township Master Plan



Township Hall

2030 Edition

The 2030 edition of the <u>Summit Township Master Plan</u> was approved by the Summit Township Planning Commission on February 17, 2009.

Secretary

The 2030 edition of the <u>Summit Township Master Plan</u> was approved by the Summit Township Board on March 24, 2009.

Summit Township Clerk



Master Plan 2030 Edition

Prepared by: Summit Township Planning Commission

With assistance from: Region 2 Planning Commission Staff

Table of Contents

	Page
Introduction	
Why Plan?	2
What is a Master Plan?	
MPEA & MZEA Compliance	
Location and Natural & Cultural Features	
Location	
Geology	
Soils & Hydrology	
Hazard MitigationArts & Cultural Opportunities	
··	
Population	
Population History & Projections	
Households & Family Composition	
Disability of Residents	
Racial & Ethnic Composition	
Income	
Existing Land Use and Public Infrastructure	
Land Use/Land Cover	
Land Use & Transportation	
Municipal Sewer and Water	
Community Development Policies	
Mission Statement	
Residential Development Policy	28
Office Development Policy	29
Commercial Development Policy	
Industrial Development Policy	29
Future Land Use	31
Limited Use Areas	
Residential Areas	
Office Area	
Commercial Areas	
Industrial Areas	
Zoning Plan	
What is the Zoning Plan?	
Zoning Districts	
Dimensional Standards	
Rezoning Criteria	

Zo W Appendio Po	oningho will implement the Plan?es ces opulation Summary	Page
	List of T	
Table 1 Table 2 Table 3 Table 4 Table 5 Table 6 Table 7	Disabled Residents	Page
	List of Fi	gures
Figure 1 Figure 2 Figure 3 Figure 4	Population Projections Population by Generation	Page
	List of I	
Map 1a Map 1b Map 2 Map 3a Map 3b Map 4a Map 4b Map 4c Map 4d Map 4e Map 5 Map 6	Jackson County	Page Michigan 4 6 9 19 20 22 25 33 39



Why Plan?

Summit Township must continue to change in order to remain a dynamic and attractive community. New residents must be attracted and existing residents must be encouraged to stay. Homes need to be remodeled and new ones must be built. Business start-ups must be generated and existing businesses must be retained. Industries must be developed and expanded while others must be relocated within the Township. Parks and other public spaces must continue to be developed or improved. Numerous other changes must be made as the Township matures.

The Summit Township Master plan was prepared under the authority of the MPEA —the Michigan Planning Enabling Act (PA 33 of 2008), as amended— which authorizes the Planning Commission to prepare and adopt a master plan for the Township's physical growth and development. The MPEA also requires a master plan to be reviewed at least every 5 years to determine if the plan needs to be amended or revised.

Some communities simply allow change to happen. They hope for the best and react to development proposals as they surface. Others work diligently to influence change in a manner that results in the quality of life desired by residents and others. A major step in that "influencing process" is the preparation of a master plan.

What is a Master Plan?

A master plan provides a framework within which the Township evaluates its present status and outlines its desired future direction. The master plan is the guiding document for land use, development and zoning decisions in the Township of Summit. A well-designed and implemented Plan will help Summit Township become a highly desirable community in which to live, work and visit.

The Plan is a "living" document which the Township should review on a regular basis. This review should evaluate the level of program achievement and include a strategic implementation plan for the upcoming year. If circumstances in the community change the Plan should be amended. The Township should also consult the Plan when allocating funds and use the Plan as support for grant applications.

MPEA & MZEA Compliance

This master plan is intended to be the plan referred to in the MZEA —the Michigan Zoning Enabling Act (PA 110 of 2006), as amended— as the basis for the zoning ordinance and as provided for in the MPEA to serve as the master plan for the Township of Summit. The required zoning plan elements are found in Appendix A. The <u>Jackson County Community Cultural Plan</u>, a separate document, is included as a special plan element of this master plan. The Township should also consider adopting the <u>Jackson County Hazard Mitigation Plan</u> as a special plan element of this master plan once it is completed.

Introduction



LOCATION AND NATURAL & CULTURAL FEATURES

Location

Summit Township is a political subdivision of Jackson County, located in South-Central Lower Michigan. The Jackson Urbanized Area extends into Summit. Jackson is connected to Ann Arbor, Battle Creek, Detroit, and other urbanized areas along the Interstate 94 (I-94) corridor (see Map 1a).

Map 1a I-94, Corridor, South-Central Lower Michigan



Summit Township surrounds the southern half of the City of Jackson in the center of Jackson County (see Map 1b). Accordingly, a significant portion of Summit is an integral part of the Jackson Urbanized Area. Vandercook Lake, an unincorporated village, is also an important part of the Township.

SPRINGPORT LEONI SANDSTONE BLAOK MAN TOWNSHIP 94 TOWNSHIE TOWNSHIP **GRASS** PARMA SON **MICHIGAN** LAKE CENTER ALBION SPRING ARBOR VANDERCOOK SPRING AKE NAPOLEON ARBOR TOWNSHIP CONCORD HANOVER LIBERTY BROOKLYN TOWNSHIP CEMENT **MANOVER** CITY 12

Map 1b

Jackson County

Location and Natural & Cultural Features

Summit Township is connected to the Jackson Urbanized Area and surrounding jurisdictions via a variety of roadways. US Highway 127 (US-127), Michigan Highway 50 (M-50), and M-60 provide access to Interstate 94 (I-94) and the other communities within Jackson County and beyond (see Map 2). A variety of local roads and streets provide direct access to homes and businesses within the Township and the surrounding area. The Falling Waters Trail and the Intercity Trail provides a non-motorized connection to the Village of Concord, the City of Jackson, and other destinations.

Geology

In geologic terms, the lower peninsula of Michigan is classified as the Michigan Basin with older rock formations near the surface along the edges of the state and younger formations near the surface closer to the center of the state. The oldest and deepest formation found in southern Jackson County is the Mississippian, estimated to have formed 310-345 million years ago. They are found in depths of 0-535 feet. Mississippian bedrock consists of Antrium Shales, Beria Sandstones, Coldwater Shales, Lower Marshall Sandstones, Napoleon Sandstones, Michigan Shales, Michigan Sandstones and Bayport Limestones. The Pennsylvanian system consists of Parma Sandstones, Upper Saginaw and Lower Saginaw Verne Limestones, and Woodville Sandstones.

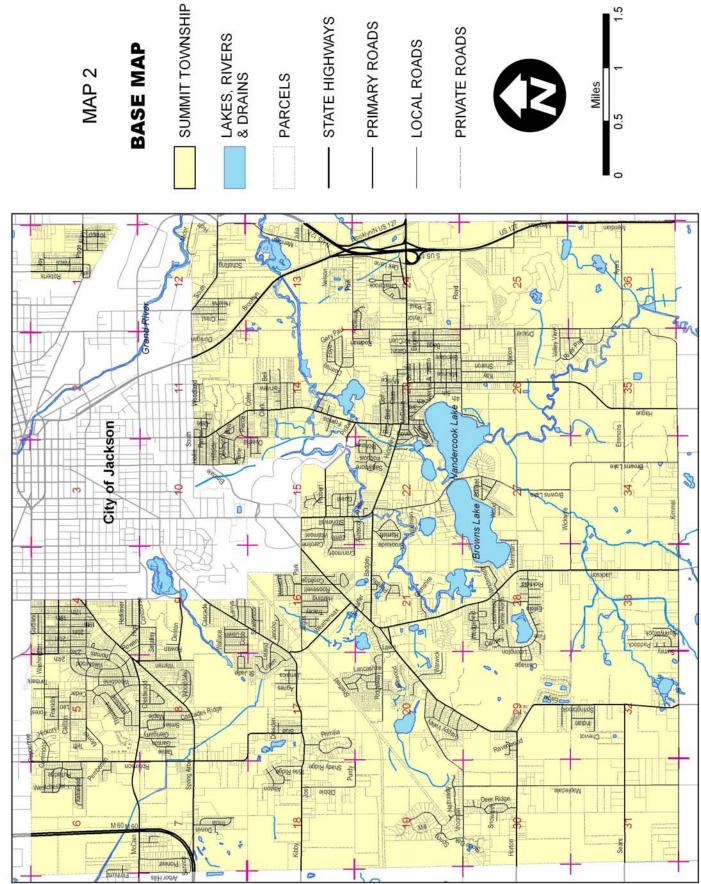
Glaciers have had the most significant impact on the entire county's surface over the past 300 million years, particularly the Wisconsinian glacier that moved through and retreated 100 million years ago. This glacier is thought to have flowed from the northern Canadian Highlands south to the junction of the Ohio and Missouri Rivers.

As the glaciers flowed south, their tremendous weight gouged out large chunks of the earth and scoured the surface. This rubbing of materials broke down large chunks to smaller ones. As the glacier began to melt and retreat, the scoured materials were deposited with larger pieces on the bottom and finer particles on top. This deposition of material in an unsorted and unstratified heterogeneous mixture is known as a Till Plain. Till plaining generally consists of nearly flat to slightly rolling surfaces. The eastern portion of Summit Township is comprised of till plains.

Most of the Township consists of Outwash Plains and Moraines. Outwash Plains resulted from the action of glacial meltwater. Materials carried by glaciers were deposited by water that was produced by the melting of ice. The sediment was deposited in a manner similar to an alluvium (deposition of material by rivers at their mouth). The material typically consists of fine silts, sands, and clays that were suspended in water. Outwash Plains are located in the middle of the Township running from the northwest to the southeast along drainage and water areas.

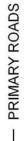
The remainder of Summit consists of Moraines. These geologic features are quite similar to till plains. Their topography is undulating with slopes varying from slight to severe with depressions and knobs dispersed throughout. Moraines were formed by the leading edges of glaciers (end or terminal moraines), by the sides of the glacier (lateral moraines), or by materials that were actually collected and carried by the glacier (medial moraines). Many of the moraines in Summit Township are end or terminal moraines.

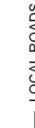
Location and Natural & Cultural Features

















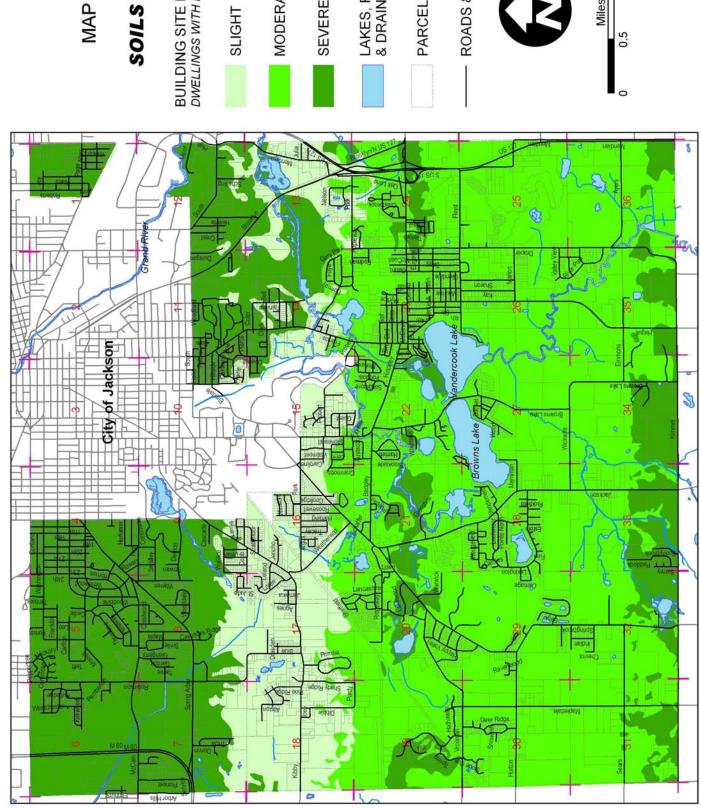
Soils and Hydrology

The most detailed and comprehensive source of soils information for Summit Township is the <u>Soil Survey of Jackson County, Michigan</u>. In this survey, major soil types are identified using soil borings on the basis of the Natural Resources (Soil) Conservation Service's taxonomic classification system and then mapped. Based upon the characteristics of each soil type, the Service made inferences about the constraints that each soil type will impose on the following land use alternatives: shallow excavations, dwellings without basements, dwellings with basements, small commercial buildings, local roads and streets, and lawns and landscaping (see Table 11 of the <u>Soil Survey</u>).

The soils and their locations in the Township were digitized locally for use in a computerized Geographic Information System (GIS) and a map produced showing areas where slight, moderate, or severe limitations may affect the construction of dwellings with basements. Soils with slight limitations can be developed with little or no special problems which might restrict development. Soils identified as moderate for development may require special engineering to overcome a physical constraint, but may still be practical for development and environmentally safe. Limitations such as rapid permeability, shrink/swell, or excessive slope are examples of moderate limitations. Soils categorized with severe limitations that require special engineering or construction techniques are often impractical. In most cases, these soils will not handle construction of any structure and they may also be classified as wetlands, water recharge areas, floodplains, muck soils, or soils with high water tables. These soils often follow drainage patterns to surface water bodies, drains, or rivers.

Wetlands that are 5 acres or more or those which are contiguous with a lake stream or drainage area are protected under state law. The Geomaere-Anderson Wetland Protection Act was adopted to protect those wetlands deemed critical to the public interest. Wetlands are valuable to the community because they perform functions such as floodwater storage areas, water purification, sediment filtration and aquifer recharge, to name a few. A wetland is usually a transitional zone between aquatic and terrestrial systems.

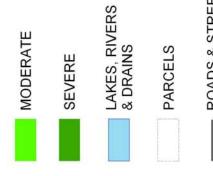
Wellhead protection areas also cover much of Summit Township. Care must be taken in the development of these areas to protect the underlying groundwater and to ensure that access to it is not impaired. Accordingly, the Township should adhere to the Wellhead Protection Plan for Jackson County (once it is completed) when regulating land use in designated wellhead protection areas.

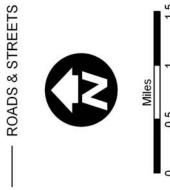


MAP 3a

SOILS MAP

BUILDING SITE LIMITATIONS DWELLINGS WITH BASEMENTS





WETLANDS

MAP 3b

HYDROLOGY MAP

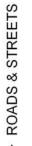
















Hazard Mitigation

Jackson County residents have experienced "massive ice and snow storms, hazardous material threats on [local] highways, powerful electrical storms, tornadoes, and a broken gas pipeline "The disasters are "costly, disruptive, and they threaten our health, welfare, and human life." The <u>Jackson County Hazard Mitigation Plan</u> is currently under development. The document "anticipates natural, technological, and human related disasters; and identifies actions and activities to implement before disasters happen to minimize damage to property and harm to our citizens." The following types of disasters are among the top disaster likely to impact Jackson County:

- Energy emergencies
- Structural fires
- Civil disturbances
- Riverine flooding
- Significant infrastructure failures

The mitigation plan has "a pre-disaster focus to develop strategies and actions to implement prior to the occurrence of [a] disaster to minimize the negative impacts associated with these disasters. Summit Township should work towards implementing the document locally once it is completed, thereby enabling and promoting hazard mitigation efforts. Please refer to the <u>Jackson County Hazard Mitigation Plan</u> for more detail. The Township should consider adopting the document as a special plan element of this master plan once it is completed.

Arts & Cultural Opportunities

Jackson County, including Summit Township, "is home to numerous professional artists, strong cultural organizations, historical sites and a varied mixture of cultural heritages." The <u>Jackson County Community Cultural Plan</u> was published in December 2006 under the guidance of the Arts and Cultural Alliance of Jackson County (ACAJC) "to build on what is currently available in arts and culture and to ensure the strength and sustainability of the sector into the future." The overarching vision of that plan is to "fully develop the potential for arts and culture in Jackson in order to encourage life-long appreciation and broad participation, and to ensure the community is a vibrant and dynamic place to visit, work and live."

Jackson Arts & Culture Creating a vibrant and dynamic place to visit, work and live

Summit Township should work towards implementing the document locally, thereby enabling and promoting arts and culture. Accordingly, the <u>Jackson County Community Cultural Plan</u> is adopted as a special plan element of this master plan under separate cover. The plan can be found online at the ACAJC website: <u>www.acajc.org</u>.



Note:

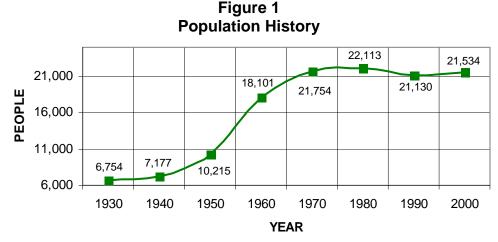
This document contains demographic data recently developed for the 2008-2012 edition of the <u>Summit Township Recreation Plan</u>. Since this edition of the Master plan was created in 2008, the Township's planning commission decided to wait until the 2010 US Census to update Summit's population and housing data. The original chapter on population and housing is located in Appendix A.

The demographic composition of the Township has an effect upon the needs of its residents. For example:

- **Population History & Projections** establish the need for municipal facilities and services (standards for which are based upon population size).
- The Age & Sex of the Population further refines the need for municipal facilities and services balanced among various age groups and gender interests.
- Household & Family Composition further refines the need for municipal facilities and services balanced between family-oriented and individual activities.
- Racial & Ethnic Composition further refines the need for general facilities and services balanced among the various interests of racial and ethnic groups.
- The Disabilities of Residents establish the need for special facilities and services and disability accommodations to general facilities and services.
- Income helps to illustrate the need for publicly-funded facilities and services.

Population History & Projections

Summit Township contained 21,534 residents in the year 2000, according to the US Census. The chart below shows a significant population increase in the Township between 1930 and 1980, especially during the '50's and '60's. The population declined slightly between 1980 and 1990 although a small population increase occurred between 1990 and the year 2000.



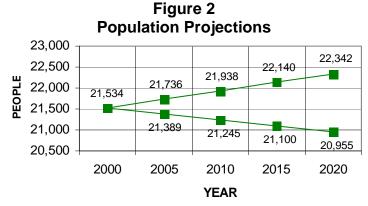
Population projections are estimates, usually based on past trends of real growth. The period of time used in this study is the year 2000 to 2020 (20 years from the official 2000 census data). Various factors play a role in the future population of a given area.

Primary factors that affect growth are births, deaths, in-migration, and out-migration. A change in one of those factors affects the others. In the following chart, population has been projected at five year intervals. Five year projections can easily be changed as situations occur (nationally as well as locally) which affect local in- and out-migration, such as a new industrial or housing development.

A simple projection model has been used to estimate population growth that might reasonably be expected in the future for the Township. The *Linear Method* is based upon the following formulas.¹

Pn = Po(1+r) $r = \left(\frac{Po-Pm}{Pm}/Y1\right)Y2$

This model describes a pattern of population growth in which the population level will continue to change at a given rate based upon changes in population preceding the Year 2000. A minimum population projection was determined using the net loss of population in the Township which occurred between 1980 and the year 2000. A maximum population projection was based upon the population gain which occurred between 1990 and the year 2000. Based upon this information, it is reasonable to expect that the population of Summit Township will range between 21,250 and 22,000 people in 2010 and 21,000 and 22,500 people in 2020.



Age & Sex of the Population

The median age of Summit Township residents in 2000 was 40.0 years, higher than the 35.3 years for the nation that year. The median ages of female and male residents were 38.8 and 41.2 years, respectively. As the figure illustrates, 'baby boomers' – people between 35 and 54 years of age in 2000– accounted for almost one third (29.5%) of the population. 'Shadow boomers' –people between 15 and 34 years of age in 2000– accounted for less than a quarter (22.0%) of the population. 'Echo boomers' – people between 5 and 15 years of age in 2000– accounted for less than 15% of residents (14.5%). 'Older generations' –people at least 55 years of age in 2000– accounted for more than a quarter (27.6%) of the population. 'Younger generations' –people less

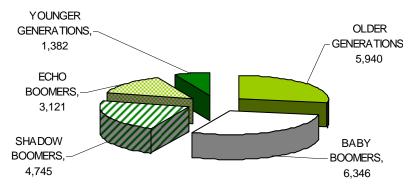
¹ "Pn" is the future population level, "Po" is the base population level, "r" is the growth rate, "Pm" is the past population, "Y1" is the historic time period (20 years), and "Y2" is the future time period (5 years).

than 5 years of age in 2000– accounted for more than 6% of the population (6.4%). Over half (52.2%) of the Area's population was female in 2000; in no generation did males outnumber females.

Table 1
Age of the Population

	Male	Female	Total		Male	Female	Total
Total population	10,291	11,243	21,534	65 to 69 years	416	501	917
Under 5 years	690	692	1,382	70 to 74 years	409	555	964
5 to 9 years	768	769	1,537	75 to 79 years	377	520	897
10 to 14 years	792	792	1,584	80 to 84 years	244	335	579
15 to 19 years	677	640	1,317	85 to 89 years	95	193	288
20 to 24 years	462	462	924	90 years and over	51	133	184
25 to 29 years	560	598	1,158				
30 to 34 years	659	687	1,346	16 years and over	7,890	8,835	16,725
35 to 39 years	736	780	1,516	18 years and over	7,589	8,551	16,140
40 to 44 years	824	814	1,638	21 years and over	7,264	8,253	15,517
45 to 49 years	820	898	1,718	60 years and over	2,030	2,699	4,729
50 to 54 years	705	769	1,474	62 years and over	1,851	2,520	4,371
55 to 59 years	568	643	1,211	67 years and over	1,434	2,033	3,467
60 to 64 years	438	462	900	75 years and over	767	1,181	1,948

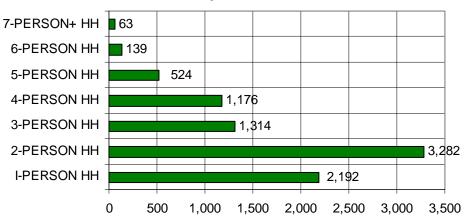
Figure 3 Population by Generation



Household & Family Composition

Summit Township contained 8,690 households in 2000. Almost two thirds (63.0%) of households were comprised of 1 (25.2%) or 2 (37.8%) people. Less than one third (28.7%) of households were comprised of 3 (15.1%) or 4 (13.5%) people. Households with 5 or more people comprised only 8% (8.4%) of the total. Although the overwhelming majority of households were comprised of families, more than one quarter (28.8%) were not. The average household size was 2.46 people and the average family size was 2.93 people in 2000.

Figure 4
Persons per Household



Disability of Residents

People with at least one disability comprised approximately two out of ten (18.1%) residents of Summit Township at least five years of age in 2000. However, age is often a determining factor in the distribution of disability. As the table indicates, approximately four out of ten elderly residents (41.9% (at least 65 years old)) were disabled. However, less than two out of ten adolescents (12.9% (ages 16-20)) and adults (14.4% (ages 21 to 64)) and less than one out of ten children (6.9% (ages of 5 and 15)) were disabled.

Table 2
Disabled Residents

5 to 15 Years (% of Total Pop)	17.1%
No Disability	93.1%
With One Type of Disability	5.4%
With Two or More Types of Disability	1.5%
16 to 20 Years (% of Total Pop)	5.9%
No Disability	87.1%
With One Type of Disability	8.5%
With Two or More Types of Disability	4.4%
21 to 64 Years (% of Total Pop)	58.6%
No Disability	85.6%
With One Type of Disability	6.7%
With Two or More Types of Disability	7.7%
65 Years and Over (% of Total Pop)	18.4%
No Disability	58.1%
With One Type of Disability	19.0%
With Two or More Types of Disability	23.0%

Racial & Ethnic Composition

Race and ethnicity are not significant issues given that the overwhelming majority (91.7%) of Summit Township's population was white and non-Hispanic in the year 2000. However, Non-Hispanic African American residents comprised 4.2% of the population. Non-Hispanics of multiple races and Asian descent comprised 1.4% and 1.5% of the population, respectively. Hispanic residents comprised 1.8% of the population.

Income

The median household income in Summit Township (\$50,492) in 2000 was greater than the median income for the United States (\$41,944) that year. ² The household income for the average (mean) Township household (\$63,369) was also more than the income of the average American household (\$50,046).³ It should also be noted that the median and average household incomes were higher for families while non-family median and mean household incomes were significantly less. The per capita income in Summit Township (\$25,738) was also greater than the per capita income for the entire United States (\$21,587).⁴

Table 3
Household Income in 2000

	Total	Family	Non-Family
Median Income	\$50,492	\$57,182	\$27,665
Mean Income	\$63,369	\$68,399	\$47,106
% of Households	100.0%	72.0%	28.0%

² The median household income means that ½ of the household incomes are greater and ½ were less than the stated amount.

³ The mean income is the average income (i.e., the sum of all household incomes divided by the number of households).

⁴ Per capita income is the average income for all residents (i.e., the sum of all individual incomes divided by the total population).



EXISTING LAND USE & PUBLIC INFRASTRUCTURE

Note:

The Township received new land use information in 2000 from Michigan State University's Remote Sensing and Geographic Information Science Research & Outreach Services. Land use is categorized differently than the previous Township studies conducted in 1968, 1973, and 1997, making a comparison with the Year 2000 difficult. Appendix B contains the original chapter on land use and transportation.

Land Use/Land Cover

Summit Township is comprised of approximately 36 square miles. Lakes, ponds and wetlands accounted for approximately 12% of the Township, leaving 32 square miles available for development. Built-up lands —acreage already developed — covered approximately 47% of the municipality in 2000. Agricultural, grass, shrub, and forest lands accounted for the remaining 42% of the Township.

Table 4
Existing Land Use/Land Cover

Land Use	Acres	Square Miles	
Built-Up Lands	10,791	16.9	46.6%
Agricultural & Open Lands	9,641	15.1	41.6%
Lakes and Ponds	466	0.7	2.0%
Wetlands	2,269	3.5	9.8%
	23,166	36.2	100.0%

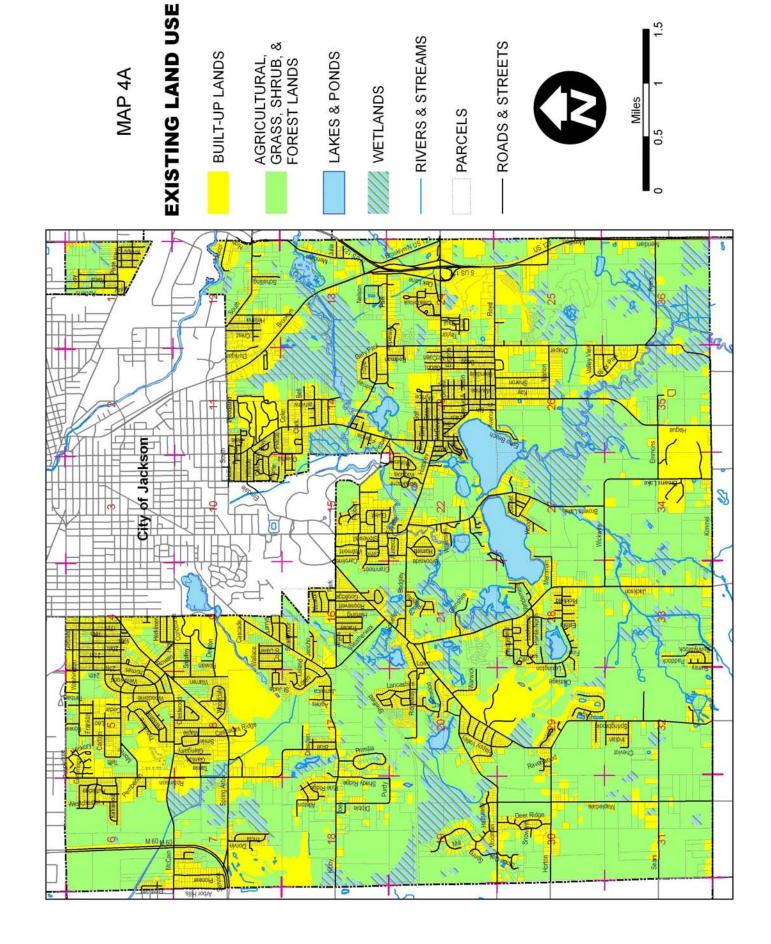
Source: Remote Sensing, Michigan State University

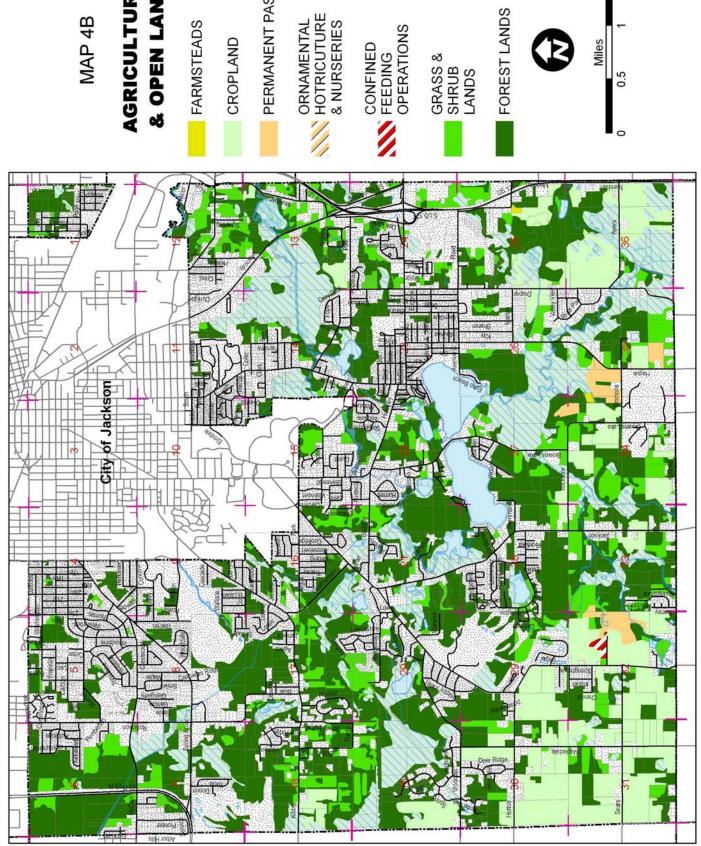
Forests covered almost two-thirds of the 15 square miles of Summit Township's agricultural and open lands in 2000. Grass and shrubs accounted for another 17% of undeveloped portion of the municipality. Farmland covered the remaining 22% of agricultural and open lands. Active croplands and permanent pasture accounted for almost all of the farmland. Confined feed lots, farmsteads, and ornamental horticulture and nursery operations accounted for a very small portion of farmland.

Table 5
Agricultural & Open Lands

Land Use	Acres	Square Miles	
Farmsteads	8	0.0	0.1%
Cropland	1,836	2.9	19.0%
Permanent Pasture	144	0.2	1.5%
Ornamental Horticulture & Nurseries	1	0.0	0.0%
Confined Feed Lots	13	0.0	0.1%
Grass & Shrub Land	1630	2.5	16.9%
Forest Land	6010	9.4	62.3%
	9,641	15.1	100.0%

Source: Remote Sensing, Michigan State University





MAP 4B

AGRICULTURAL & OPEN LANDS



CROPLAND

PERMANENT PASTURE

GRASS & SHRUB LANDS

FOREST LANDS

Residential development covered approximately 63% of the 17 square miles of Summit Township's built-up lands in 2000. Single-family homes and duplexes accounted for almost all residential development. Multi-family homes and manufactured home parks comprised less than 3% of all residential development.

Commercial development covered approximately 11% of built-up lands in the Township. Institutions —such as the Jackson Community College Campus— accounted for 54% of commercial development. Neighborhood businesses accounted another 37%. General business areas comprised the remaining 9% of commercial development.

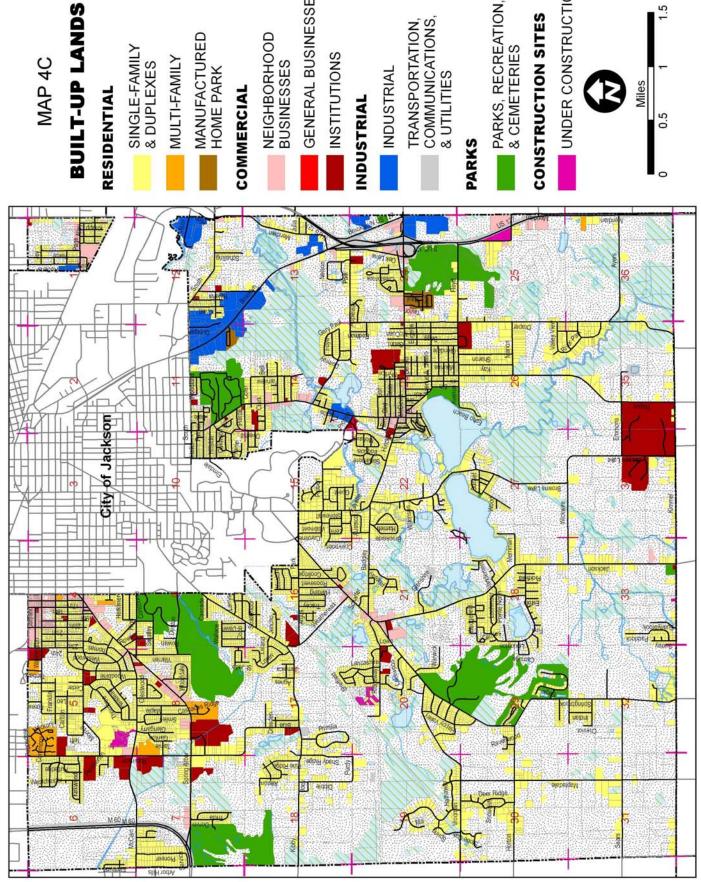
Industrial development covered approximately 13% of built-up lands in Summit Township. Industrial shops and plants comprised approximately 77% of all industrial development. Utility, communication, and transportation infrastructure accounted for the remaining 23%.

Parks, other recreational facilities, and cemeteries covered approximately 12% of builtup lands in the Township. Less than half of a percent of all built-up lands were under construction in 2000.

Table 6
Existing Land Use/Land Cover
Built-Up Lands

Land Use	Acres	Square Miles		
Residential	6,833	10.7	63.3%	100.0%
Single-Family & Duplexes	6,655	10.4	61.7%	97.4%
Multi-Family	140	0.2	1.3%	2.0%
Manufactured Home Park	38	0.1	0.4%	0.6%
Commercial	1,207	1.9	11.2%	100.0%
Neighborhood Businesses	445	0.7	4.1%	36.8%
General Businesses	110	0.2	1.0%	9.1%
Institutions	653	1.0	6.1%	54.1%
Industrial	1,387	2.2	12.9%	100.0%
Industrial	1,066	1.7	9.9%	76.9%
Transportation, Communications, & Utilities	321	0.5	3.0%	23.1%
Parks, Recreation, and Cemeteries	1,326	2.1	12.3%	
Under Construction	37	0.1	0.3%	
	10,790	16.9	100.0%	

Source: Remote Sensing, Michigan State University



MAP 4C

SINGLE-FAMILY & DUPLEXES

MULTI-FAMILY

NEIGHBORHOOD BUSINESSES

GENERAL BUSINESSES

INSTITUTIONS

INDUSTRIAL

TRANSPORTATION, COMMUNICATIONS, & UTILITIES

PARKS, RECREATION, & CEMETERIES

CONSTRUCTION SITES

UNDER CONSTRUCTION



Land Use and Transportation

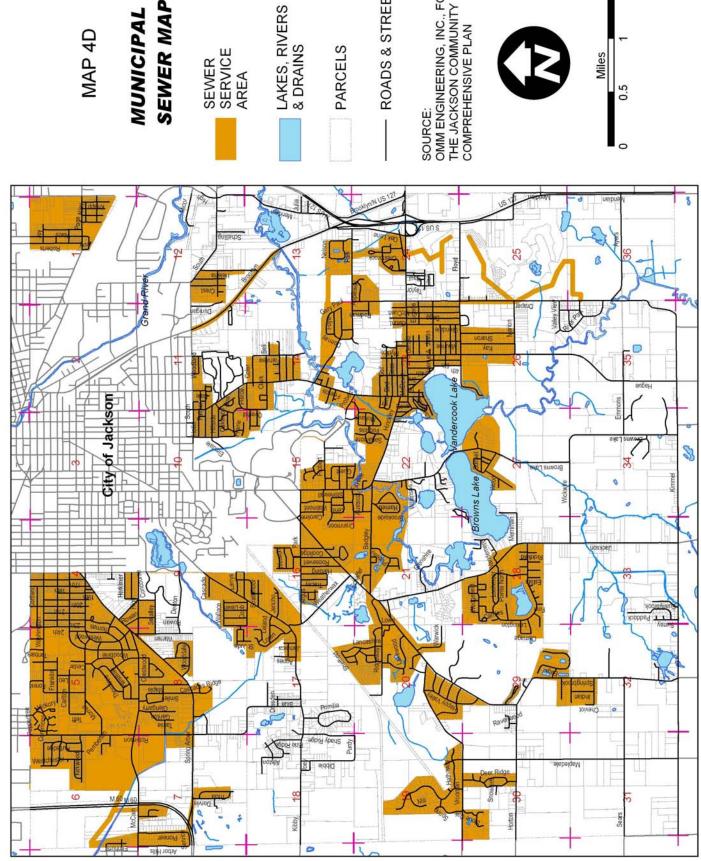
Generally, the land use pattern in Summit Township could be described as a series of residentially developed areas extending radially from the City of Jackson along major roads, with more rural types of land use in the southern and western portions of the Township and interspersed between developed areas. The major roads linking the Township with the City include Michigan Avenue, Spring Arbor Road, Kibby Road, Weatherwax Drive, Horton Road, Fourth Street, Francis Street, Airline Drive, South Street, and Page Avenue. Each of these supports residential development along its corridor with Airline Drive and Page Avenue also serving substantial industrial land uses. Major commercial land uses (including offices) occupy land areas along Michigan Avenue, Spring Arbor Road, and Francis Street. Smaller centers of commercial activity are located along Horton Road, McDevitt Street, and Page Avenue.

While the primary orientation of the transportation system tends to link the Township with downtown Jackson, some major roads provide passage laterally, linking the developed areas within the Township. These roads include McDevitt Street, Hinkley Boulevard, Badgley Road, and Robinson Road. A few major transportation routes run through the Township serving primarily through traffic and include M-60 and Spring Arbor Road running east and west in the western portions of the County and US-127 extending north and south in the eastern portion of the Township.

Also, several areas are served by buses provided by the Jackson Transit System. The present route includes Francis Street to Vandercook Lake, and to the Jackson Community College and part of the Spring Arbor Road corridor. This bus service provides essential transportation primarily to the lower income people such as elderly, students, and handicapped, as well as to the general population.

Municipal Sewer and Water

Municipal sewer and water serve major portions of Summit Township, extending from the City of Jackson to Vandercook Lake and a majority of the other "built-up lands" comprising the municipality. For example, municipal water serves the overwhelming majority of the Township's residential subdivisions and commercial and industrial areas. Water service also extends to important institutions located within the Township such as the Jackson Community College Campus. The sewer service area covers a smaller portion of the Township although it also serves a majority of the residential neighborhoods in the municipality. The rural southern and western portions of Summit Township are not served by municipal water or sewer.



MAP 4D

MUNICIPAL SEWER MAP



SEWER SERVICE AREA



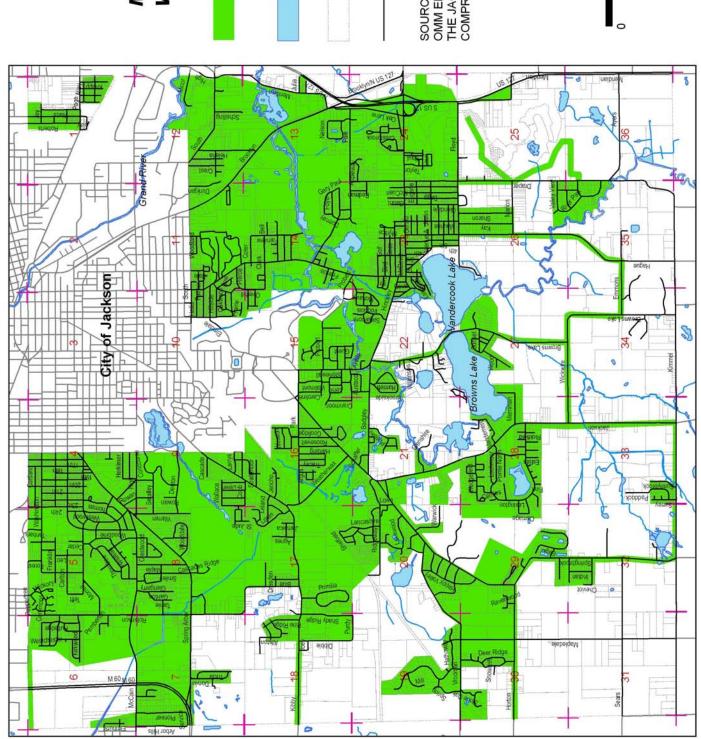
PARCELS

ROADS & STREETS

SOURCE:
OMM ENGINEERING, INC., FOR
THE JACKSON COMMUNITY
COMPREHENSIVE PLAN







MAP 4E

MUNICIPAL WATER MAP

WATER SERVICE AREA LAKES, RIVERS & DRAINS

PARCELS

ROADS & STREETS

SOURCE:
OMM ENGINEERING, INC., FOR
THE JACKSON COMMUNITY
COMPREHENSIVE PLAN







Mission Statement

The ultimate goal of the Summit Township Master plan is to implement a policy that will guide future development in a manner consistent with the natural attributes of the land, the preservation of open spaces, the rural character, and the provision of necessary public facilities and services.

The following goals and objectives are intended to further define the mission statement by listing the more important policies identified by the community during the development of the plan.

Residential Development Policy

Goal: Encourage the development of residential areas of all types that will meet the needs of an increasing population, while conserving open areas and environmentally sensitive lands.

The Summit Township Planning Commission must determine the most appropriate locations for low-, moderate- and high-density residential uses based upon existing roads, municipal services, public utilities, and environmental constraints and future housing needs of the community. The Planning Commission should encourage development of residential use areas where suitable vacant land is available and map those proposed uses on the future land use map. The purpose of identifying these areas is to discourage discrimination based upon housing type, design, or density.

Goal: Protect existing residential neighborhoods from encroachment by incompatible land uses.

Landscaping and buffering are effective means of screening when it is necessary to separate residential property from commercial or industrial use. The Planning Commission should periodically review ordinance regulations to ensure that adequate provisions are available to protect residential uses in transition areas. Commercial and industrial uses should be discouraged from expanding into existing residential neighborhoods or onto local residential streets.

Goal: New residential development should be encouraged to cluster in predetermined areas where municipal services can be provided with existing infrastructure or where they can be extended without additional expense to the Township's current population.

New residential developments should be encouraged to cluster around areas where current existing residential uses are located. These areas should have good physical characteristics that are conducive to the particular type of development. Residential development should be encouraged where existing municipal services necessary can be provided. Central water and sewer will be required of all multiple-family developments.

New residential development should be encouraged to preserve the rural character and the environmental integrity of the Township. The plan recognizes that the Township's open spaces, including woodlands, fields, and farmland are fundamental components of

Community Development Policies

the rural character of the community. The plan should encourage higher density residential uses away from high quality farming to support preservation of prime farmland and open spaces.

Office Development Policy

Goal: Encourage the development of office space in transition areas between residential and commercial or industrial space.

Office space should be encouraged in certain predetermined clusters as a transition area while meeting the needs for offices of the community.

Goal: Encourage more intensive office/research facilities in a high-tech park atmosphere.

Under existing ordinance regulations, a high-tech research area could be allowed, but this type of use has not been encouraged in Summit Township in the past. This plan suggests that this type of development is beneficial and urges the Planning Commission to consider adopting new zoning regulations specifically designed for this type of development.

Commercial Development Policy

Goal: Encourage the development of commercial uses that support the needs of the Township and diversify the local economy in areas that will provide convenient access to shopping and related services compatible with commercial districts in adjacent areas.

New commercial development or redevelopment is encouraged to cluster in predetermined areas that are easily accessible along major thoroughfares or at major intersections of the Township of sufficient size to provide adequate off-street parking. Commercial uses should be located to avoid incompatibility with adjacent uses.

Industrial Development Policy

Goal: Encourage the development of industrial uses to diversify the local economy and to provide a stable tax base for the Township at locations that will allow the quality of the local environment to be maintained.

Industrial uses should be located in areas where they can be adequately buffered from residential uses. Landscaping will be required of each new industrial site. Light, clean industrial uses located in industrial parks or subdivisions are preferred. Industrial areas should be located on major thoroughfares having access to the surrounding region or state. New vacant areas should be planned to provide an employment base and tax base for the residents of the community.



The Summit Township Master plan represents a vision of how the community might look in the future. The horizon is the year 2030 or a little more than 20 years. The plan does not suggest that the Township will develop to the limits identified on the future land use map. Rather, the plan is intended to guide the community through its daily decision making processes so that future development will be consistent with the development goals adopted in the plan.

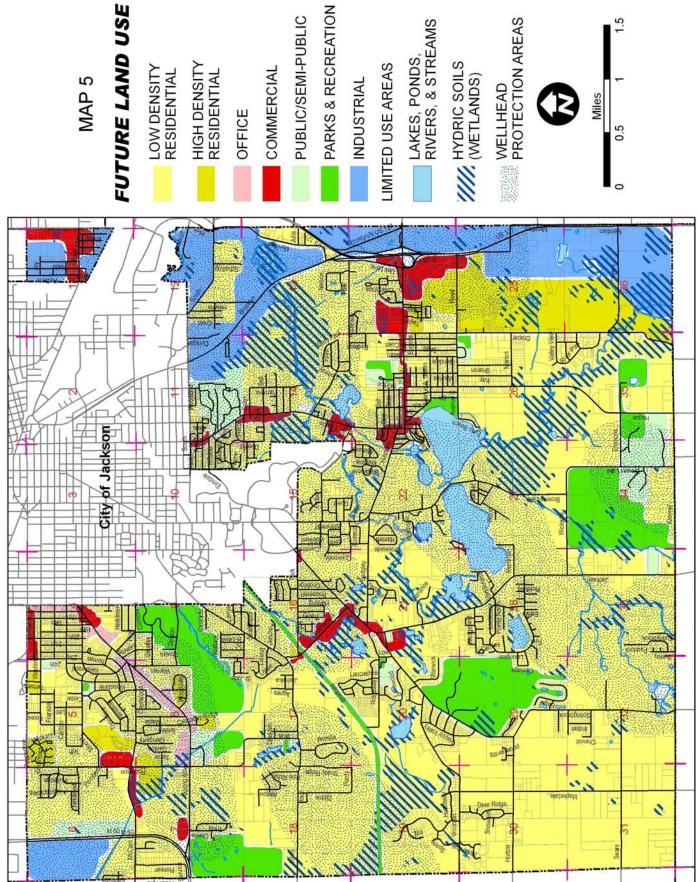
The master plan consists of policies that address future land use and development of the Township over the life of the plan. However, the plan itself has no regulatory authority relying instead upon other tools, most notably the zoning ordinance. The plan simply suggests where various land uses should be located. The zoning ordinance carries out the policies of the plan by regulating the type of use that a parcel may have, the location of the uses, the bulk and density of development throughout Summit Township.

The plan presented here is not static. It is designed to be a flexible document that can and should change as the community changes. Even though the document is long-range in nature (20 years ±), it should be periodically reviewed and updated as the community grows and changes. There will be times when it will be necessary to deviate from the plan. Changing land use patterns may cause certain areas on the Master plan map to become obsolete for a use suggested. When this happens, the Planning Commission may be required to interpret the most appropriate type of use for an area. Interpretation of a specific site should be made with regard to the impact on the surrounding area.

The future land use map was not designed nor was it intended to parallel the existing zoning map. Zoning is the tool used to carry out the plan. Therefore, the zoning map will not look exactly like the future land use map. As the community grows and rezoning requests become necessary to accommodate development, future rezonings should be consistent with the plan in most cases or the plan should be amended to reflect changing trends. This is not to suggest that every rezoning needs to be consistent with the plan. In areas where several requests are made for rezoning over a short period, it may be necessary to consider amending the plan if changing land use patterns warrant a change in the plan. The future land use map is comprised of the following categories:

Limited Use Areas

Natural resources are scattered throughout Summit Township. Expansive areas of floodplains and wetlands benefit the entire community by providing habitat for wildlife, flood control, groundwater retention and recharge and surface water purification. They may also provide areas for recreation and contribute open space that in turn helps provide a rural atmosphere to Summit Township.



MAP 5





HIGH DENSITY RESIDENTIAL

COMMERCIAL

PUBLIC/SEMI-PUBLIC

PARKS & RECREATION

INDUSTRIAL

LIMITED USE AREAS

LAKES, PONDS, RIVERS, & STREAMS

WW HYDRIC SOILS (WETLANDS)

WELLHEAD PROTECTION AREAS



Because of the value these natural resources provide the community, and the severe physical limitations that many of these areas have for development, the plan suggests that these areas be used for limited uses. Some types of recreation, open space, and natural resource based uses like agriculture, wildlife management, and very low density residential may be appropriate in some areas depending upon the physical constraints of individual parcels.

Residential Areas

Population projections for Summit Township suggest that the Township will grow by almost 13% from 21,130 persons in 1990 to 23,854 person in 2015. These estimates are based upon various factors such as births, deaths and migration rates over an extended period. More recent building permit data between 1990-1996 suggests that Summit Township is growing more rapidly than has been projected. This may be due to a number of factors including a healthy economy with low inflation and low interest rates and a desirable rural community with most all of the basic municipal services available in the City of Jackson.

If the economy continues at its current pace and new housing continues to be in demand, Summit Township may be the recipient of more than 2,400 new dwellings that in turn could swell the population to around 27,000 by 2015. If this were to occur, the spatial requirements of the new population could range from 608 acres for development at 4 dwellings per acre to 2,433 acres for development at one dwelling per acre. The land required for the new population would range from 1-4 square miles. The current population consumes between 6-7 square miles of land. Without clustered housing developments, it will be difficult to find space to accommodate the demand for housing for this new population.

Low Density Residential Areas

Low density residential areas comprise the largest land use category on the plan map. Summit Township is essentially a bedroom community although limited office, commercial and industrial uses are also found in the Township.

Low density residential is defined as developments of up to about 1 dwelling per 10,000 square feet or about 4 dwellings per acre. Generally, the type of use found in this area will be single-family residential. However, other types of uses, particularly when developed to a larger scale, may also be considered by the Township if the overall density of the development does not exceed the limit of 4 dwelling units per acre. Multiple-family, or planned residential developments with a multiple-family component may be considered if it can be demonstrated that the development will not adversely affect surrounding properties, will not place a burden on the community for services, and will not exceed an overall density of about 4 dwellings per acre.

When determining density, only the buildable portions of a parcel may be counted. Buildable areas are those portions of a parcel that are accessible by road or drive or could be accessible with permit approval to cross an environmentally sensitive area

Future Land Use

from Michigan Department of Environmental Quality. Buildable area shall be the area capable of supporting a residential structure and its septic systems if not served by municipal sewers or the gross area capable of supporting a residential structure and having access mentioned above.

Planned residential developments may count one half of the total area that is not buildable and add it to the buildable acreage for density calculations provided that an equal number of acres is preserved as open space in the buildable component of the development. The purpose is to allow for a high concentration of development at a higher density and at the same time preserve the open rural atmosphere of the community. The Planning Commission and the Township shall maintain the right of determining the most suitable density for each planned residential development. The purpose of these calculations is to establish a formula for maximum density. However, maximum density may not always be suitable for the site or the community.

High Density Residential Areas

High density residential developments are generally those housing developments built at more than four dwellings per acre. They may be either single-family, two-family, multi-family or some combination of these uses. A mobile home park, for example, built at 6 dwellings per acre would be considered high density just as an apartment complex would be if it exceeded 4 dwelling units per acre.

Density shall be calculated the same way it is for low density residential developments. Only buildable areas shall be used in the density calculations.

Office Areas

Office uses include, but are not limited to, medical, legal, architectural, insurance and other office complexes. They are frequently used as a buffer between more intensive uses and residential uses. In the Township, a portion of the Spring Arbor Road corridor has been suggested for office uses. Within the corridor, numerous office complexes have already been developed. It is the intent of the plan to encourage continued office development along the corridor and at the same time preserve existing housing for residential use where possible. However, continued development of the corridor for office use may bring pressure for redevelopment of existing residential structures for office use. A site specific analysis on a case by case basis may be considered by the Planning Commission before allowing encroachment of offices into these residential areas.

Commercial Areas

Commercial areas have been reserved at strategic points across the Township to help meet the retail needs of this residentially growing community. Lumped into this category are low, moderate, and high impact commercial uses. The purpose of lumping the commercial uses into one category is to allow the Township to evaluate a rezoning request based upon the compatibility of the request with the surrounding area. It may be possible for low impact and moderate or high impact uses to coexist in certain cases.

Future Land Use

Commercial areas are found in the northwest portion of the Township at McCain and Robinson Roads; along the southwest side of Weatherwax Drive; on Francis Road north of the Vandercook Lake area; in the northeast corner; and along McDevitt and Vandercook Lake. A large parcel has also been suggested south of McDevitt near the U.S. 127 interchange.

Industrial Areas

Industry does not currently play a major role in Summit Township. Most people who live in the Township work in a different community. Even though industry has not played an important role in land development here, there are opportunities to expand the role that industry has in Summit Township. New industry will provide higher paying new jobs to the area and increase the Township's tax base.

Currently most of the existing industrial operations are located in the east portion of the Township along the U.S. 127 corridor and along Airline Drive. The plan suggests expanding new industrial opportunities into the east portion of the community along these corridors. Some of this area has residential uses already located near existing industrial plants. While redevelopment of the area toward industry may be the ideal or logical transition, it may not be practical to assume that industry will replace residential uses in these areas. Rather, it is the intent of the plan to encourage infill into vacant areas and use buffering and open space to help make industry and residential uses more compatible. Also, within this area the Planning Commission may determine that a particular parcel may not be appropriate for industrial development even though the plan suggests the more intensive use. In areas where industry is proposed next to existing residential uses, decisions regarding compatibility will have to be made on a case by case basis.



What is the Zoning Plan?

The master plan provides the legal basis for zoning in Summit Township. Accordingly, the plan is required to contain a special plan element, known commonly as the zoning plan, by Michigan's planning and zoning enabling acts. As noted in the Michigan Planning Guidebook (May 2008),"special plan elements are often prepared to establish a legal basis for a local regulation, such as a zoning plan to serve as the basis for zoning regulations."

The MPEA —the Michigan Planning Enabling Act (PA 33 of 2008), as amended— requires "a zoning plan for the various zoning districts controlling area, bulk, location, and use of buildings and premises" because Summit Township has an adopted zoning ordinance (Sec. 33 (2) (d)). The MZEA —the Michigan Zoning Enabling Act (PA 110 of 2006), as amended— requires the planning commission to adopt and file with the township board "a zoning plan for the areas subject to zoning" in Summit Township (Sec. 305 (a)). Finally, the MPEA also requires the zoning plan to "include an explanation of how the land use categories on the future land use map relate to the districts on the zoning map" (Sec. 33 (2) (d)).

Zoning Districts

The Zoning Code, Chapter 150 of Summit Township's Code of Ordinances, divides the Township into the following zoning districts (please see Map 6):

Open Districts

Open districts are established to protect land best suited for open use from the encroachment of incompatible land uses, to preserve valuable agricultural land for agricultural uses, and to retain land suited for open space and recreation use for the future.

Agricultural District (AG-1)

Suitable land is set aside for agricultural development and related uses. Agricultural uses must conform to the Michigan Right to Farm Act (PA 93 of 1981), as amended, and the open space preservation provisions of the MZEA.

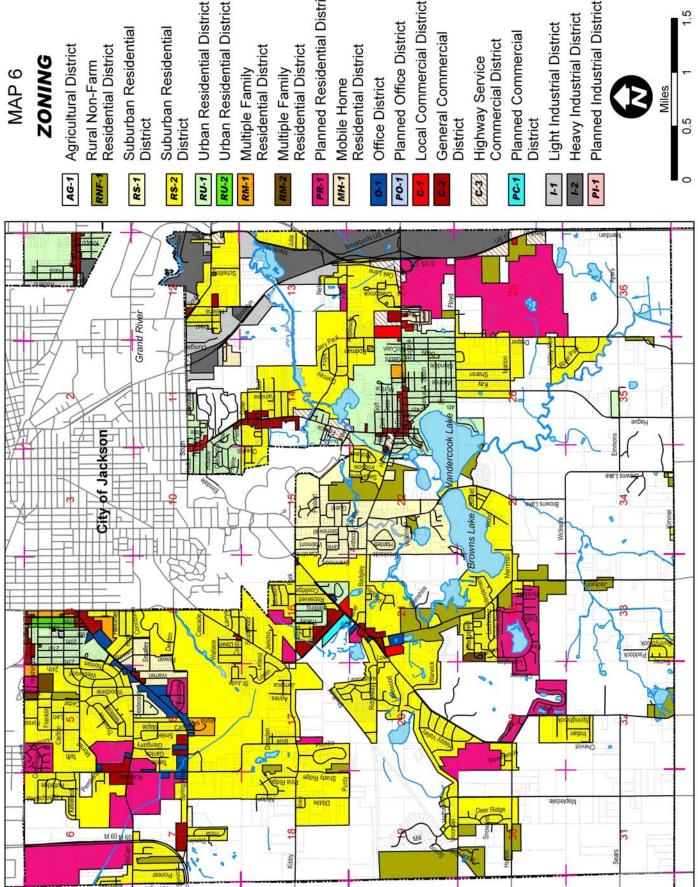
Residential Districts

Residential districts are designated principally for residential use and are limited to dwellings and uses normally associated with residential neighborhoods in order to encourage a suitable and healthy environment for family life.

Rural Non-Farm Residential District (RNF-1)

Land is set aside for single-family dwellings at low densities in order to preserve rural character and to allow local soils to absorb sewage wastes from individual septic tanks.

Zoning Plan



MAP 6

ZONING

Agricultural District

Residential District Multiple Family

Planned Residential District

Mobile Home Residential District

Planned Office District Office District

Local Commercial District

General Commercial District

Highway Service

Planned Commercial Commercial District

Light Industrial District

Planned Industrial District Heavy Industrial District



Suburban Residential Districts (RS-1) and (RS-2)

Land is set aside principally for single-family dwellings of moderate suburban densities where necessary urban services and facilities, including sanitary sewers and water supply systems, can be feasibly provided.

Urban Residential Districts (RU-1 and -2)

Land is set aside principally for high-density single-family residential dwellings where necessary urban services and facilities are provided, including sanitary sewers and central water systems.

Multiple-Family Residential District (RM-1)

Land is set aside to permit a high density of population and a high intensity of land use in those areas which are served by a central water supply system and a sanitary sewer system, and which abut or are adjacent to the other uses or amenities, which support, complement, or serve such a density and intensity.

Multiple-Family Residential District (RM-2)

Land is set aside to permit a moderate density of population and a moderate intensity of land use in those areas which are served by a central water supply system and a central sanitary sewerage system, and which abut or are adjacent to the other uses or amenities, which support, complement, or serve such a density and intensity.

Mobile Home Residential District (MH-1)

Land is set aside to permit mobile homes at a density of population and an intensity of land use in those areas which are served by a central water supply system and a sanitary sewer system, and which abut or are adjacent to the other uses, buildings, structures, or amenities which support, complement, or serve the density and intensity.

Office District

The Office District is designed principally for office use and those uses which are customarily associated with offices.

Commercial Districts

Commercial districts are designed to limit compatible commercial enterprises at appropriate locations to encourage efficient traffic movement, parking and utility service; advance public safety; and protect surrounding property.

Local Commercial District (C-1)

Planned and integrated groupings of stores are encouraged that retail convenience goods and provide personal services to meet the regular and recurring needs of the neighborhood resident population.

Zoning Plan

General Commercial District (C-2)

Planned and integrated groupings of retail, service, and administrative establishments are encouraged that retail convenience and comparison goods and provide personal and professional services for the entire area.

Highway Service Commercial District (C-3)

Commercial establishments offering accommodations, supplies, and services to local as well as automobile and truck traffic are encouraged along major thoroughfares or adjacent to the interchange ramps of a limited access highway facility.

Industrial Districts

Industrial districts are designed to provide employment opportunities to local citizens and the resulting economic benefits to the township.

Light Industrial District (I-1)

Light industrial uses are encouraged that operate in a safe, non-objectionable and efficient manner and which require a minimum of buffering measures from adjoining non-industrial zoning districts because they are compatible in appearance.

General Industrial District (I-2)

Industrial operations which require suitable space are encouraged so that they can comply with all provisions of this chapter and can assure protection of the public interest and surrounding property and persons.

Planned Development Districts

Planned Development Districts are intended to provide flexible land use and design regulations and to permit a variety of development types, containing both individual building sites and common property which are planned and developed as a unit. They encourage innovation in development to enable development demands to be met through the conservation and more efficient use of land in the developments and by a variety of types, designs, and physical settings.

Planned Residential District (PR-1)

Small-to-large scale neighborhoods that permit a variety of residential types can be created using this planned district.

Planned Office District (PO-1)

Offices in a variety of types can be created using this planned district.

Planned Commercial District (PC-1)

Regional commercial shopping centers can be created using this planned district.

Planned Industrial District (PI-2)

Industry in a variety of types can be created using this planned district.

Zoning Plan

Dimensional Standards

The following bulk, height, and setback restrictions for each district are included in the Zoning Code (§ 150.146).

Table 7
Bulk, Height, and Setback Restrictions

	Lot F	Requirem	ents	Minimum Yard Re-		Max Bldg			
Zoning	Min Lot	<u> </u>	Max		mum tar Juiremen			nt Re- ments	
District	Area	Width	Lot Cov	Front	ront Side Rear			Acces- sory	
Agricultural (AG-1)	2 acres	200'	10%	60'	30' 60' *	50'	2.5 story or	80'	Single-family detached dwelling units.
Rural Non- Farm Residen-	3 acres 1 acre				20'		2.5		All other uses. Single-family detached dwelling units.
tial (RNF-1)	2 acres	150'	20%	35'	35' *	35'	story or 35'	14'	All other uses.
Suburban Residential 1	20,000 sf	100'	30%	35'	10' min 25' total	20'	2.5 story or	14'	Single-family detached dwelling units.
(RS-1)	1 acre	120'			35' *		35'		All other uses.
Suburban	10,000 sf	80'	30%	35'	10' min	201	2.5	14'	Single-family detached dwelling units with central sewage and water systems.
Residential 2 (RS-2)	15,000 sf	100'	JU /0	35	25' total 35' *	20'	0' story or 35'	•	Single-family detached dwelling units without central sewage.
	1 acre	120'						All other uses.	
Urban Residential 1	7,500 sf	60'	30%	25'	10'	_ 25'	2.5 story or	14'	Single-family detached dwelling units.
(RU-1)	20,000 sf		3070	20	25'	- 20	35'	17	All other uses.
Urban Resi-	7,500 sf	60'					2.5		Single-family detached dwelling units.
dential 2 (RU-2)	10,000 sf	80'	30%	25'	10' min 25' total	25'	story or 35'	14'	Two-family dwelling units
	20,000 sf	120'							All other uses.
Multi-Family	10,000 sf	80'			10' min		2.5 5' story or 35'		Two-family dwelling units. 15,000 sf for first three dwellings units
Residential (RM-1)	15,000 sf	120'	25%	25'	5' 25' total 25' *			•	plus 2,000 sf for each additional unit.
	20,000 sf	120'							All other uses.

Table 7 (Continued)
Bulk, Height, and Setback Restrictions

	Lot I	Requirer	nents	Mini	mum `	Yard	Max Heigh			
Zoning District	Min Lot		Max Lot	Req	uirem	ents	quirer	nents		
District	Area	Width	Cov	Front	Side	Rear	Princi- pal	Acces- sory		
Multi-Family Residential (RM-2)	10,000 sf 15,000 sf 20,000 sf	80' 120' 120'	25%	25'	10' min 25' total 25'*	25'	2.5 story or 35'	14'	Two-family dwelling units. 15,000 sf for first three dwellings units plus 4,000 sf for each additional unit. All other uses.	
Mobile Home Residential (MH-1)	Min 10 acres						Act, as am and Sec.		Mobile home site within a mobile home park	
Office	10,000 sf	80'	30%	25'	10' min	25'	2.5	2.5 25' story or 35'	25'	Uses with central sewage and water systems.
(O-1)	15,000 sf	100'	0070			25' total	20		20	Uses without central sewage.
Local Commercial	10,000 sf	75'	35%	35'	20'	35'	35'	n/a	Uses with central sewage and water systems.	
(C-1)	15,000 sf	100'			35' *				Uses without central sewage.	
General Commercial	10,000 sf	75'	35%	35'	20'	20'	35'	n/a	Uses with central sewage and water systems.	
(C-2)	15,000 sf	100'	0070	00	35' *	20		11/4	Uses without central sewage.	
Highway Ser- vice Commer- cial (C-3)	15,000 sf	100'	35%	35'	20' 35' *	20'	35'	n/a		
Light Industrial (I-1)	20,000 sf	80'	35%	35'	20' 35' *	35'	35'	n/a		
Heavy Indus- trial (I-2)	2 Acres	200'	35%	35'	20' 35' *	35'	35'	n/a		

^{*} Corner Lot

^{* * *}In Central Business District, no lot requirements, yard requirements, or transition strips are required, only side yard and rear yard when abutting Residential Districts.

Rezoning Criteria

The most common zoning application of the master plan is during the rezoning process. Accordingly, a rezoning should be required to meet set criteria in order to be considered consistent with the master plan. Sec. 150.381 (c) of the township's zoning code contains standards which satisfy this requirement:

- Is the proposed rezoning consistent with the policies and uses proposed for that area in the Township's master plan?
- Will all of the uses allowed under the proposed rezoning be compatible with other zones and uses in the surrounding area?
- Will any public services and facilities be significantly adversely impacted by a development or use allowed under the requested rezoning?
- Will the uses allowed under the proposed rezoning be equally or better suited to the area than uses allowed under the current zoning of the land?

Relationship to the Future Land Use Map

The remainder of this chapter equates the various zoning districts included on the zoning map with the various categories included on the future land use map.

Residential Areas

The following residential areas are included on the future land use map:

Low-Density Residential Areas

Low-density residential areas are addressed generally on the future land use map. The following zoning districts equate to those areas:

- AG-1 Agricultural District
- RNF-1 Rural Non-Farm District
- RS-1 Suburban Residential District 1

High Density Residential Areas

High-density residential areas are addressed generally on the future land use map. The following zoning districts equate to those areas:

- RS-2 Suburban Residential District 2
- RU-1 Urban Residential District 1
- RU-2 Urban Residential District 2
- RM-1 Multiple-Family Residential District 1
- RM-2 Multiple-Family Residential District 2

However, it is not always easy to equate future land use categories and zoning districts. Accordingly, both low -and high-density developments may occur in the following zoning districts:

- MH-1 Mobile Home Residential District
- PR-1 Planned Residential District

Zoning Plan

Office Areas

Office areas are addressed generally on the future land use map. The following zoning districts equate to those areas:

- O-1 Office District
- PO-1 Planned Office District

Commercial Areas

Commercial areas are addressed generally on the future land use map. The following zoning districts equate to those areas:

- C-1 Local Commercial District
- C-2 General Commercial District
- C-3 Highway Service Commercial District
- PC-1 Planned Commercial District

Industrial Areas

Industrial areas are addressed generally on the future land use map. The following zoning districts equate to those areas:

- I-1 Light Industrial District
- I-2 Heavy Industrial District
- PI-2 Planned Industrial District

Limited Use Areas

The following limited use areas identify areas of the township which are environmentally sensitive or are important in some other way:

- Lakes, Ponds, Rivers, & Streams
- Hydric Soils
- Wellhead Protection Areas.

Although they are identified on the future land use map, they don't equate to any district on the zoning map.



The master plan is a document that verbally and graphically represents the future development policies of Summit Township. The plan itself is not a legally binding or enforceable document. The plan is also not capable of bringing about change without other tools that are designed and authorized by statute to carry out its policies.

Zoning

The master plan is the legal basis for the Township's zoning ordinance and zoning is the most common tool used to carry out the plan. The zoning districts on the official zoning map do not necessarily follow the land use categories on the future land use map. However, as the Township continues to grow and the rezoning of certain areas become more frequent, the zoning map should resemble the future land use map more than it did when the master plan was first adopted. See Appendix A —the Zoning Plan— for a more on the relationship between the future land use and the zoning maps.

The ultimate goal of the master plan is to serve as a vision of what the community could look like if its policies are implemented. To make this vision become a reality, zoning decisions should be consistent with this document.

The Summit Township Master plan is a flexible document that has been designed to change as the community changes. It should be periodically updated as development activity causes the landscape to change. If the document was inflexible, it would not be possible to interpret unique circumstances that occur with some rezoning cases. There will likely be many instances when it will be necessary to deviate from the Plan. When this is necessary, it should be done with consideration for the effect on not only the adjacent property owners, but also the impact on the entire community. The reasons why it is necessary to deviate from the Plan should be well documented in the motion and minutes of any public hearing or meeting.

Who Will Implement the Plan?

Three distinct municipal bodies (with the assistance of staff) undertake the major planning responsibilities for the Township of Summit: the planning commission, the zoning board of appeals and the township board. All of their decisions and recommendations should be based upon the master plan.

Planning Commission

Development and approval of the master plan is an important responsibility of the planning commission. The commission is charged with developing the zoning ordinance, over which the township board has final authority. It also recommends approval or rejection to the township board for rezonings and various other zoning requests.

Zoning Board of Appeals

The zoning board of appeals (ZBA) decides use and dimensional variance requests (e.g., setback requirements). The ZBA makes an official interpretation of the zoning or-

Implementation

dinance when the Planning Commission disagrees on its meaning or intent. ZBA decisions are final. Appeals are made to the circuit court.

Township Board

As the legislative body for Summit Township, the Board is responsible for the passage of all municipal ordinances, including the zoning. The Board appoints members to the Planning Commission and the ZBA.

Other Planning Efforts

Township staff and other municipal committees undertake planning efforts on their own or in conjunction with the Planning Commission. Future updates to those plans should complement the goals of the Comprehensive Plan. In turn, those documents should be consulted whenever this plan is amended or a new plan is adopted.



POPULATION & HOUSING — APPENDIX A

Note:

Since this edition of the Master plan was created in 2008, the Township's planning commission decided to wait until the 2010 US Census to update Summit's population and housing data. This appendix contains the original chapter on population and housing. Please refer to Chapter 3 for a more up-to-date view of current conditions.

Summit Township experienced rapid growth between 1950 and 1970. The post war housing boom resulted in growth 31% higher than the growth rate recorded Countywide. In 1930, the Township population was 6,754 persons. By 1960, the population had almost tripled and Summit Township was on its way from a rural, agricultural area to a more urban, bedroom community. The population peaked in 1980 when 22,113 people were counted by the U.S. Census Bureau. The period between 1970 and 1980 was the first time the Township's growth slowed. During that period, the population grew by only 1.7%. A national recession that rippled through the county and Summit Township brought with it with high inflation, unemployment, and mortgage rates that suppressed new housing starts. Summit's population actually declined between 1980 and 1990. The recession in the middle of the 1980's was responsible for several major industrial plant closings that caused substantial out-migration Countywide. Table B-1 summarizes the Township's historical growth in population.

Table A-1
Population by Decade — 1930-1990
Summit Township/Jackson County

Year	Summit Township			Jackson	County
	Population	Growth	% of County	Population	Growth
1930	6,754		7.3%	92,304	
1940	7,177	6.3%	7.7%	93,108	0.9%
1950	10,215	42.3%	9.5%	107,925	15.9%
1960	18,101	77.2%	13.7%	131,994	22.3%
1970	21,754	20.2%	15.2%	143,274	8.6%
1980	22,113	1.7%	14.6%	151,495	5.7%
1990	21,130	-4.5%	14.1%	149,756	-1.2%

Source: U.S. Census Bureau

Population analysis and projections are an important component of the master plan. The ability of local planners and elected officials to assess the future needs of the community is dependent upon an understanding of who the people are that live in the community and what their needs for municipal services are. The level of community services is sometimes related to the degree that the population is either concentrated or dispersed. In general, the more people there are, the more services will be necessary to support the population. The more concentrated the population, the more cost effective it is to provide municipal water and sewer, and to also provide adequate police and fire protection.

Population projections are simply estimates of the community's population at a given point in time. Estimates are generally based upon activities and events that contribute to population increases or decline. Certain assumptions must be made when projecting population. Assumptions are usually, but not always, based upon some past trends. Some factors that influence the community population are births, deaths, migration, and fertility. Many population projection models use some or all of these factors to estimate future population.

Births and deaths are referred to as vital events. The difference between the two is the natural rate of increase or decrease. Death rates tend to be fairly stable over time. Birth rates and fertility rates change slowly. Usually, national birth and death rates can be applied in our region because historically the local rates have paralleled the national rates fairly closely.

Migration on the other hand, is much more difficult to estimate. Generally, migration rates are based upon past rates from the state's Office of Management and Budget. The state uses a number of resources to estimate migration, including tax records. In the early- to mid-1980's most communities in Jackson County experience some degree of out-migration. Since the mid-1980's, migration has leveled off and some areas have experienced in-migration that has resulted from new jobs and a state-wide expanding economy. When past population projections are significantly off the estimates, it is usually because of migration rates. They can change rapidly as they did locally in the 1980's. The combination of all factors yields a growth rate that can be either positive or negative. Growth rates are in turn applied to the projection.

Building permit data helps estimate in-migration and is particularly useful in the population projection. This data is more current than the census information compiled in 1990. By knowing the number of new homes and apartments built in the Township in a given year, it is possible to multiply that total by the average persons per household (2.61 persons/household in 1990) to estimate the migration rate. In Summit Township, that rate was 1.2% per year between 1990 and 1996.

Table B-2 has broken the population of Summit Township into age cohorts. Cohorts are 5-year increments derived from the 1990 census. A matrix is developed from the 1990 census data based upon estimated births, deaths, fertility, and migration rates. Rates are applied for each age cohort and carried out diagonally from left to right through the matrix. For example, there were 1,517 children counted in 1990 in the 0-4 age cohort. As this age cohort becomes older, it is estimated from national survival rates that each child has a 99.27% of surviving the next 5 years. Similar calculations are made for each cohort every 5 years with fertility rates applied to females in the 15-44 age cohorts. Migration rates are also applied to each cohort so that by 2015 —with all of the variables factored into the equation— those 1,517 children in the 0 through 4 age bracket in 1990 are estimated to increase to 1,902 persons by 2015.

The Cohort/Survival table estimates that the Township's population will grow slowly from 21,130 persons in 1990 to 23,854 persons by 2015. The table shows the popula-

tion actually declining between 1990 and 2000 before increasing after the turn of the century. The decline is attributed to a fairly large elderly population in 1990. Even though new housing will contribute to additional population and fertile females will increase the number of children in the Township, deaths will erase much of the gains from in-migration and births for the next ten years. These estimates assume that new housing starts, migration, etc. remain constant during the projection period.

As was mentioned earlier, projection models must be based upon historical trends. Those trends usually span two or three decades so that growth rates average highs and lows over extended periods. However, recently Summit Township has experienced much higher growth rates than the historical average. Based upon building permit data compiled during the 1990's (1990-1996), the Township could experience more growth than the projection model has estimated. Projecting the permit data out over the life of the plan (2015), Summit's population could increase to approximately 27,000 persons. This increase would represent about 28% of the 1990 population and would be significant in terms of demand for land and municipal services.

Table A-2
Population Projections* — 1990-2015
Summit Township

Age Cohort	1990	1995	2000	2005	2010	2015
0-4	1,517	1,626	1,653	1,707	1,817	1,979
5-9	1,526	1,591	1,705	1,734	1,790	1,906
10-14	1,481	1,602	1,671	1,790	1,821	1,879
15-19	1,417	1,554	1,681	1,753	1,878	1,910
20-24	1,149	1,478	1,621	1,753	1,828	1,958
25-29	1,416	1,196	1,538	1,687	1,824	1,902
30-34	1,631	1,468	1,240	1,595	1,749	1,891
35-39	1,739	1,677	1,509	1,275	1,640	1,798
40-44	1,591	1,762	1,699	1,529	1,292	1,662
45-49	1,236	1,574	1,743	1,681	1,513	1,278
50-54	1,016	1,181	1,504	1,665	1,602	1,445
55-59	1,060	922	1,072	1,365	1,512	1,454
60-64	1,216	894	777	903	1,151	1,275
65-69	1,104	919	675	587	682	870
70-74	841	692	576	423	368	427
75-79	540	405	330	277	204	177
80+	650	114	85	70	58	43
Total	21,130	20,655	21,099	21,794	22,729	23,854

Source: Region 2 Planning Commission

^{*} The *Cohort/Survival Method* was used. It assumes 5.65% migration rate, national standard fertility and mortality rates applied to each cohort where applicable.

In terms of composition of the population, 48.1% of the Township's residents were male and 51.9% were female in 1990. The median age was 36.2 years while the median age county-wide was 33.4 years. A little over 25% of Summit's population was under 18 years while 14.8% was 65 years or older. As Table B-3 summarizes, the Township is predominately white (94.6%) with blacks totaling 714 persons (3.4%).

Table A-3
Racial and Ethnic Composition — 1990
Summit Township

Race/Ethnic Background	Population
White	19,981
Black	714
American Indian, Eskimo, or Aleut	77
Asian or Pacific Islander	257
Other race	101
Hispanic origin (any race)	245

Source: U.S. Census Bureau

Education

Summit Township residents who are 25 years and over are generally better educated than the County average. As Table B-4 shows, there are proportionately fewer residents with less than a high school diploma and more residents with a college degree than is found in Jackson County.

Table A-4
Educational Attainment — 1990
Summit Township/Jackson County

	Summit Township		Jackson	County
Persons	Number	Percent	Number	Percent
25 years and over	14,070		97,049	
Less than 9th grade	597	4.2%	5,996	6.2%
9th-12th grade, no diploma	1,639	11.7%	15,654	16.1%
High School Diploma	4,161	29.6%	33,051	34.1%
Some College, no degree	3,296	23.4%	21,768	22.4%
Associates Degree	1,058	7.5%	8,038	8.3%
Bachelors Degree	2,140	15.2%	8,581	8.8%
Graduate/Professional Degree	1,179	8.4%	3,961	4.1%

Source: U.S. Census Bureau

Occupations

Tables B-5 and B-6 show the employment of residents by industry for Summit Township and Jackson County in 1980 and 1990. In both cases there has been a shift in employment in manufacturing of durable and non-durable goods into other employment sectors such as retail trade and health services. The tables also show that the Township trails the county average in percentage of employment in manufacturing of durable and non-durable goods. Manufacturing jobs are desirable for a community because they generally are higher paying and have more benefits for residents of the area.

Table A-5
Employment by Industry — 1980
Summit Township/Jackson County

	Summit T	ownship	Jackson	Jackson County	
Industry	Number	Percent	Number	Percent	
Employed persons 16 years & over	9,568	100.0%	60,427	100.0%	
Agriculture, Forestry and Fishing	44	0.5%	1,048	1.7%	
Mining	75	0.8%	268	0.4%	
Construction	298	3.1%	2,331	3.9%	
Manufacturing, non-durable goods	604	6.3%	3,774	6.3%	
Manufacturing, durable goods	2,007	21.0%	14,392	23.8%	
Transportation	180	1.9%	1,829	3.0%	
Communications & other public utilities	807	8.4%	3,923	6.5%	
Wholesale trade	449	4.7%	2,007	3.3%	
Retail trade	1,473	15.4%	9,732	16.1%	
*Banking and credit agencies	244	2.6%	1,082	1.8%	
*Insurance, real estate & other finance	196	2.1%	1,299	2.2%	
Business and repair services	272	2.8%	1,859	3.1%	
*Private households	54	0.6%	404	0.7%	
*Other personal services	221	2.3%	1,419	2.4%	
Entertainment & recreation services	53	0.6%	427	0.7%	
*Professional related services	2,209	23.1%	11,956	19.8%	
Public administration	382	4.0%	2,677	4.4%	

Source: U.S. Census Bureau, 1980

^{*} U.S. Census Bureau changed classification for the 1990 census

Table A-6
Employment by Industry — 1990
Summit Township/Jackson County

	Summit 7	Township	Jackson County	
Industry	Number	Percent	Number	Percent
Employed persons 16 years & over	10,062	100.0%	64,317	100.0%
Agriculture, Forestry & Fishing	48	0.5%	1,126	1.8%
Mining	43	0.4%	181	0.3%
Construction	299	3.0%	2,877	4.5%
Manufacturing, non-durable goods	426	4.2%	3,337	5.2%
Manufacturing, durable goods	1,781	17.7%	12,870	20.0%
Transportation	246	2.4%	2,047	3.2%
Communications & other public utilities	711	7.1%	3,159	4.9%
Wholesale trade	425	4.2%	2,391	3.7%
Retail trade	1,923	19.1%	12,057	18.8%
Finance, insurance, & real estate	486	4.8%	2,560	4.0%
Business and repair services	392	3.9%	2,396	3.7%
Personal services	244	2.4%	1,751	2.7%
Entertainment & recreation services	157	1.6%	698	1.1%
Health services	883	8.8%	5,203	8.1%
Education services	978	9.7%	5,116	8.0%
Other professional related services	556	5.5%	3,439	5.4%
Public administration	464	4.6%	3,109	4.8%

Table B-7 classifies the Township and County's residents by occupation rather than by industry. Summit Township has proportionately more of its labor force in professional occupations such as executive, administrative and managerial as well as professional specialty occupations. Proportionately fewer residents of the Township are in occupations like machine operators, assemblers, and inspectors compared to the county. Table B-8 is a summary of the class of workers found in the Township and County. Over 80% of the area is classed as private wage and salary worker while 12% are government workers.

Table A-7 Occupation of Residents — 1990 Summit Township/Jackson County

	Summit Township		Jackson County	
Occupation	Number	Percent	Number	Percent
Employed persons 16 years & over	10,062	100.0%	64,317	100.0%
Executive, administrative &managerial	1,447	14.4%	6,395	9.9%
Professional specialty occupations	1,646	16.4%	7,469	11.6%
Technicians and related support	290	2.9%	2,001	3.1%
Sales occupations	1,258	12.5%	6,923	10.8%
Administrative support occupations including clerical	1,692	16.8%	10,323	16.1%
Private household occupations	32	0.3%	211	0.3%
Protective service occupations	280	2.8%	1,786	2.8%
Service occupations, except protective & household	972	9.7%	7,982	12.4%
Farming, forestry, &fishing occupations	48	0.5%	1,021	1.6%
Precision production, craft, &repair	1,097	10.9%	8,066	12.5%
Machine operators, assemblers, & nspectors	673	6.7%	6,858	10.7%
Transportation &materials moving	303	3.0%	2,720	4.2%
Handlers, equipment, cleaners, helpers, & laborers	324	3.2%	2,562	4.0%

Table A-8
Class of Worker — 1990
Summit Township/Jackson County

	Summit T	ownship	Jackson County	
Occupation	Number	Percent	Number	Percent
Employed persons 16 years and over	10,062	100.0%	64,317	100.0%
Private wage and salary workers	8,168	81.2%	52,750	82.0%
Government workers	1,271	12.6%	7,743	12.0%
Local government workers	722	7.2%	3,903	6.1%
State government workers	442	4.4%	3,112	4.8%
Federal government workers	107	1.1%	728	1.1%
Self-employed workers	569	5.7%	3,512	5.5%
Unpaid family workers	54	0.5%	312	0.5%

Source: U.S. Census Bureau, 1990

Table B-9 on the following page displays unemployment rates as tracked by the Michigan Employment Security Commission (MESC) from 1970-1995 when the last annual averages were released. During this period, unemployment rates have taken a roller coaster ride with highest rates recorded in the mid-1980's. In 1989, the County recorded its lowest rate in a decade at 6.8%. Since that time, the unemployment rate rose to 9.9% before declining again to its lowest level since 1973 when the rate was 4.4%. The table also shows a new trend in the civilian labor force. In 1994, the labor force grew to 73,700 persons for an increase of just over 11%. This is the largest labor force recorded for Jackson County and is combined with a relatively low unemployment rate. This suggests that a significant in-migration may have occurred Countywide.

Table A-9
Employment Estimates and Unemployment Rates
Jackson County

	Civilian		Unemploy	/ed
Year	Labor Force	Employed	Number	Rate
1970	58,300	54,800	3,500	6.0%
1971	58,200	54,000	4,200	7.2%
1972	61,500	58,200	3,300	5.4%
1973	64,000	61,200	2,800	4.4%
1974	65,800	62,000	3,800	5.8%
1975	64,900	57,100	7,800	12.0%
1976	64,900	58,400	6,500	10.0%
1977	65,400	60,000	5,400	8.3%
1978	67,700	61,900	3,800	5.8%
1979	68,300	63,400	4,900	7.2%
1980	66,100	58,400	7,700	11.6%
1981	66,900	59,200	7,700	11.5%
1982	66,100	55,300	10,800	16.3%
1983	65,300	55,000	10,200	15.7%
1984	64,000	56,000	8,000	12.5%
1985	62,200	54,400	7,900	12.7%
1986	61,500	55,900	5,600	9.1%
1987	62,600	57,600	5,000	8.0%
1988	66,100	61,000	5,100	7.7%
1989	67,100	62,500	4,600	6.8%
1990	65,400	60,200	5,200	7.9%
1991	64,800	58,400	6,400	9.9%
1992	65,800	59,300	6,500	9.9%
1993	66,300	61,000	5,300	7.9%
1994	73,700	69,100	4,700	6.4%
1995	72,500	68,600	3,900	5.4%

Source: Michigan Employment Security Commission

Income

The median income in Summit Township is significantly higher (20%) than the county median. In 1990, the Township's median income was \$35,151, while Countywide the median was \$29,156 during the same year. Table B-10 shows the number of households by income bracket and the median income for the Township and Jackson County.

Table A-10
Household Income — 1989
Summit Township/Jackson County

	Summit Township		Jackson	County
Income Bracket	Number	Percent	Number	Percent
Less than \$5,000	236	2.9	2,800	5.2
\$5,000 to \$9,999	608	7.5	5,345	9.9
\$10,000 to \$14,999	689	8.6	5,080	9.4
\$15,000 to \$24,999	1,196	14.8	9,825	18.2
\$25,000 to \$34,999	1,278	15.9	9,162	17.0
\$35,000 to \$49,999	1,648	20.4	10,414	19.3
\$50,000 to \$74,999	1,460	18.1	8,011	14.9
\$75,000 to \$99,999	461	5.7	2,009	3.7
\$100,000 to \$149,999	308	3.8	884	1.6
\$150,000 or more	179	2.2	361	.7
Median Household Income	\$35,151		\$29,156	
Total Households	8,063	100	53,891	100

Source: U.S. Census Bureau

The mean wage and salary income in Jackson County was \$34,549 in 1989 while in the Township it was almost 24% higher at \$42,693. Other types of income, as displayed in Table B-11 were also much higher in the Township compared to Jackson County.

Table A-11
Selected Income Types — 1989
Summit Township/Jackson County

Type of Income	Jackson County	Summit Township
Wage and Salary	\$34,549	\$42,693
Non-Farm, Self-Employment	\$14,667	\$16,487
Farm, Self-Employment	\$ 7,439	N/A
Social Security	\$ 8,477	\$ 8,995
Public Assistance	\$ 4,346	\$ 5,161
Retirement Income	\$ 7,361	\$ 8,737

Source: U.S. Census Bureau, 1990

As a percentage of total, poverty is a greater problem countywide than it is in the Township. Only 5.3% of all families in the Township were classified as being below poverty while in the County 9.4% of families were classified as being in poverty by the U.S. Census Bureau in 1990. Table B-12 summarizes, by percentage of total, persons classified as living in poverty.

Table A-12
Poverty Status of Persons and Families — 1990
Summit Township/Jackson County

	Percent of Total				
Poverty Status	Jackson County	Summit Township			
All persons	12.0%	6.6%			
Persons 18 years and over	10.1%	5.8%			
Persons 65 years and over	9.9%	5.8%			
Related children under 18 years	16.5%	8.4%			
Related children under 5 years	20.9%	12.1%			
Related children 5 to 17 years	14.7%	6.9%			
Unrelated Individuals	24.3%	16.6%			
All Families	9.4%	5.3%			
With related children under 18 years	14.7%	8.0%			
With related children under 5 years	20.3%	11.7%			
Female householder families	34.3%	24.4%			
With related children under 18 years	46.4%	34.1%			
With related children under 5 years	61.8%	47.4%			

Source: U.S. Census Bureau, 1990

Housing

In 1990, Summit Township had 8,288 total housing units of which 8,028, were occupied housing units. Table B-13 summarizes housing characteristics for the Township and compares them with Jackson County.

Table A-13
Occupancy and Tenure of Housing Units — 1990
Summit Township/Jackson County

Status	Summit Township	Jackson County
Occupied housing units	8,028	53,660
Owner-occupied	6,455	39,528
Percent owner-occupied	80.4	73.7
Renter-occupied	1,573	14,132
Percent renter-occupied	19.6	26.3
Vacant housing units	260	4,319
For seasonal or occasional use	43	1,844
Homeowner vacancy rate	0.9%	1.1%
Rental vacancy rate	4.6%	6.5%
Total Housing Units	8,288	57,979

As the above table shows, most Township residents (80.4%) live in an owner-occupied dwelling. Countywide the average is lower (73.7%). Conversely, fewer people rent dwellings in Summit Township than they do Countywide as a percentage. Also, vacancy rates for owners and renters are lower in the Township when compared to Jackson County. This data suggests that Summit Township has a stable supply of housing where there is probably more competition for all types of housing than there is in across the greater Jackson area.

According to Table B-14, there were slightly fewer persons per owner-occupied unit (not the same as persons per household) in Summit Township compared to the county, but there was a slightly higher number of persons per renter-occupied unit in the Township.

Table A-14
Persons per Dwelling — 1990
Summit Township/Jackson County

Persons per Dwelling	Summit Township	Jackson County
Persons per owner-occupied unit	2.67	2.73
Persons per renter-occupied unit	2.32	2.30

Source: U.S. Census Bureau

Summit Township has a high percentage of single-family detached homes. As Table B-15 displays, 83.1% of homes in the Township are 1-unit, detached dwellings. Countywide, the average is 73.1%. The Township has proportionately fewer 2-4 units and mobile homes than does Jackson County.

Table A-15
Units in Structure — 1990
Summit Township/Jackson County

	Summit	Township	Jackson	n County
Type of Structure	Number	Percent	Number	Percent
1-unit detached	6,889	83.1	42,357	73.1
1-unit - attached	159	1.9	848	1.5
2-4 units	278	3.4	4,832	8.3
5-9 units	175	2.1	1,482	2.6
10 or more units	497	6.0	3,536	6.1
Mobile home, trailer, other	290	3.5	4,924	8.5

In 1990, the median value of a home was \$56,400, which is almost 18% higher than the \$47,900 median value of a home in Jackson County.

Table A-16
Housing Value — 1990
Summit Township/Jackson County

	Summit Township		Jacksoi	n County
Value	Number	Percent	Number	Percent
Specified owner-occupied units	5,809	100.0	30,048	100.0
Less than \$50,000	2,432	41.9	15,869	52.8
\$50,000 to \$99,999	2,463	42.4	11,554	38.5
\$100,000 to \$149,999	616	10.6	1,831	6.1
\$150,000 to \$199,999	171	2.9	497	1.7
\$200,000 to \$299,999	101	1.7	229	.8
\$300,000 or more	26	0.5	68	.2
Median (dollars)	\$56,400		\$47,900	

Source: U.S. Census Bureau

As Table B-16 above shows, Summit Township has fewer homes valued at less than \$50,000 than does the entire Jackson County. In addition, the Township has significantly more homes valued at more than \$50,000 in each value bracket of the table.

Renters accounted for 1,448 occupied units in 1990. Renters represent 17.5% of all occupied units in Summit Township which is slightly lower than the Jackson county average of 22%. The median rent paid was \$385/month, which is about 20% higher than the county average of \$309/month.

Table A-17
Contract Rent — 1990
Summit Township/Jackson County

Monthly Rent	Summit Township	Jackson County
Specified renter-occupied units	1,448	12,997
Less than \$250	209	3,918
\$250 tot \$499	939	8,090
\$500 to \$749	256	791
\$750 to \$999	22	134
\$1,000 or more	22	64
Median (dollars)	385	309

The age of a structure is not always a reliable indicator for determining the condition of a dwelling unit. However, when a structure's age along with other data about the community's housing stock is analyzed, generalizations can be made regarding the overall condition of the housing stock in a community. Structures that were built before 1939 are over fifty years old and may be beginning to experience major structural problems. The percentage of homes over fifty years old is one factor planners look at to determine if the community is beginning to experience problems which could lead to blight. Another factor is the percentage of dwellings that lack complete plumbing facilities and the final factor is the number of people to the number of bedrooms. A density of over 1 person per bedroom is considered overcrowding which contributes to deteriorating housing. Table B-18 displays the structural characteristics for Summit Township as well as for the state, county, city and urbanized townships in the county.

Table A-18
Structural Characteristics — 1990
Summit Township and Selected Communities

		Year Built		Lack Com-	
Community	All Housing Units	1980- 1990	1939 or before	plete Plumbing	Over- crowding*
State of Michigan	3,847,926	13.6%	20.8%	0.8%	
Jackson County	57,979	11.1%	29.4%	0.4%	1.0%
Lenawee County	35,104	10.5%	34.8%	0.6%	0.9%
Hillsdale County	18,547	13.5%	36.1%	1.8%	0.9%
City of Jackson	15,689	4.1%	59.0%	0.5%	1.1%
Blackman Township**	6,202	15.7%	9.5%	0.2%	0.9%
Leoni Township	5,291	13.4%	18.5%		1.0%
Summit Township	8,288	7.1%	15.8%	0.1%	0.9%

Source: U.S. Census Bureau, 1990

^{*} Over 1 person per bedroom

^{**} Excludes prison population

The table on the previous page suggests that a fairly low percentage of the Township's housing stock was built prior to 1939 and only 7.1% of the Township's housing was built between 1980 and 1990. New housing starts since 1990 have dramatically increased local housing opportunities. By 1996, an additional 498 dwellings were constructed for an increase of 6.0% for the six-year period. If new construction of housing continues at its current rate of 1% per year as it has done through the middle of the decade, and if housing is the dominate variable in the population projection, the Township's population would grow from 21,130 in 1990 to 23,795 persons in 2000; 26,173 persons in 2010; and, 27,481 persons in 2015. These estimates based upon the availability of housing are considerably higher than the previous estimates based upon births, deaths, and migration. It is likely that actual population will be somewhere in between 23,854 and 27,481 persons.

A little over 68% of occupied units in the Township are hooked to municipal water and almost 80% are connected to the public sewer system.

Table A-19
Water and Sewer Hookup Type — 1990
Summit Township

Selected Characteristics	Dwellings
Lack complete plumbing	8
Public water system	5,483
Private drilled well	2,661
Individual dug well	140
Public sewer	6,388
Septic tank	1,889
Other sewage disposal	11

Source: U.S. Census Bureau

Table B-20 summarizes building permit activity that has occurred in the Township between 1986 and 1996. Included in this table is new construction of single-family, two-family, three and four-family and five+-family dwellings and total demolitions of dwellings per year.

As the table shows, the predominate type of construction are single-family homes with 581 units constructed since 1986. Another 297 multiple-family units (two-family or more) have also been constructed during this period. Only 29 dwellings were demolished during the period resulting in a net construction of 849 dwellings between 1986 and 1996.

Table A-20 Building Permit Data — 1986-1995 Summit Township

			3-4	5+			Net
Year	1 Family	2 Family	Family	Family	Subtotal	Demolitions	Housing
1986	21	14	18		53	1	52
1987	39	2			41	7	34
1988	35	4	12		51	1	50
1989	43	6	3		52	4	48
1990	57		6	120	183	1	182
1991	43				43	1	42
1992	55			96	151	4	147
1993	47	2			49	3	46
1994	67		4	10	81	7	74
1995	59				59		59
1996	115						115
Total	581	28	43	226	878	29	849



Note:

The Township received new land user information for 2000 from Michigan State University's Remote Sensing and Geographic Information Science Research & Outreach Services. Land use is categorized differently than the previous Township studies conducted in 1968, 1973, and 1997, making a comparison with the Year 2000 difficult. This appendix contains the original chapter on land use and transportation.

Generally, the land use pattern in Summit Township could be described as a series of residentially developed areas extending radially from the City of Jackson along major roads, with more rural types of land use in the southern and western portions of the Township and interspersed between developed areas. The major roads linking the Township with the City include Michigan Avenue, Spring Arbor Road, Kibby Road, Weatherwax Drive, Horton Road, Fourth Street, Francis Street, Airline Drive, South Street, and Page Avenue. Each of these supports residential development along its corridor with Airline Drive and Page Avenue also serving substantial industrial land uses. Major commercial land uses (including offices) occupy land areas along Michigan Avenue, Spring Arbor Road, and Francis Street. Smaller centers of commercial activity are located along Horton Road, McDevitt Street, and Page Avenue.

While the primary orientation of the transportation system tends to link the Township with downtown Jackson, some major roads provide passage laterally, linking the developed areas within the Township. These roads include McDevitt Street, Hinkley Boulevard, Badgley Road, and Robinson Road. A few major transportation routes run through the Township serving primarily through traffic and include M-60 and Spring Arbor Road running east and west in the western portions of the County and US-127 extending north and south in the eastern portion of the Township.

Also, several areas are served by buses provided by the Jackson Transit System. The present route includes Francis Street to Vandercook Lake, and to the Jackson Community College and part of the Spring Arbor Road corridor. This bus service provides essential transportation primarily to the lower income people such as elderly, students, and handicapped, as well as to the general population.

Previous studies estimated the total land area in the Township at 18,988 acres. Manual methods were used to calculate land acreage in these studies. The acreages used here were derived from a Geographic Information System (GIS) and are more accurate than manually calculations used previously. The land area of Summit Township totals 19,252.4 acres, or 30.08 square miles using GIS calculation methods. Of this total, 5,709.9 acres or 29.7 percent of the total land area was developed for residential, commercial, industrial, recreational, public and semi-public land uses as of 1997. Of the remaining undeveloped 13,543 acres, 394 are water areas and 12,990 acres consisted of agricultural, forest and vacant and wetland areas. Detailed land use acreages for various land use categories are shown for 1968, 1973, and 1997 in Table 21 on the following page.

Table C-1 provides an indication of the acreages for various uses in 1968, 1973, and 1997 as well as the percent of change in acreage figures over the periods. It generally shows the contrast in land use between the urban and rural nature of the Township. Of the developed land, the vast majority of land area is developed residentially. The residential component and others are shown in Table C-2, which summarizes the percentage of various types of developed land uses in relation to developed land as a whole.

Table B-1 Land Use — 1968, 1973, 1997

	1968	1973		19	97
Land Use Category	Acres	Acres	Change	Acres	Change
Residence	2,760	2,881	4.4%	4,080.7	41.6%
Single-Family	2,681	2,783	3.8%	3,836.9	37.9%
Two-Family	1	1	0.0%	5.8	480.0%
Multiple-Family	9	48	322.2%	155.2	308.4%
Mobile Homes	36	40	11.0%	28.2	-29.5%
Farmsteads	33	19	-42.4%	54.6	187.4%
Commerce	109	118	7.6%	222.8	88.8%
Local Commercial				83.0	
General Commercial				139.8	
Industry	100	112	12.0%	295.0	163.4%
Light Industry	51	59	15.7%	105.4	78.6%
Transp., Communication, Utilities	24	28	16.7%	59.4	112.1%
Heavy Industry	25	25	0.0%	130.2	420.8%
Parks and Recreation	916	916	0.0%	594.8	-35.1%
Public and Semi-Public	225	225	0.0%	516.6	129.6%
Total Developed	4,110	4,252	3.1%	5,709.9	34.3%
Water Area	394	394	0.0%	394.0	0.0%
Ag, Forest, Vacant, Streets/RRs	14,484	14,342	-1.3%	13,148.5	- 8.3%
Total Area	18,988	18,988		19,252.4	

Source: Land Use Surveys, 1968, 1973, and 1997, Region 2 Planning Commission

Table B-2 Land Use as a Percent Developed Land — 1968, 1973, 1997

	% of Developed Land				
Land Use Classification	1968	1973	1997		
Residential	67.2%	67.8%	71.5%		
Commercial	2.7%	2.8%	3.9%		
Industrial	2.4%	2.6%	5.2%		
Park & Recreation	22.3%	21.5%	10.4%		
Public and Semi-Public	5.5%	5.3%	9.1%		
Total Developed Land	100.0%	100.0%	100.0%		

Source: U.S. Census Bureau, 1990

Of the land classified as "developed" in Summit Township, nearly three quarters (71.5%) is developed residentially, reaffirming the conclusion that developed land in the Township is primarily residential in nature. Commercial and industrial land uses totaled 3.9 percent and 5.2 percent respectively, of developed land uses. Park and recreation land uses totaled 10.4 percent of the land developed and public and semi-public land uses, 9.1 percent. The categories of Parks and Recreation and Public and Semi-Public have changed for the calculations presented here due to the fact that in 1968 and 1973 schools etc. were included in this category instead of under the category Public and Semi-Public. Also, some additional land, such as Dahlem Environmental Center, has been included in the 1997 Recreation category.

The table also indicates that while the development in Summit Township is primarily residential, it is becoming even more so developed residentially. The percent of developed land used for such purposes increased by 3.7 percent since 1973. Commercial development also experienced a slight relative increase from 2.7 percent of the total developed area used for such purposes in 1968, to 2.8 percent in 1973, and to 3.9 percent in 1997. Industrial land almost doubled from 2.6 percent of developed land in 1973 to 5.2 percent in 1997.

While developed land in the Township is primarily residential, single-family residential development is by far the predominate form of residential development. This is shown in the Table C-3 which provides acreages for various types of residential land uses and the percentages of these acreages in residential use for the years 1968, 1973, and 1997:

Table B-3 Residential Acreage — 1968, 1973, AND 1997

Residential Land Uses	1968		1973		1997	
	Acres	%	Acres	%	Acres	%
Single-Family	2,681	97.1%	2,783	96.6%	3,836.9	94.0%
Two-Family	1	0.0%	1	0.0%	5.8	0.1%
Multiple-Family	9	0.3%	38	1.3%	155.2	3.8%
Mobile Homes	36	1.3%	40	1.3%	28.2	0.7%
Farmsteads	33	1.2%	19	0.7%	54.6	1.3%
Total	2,760	100.0%	2,881	100.0%	4080.7	100.0%

Source: U.S. Census Bureau, 1990.

Significant trends appear to be emerging with residential land development in Summit Township as is shown in Table C-3 above. While the greatest acreage increase since 1973 occurred in single-family land use, increasing by 1,054 acres or 38 percent, land development in multiple-family acreage increased to 117 acres. Relative to the amount of land utilized for these purposes in the past, this represents a substantial increase in development since 1973 of 308.4 percent for multiple-family land use.

Existing Land Use Appendix



CAPITAL IMPROVEMENTS PROGRAMMING APPENDIX C

What is a Capital Improvements Program?

"Capital improvements are those physical facilities which involve a substantial investment and last a long time . . . as opposed to the operating expenses that occur during the same year they are budgeted." Examples of capital improvements include: municipal buildings (e.g., Township Hall, fire stations, etc.), parks and recreation facilities, streets and alleys, and utilities (e.g., water and sewer lines). A capital improvements program (CIP) is a six-year prioritized listing of those projects along with the following information: location, date of construction, cost, means of financing, sponsor, and relationship to other facilities (if pertinent). The CIP "is updated annually with the first year year being the current year capital budget" according to the Michigan Planning Guidebook (May 2008).

Why Prepare a Capital Improvements Program?

Section 65 of the MPEA —the Michigan Planning Enabling Act (PA 33 of 2008), as amended— requires the Planning Commission to "annually prepare a capital improvements program of public structures and improvements," upon the adoption of this Master Plan unless exempted by the Township Board. If the Planning Commission is exempted, the Township Board "shall prepare and adopt a capital improvements program [(CIP)], separate from or as a part of the annual budget, or shall delegate the preparation of the capital improvements program to the" Township Supervisor or a designee "subject to final approval by the" Board. The CIP shows "those public structures and improvements, in the general order of their priority, that in the Planning Commission's judgment will be needed or desirable and can be undertaken within the ensuing 6-year period . . . [and] shall be based upon the requirements of Summit Township for all types of public structures and improvements. Consequently, each agency or department of Summit Township with authority for public structures or improvements shall upon request furnish the Planning Commission with lists, plans, and estimates of time and cost of those public structures and improvements."

Of course, there are also benefits to developing and maintaining a CIP. Chief among those benefits is the coordination of seemingly disparate projects. For example, water and sewer projects can be coordinated with street paving projects eliminating the potential for streets to be repaved, only to be torn up to for a water or sewer project two or three years later. It is also important to note that "plans for new public works that are identified in the [master Plan can] actually come to fruition through the CIP" and to ensure that "new public facilities are built in locations and consistent with the public policy for development in particular areas or neighborhoods as spelled out in the" Master Plan, according to the Michigan Planning Guidebook.

Developing a Capital Improvements Program

The following information should be used to develop the capital improvements program (CIP) upon the completion of the comprehensive plan:

Capital Improvements Program Appendix

Establishing Objective Criteria

"Without objective criteria, the [capital improvements process (CIP)] can quickly break down into a strictly political process where those agencies or neighborhoods with more political or fiscal resources (or both) will run roughshod over smaller agencies or weaker neighborhoods," according to the <u>Michigan Planning Guidebook</u>, and simply ranking proposed projects as 'urgent,' important,' or 'desirable' "leave room for disagreement in determining priority. More robust criteria are often used first to examine each project:"

- Does the proposed facility address a risk to public safety or health?
- Is the current facility deteriorated or unsafe?
- Is the proposed facility part of a systematic replacement program?
- Will the proposed facility result in improvement of operating efficiency?
- Is the proposed facility necessary to:
 - Ensure the success of another capital improvement?
 - Meet a state or federal statutory or administrative requirement?
 - A court order?
 - A major public goal of the legislative body?
- Will the proposed facility result in the equitable provision of services or facilities to a part of the population with special needs?
- Will the proposed facility protect or conserve sensitive natural features or natural resources or the air or water quality of Summit Township?
- Will the proposed facility protect the investment in existing infrastructure from becoming over capacity?
- Will the proposed facility result in a new or substantially expanded facility to provide a new service or new level of service in Summit Township?

Those answers can then be used to place proposed facilities into groups based upon the following criteria:

- The proposed facility is urgent and fills a high priority need that should be met.
- The proposed facility is a high priority that should be done as funding becomes available.
- The proposed facility is worthwhile if funding is available (but may be deferred).
- The proposed facility is a low priority that is desirable but not essential.

The criteria listed above are recommended for larger governments with the potential for many projects. The criteria used for "small communities with few projects may not be much more than 'urgent,' 'important,' or 'desirable."

Establishing a Process

The <u>Michigan Planning Guidebook</u> recommends that a community the size of Jackson create a special committee to advise the City Planning Commission on the capital improvements program (CIP). The committee should be comprised of the city manager and representatives from the city planning commission, city council, and pertinent departments (e.g., engineering; finance; fire; parks, recreation and grounds; public works; purchasing; and water). A total of eight steps are recommended for the development of a CIP:

- Prepare and inventory of all capital facilities.
- Rate the existing level of service for each infrastructure element.
- Identify the structure needs.
- Identify options to meet needs and cost estimates to all projects over the next six years.
- Prepare a draft CIP that includes a review of each project against the master plan and CIP prioritization criteria:
 - Establish financial capacity for financing public works proposals over the next six years.
 - Develop a project schedule for the next six years based on the ranking of selected projects and the availability of funding.
 - Select projects to be undertaken during the coming year which become the capital budget. The remaining projects become part of the capital improvements program for the subsequent five years.
 - Develop a project schedule for the next six years based on the ranking of selected projects and the availability of funding.
- After public review and hearing, the proposed CIP is adopted by the [city] planning commission with any agreed upon amendments. The CIP is then forwarded as a recommendation to the legislative body for final development.
- Implement current year of the CIP.
- Monitor projects and update the CIP annually.