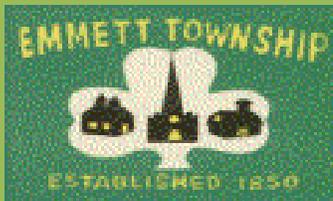


Emmett Township Master Plan Book

Emmett Township, St. Clair County, Michigan



With Assistance From:

Wade-Trim

EMT 6100-01A

Adopted on February 15, 1999 by the Township Planning Commission after a Public Hearing held on January 25, 1999.

Updated – 2013

Acknowledgements

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Chapter One - Introduction

Authority

Emmett Township derives its authority to prepare a master plan from the Township Planning Act, Public Act 1968 of 1959. Section 6 of the Act states:

The Planning Commission shall make and adopt a basic plan as a guide for the development of unincorporated portions of the township. As a basis for the plan, the Planning Commission is hereby empowered to (1) make inquiries, investigations and surveys of all the resources of the township and (2) assemble and analyze data and formulate plans for the proper conservation and use of all resources, including a determination of the extent of probable future need for the most advantageous designation of lands having various use potentials and for services, facilities and utilities required to equip such lands.

Purpose

Planning is a process which involves the conscious selection of policies relating to land use, growth and development in a community. A master plan serves several functions:

- ~ Provides a general statement of the Township's goals and provides a comprehensive view of the community's desired future.
- ~ Serves as the primary policy guide for local officials considering zoning, land division, capital improvement, and other matters related to land use and development; thus, it provides a stable and consistent basis for decision-making.
- ~ Provides the statutory basis for the Zoning Ordinance, as required by the Township Zoning Act, Public Act 184 of 1943.
- ~ Coordinates public improvements and private development activities to assure the wise and efficient expenditure of public funds.

Planning History

Emmett Township adopted its first Master Land Use Plan in 1981. This document is the first revision of that document. Since adoption of the initial plan, Emmett Township has experienced growth and development at an increasing pace. Emmett Township was one of the fastest growing communities in St. Clair County during the 1990-1995 period. In that time the Township's population has increased by approximately one-quarter. It is projected to be one of the fastest growing communities in the county through the year 2020. This could negatively impact local agricultural activities and detract from the community's rural, residential character. For these reasons, Emmett Township has undertaken this revision of its Master Plan.

The Emmett Township Master Plan was prepared by the Township Planning Commission, in cooperation with the Township Board. Wade-Trim provided technical assistance to the bodies. The member's names are listed on the acknowledgment page of this document.

To develop the Master Plan, a number of activities were undertaken. At the outset of the program, survey forms were sent to all Township residents property owners asking opinions about basic land use issues. Out of 831 surveys mailed, 215 responses were received. Background studies were developed over the course of 10 months. The Planning Commission studied each draft report, providing comments and requesting changes as appropriate. The Township Board was also provided with opportunities to review and comment on each chapter in the draft Master Plan. A copy of each chapter was also provided to the St. Clair County Metropolitan Planning Commission for its review and comments. The draft was given public hearing on January 25, 1999 and was referred to St. Clair County Metropolitan Planning Commission for its review and comments. The Emmett Township Planning Commission adopted the Future Land Use Plan on February 15, 1999

Master Plan Organization

The Emmett Township Master Plan is comprised of three primary components. The background studies document the social, economic and environmental conditions which existed at the time the Plan was prepared. The goals, objectives and policies chapter provides the philosophical basis of the Master Plan. And, the future land use plan communicates the Township's vision of its future in written and graphic form.

Chapter Two - Regional Setting

Emmett Township is not an isolated community. Therefore, the Master Plan needs to acknowledge the Township's regional context. Through recognition of regional conditions and trends, the will be more realistic and reasonable in terms of guiding the future utilization of land resources within the Township.

Regional Influences on Emmett Township

As shown on Map 1, Emmett Township is located in St. Clair County just to the west of the City of Port Huron. It is bordered by Kenockee, Riley, Mussey and Brockway Townships. The Village of Emmett is located within the south easternmost corner of the Township. While located just 15 minutes' drive from the City of Port Huron, the Township has not been subject to the level of urban sprawl experienced by many rural communities located near urban centers. Recent and projected population growth trends indicate that this may soon be changing.

Adopted Plans of Surrounding Communities

The adopted plans of surrounding communities and St. Clair County may directly impact the future development of Emmett Township. Therefore, it is important to recognize such plans and to evaluate their importance to development of the Township's Master Plan.

Kenockee Township

Located directly east of Emmett Township, Kenockee Township recently amended its Master Plan and adopted a new Zoning Ordinance. All of the land abutting Emmett Township is planned and zoned for either agricultural or open space. The Open Space zoning district abuts Emmett Township at the north half section of Section 1 at the Mill Creek waterway; and along the Pine River in south one-half of Section 24. The Open Space zoning permits farming at a minimum of 10 acres and single family residential with a minimum of five acres. The remainder of Kenockee Township land abutting Emmett Township is zoned for agricultural use. The minimum land acreage for farms and single family homes in this zoning district are the same as 1'1 the Open Space district. In addition the agriculture zoning district permits two-family homes on parcels which are at least five acres in size. Previously, the minimum acreage for single family homes in agricultural zones was 2 ~ acres.

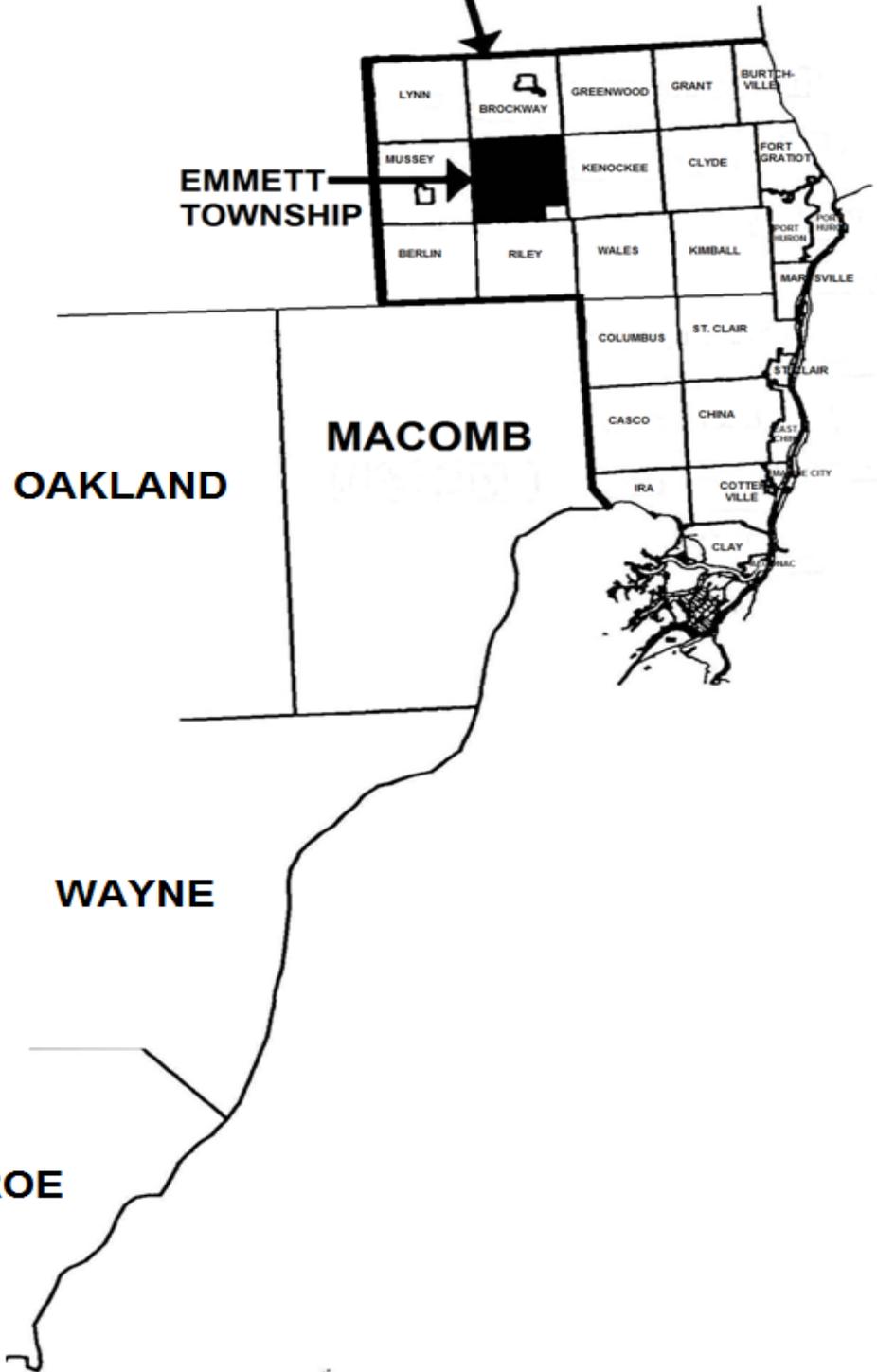
Riley Township

Located to the immediate south of Emmett Township, the Riley Township Master Plan calls for the bulk of its land area to remain in agriculture and low density residential land uses. Along the common border with Emmett Township, commercial/office and low/medium density residential land uses are planned at the two 1-69 interchanges in Riley Township. The westernmost interchange and the land planned for commercial/office use borders Emmett Township. The easternmost interchange. where low/medium density residential and commercial/office land uses are planned for border the Village of Emmett. The remainder of Riley Township land bordering Emmett Township is planned for agricultural and low density residential land uses.



ST. CLAIR COUNTY

EMMETT TOWNSHIP



LIVINGSTON

OAKLAND

MACOMB

WASHTENAW

WAYNE

MONROE

REGIONAL LOCATION

**EMMETT, TOWNSHIP,
ST. CLAIR COUNTY, MICHIGAN**

Mussey Township

Mussey Township is located to the west of Emmett Township and completed its new Master Plan in the spring of 1997. Like other communities in the region, Mussey is planning for the bulk of its land area to remain in agricultural use. Unique to Mussey Township is the designation of over one-third of the Township's land area for prime agriculture land use. This designation is intended to preserve the existing agricultural land uses by limiting non-agricultural uses and encouraging large parcel sizes. Remaining areas planned for agricultural use are characterized by increasing frequency of non-agricultural uses (primarily single-family residential) and small parcels interspersed with large lots. The Township has designated residential areas with differing densities, local and highway commercial land uses, light industrial and recreation/conservation land uses. The only land use designations bordering Emmett Township are agricultural to the north of Bryce Road and prime agricultural to the south.

Brockway Township

Located to the north of Emmett Township, Brockway Township completed its Master Plan in 1995 with an amendment in 1996. Land areas bordering Emmett Township are planned for agricultural use with the exception of the land surrounding Mill Creek which is designated for river conservation. The river conservation designation permits farming and agricultural but is oriented to preserving the natural character and beauty of the Mill Creek and its riparian land area.

Emmett Village

The Village is located within the south-easternmost corner of Emmett Township and completed its most recent Master Plan in the summer of 1996. The primary planned future land use in the Village's Master Plan is residential. All land area bordering the Township is planned for residential land use. The Village has also planned for general commercial at the intersection of M-19 and M-21 and a central business district along M-19 primarily to the south of the Grand Trunk Western Rail Road. A small area of industrial is planned for both sides of the railroad tracks to the east of M-19.

St. Clair County

The St. Clair County Metropolitan Planning Commission and its staff are in the process of developing a new county-wide Master Plan. To date the staff have completed a series of public meetings to discuss issues and concerns of the citizens and local government officials. Background studies are currently being developed and by January or February 1999, a draft future land use plan should be completed. To develop the county future land use plan, the County's staff and Planning Commission will draw upon local governments' future land use plans. One issue the county will be analyzing will be the extent to which the future land use plans of neighboring communities have complementary or conflicting land uses.

Chapter Three - Background Studies Summary

As part of the development of the Emmett Township Master Plan, five background reports were prepared. These background studies documented past trends, an inventory of current conditions and projected future trends. They covered the Township's natural features, existing land use patterns and the social, economic and demographic characteristics. They also included a community opinion survey and an analysis of the potential range of demand for land use by residential, commercial and industrial users.

The following summarizes the findings of these studies. The complete text and data of each study may be found in Chapters Four through Eight.

Natural Features

- The majority of land in the Township is characterized as generally flat to rolling topography. There are two significantly different variations from this norm: a north-south minor ridge line associated with dense woodlands located in the western sections of the Township; and an escarpment associated with Mill Creek in Section 1.
- Surface drainage is accomplished through a system of small drainageways, most of which eventually link with Mill Creek (outside of the creek's course in the Township). Some are prone to flooding during heavy rain and snowmelt, especially if the banks have become cluttered with debris.
- There are many small and scattered wetlands throughout the Township, most are associated with woodlands.
- The majorities of soils in the Township are poorly drained and generally have a high water table. These soils require engineered septic fields and tile drainage for efficient cultivation. Building and road construction on such soils is also limited by the natural characteristics, but with proper preparation and design, the soil limitations (heaving, flooding and poor drainage) can be mitigated.

Existing Land Use

- Totalling 52.4 percent of the Township's land area, agriculture is the primary land use.
- Six property owners account for 960 acres of land that are enrolled in Michigan's farmland preservation program (P.A. 116). This accounts for 8 percent of agricultural land area. All are scheduled to expire by 2007 unless they are renewed.
- Residential land uses account for the majority of land uses among all developed land area; but account for less than 4 percent of the Township's total land area. Much of existing residential development can be characterized as strip development where homes have been constructed close to each other and relatively close to the roadway which results in multiple driveway cuts within relatively short distances and much vacant land behind the home.
- Several land use conflicts were identified in the Township. Each involves a general industrial use which is located in the midst of an area which has been predominately developed or zoned for agricultural/residential use. None is zoned for general industrial land use.
- There are a numerous cases of poor parceling and land fragmentation in the Township. There are many deep and narrow parcels which are developed along the roadway with vacant/fallow land in back, there are also many landlocked parcels.

- Currently there are no public water or sewer services available to Township residents. The majority of roadways in the Township are dirt/gravel pack roads.
- The Township does not own or operate any public parks.

Socioeconomic Profile

- Emmett Township population is projected to grow from approximately 1,930 in 1997 to 3,340 by 2020. This is an increase of 120 percent from 1990 Census population level of 1,519.
- From 1980 through 1990, the senior population declined by 5.6 percent while the elderly population nearly doubled (97 percent increase). This reflects national trends that the elderly will continue to be the fastest growing population group during the next 10 to fifteen years. If Township residents choose to remain in the Township as they age, the proportion of seniors and elderly population, currently less than the state and national averages, will swell.
- From 1980 to 1990, the average household size, as measured by persons-per-household, declined by 7.0 percent from 3.44 persons to 3.20. Nevertheless, the Township's households are larger than those of the general population. This is due in large part to the considerably higher proportion of married couple families (72.5 percent) in the Township than in the state (55.1 percent) and country (56.1 percent).
- In 1990, 42 percent of the Township's senior and elderly identified themselves as disabled. Although seniors and elderly represent only 2.8 percent of the Township's total population, this age group's share of total population is expected to continue to grow as the baby boomer generation (those born between 1946 and 1964) ages. With this increase in the senior and elderly populations, comes the concern for proper senior housing and the availability of differing levels of care.
- From 1990 through 1997, construction of new single family homes and mobile homes have helped to increase the Township's total housing stock, net of demolitions by 223. New single-family development has been steady since 1993 with peak construction in 1995 when fifty-six building permits were issued. The overwhelming majority (82.0 percent in 1990) of the Township's housing stock are single-family detached structures. With the exception of two, 2-unit structures, the remainder of the housing stock is mobile homes. The lack of public facilities (water and sewer) can explain the fact that there are no multiple family developments. There is a comparatively high percentage of mobile homes (17.6) located within Emmett Township versus the 9.3 percent found in the County as a whole.
- The rate of home ownership (83.1 percent) exceeds the national rate by nearly 20 points and the County rate (69.6 percent) by over 13 points.
- Nearly 36 percent of the homes are forty years or older and, may, in the near future, be in the need of major repairs. There are also 115 structures (22 percent) that were built before 1939, some of which may have potential historic value.
- Manufacturing, Wholesale and Retail Trade, and Professional Services were the top three employment sectors for residents of Emmett Township and St. Clair County. SEMCOG data reveals that over 14,000 people residing in St. Clair County commute to Macomb County for work. Macomb County has a high percentage of manufacturing and wholesale/retail trade industries.
- While only 2 percent of people in St. Clair County are employed in agriculture, forestry, fishing, and mining, almost 10 percent of Emmett Township residents are employed in these industries.

- The median household income for residents of Emmett Township is \$1,808 greater than that of the County whereas the family and per capita incomes are less than the County. This may be due to the higher concentration in the Township of married couple families with children which would increase the proportion of dependent residents (children) relative to income earners.

Community Opinion Survey

- Out of approximately 800 community opinion surveys mailed to residents, 215 surveys were returned resulting in an overall response rate of 25.9 percent. This is within the expected response rate of 25 to 50 percent for mailed surveys.
- The survey respondents indicated a strong desire to maintain a rural character and maintain the natural features of the area.
- Among survey respondents there exists generalized support for senior housing, a policy to discourage strip residential developments, policy for design standards, and a policy noting provisions for accessory apartments and home businesses.
- Farms and orchards were noted by a large number of the respondents as having intrinsic value that should be preserved; however, very few of the respondents were willing to support conservation methods (such as a publicly funded Purchase of Development Rights (PDR) program or land conservation purchases).
- Generally, respondents feel that commercial uses should be allowed, but their appearance and location should be controlled. In addition, respondents believe that commercial developments should be oriented to meet local needs.
- Nearly half of the respondents believe that the existing commercial developments are not adequate to meet the residents' needs.
- Respondents are divided over whether an industrial park should be developed within the Township, but are in support of design and location guidelines should such a use be developed.

Market Assessment

- With a projected population of just over 3,300 persons, it is estimated that an additional 505 housing units will need to be constructed by 2020. This is an increase in population of 119 percent and an increase in housing stock of 99 percent.
- Commercial development planning standards indicate that the need for additional commercial land use area will be limited to approximately 35 acres due to the relatively small population of Emmett Township as well as the stock of existing commercial land uses in nearby communities. Actual land planned for commercial land use should be greater than 35 acres to assure that the market for commercial land is not excessively restricted as to artificially inflate the price of land for commercial development.
- Future commercial land uses should be allocated between neighborhood commercial (three acres), non-center commercial and general business (33 acres) and office uses (9 acres).
- Industrial development planning standards indicate that the need for additional industrial land use area could range between 2 acre and 71 acres.

- The lack of utilities in the Township, its relatively small population base (current and forecast) and the availability of developable land elsewhere indicate that the demand and need for industrial land uses in Emmett will be less than the maximum 71 acres. This study finds that the most realistic level of demand for industrial land use will be around 40 acres. In order to provide sufficient potential supply of industrial land, more than 40 acres should be provided in the land use plan.

Chapter Four - Natural Features

Introduction

The development of land, including the excavation, fill, clearing, grading, and construction that occurs on a site can significantly impact the natural environment. Just as the master planning process requires that planners study the community's socio-economic status and existing land use patterns, they must also consider the natural environment in which all human activity takes place. In particular, without a clean and viable natural environment human activity cannot occur, therefore, the preservation of natural and environmentally sensitive areas in long-range planning is an important issue.

Environmentally sensitive areas can be defined as land areas whose destruction or disturbance will immediately affect the life of the community by either: 1) creating hazards such as flooding; 2) destroying important resources such as wetlands and wood lots; or 3) wasting important productive lands and renewable resources.'

The purpose of this report, therefore, is two-fold. First, this study determines land most suitable for development, which would require the least development costs and provide the maximum amenities without having adverse effects on existing natural systems. Secondly, this report will help identify lands most suitable for recreation-conservation. The applicable natural features of Emmett Township are presented below.

Significant Site Features

Significant site features are those surface characteristics which serve to shape the community - in some instances resulting in discouraging development and in others attracting particular land use activities. The first of these to be examined is climate.

Climate

According to the *St. Clair County Recreation Plan*, the climate of the Emmett Township area is continental, influenced by the midwest United States and central Canada. Data obtained from the Sarnia Weather Office in Ontario reveals that the mean average temperature in the area for the coldest month, January, is 21.7DF; and for the warmest month, July, is 69.6 DF.

Monthly precipitation amounts vary from 0.85 inches in February to 3.19 inches in June. The area receives an annual average precipitation of approximately 24.41 inches. Snowfall in the area averages 54.69 inches annually.

¹ For a complete discussion on the importance of protecting environmentally sensitive areas see Performance Controls for Sensitive Lands, Planning Advisory Service Reports 307 and 308, June 1975.

Topography

According to the United States Geological Survey (USGS) Quadrangle Maps, topography of Emmett Township is generally flat to gently sloping with the highest elevations in the western half of the Township, becoming generally lower and flatter in the middle and eastern sections with the exception of the escarpment associated with Mill Creek waterway in the northeastern most section of the Township.

Land elevations range from a height of 850 feet above sea level, along a ridge running north/south in the west have of the Township, to a low of 770 feet in the southeastern part of the Township. Contour elevations for Emmett Township are depicted on Map 2.

Watercourses

There are a few small, unnamed water bodies located within the limits of Emmett Township according to the USGS. Most are either privately built ponds or the result of previous sand and gravel extraction operations.

Surface drainage in Emmett Township is accomplished by a system of small drainageways, most of which eventually link with Mill Creek - although outside the Township borders. Others connect with the Pine River system. Some of these watercourses are prone to flooding during major wet weather events - especially if the drain has been poorly maintained and the resulting debris causes natural damming. According to the Federal Emergency Management Agency (FEMA), there are no 1 DO-year floodplains within Emmett Township. However, the Mill Creek does have the riverbed and floodway within its banks. Development in these flood prone areas (Mill Creek and drainways) must still be carefully managed.

Small streams and drains in Emmett Township include Benke, White, Gleason, Cox Doty, Quakenbush, Popplewell, McLaren, Foley, Sullivan, Hyde and Emmett Drains. Receiving flows from some of these drainage ways, the Mill Creek flows northwest to southeast in Section 1. With headwaters in eastern Lapeer County for the creek's North Branch and nearby Lynn Township for its South Branch, Mill Creek meanders through Lapeer and St. Clair Counties until it joins the Black River northwest of Port Huron at the Port Huron State Game Area in Clyde Township. The Black River then joins the St. Clair River a short distance later. Emmett Township's watercourses are depicted on Map 2.

Woodlands

As also indicated on Map 2, USGS and MIRIS (Michigan Resource Information System) data for Emmett Township and aerial photographs show the existence of many woodlands, some of substantial size, throughout the Township particularly along stream and creek courses. Primary species of woodland vegetation in St. Clair County include mixed deciduous trees such as oaks, elms, maples, hickory, cherry, beech, basswood, and ash with smaller numbers of conifers such as pine, according to the *St. Clair County Recreation Plan 1991 – 2001*.

These likely second- and third-growth woodlands are valuable as wildlife habitat and for aesthetic enjoyment. Woodlands also moderate certain climate conditions, such as flooding and high winds, by protecting watersheds from siltation and soil erosion caused by storm water runoff or wind. Woodlands can also improve air quality by absorbing certain air pollutants, as well as buffer excessive noise generators. Future land use planning decisions should consider these characteristics of woodlot when future development projects are proposed.

Wetlands

Wetlands are an important, though commonly overlooked, natural resource which provide both aesthetic and functional benefits. Over the past twenty to thirty years, over 70 percent of Michigan's wetlands have been destroyed by development and agricultural activities. Therefore, Michigan enacted the Goemaere-Anderson Wetland Protection Act (Michigan Public Act 203 of 1979) to protect the remaining wetlands.

The wetland act authorizes the Michigan Department of Natural Resources (MDNR) to preserve certain wetland areas. The MDNR may require permits before altering regulated wetlands and may prohibit development in some locations. The MDNR defines "wetlands" as follows:

"Land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh and which is any of the following:

- Contiguous to the Great Lakes or Lake St. Clair, an inland lake or pond, or a river or stream.
- Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and more than five acres in size; except this subdivision shall not be of effect, except for the purpose of inventorying, in counties of less than 100,000 population until the department certifies to the commission of natural resources it has substantially completed its inventory of wetlands in that county.
- Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and five acres or less in size if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has so notified the owner; except this subdivision may be utilized regardless of wetland size in a county in which the above subdivision is of no effect; except for the purpose of inventorying, at the time."

Among the criteria used by the MDNR when conducting a wetland determination are:

- Presence of standing water (at least one week of the year).
- Presence of hydric soil types that are saturated, flooded, or ponded sufficiently to favor wetland vegetation (usually black or dark brown).
- Predominance of wetland vegetation/plant material, or aquatic life, such as cattails, reeds, willows, dogwood, elderberries, and/or red or silver maple trees.
- Presence of important or endangered plant or wild life habitat or a rare ecosystem.
- The area serves as an important groundwater recharge.
- Size and Location - minimum size to be state regulated is five acres unless the wetland is contiguous to a lake, pond, river or stream, or is considered to be "essential to the preservation of natural resources of the state."

The determination that a site contains a regulated wetland can have several consequences:

- The MONR may issue a permit to fill the wetland.
- The MDNR may require mitigation, such as replacing the wetlands (sometimes this involves increasing the overall on-site wetland acreage by two or three times).
- The MDNR may prohibit development in the wetland area, if it is determined that there is a "prudent" alternative.

The Land Resource Programs Division of the MDNR has provided an inventory of land uses within Emmett Township which includes various classes of forested and non-forested wetlands.

Wetlands and wooded wetlands shown on Map 2 were determined by the U.S. Department of the Interior, Fish, and Wildlife Service using 1981 high altitude aerial photography and National Wetlands Inventory Maps. The wetlands generally fall within low lying areas along creeks and drains. Many of the wetland areas associated with streams are also forested and are shown as wooded wetland areas. The map delineates significant wetlands, but not necessarily all the wetlands regulated under the State Wetland Act.

Where this map or on-site observation indicates the likelihood of a regulated wetland, sources (soil survey, MDNR maps, or U.S. Interior, Fish, and Wildlife maps) should be referenced to further determine if the wetland has the physical and biological characteristics which place it under the jurisdiction of the MONR. A formal written determination by a qualified wetland consultant and/or staff from the MDNR may be required.

Wildlife

Situated in the northwestern area of St. Clair County, just south of Sanilac County, Emmett Township is home to a mixture of wildlife species. While data provided from the MONR, Wildlife.

Division, indicates that there are no known endangered species residing in Emmett Township, there is an interesting variety of plant and animal life.

Approximately 300 different species of birds can be sighted in St. Clair County and the state of Michigan. This number includes year-round residents such as the Northern Cardinal, BlackCapped Chickadee, White-Breasted Nuthatch, or Ring-Necked Pheasant, part-year residents, such as the Northern Junco in winter or the House Wren in the spring, summer and fall, as well as migratory birds passing through the area on their way to summer nesting areas in Canada or the Arctic, or flying south to winter habitats in the southern United States or Latin America.

The variety of bird life in the area can also be broken down into the type of habitat they prefer. Within Emmett Township this can include species which frequent many of the surrounding farmlands, pastures, and meadows, such as Eastern Meadowlarks, Field Sparrows, and RingNecked Pheasants; woodland species such as Woodpeckers and Nuthatches; or wetland varieties who reside around ponds, or drainage ways, such as Great Blue Herons, Belted Kingfishers, and several varieties of ducks. According to the *Atlas of Breeding Birds of Michigan*, approximately 60 bird species breed in Emmett Township". The variety of breeding birds in a community is one barometer of the availability and suitability of various wildlife habitats. Fluctuations over time provide indications that changes are occurring that affect the habitats.

Mammals which are indigenous to Emmett Township and surrounding areas, include but are not necessarily limited to, gray, red, and fox squirrels, woodchucks, gophers, opossums, raccoons, cottontail rabbits, white-tailed deer, as well as a variety of small moles, voles, bats, and mice.

In addition to the birds and mammals residing in the Township, a variety of reptiles and amphibians, such as toads, frogs, turtles, and snakes are residents, particularly along rivers and small drainage ways.

As portions of the Township have developed and open areas have filled in, a number of these animal species have learned to adapt to their changing surroundings. However, preservation of areas determined as critical animal habitats should be considered when reviewing plans.

In addition to the various deciduous and conifer tree species discussed briefly under woodlands, the Township is also home to a number of different kinds of plant life. These plants range from grasses and legumes found in and near fields or meadows to wetland plants such as cattails or sedge, to upland plants such as a variety of goldenrod or Queen Anne's lace.

Soils

According to the *St. Clair County Soil Survey* conducted by the U. S. Department of Agriculture and issued in 1974, there are twelve soil associations in the county. A soil association is a landscape that has a distinctive proportional pattern of soils. It is named for the dominant soils found in the association although it may have more than one minor soil as well.

²Richard Brewer, Gail A. McPeck, and Raymond J. Adams, Jr., *The Atlas of Breeding Birds of Michigan*, Michigan State University Press, 1991.

A soil association map is a useful guide for activities such as the management of natural features such as a watershed, woodlands or wildlife areas. It is also useful for planning recreational facilities and community development and generalized land use planning. It should be noted, however, that soil interpretations and characteristics as researched for the County Soil Survey and reported here, are general in nature and will not eliminate the need for on-site study and testing of specific sites for the design and construction of specific uses.

The Emmett Township Soil Associations Map (Map 3) illustrates the general location of the five main soil associations found in Emmett Township as identified by the *Soil Survey of St. Clair County*. These five are: Blount-Parkhill, Hoytville-Allendale-Nappanee, Wainola-Deford, Bach, and Alluvial Land - Rough Broken Land.

Blount-Parkhill soil association is the most dominant association found in the Township, covering virtually all the sections east of Connors Road with the exception of Section 1 and Sections 4,5, and 8. These soils are characterized as nearly level to gently sloping, somewhat poorly drained and poorly drained soils that have a dominantly loamy subsoil; and are located primarily on till plains.

The Blount-Parkhill association is predominant throughout the County, comprising approximately 39 percent of the survey area. Typically most areas of these soils are used for farming. Dairying and cash crops are the main kinds of farming on these soils in St. Clair County. The major soils have a seasonal high water table and need drainage for most uses. Erosion is a moderate hazard on the gentle slopes.

About 35 percent of the association are Blount soils (BIA and BIB) can pose severe limitations for septic tank disposal fields because of seasonally high water table and slow permeability. The Blount

soils can also pose moderate limitations for the development of roads and buildings because of frost heave and moderate shrink-swell potential. The Parkhill soils comprise about 30 percent of this soil association and its soil types (Pc) also pose severe limitations for septic tank disposal fields. It is somewhat better suited for building construction because the threat of shrink-swell is lower and the compressibility of the soil is somewhat greater. In any case it is important that the soil characteristics of any site be further studied and identified prior to any development.

Hoytville-Allendale-Nappanee is found in the west central area of the Township, primarily Section 19. It is characterized by nearly level to gently sloping, very poorly drained and somewhat poorly drained soils that have a clayey to sandy subsoil. County wide approximately 7 percent of the soils are in this association. With the exception of the highly urbanized areas near the St. Clair River, most areas of this soil association are used for farming or are idle. The Allendale portions of the association are prone to drought and suffer threat of soil blowing. The Allendale and Hoytville areas of the association are difficult to farm because of the extreme variability in soil textures.

The Wainola-Deford soil association is found in the north central area of the Township, in Sections 4,5,8 and a small area of 9 and 17. They are characterized by nearly level, somewhat poorly drained soils that have a sandy subsoil. This association comprises about 9 percent of the county soil survey. Farmed areas tend to be well suited to hay and pasture consequently, dairying and beef cattle raising are the main kinds of farming practiced on these soils.

The Bach Association is found the westernmost sections of the Township in Sections 6, 7, 18, 30 and 31 with small portions found in Sections 29 and 32. The County Soil survey found that about 10 percent of the county survey is represented by the Bach soil association. It is characterized by nearly level, very poorly drained, dominantly high-lime soils that have a loamy subsoil. Like the previous three soil associations, the Bach soil series (Bc) have severe limitations as use for septic disposal fields because of seasonally high-water table, unstable soils which may plug tile and filter beds and water saturation during wet periods.

Alluvial Land-Rough Broken Land Association is found only in the northeastern most area of the Township, in Section 1 and is associated with the Mill Creek. It is characterized by nearly level to gently sloping, well-drained to poorly drained soils on floodplains and the adjacent steep to very steep soils on bluffs. It makes up about 6 percent of the County soil survey coverage. Generally, the land areas in this soil association are not well suited to farming, building or roadway development because of the risk of flooding and the steep slopes. Land creep, slides, and sloughing of the raw escarpment are the main deterrents to development of these areas. When farming does occur, it is usually corn, small grains and hay. County-wide, most areas of this soil association are pastured, forested or idle and covered with brush.

Summary

The natural ability of the land in the Township to support development is limited. Although the topography is relatively flat and the existence of steep slopes is minimal, the majority of soils in the Township are poorly drained and generally have a high-water table. These soils require engineered septic fields and tile drainage for efficient cultivation. Building and road construction on such soils is also limited by the natural characteristics, but with proper preparation and design, the soil limitations (heaving, flooding and poor drainage) can be mitigated.

While there are no major waterways within the Township, flooding along the numerous drains in the Township can occur during heavy rain and snowmelt, especially if the banks have become cluttered with debris. There are many small and scattered wetlands throughout the Township, most are associated with woodlands. Most wetlands are too small to qualify for oversight from the Michigan Department of Natural Resources.

Chapter Five - Existing Land Use Inventory

The rational application of the planning process in the presentation of the Future Land Use Plan is possible only when there is a clear understanding of existing land uses and their relationships. Knowledge of existing land development furnishes the basic information by which decisions can be made concerning proposals for future residential, commercial, industrial, and public land use activities.

Survey Methodology

In November 1997, Wade-Trim conducted a field survey of existing land uses in the community and recorded land uses on 1 :400 scale aerial photographs acquired from the St. Clair County Metropolitan Planning Commission. Two Township representatives accompanied the WadeTrim planner. During the field survey, the general intensity of existing development, areas in transition, blighted areas, properties undergoing redevelopment and properties under construction were noted. Recreation areas, community facilities, and utility corridors were similarly recorded.

Land use data was transposed onto a CADD-generated property line base map that was developed using MIRIS digital files and County tax maps from the Land and Graphic office of the St. Clair County. The land use categories were determined by the Michigan Land Cover/Use Classification System categories. The Township provided a list of PA 116 lands which was also included, on the Existing Land Use Map to illustrate the distribution and extent of such lands in the Township.

Existing Land Use Classifications

The following defines the land use classifications that were used to categorize the existing land uses in Emmett Township and describes the distribution of those uses. Map 4, Existing Land Use, provides a graphical representation of this information. Acreage calculations for each land use category were derived directly from the Existing Land Use Map. Data in Table 1 summarize the distribution of existing land use coverage by developed and total acres.

Table 1
Emmett Township
Existing Land Use Acreage, 1997

Land Use Classification	Developed Acres	Percent of Developed Acres	Total Acres	Percent of Total Land Area
Agricultural	N/A	N/A	11,364.1	52.4
Single-Family Residential	860	96.3	860.0	3.97
Two-Family Residential	6.5	.73	6.5	.03
Seasonal Residential	6.9	.77	6.9	.03
Commercial	10.1	1.13	10.1	.05
Industrial	2.4	.27	2.4	.01
Excavation	N/A	N/A	17.6	.08
Public/Semi-Public (Township, County, Other, Institutional)	7.1	.80	83.7	.39
Rights-of-Way, Water, Vacant	N/A	N/A	9,337.6	43.05
Totals	893.0	100.0	21,688.9	100.0

Source: Existing land use survey completed by Wade-Trim and Township Board Members, November 1997.

N/A: Not Applicable

Agriculture

The agriculture category includes lands under cultivation, horse farms, ranching operations, sod farming, pastures, orchards, nurseries, vineyards, and tree farms. Agricultural land uses represent the most extensive land use in the Township. There are approximately 11,364 acres of land dedicated to agricultural uses, which is 52 percent of the Township's total land area. Typical agricultural uses are field crops such as soy, wheat and corn, a few apple orchards (both active and fallow), and limited livestock production. The active apple orchards also have structures for the in-season sale of apples and cider.

There are approximately 73 acres of land in Sections 7 and 8, along Sullivan Road, that are used as a nursery/tree farm. They are classified as agricultural lands rather than commercial. In some

communities, a nursery/tree farm which sells its product either to individual consumers or wholesalers/retailers could be classified as commercial. In Emmett Township, these lands could be classified as agricultural because the primary activity is cultivation and the properties are in a rural area surrounded by agricultural land uses. To classify the land use as commercial would skew the land use analysis and market assessment for future land use planning. Ultimately, it could *affect* zoning decisions.

In an *effort* to slow the loss of farmland to residential development, the State enacted the Farmland and Open Space Act, Public Act 116 of 1974, to provide for tax relief through development rights agreements. The Act allows a landowner to enter into an agreement with the state in which the owner promises to keep the land in agricultural use in return for state income tax credits.

The minimum duration for an agreement is ten years, but an agreement may be struck for as long as 99 years. Agreements can also be renewed. To be eligible for inclusion in the program, a property must satisfy one of the following conditions:

- Be an operating farm greater than 40 acres;
- Be an operating farm of 5 to 40 acres with a gross annual income of \$200 per tilled and cleared acre; or,
- Be an operating specialty farm (as designated by the Michigan Department of Agriculture) of at least 15 acres with a gross annual income of at least \$2,000.

At least 51 percent of the land in an operating farmland application must be under active cultivation or pasture. The property owner does not have to provide public access to the land and the property may be sold. New owners, however, are bound by the agreement until it expires.

As of January 1998, six property owners had enrolled approximately 960 acres of land in Emmett Township in the PA 116 program. This represents 8.4 percent of agricultural land in the Township. The location of enrolled properties is shown on Map 4. Out of the 960 acres of PA 116 lands, 320 acres or 33 percent are scheduled to expire by the end of 1998. In 2000, 120 acres will expire, 160 acres expire in 2002, 200 acres in 2004 and 160 acres in 2007.

Single-Family Residential

This category includes detached single-family residential dwellings and mobile homes located outside of mobile home parks. Areas designated single-family include associated maintained yards, as well as accessory structures such as garages. Homes located on farms are also classified as single-family. The farmed portion of such properties is classified as agricultural.

Single-family residential land use presently covers approximately 860 acres, or 3.97 percent of the Township's total land area. Such development accounts for 96 percent of the developed land in the Township. Much of the single-family residential uses can be characterized as strip development where homes have been constructed close to each other, relatively close to the roadway which as a consequence has multiple driveway cuts within relatively short distances and, much vacant land behind the structure. Strip residential development is dispersed throughout the Township with no real concentrations. There are presently no urban/suburban style residential subdivisions in the Township. However, there is one under development located in Section 19 along Shamrock Drive, a private roadway.

Two-Family Residential

There are four duplexes in the Township and no multiple-family structures (those with more than three units per structure) in the Township. While not directly observable during the existing land use, the Township is aware that some of the duplexes are actually the result of homeowners who have constructed "granny flats" within the existing single-family structure. These are distributed throughout the Township. Granny flats are constructed generally for the purpose of housing family members, usually elderly grandparents, who can no longer live in their own homes alone and need help with daily living activities.

This classification includes all two-family dwelling units and any accessory structures, as well as the maintained yards. Two-family residential development accounts for a small amount of the Township's total existing land use, 6.5 acres, or 0.03 percent. In comparison to other developed land uses, two-family dwellings occupy 0.73 percent of the developed land area.

Seasonal Residential

Seasonal residential uses are dispersed throughout the township and usually consist of a single mobile home or recreational vehicle on a parcel of land that is clearly not used as a year-round residence. There are no permanent utility hook-ups for water, sewer or electricity. There is one facility, the Beech Grove Campgrounds, located on Breen Road in Section 29 that represents the single largest concentration of such land uses. At the time of the land use inventory, there were approximately three mobile homes at the facility that appeared to be year-round residences and space around the wooded lot and lake for approximately 130 seasonal campers. There are approximately 7 acres of land in the township being used for seasonal residences. This represents less than 0.1 percent of all township land area and just under one percent of all developed land area.

Commercial

This classification includes offices and three subtypes of commercial uses: convenience, comparison, and general commercial uses. Convenience commercial uses are stores or service establishments which satisfy the day-to-day needs of Township residents. Uses typically included in this category are food, hardware, and personal service establishments.

Comparison commercial uses are those which are comprised of a single structure or group of structures having a large amount of floor space and a variety of commercial and service establishments. They typically offer products and services needed less frequently which draw comparison shoppers. Often these uses are found in a community or regional shopping center. Uses included in this category are general merchandise stores, apparel and accessory shops, and furniture and appliance establishments.

General commercial uses do not require location in a shopping center. Rather, such uses typically benefit from a location on a major thoroughfare that permits good access. Uses included in the general commercial category are automotive dealers, gasoline service stations, eating and drinking establishments, and landscape or building material outlets.

There are approximately 10.1 acres of commercial land uses in Emmett Township. This equates to 0.05 percent of the Township's land area and 1.13 percent of the developed land area. This acreage is comprised of one active convenience store, Trombley's at the corner of Sheridan and Bryce roads and Hull's Used Car Sales/Driving Range near Bryce and Quain in Section 21. There is also a catering business, Keegan's, located at the intersection of Rynn and Dunnigan roads. Prior to the construction of 1-69, Keegan's was a restaurant and truck stop and still has the restaurant building which is rented out for private parties. The total commercial acreage does not include the acreage used for the seasonal sale of apples and cider.

Industrial

The industrial land use category includes areas with or without buildings where raw or semifinished materials are fabricated and lands used for storing raw materials for production. This category includes warehouses, processing facilities, and manufacturing facilities as well as nonmanufacturing uses which are industrial in nature such as junk yards and collision shops.

Representing approximately 2.4 acres, there is one industrial use in the Township, the above ground storage of propane fuel located on Bryce Road in Section 22. In addition, there are several lots in the Township (in Sections 4, 15, and 20) where the occupants of single family homes are using their yards for junk storage. These are non-conforming uses which create a blight influence on the surrounding properties.

Public/Semi-Public Uses

Public land uses include open land available for cultural, public assembly and recreational purposes, utility substations, educational uses and governmental administration and service buildings. Privately owned land areas that are used for educational or religious purposes, occupied by communication towers, or land which is used for recreation activities and is open to the general public are also included in this category. The Oakland Beagle Club on Bryce Road is thus public/semi-public. However, since it is a large area (approximately 80 acres) and privately owned, its acreage is not included within the developed acreage totals.

Among the public/semi-public uses noted on the Existing Land Use Map are the newly constructed Township Hall on Dunnigan in Section 26, and the old Township Hall located on Sheridan Road in Section 21. There are two communication towers; one is located on Imlay City Road and the other on Emmett Road (M-19).

Rights-of-Way, Water Bodies, Open Space and Other

All dedicated rights-of-way (highways, roads, and major utility easements) are included in this category. Also included are lands lying fallow, woodlands, water bodies, and vacant land for which no specific use was identified.

Lands in this category account for nearly half (9,337.6 acres, 43 percent) of the Township's total land area. It should be noted that a portion of this land area will never be available for development since it includes land used for transportation right-of-way, waterways and drains. The only water bodies in the Township are ponds, usually man-made, on private lots.

Land Use Considerations

In the process of developing and evaluating land use policies for Emmett Township, potential development problems and opportunities must be examined. A number of these are discussed below.

Sprawl Development

Sprawl is the uncontrolled growth of urban development into previously rural areas. Sprawl development tends to follow the path of least resistance, with development decisions favoring short-term, individual economic benefits over long-term, community benefits. In many areas of Michigan, sprawl development has resulted in strip commercial development along state and county highways and strip residential development along County and Township primary roads. This type of development can cost the Township the loss of road capacity, open space, natural resources.

Future land use planning in Emmett Township should take into account the regional location of the Township in relation to growth and development pressures spreading westward from Port Huron. As discussed in Chapter 6, Socioeconomic Profile, the Township is forecast to double its population by the end of this planning period. As discussed earlier in this chapter, there has been much strip residential development in the Township. As the Township continues to grow, counteracting sprawl development will remain a significant challenge and concern. Proper land use planning and zoning regulations which encourage coordinated development will help the Township guide future growth and counteract sprawl development pressure.

Land Use Conflicts

A major problem confronting communities, urban and rural, is incompatible land use relationships. Incompatible land uses occur when neighboring land uses, either by the nature of the activity or the scale of the development, negatively effect the normal enjoyment or operation of one or more adjacent properties. An obvious example is a residence located adjacent to an industrial operation. A preponderance of nonconforming uses (a use not permitted in the zoning district in which it is located) may also result in incompatible land use associations and may have deteriorating physical and economic impacts on the surrounding area.

From the existing land use survey, several examples of potential land use conflicts were identified. Each involves a general industrial use which is located in the midst of an area which has been predominately developed or zoned for agricultural/residential use. None is zoned for general industrial land use.

The first example involves the propane gas storage facility on Bryce Road. In this case, the potential for future residential development in proximity to the propane storage may be impacted by this general industrial operation. A means of addressing this conflict is to require any adjacent residential uses to provide screening along the common property line. In the long-term, no negative impacts on adjacent residential uses are anticipated. In the short-term, attention should be paid to protecting adjacent residential properties from any adverse impacts.

A second example are the junk yards in Sections 4, 15 and 20. In these cases, the junk yards which are only permitted in general industrial zones, exist as a nonconforming use in an agricultural/residential area. Since the use is nonconforming, the zoning ordinance encourages its relocation by limiting the occupant's ability to physically expand the use or construct structures.

Because Emmett Township has not experienced widespread or dispersed commercial and industrial development, such land use conflicts should not provide a significant challenge to the development of a future land use plan. However, as the Township continues to grow, the potential for land use conflicts between existing and/or planned commercial and industrial uses and developed or proposed residential areas will need to be considered more often. To prevent conflicts, the Township may want to consider the establishment of zoning regulations which require buffering and screening between incompatible to help mitigate land use conflicts. In addition, some communities, in particular those where high growth and dense development prevail, transitional zoning districts can be created as a type of buffer. Office and special purposed residential zoning districts are often used as a transitional zoning district between commercial and residential areas.

Poor Parceling and Land Fragmentation

There are many parcels in Emmett Township located along section line roads which are deep and narrow. Sometimes these parcels lack adequate road frontage and/or width to be further divided. These parcels may eventually require private roads and/or long drives to service development placed off the roadway. In some cases, the portion of the parcel which has been developed prevents access to the balance which remains vacant. Without adequate land assembly, such vacant acreage will remain inaccessible and undevelopable. Efficient parcel division, even in very low density areas, is an important consideration in the creation of a coordinated development pattern and the conservation of usable open space and natural features.

The subdivision of large parcels of agricultural land and woodlands may negatively impact natural features (woodlands, slopes, water resources, wildlife habitat) and the community's unique environmental character. As parcel size decreases, agricultural become less productive or fall out of use as productive lands. In addition, subdivision of woodland areas tends to result in the interruption of wildlife habitats and may reduce the diversity of wildlife found in the Township.

Future land divisions will have a great impact on the aesthetic and environmental character of Emmett Township. The 1997 changes to the land division act make it more difficult for the Township to assure the efficient division of land and its accessibility by public safety and service vehicles. The Zoning Ordinance is then, an increasingly important tool that is accessible to the Township for influencing development patterns.

Accessibility

The location of 1-69 and the use of Emmett Road (M-19) as a regional thoroughfare are important factors to consider when planning for the future development of Emmett Township. The Emmett Road (M-19) interchange with 1-69 is one of just four 1-69 interchanges in St. Clair County. With the County's population expected to grow by approximately 30 percent by 2020, the presence of 1-69 interchanges in a community may steer the population growth to these communities.

The future land use plan must consider the likely impact that land development will have on the function and capacity of roads, particularly those that currently carry a large number of vehicle trips per day.

PA 116 Lands

There are several large parcels totaling approximately 960 acres dedicated to agricultural purposes under Public Act 116 (see Map 4). For future planning purposes, this land is considered to be static in nature. Future development should take into account the positive value associated with agricultural land and be directed to unproductive land.

Public Utilities

Sanitary sewer and public water supply systems are important not only from a public health and safety standpoint, but are necessary to accommodate high intensity development. Access to public utilities and potential expansion of utility service should be taken into consideration when determining the future land use of the Township. Currently there are no public sanitary or water facilities within the Township.

Chapter Six - Socioeconomic Profile

This chapter examines several elements that are essential to understanding the Township's population and household characteristics. These items include population growth, household size, projected population growth trends, age/sex distribution, racial composition, education and disability status, income characteristics, employment patterns and housing value, tenure, and unit age. Data from the Census, SEMCOG and the St. Clair County Planning Department were used. Data was analyzed and a report developed profiling the Township's socioeconomic characteristics and relating them to regional trends.

Demographic Characteristics

Population

Population trends for Emmett Township and surrounding communities was collected and compared to that of St. Clair County and the State of Michigan (Table 2 and Chart 2). Neighboring Mussey Township (including Capac) experienced the largest percentage of growth, 14.5 percent, from 1980 to 1990. Clyde Township and the City of Yale experienced the next greatest amount of growth between 1980 and 1990, 9.1 percent and 9.0 percent, respectively.

<i>Place</i>	<i>1980 Population</i>	<i>1990 Population</i>	<i>Change 1980 to 1990</i>	
			<i>Number</i>	<i>Percent</i>
Emmett Township	1,413	1,519	106	7.5
Emmett Village	285	289	4	1.4
Brockway Township	1,586	1,609	23	1.5
City of Yale	1,814	1,977	163	9.0
Mussey Township ^a	2,719	3,113	394	14.5
Clyde Township	4,632	5,052	420	9.1
City of Port Huron	33,981	33,694	(287)	(0.8)
Kenockee Township	1,730	1,854	124	7.2
St. Clair County	138,802	145,607	6,805	5.0
Michigan	9,262,078	9,295,297	33,219	0.4

Data compiled by Wade-Trim.
 Sources: 1980 US Census, *General Population Characteristics, Michigan*, Tables 14, 14a; 1990 US Census, *General Population Characteristics, Michigan*, Table 1; 1990 US Census, Summary Tape File (STF) 3A, Table P003.
^a Including Capac

Since SEMCOG's population projections were based in part upon building construction variables through part of 1993, the consultant re-estimated the 1995 population of the Township using the most up-to-date residential building data. This yielded a population of 1,930. The consultant then applied the difference of 2.2 percent to the SEMCOG projections. This procedure assumes that a" variables involved in the SEMCOG projections hold true with the exception of the 1995 population estimate. Modifying the SEMCOG projections yields a slightly higher population of 3,340 or a 119.8 percent increase over the 1990 population.

Age-Life Cycle

As humans progress through life, they pass through stages of life that generally correspond to their age levels. Life-cycle analysis is used by demographers and policy makers to anticipate future changes in things such as consumption, housing, medical care, education and recreation. In this analysis, six life-cycles are defined:

1. Preschool (Less than five years of age)
2. School (5 to 19 years)
3. Family Formation (20 to 44 years)
4. Empty Nest (45 to 64 years)
5. Senior (65 to 74 years)
6. Elderly (75 years or more)

Nation-wide, the single largest population group, the "baby boomers" born between 1946 and 1964, are in the family formation stage of life. This population group is large, comprising 82 million or 40.2 percent of the nation's total population in 1990. As this population bulge moves through life, they "operate like a "pig in a python", slowly moving through building-type cycles" and leaving "predictable weakness in the wake of those markets they have passed through".¹

The younger boomers have greater demand for apartments and single-family starter homes. Older boomers move into larger homes, require health care (maternity), and spur construction of retail and manufacturing (production and consumption), offices and transportation improvements. As they age, boomers wi" impact leisure and recreation markets, move into smaller homes, especially homes they can age in. Moving into the senior and elderly years, boomers may be moving to retirement communities, or even to their second home bought many years earlier. In the near future as boomers swell the ranks of the seniors and elderly, demand for health care and "lifecare" services and facilities will increase".²

As boomers mature, they will leave market weakness behind, but their children wi" repeat a similar demographic bulge and market demand by the first part of the next century. For example, the proportion of young adults (aged 25 to 34) entering the family formation stages is expected to decline 10 percent in the late 1990'S3. The "echo boom" children, born between 1978 and 1995, "form a generation almost as large as the original baby boom" -73 million. During the next ten to fifteen years, the echo boom generation will induce increased demand and need for education, recreation and consumer goods. By the year 2010, the pace of decline among the family formation population will slow as the echo boom begin to start their own families, moving from rented apartments to single-family starter homes".

¹Ellen Flynn-Heapes, "The Demographics of Demand: How to Select Strong Future Markets," *Marketer*, February 1994, p.1.

²Ibid.

³Berna Miller, "Household Futures," *American Demographics*, March 1995, p.4

Compared to the state (7.6 percent) and national (7.5 percent) benchmarks, Emmett Township (see Table 4 and Chart 4), with 7.6 percent of its 1990 population under the age of 5, has a similar concentration of the preschooler population group. This represents a slight increase from the 1980 level of 6.3 percent. This is opposite of what is predicted as a trend for the future, which is a steady decline of school age population during over the next 10 to fifteen years.

The proportion of seniors and elderly residents increased between 1980 and 1990, from 8.6 percent of total population to 10.1 percent. It is worthwhile to note from Table 4 that the senior population declined by 5.6 percent while the elderly population nearly doubled (97 percent increase). This reflects national trends which confirm that the elderly population is the fastest growing population group in the country, and more importantly, that the elderly will continue to be the fastest growing population group during the next ten to fifteen years.

Table 4 Emmett Township Life Cycle 1980-1990						
Age-Life Cycle	1980		1990		Change 1980-1990	
	Number	Percent	Number	Percent	Number	Percent
Under 5 years - Preschool	89	6.3	117	7.6	28	31.5
5 to 19 - School	510	36.1	419	27.4	(91)	(17.8)
20 to 44 - Family Formation	480	34.0	562	36.7	82	17.1
45 to 64 - Empty Nest	210	15.0	279	18.2	69	32.9
65 to 74 Senior	89	6.3	84	5.6	(5)	(5.6)
Over 75 Years - Elderly	35	2.3	69	4.5	34	97.1
Total	1,413	100.0	1,530	100.0	117	8.3
Data compiled by Wade-Trim. Sources: 1990 US Census, <i>Census of Population and Housing, Michigan</i> , Summary Tape File 3A; 1980 US Census, <i>Census of Population and Housing</i> , Summary Tape File 1 A						

If the Township residents choose to remain in the Township as they age, the proportion of seniors and elderly population, currently less than the state and national averages, will swell.

⁴ Ibid.

Educational Attainment

The following table indicates that, compared to the State of Michigan, a greater percentage of Emmett Township's residents over 25 years old have a high school degree but a significantly lower number of people have any higher education. While 17.4 percent of Michigan residents have a bachelor's degree or higher, only 3.1 percent of those people living in Emmett Township have a bachelor's degree or higher.

Table 5 Educational Attainment 1990				
	Emmett Township		Michigan	
	Number	Percent	Number	Percent
<i>Persons 25 years and over</i>	901		5,842,642	
Less than 9th grade	94	10.4	452,893	7.8
9th to 12th grade	164	18.2	903,866	15.5
"				
High School graduate	384	42.6	1,887,449	32.3
Some college, no degree	188	20.9	1,191,518	20.4
Associate's degree	43	4.8	392,869	6.7
Bachelor's degree	21	2.3	638,267	10.9
Graduate or professional degree	7	0.8	375,780	6.4
Percent high school graduate or higher	71.4	--	76.8	--
Percent bachelor's degree or higher	3.1	--	17.4	--
Data compiled by Wade-Trim.				
Sources: 1990 US Census, Summary Tape File 3A, General Profile				

Racial Composition

Demographic studies and projections indicate that the nation's ethnic and racial population is becoming increasingly diverse and is gaining a greater share of total population. Currently, the nation's white, non-Hispanic population is 75.7 percent of the total, while minorities comprise 24.3 percent. At the state level, the proportions are similar but not as great: 82.3 percent of the state's population are white and 17.7 percent are minorities.

St. Clair County and Emmett Township, as revealed in Table 6, do not follow the state and national trend. In Emmett Township, the proportion of the total population that is white is close to 100 percent. Given its smaller population base and historic migration trends in Michigan, this is not unexpected. However, demographic projections indicate that by the Year 2010, minority populations will comprise an even greater share of total population.⁵ This growth can be a new market for businesses and industry to target, especially if, as forecasted, an increasing portion of the minority population will be middle income earners with greater mobility.

**Table 6
Comparative Race/ethnicity
1990**

Race/Ethnicity	Emmett Township		St. Clair County		Michigan		United States	
	Number	Percent	Number	Percent	Number	Percent	Number^a	Percent.
White	1,516	99.1	139,253	95.6	7,649,951	82.3	188,128	75.7
Black	0	0.0	2,934	2.0	1,282,744	13.8	29,216	11.8
American Indian, Eskimo, Aleut	3	0.2	694	0.5	52,571	0.6'	1,794	0.7
Asian, Pacific Islander	3	0.2	453	0.3	102,506	1.1	6,969	2.8
Hispanic-Any Race	8	0.5	2,225	1.5	201,596	2.2	22,354	8.9
Other Race	0	0.0	48	0.03	5,929	0.1	249	0.1
Total	1,530	100.0	145,607	100.0	9,295,297	100.0	248,710	100.0

Data compiled by Wade-Trim.

Sources: 1990 US Census, Summary Tape File 3A, Table P012; 1990 US Census, *Summary Population and Housing Characteristics, Michigan*, Table 3; and *Statistical Abstract of the United States*, 1993. Table 19.

^a In thousands

Household Characteristics

A relatively recent phenomenon, characteristic of today's population, is one of the declining household size as measured by the number of persons per household. As a result, it has not been uncommon for communities to register a net increase in the housing supply while simultaneously recording a population loss. This trend has evolved to a large extent, due to the declining size of families. People are marrying at a later age than a generation ago, postponing having children, and having fewer children when they do start a family. Married couple families still comprise the largest group of households, but the number of single parent (male or female) headed households is increasing and expected to grow, contributing to the decline in average household size. Finally, as the baby boom generation ages, they will swell the ranks of single-person, non-family households.

By the year 2010, demographers expect the number of married couple families to increase by 17 percent compared to 44 percent for single male headed families and 18 percent for single

⁵Harold L. Hodgkinson, *A Demographic Look at Tomorrow*, June 1992.

female headed families⁶, Households comprised of men living alone are expected to grow by 39 percent while females living alone will grow by approximately 33 percent⁷.

Married couple families will continue to be the largest and economically most powerful household segment. Increasingly, "parents of the future are likely to be older dual-earner couples, so they will have even more resources to spend on their children"⁸. Even though their families will be smaller, they will still demand housing with numerous bedrooms, either for aging parents, or for specialty rooms (home office, hobby, guest space). Increasingly, "convenience and value-for-money" will become the watchwords of married parents. Dual income parents, juggling the job, children, and the spouse will not have time to "do things the old fashioned way", for them, the "quickest way is often the only way"⁹.

Table 7				
Persons Per Household				
Emmett Township and St. Clair County				
1980 - 1990				
Place	1980	1990	Change	
			Number	Percent
Emmett Township	3.44	3.20	(0.24)	(7.0)
St. Clair County	2.92	2.73	(0.19)	(6.5)

Data compiled by Wade-Trim.
Sources: 1990 US Census, *General Population Characteristics, Michigan*, Tables 7,47; 1980 US Census, *Census of Population and Housing, Summary Tape File 1 A*

Emmett Township's household size, like the rest of the country has been declining for several decades (see Table 7). From 1980 to 1990, the average household size, as measured by persons-per-household, declined by 7.0 percent from 3.44 persons to 3.20. Nevertheless, the Township's households are larger than those of the general population. This is due in large part to the considerably higher proportion of married couple families (72.5 percent) in the Township than in the state (55.1 percent) and country (56.1 percent) (see Table 8).

Among the other households, such as single parent and single, non-family households, the Township has proportionately fewer households than the region and the country. As the population ages, the Township can expect an increase in the number of elderly single householders. It is also conceivable that the number of single parent households will increase as well, although not in the same degree as projected at the national level. These changes in household size and composition will impact the demand for housing over the next 15 to 20 years. This may be reflected in smaller house size, and accessory apartments for elderly grandparents.

⁶The Editors, "The Future of Households," *American Demographics*, December 1993, p. 28.

⁷Ibid.

⁸Ibid., p. 32.

⁹Ibid.

**Table 8
Comparative Household Characteristics
1990**

	<i>Emmett Township</i>		<i>St. Clair County</i>		<i>Michigan</i>		<i>United States</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number^a</i>	<i>Percent</i>
Married Couple Families	339	72.5	33,179	62.6	1,883,143	55.1	52,317	56.1
Single Male Families	4	0.8	540	1.0	113,789	3.3	2,884	3.1
Single Female Families	29	6.2	3,584	6.8	442,239	12.9	10,890	11.6
Single Person Non-Family	21	4.5	2,715	5.1	809,449	23.7	22,999	24.6
Other Non-Family	75	16.0	12,980	24.5	170,711	5.0	4,258	4.6
Total Households	468	100.0	52,998	100.0	3,419,331	100.0	93,348	100.0

Data compiled by Wade-Trim.

Sources: 1990 US Census, Summary Tape File 3A, Table P019; and 1990 US Census, *Summary Population and Housing Characteristics, Michigan*. Table 5; and *Statistical Abstract of the United States*: 1993, Table 65.

^a In thousands

Disability Status

Table 9 documents the extent of the Township population, which as reported in the 1990 U. S. Census was considered disabled, either with a mobility or a self-care limitation. The Census collects disability data for two major age groups: those between 16 and 64 years of age and those aged 65 or more. The first age group refers most commonly to the working age population, and the second to the elderly and senior population. In neither case are data recorded regarding the preschool and school age population who may be disabled.

In 1990, 180 persons identified themselves as having a work disability, a mobility only disability, a self-care only disability or a combination mobility and self care disability. This is almost 12.0 percent of the Township's 1,519 residents. The largest single group of disabled population in Emmett Township are persons with a work disability, numbering 97 persons, or 54 percent of the 180 disabled persons. They are followed by those persons with self-care limitation. In 1990, there were 153 senior and elderly residents in the Township; 42 (54 percent) identified themselves as disabled. Although seniors and elderly represent only 2.8 percent of the Township's total population, this age group's share of total population is expected to continue to grow as the baby boomer generation (those born between 1946 and 1964) ages. With this increase in the senior and elderly populations, comes the concern for proper senior housing and the availability of differing levels of care.

Table 9 Disability Status in Emmett Township 1990	
	<i>Number</i>
<i>Population Aged 16 to 64 years</i>	981
Mobility or Self Care Limitation	41
Mobility Limitation Only	13
Self Care Limitation Only	34
Work Disability	97
In Labor Force	41
Prevented from Working	50
Sub-total	138
<i>Population Aged 65 and Over</i>	153
Mobility or Self Care Limitation	42
Mobility Limitation Only	26
Self Care Limitation Only	34
Sub-total	42
Total Disabled Population	180
Data compiled by Wade-Trim.	
Sources: 1990 US Census, STF 3A, General Profile	

Housing Characteristics

An analysis of the Township's housing stock by type, age, value, tenure and other characteristics is essential in determining the type of new housing which should be built in the Township. To a large extent, it is the characteristics of the existing structures that will determine what can be built and marketed in the future.

Housing Units

From 1980 to 1990, the U.S. Census recorded an increase of 55 housing units (13.0 percent) in the Township (Table 10). During this same time period, the total population of the Township increased by 7.5 percent. This further illustrates the phenomenon of total housing stock growth out pacing population growth discussed earlier. At the same time, St. Clair County had an increase of 10.6 percent in the number of housing units while the population grew only 5.0 percent.

Table 10 Housing Emmett Township and St. Clair County 1980 - 1990				
Place			Change 1980 - 1990	
	1980	1990	Number	Percent
Emmett Township	455	510	55	12.1
St. Clair County	50,244	55,573	5,329	10.6
Data compiled by Wade-Trim. Sources: 1980 US Census, <i>General Housing Characteristics, Michigan</i> , Table 45 and STF 1A, Summary Characteristics for Emmett Township; 1990 US Census, STF 3A, Table H001.				

From 1990 through 1997, construction of new single family homes and mobile homes have helped to increase the Township's total housing stock, net of demolitions by 223 units (Table 11). New single-family development has been steady since 1993 with peak construction in 1995 when 56 building permits were issued.

Table 11 Recent Residential Construction Activity Emmett Township 1990 -1997									
	1990	1991	1992	1993	1994	1995	1996	1997	Total
Single Family Residential & Mobile Homes	19	0	6	28	33	56	43	38	223
Data compiled by Wade-Trim. Sources: SEMCOG Residential Construction 1990 through 1996; Emmett Township building permits 1997									

Units in Structure

The overwhelming majority (82.0 percent in 1990) of the Township's housing stock are single-family detached structures. With the exception of two, 2-unit structures, the remainder of the housing stock is mobile homes. The lack of public facilities (water and sewer) can explain the fact that there are virtually no multiple family developments. There is a comparatively high percentage of mobile homes (17.6) located within Emmett Township versus the 9.3 percent found in the County as a whole.

Table 12 Units in Structure Emmett Township and St. Clair County 1990				
Units in Structure	Emmett Township		St. Clair County	
	Number	Percent	Number	Percent
1 Unit	418	82.0	42,942	75.0
2 Units	2	0.4	2,597	4.5
3-9 Units	0	0.0	4,243	7.4
10 or More Units	0	0.0	2,393	4.2
Mobile Home & Other	90	17.6	5,319	9.3
TOTAL	510	100.0	57,494	100.0
Data compiled by Wade-Trim.				
Sources: 1990 US Census, Summary Tape File 3A, Table H020				

Value

Data in the following table compares the value of Emmett Township's housing stock and gross rent to that of St. Clair County as a whole. Emmett Township had a median housing value of \$55,200 in 1990 while the median value for homes in St. Clair County was \$4,000 more (\$59,200). Median gross rent data was also collected and compared for both the Township and County. Both had similar values, \$413 and \$409, respectively.

Table 13 Housing Value Trends Emmett Township and St. Clair County 1990	
Place	1990
Emmett Township	
Median Value	\$55,200
Median Gross Rent	\$413
St. Clair County	
Median Value	\$59,200
Median Gross Rent	\$409
Data compiled by Wade-Trim.	
Sources: 1990 US Census, STF 3A, Tables H061 A, H043A	

Tenure

Nationwide, the rate of home ownership has grown from 55 percent of occupied homes in 1950 to 64.2 percent in 1990.¹⁰ In 1990, that rate of home ownership is exceeded at the Township and County level (Table 14). In Emmett Township, the home ownership rate of 83.1 percent of occupied homes exceeds the national rate by nearly 20 points and the County rate (69.6 percent) by over 13 points.

Category	Emmett Township		St. Clair County	
	Number	Percent of Total	Number	Percent of Total
Occupied Housing Units	472	92.5	52,882	92.0
Owner-Occupied	424	83.1	40,015	69.6
Renter-Occupied	48	9.4	12,867	22.4
Vacant Housing Units	38	7.5	4,612	8.0
Vacant for Sale	3	0.6	371	0.6
Vacant for Rent	5	1.0	992	1.7
Vacant for Seasonal, Recreational or Occasional Use	8	1.6	1932	3.4
Vacant for Migrant Workers, Other	22	4.3	1317	2.3
Total Housing Units	510	100.0	57,494	100.0
Data compiled by Wade-Trim.				
Sources: 1990 US Census, Summary Tape File 3A, Tables H008, H006				

Age of Unit

Generally, the economically useful age of residential structures is approximately 50 years. Once a residential structure has reached that age, repairs become very expensive and the ability to modernize the structure to include amenities considered standard for today's life-style is diminished. Therefore, when a community's housing stock begins to reach that age threshold, the need for housing rehabilitation, demolition and new construction will begin to increase.

During the 1950's the United States entered a residential construction housing boom that peaked in the 1970's. As a consequence, the bulk of housing in many areas of the country, including Michigan were, during the 1990 Census, between 11 and 40 years old. This is reflected in the Township housing stock with over 48 percent of the homes between 18 and 37 years old. Nearly 36 percent of the homes are forty years or older and, may, in the near future, be in the need of major repairs. There are also 115 structures (22 percent) that were built before 1939, some of which may have potential historic value.

¹⁰Bureau of Census, *Statistical Abstract of the United States*: 1993, Table 1235.

Table 15 Age of Housing Emmett Township 1990		
<i>Year Structure Built</i>	<i>Number of Structures</i>	<i>Percent of Total</i>
1980 to March 1990	81	15.9
1970 to 1979	165	32.4
1960 to 1969	81	15.9
1950 to 1959	42	8.2
1940 to 1949	26	5.1
1939 or earlier	115	22.5
Total Housing Units	510	100.0
Data compiled by Wade-Trim.		
Sources: 1990 US Census, Summary Tape File 3A, Table H025		

In 1990, in both the Township and County, the percentage of total housing stock that was vacant and for sale in the Township was less than 1.0 percent. Similarly, the vacancy rate of housing units for rent was 1.0 percent in the Township and 1.7 percent in the County. Generally, a rule of thumb for desirable vacancy rates is 5.0 percent to permit residents moving into the area a choice of housing immediately available for occupancy. The fact that the Township's and County's vacancy rates are so much lower, indicates that there may be potential residents who can not find housing in the Township and therefore locate elsewhere.

Employment and Income

Employment by Industry

The United States economy has been experiencing significant economic restructuring since World War II. Two trends in particular *have* had profound impacts upon the nation's economy and employment: globalization of the world economy and a reorientation away from manufacturing to service producing industries. Both trends have had lasting impact at the national, regional and local levels.

The following table depicts employment in Emmett Township and St. Clair County by selected industries in 1990. (Table 16) Manufacturing, Wholesale and Retail Trade, and Professional Services were the top three employment sectors for residents of Emmett Township and St. Clair County.

**Table 16
Employment by Selected Industry
Emmett Township and St. Clair
1990**

<i>Industry</i>	<i>Emmett Township</i>		<i>St. Clair County</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Agriculture, Forestry, Fishing, and Mining	64	9.8	1,281	2.0
Construction	37	5.7	4,235	6.6
Manufacturing	236	36.3	18,483	28.8
Transportation, Communications, and other Public Utilities	45	6.9	4,625	7.2
Wholesale and Retail Trade	115	17.7	13,785	21.5
Banking, Insurance, Real Estate, and other Finance	18	2.8	2,861	4.5
Business Services	23	3.5	2,219	3.5
Personal, Entertainment, and Recreational Services	12	1.8	1,972	3.1
Professional and Related Services	95	14.6	12,593	19.6
Public Administration	6	0.9	2,125	3.3
TOTAL (a)	651	100.0	64,179	100.0

Data compiled by Wade-Trim.

(a) Employed persons 16 years and older

Sources: 1990 US Census, Summary Tape File 3A, Table P077

Macomb County has a high percentage of manufacturing and wholesale/retail trade industries. SEMCOG data reveals that over 14,000 people residing in St. Clair County commute to Macomb County for work. It should also be noted that while only 2 percent of people in St. Clair County are employed in agriculture, forestry, fishing, and mining, almost 10 percent of Emmett Township residents are employed in these industries.

Unemployment Trend

MESC unemployment rates for St. Clair County were collected from 1990 through 1997. Unemployment rates peaked in 1991 at 11 percent and then continually declined each year with 1997 registering the lowest unemployment rate (5.2 percent) in the last seven years. This is consistent with regional (Southeast Michigan) and statewide employment trends.

Table 17 Unemployment Rates for St. Clair County 1990-1997							
1990	1991	1992	1993	1994	1995	1996	1997
9.0%	11.0%	10.7%	8.4%	7.2%	6.3%	5.3%	5.2%
MESC Unemployment Rates							

Income

An important determinant of a community's viability and ability to support future commercial, residential and industrial growth is the income of its residents. Households are the basic consumer unit and supplier of labor to potential businesses. Median household income (that level of income at which half of all households earn more and half of all households earn less) is a broad measure of relative economic health of a community's populace. At the national level, recessions and inflation have combined to negatively impact upon the spending power of the dollars households bring home. In a very real sense, a dollar does not purchase as much as it once did.

The following table illustrates three measures of income: per capita, median household and median family income for the Township and County. The median household income for residents of Emmett Township is \$1,808 greater than that of the County where as the family and per capita incomes are less than the County. This may be due to the higher concentration of married couple families with children in the Township which would increase the proportion of dependent residents (children) relative to income earners. For every one dollar earned by St. Clair County households, households in Emmett Township earn \$1.07, but for every dollar that St. Clair County families and individuals earned, Emmett Township residents earned \$0.98 and \$0.89, respectively.

Table 18 Family, Household, and Per Capita Income Emmett Township and St. Clair County 1989			
<i>Income Category</i>	<i>Emmett Township</i>	<i>St. Clair County</i>	<i>Township Dollar per County Dollar</i>
Median Household	\$32,500	\$30,692	\$1.06
Median Family	\$34,830	\$35,678	\$0.98
Per Capita	\$11,791	\$13,257	\$0.89
Data compiled by Wade-Trim.			
Sources: 1990 US Census, Summary Tape File 3A, Tables P1 07 A, P114A, P080A			

Households are considered the standard "consumption" unit for long-range planning. A household represents all the persons who occupy a housing unit. A household may also include one person living alone. The household differs from a family which is defined as a householder and one or more persons who are related to the householder and living in the same household. The distribution of households by income levels is presented below. According to the 1990 U.S.

Census, Emmett Township has 468 households (Table 19 and Chart 4). Over 21 percent of households in the Township make between \$35,000 and \$49,999 while 1 in 5 households in the Township make less than \$14,999. Income distribution is fairly comparable to that of St. Clair County.

Table 19
Distribution of Households by Household Income
Emmett Township and St. Clair County
1989

<i>Household Income</i>	<i>Emmett Township</i>		<i>St. Clair County</i>	
	<i>Number of Households</i>	<i>Percent of Total Households</i>	<i>Number of Households</i>	<i>Percent of Total Households</i>
Less than \$5,000	28	6.0	2,893	5.5
\$5,000 to \$9,999	30	6.4	5,051	9.5
\$10,000 to \$14,999	38	8.1	4,507	8.5
\$15,000 to \$24,999	83	17.7	8,838	16.7
\$25,000 to \$34,999	77	16.5	8,857	16.7
\$35,000 to \$49,999	99	21.2	10,252	19.3
\$50,000 to \$74,999	73	15.6	8,659	16.3
\$75,000 to \$99,999	24	5.1	2,412	4.6
\$100,000 to \$149,000	14	3.0	1,083	2.0
\$150,000 or more	2	0.4	446	0.8
TOTAL	468	100.0	52,998	100.0

Data compiled by Wade-Trim.

Sources: 1990 US Census, Summary Tape File 3A, Table P080

Poverty levels for the 1990 Census were \$6,310 for a one-person household and \$12,674 for a family of four or more. In 1990, 13.1 percent of people in Michigan were considered to be living in poverty. This number is lower at the County level (10.9 percent), and slightly lower in Emmett Township (10.1 percent).

Chapter Seven - Community Opinion Survey

Since this is Emmett Township's first major planning effort for nearly two decades it was decided to conduct a community-wide public opinion survey by mail. A public opinion survey is an ideal means of gaining certain types of information about what the public desires. The survey provides a sense of the general level of citizen support for certain programs, for example, agricultural conservation. It can be used to help elected officials determine the acceptable boundaries within which they may choose to make policy. The survey can help the community discover the views of the quiet majority. Lastly, the public opinion survey provides an opportunity for citizens to lodge specific complaints about local programs.

Methodology

The Township Planning Commission and Wade-Trim developed a list of topics and questions to include in the survey. Once the form and its content were finalized, copies were mailed to each recorded residence in the Township. A copy of the survey form is included in the Appendix of this Master Plan. A total of 831 surveys were mailed. A cover letter from the Planning Commission introducing the reader to the survey and requesting assistance was also included. Respondents were given two weeks to finish the survey and return it to the Township office. Completed surveys were assembled by the Township and mailed to Wade-Trim for computer tabulation, analysis and reporting.

Results

In total, 215 surveys were returned in time for computer tabulation for an overall response rate of 25.9 percent. This is within the expected response rate of 25 to 50 percent for mailed surveys. An additional eight surveys were received by the township after the first 215 surveys had been tabulated. A review of the eight late surveys and the initial results revealed that their ~ exclusion would not significantly alter the results of the survey.

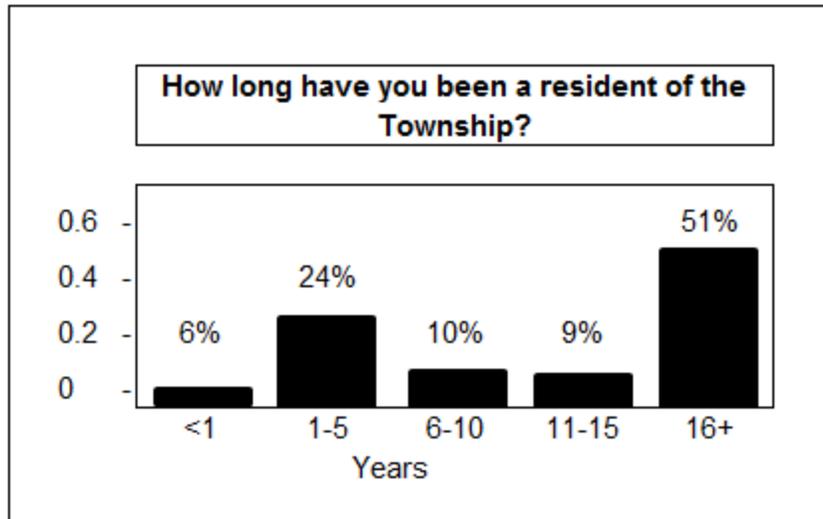
No returned survey was completed in its entirety. The greatest number of responses to anyone question was 214 out of a possible 215; most questions ranged between 195 and 214 responses. Because of an error in the form, one question, on the control of industrial signage lacked response spaces for readers to mark their answers. Consequently, this question had 125 non-replies. Interestingly, 90 respondents noticed the omission in the form and corrected it by adding the response to the empty space.

No open-ended questions were included in the public opinion survey. Nevertheless, many survey respondents added comments to the form as they were filling them out. In total, 26 surveys (12.1 percent) were returned with comments added. There were two broad topics covered by the majority of the 26 write in respondents: taxes and development.

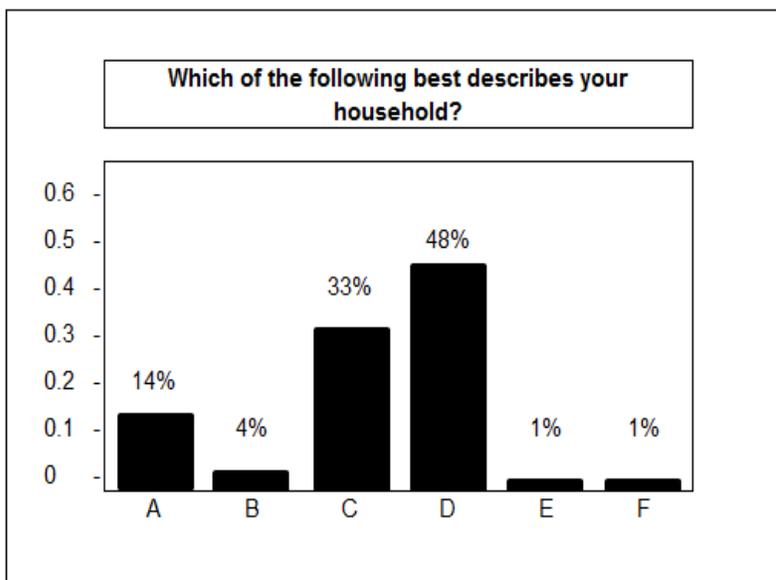
Respondents/Demographics

A series of questions asked respondents about themselves. This serves as a useful comparison to the 1990 Census and also helps to interpret the results.

- Over one-half of respondents (51 percent) have lived in the area for more than 15 years. Approximately one-third (31 percent) have lived in the community for five years or less.



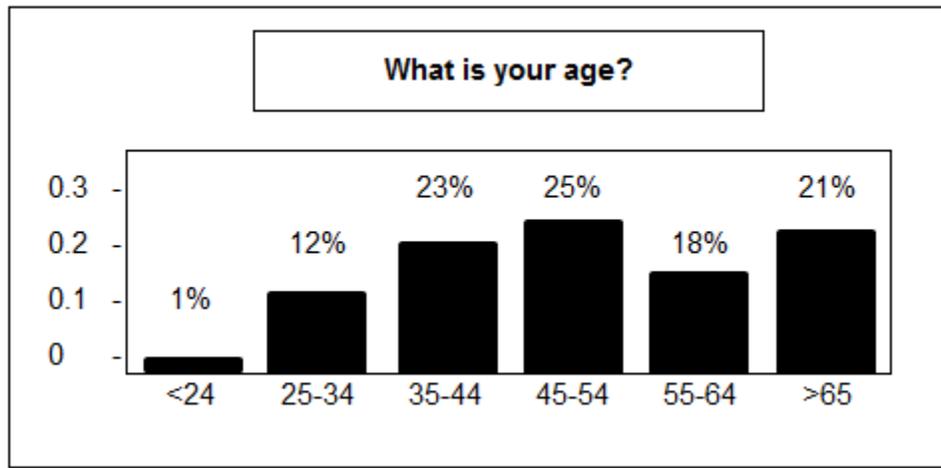
- The vast majority of respondents (81 percent) were from married-couple households, both with (48 percent) and without (33 percent) children at home. This compares with the profile of households from the 1990 Census, as discussed in Chapter Six. One respondent wrote that their household, a group of related adults, was not an optional response. This respondent did not choose one of the six options provided. There were two other surveys out of the 215 surveys that did not respond to this question. It is possible that all three felt that the optional responses did not adequately describe their households.



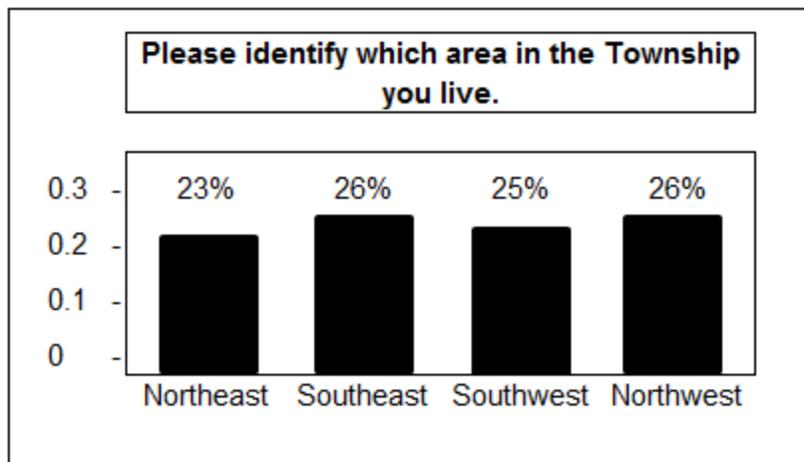
- A. Single adult, no children at home
- B. Single adult, children at home
- C. Married couple, no children at home
- D. Married couple, children at home
- E. Group of unrelated adults
- F. Unrelated adults with children at home

- Respondents were of all different ages. Those between 25 and 44 years can be considered in

the family formation stages of life. Thirty-five percent of the respondents are in this group which is similar to the Township-wide proportion in this age group in 1990. The empty nest life-cycle are those between 45 and 64 years. This age group is well represented (43 percent) among survey respondents in comparison to the 18.2 percent reported in the 1990 Census. A large percentage of respondents were 65 or older (21 percent).



- Respondents were asked to identify which of four quadrants of the Township they lived. The choices were Northeast, Southeast, Northwest and Southwest with Imlay City Road and Sheridan Road being the dividing lines between each quadrant. Results reveal that the responses are fairly evenly divided among the four quadrants.

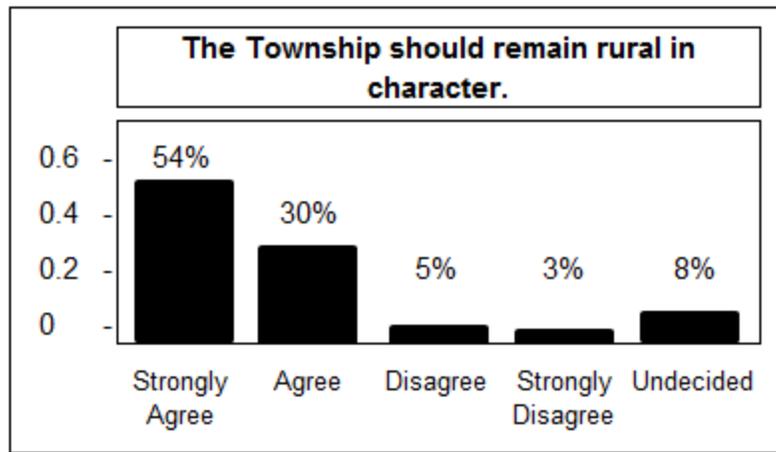


- Most respondents lived in one of two home-types: non-farm rural residence (64 percent), or farmstead (33 percent). Just three percent of respondents characterized their homes as a single-family subdivision home.

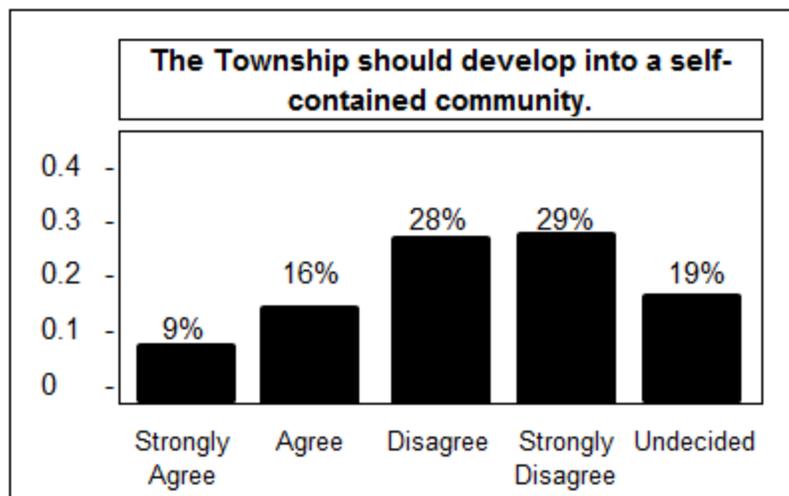
Overall Community Character

Three questions regarding the style and nature of future development and a future vision of the Township were asked.

- Generally, respondents agreed or strongly agreed (70 percent) that overall development should avoid disturbing natural features such as wetlands, steep hillsides, wooded areas, agricultural and orchard areas, and scenic views. On the average, 15.0 percent of respondents were undecided with respect to whether development should avoid disturbing these natural features. The same percentage on average (15 percent) either disagreed or strongly disagreed that these features should be avoided.
- Out of 212 responses, 178 (84 percent) agreed or strongly agreed that the Township should remain rural in character. Of these, 114 agreed strongly with that future vision. Just 17 respondents (8 percent) disagreed with the statement.



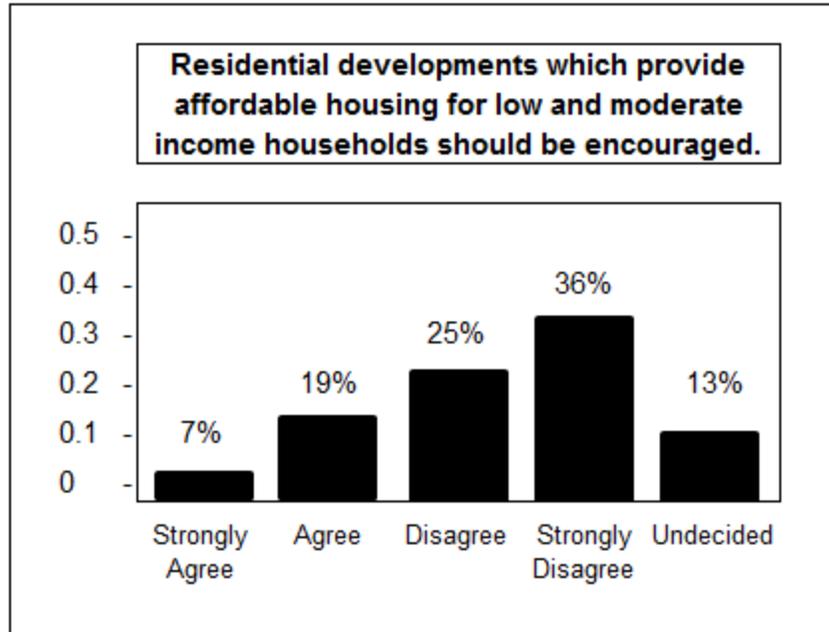
- A related question asked readers whether the Township should develop into a self-contained community with its own shopping and employment base. The majority (121 or 57.3 percent) of respondents to this question disagreed with this vision. This is less than expected given the higher degree of agreement among respondents that the Township should remain rural (84 percent). Respondents appear to believe that the Township can not be a self-contained community and remain rural at the same time. A fairly high percentage, nearly one in five (18.5 percent) were undecided.



Residential Land Uses

In general, respondents indicated moderate support for the following: senior housing, a policy to discourage strip residential development, requirements that multiple family housing blend with single family styles, and permitting accessory apartments. An average of 52.3 percent of respondents agreed or strongly agreed to each of these four topics. Just under one-third of the respondents to those four questions disagreed or strongly disagreed. Surprisingly, one-fifth of respondents were undecided whether senior housing should be encouraged and strip residential development discouraged.

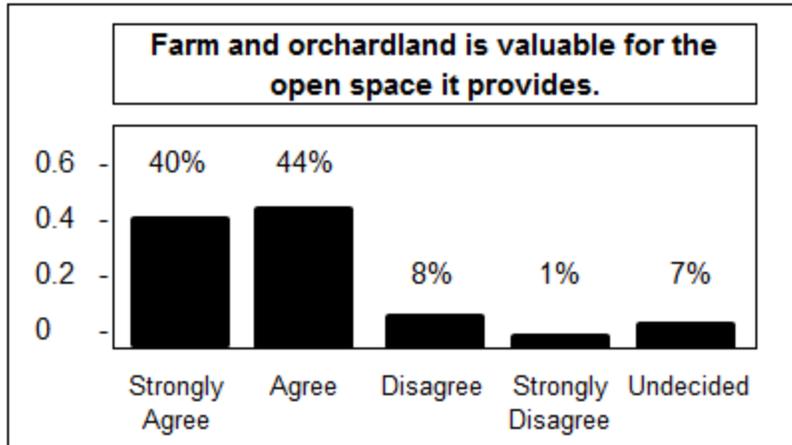
- A majority of respondents (61.6 percent) are opposed to encouraging residential developments that provide affordable housing for low and moderate income households.



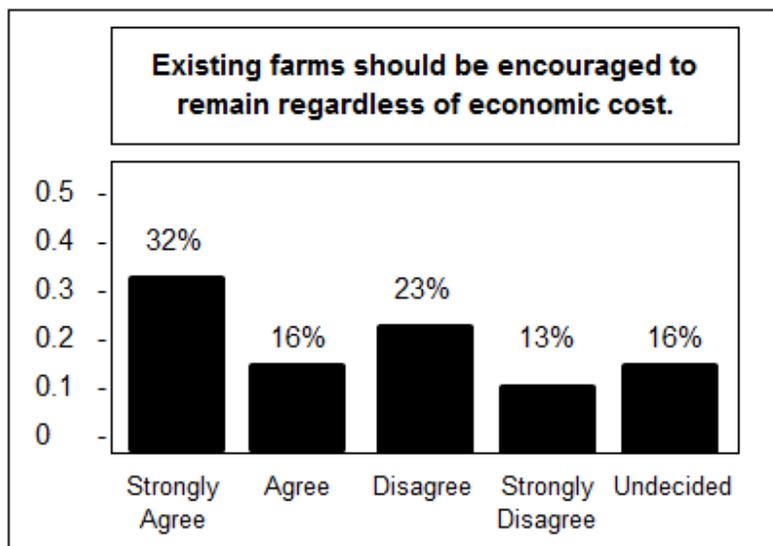
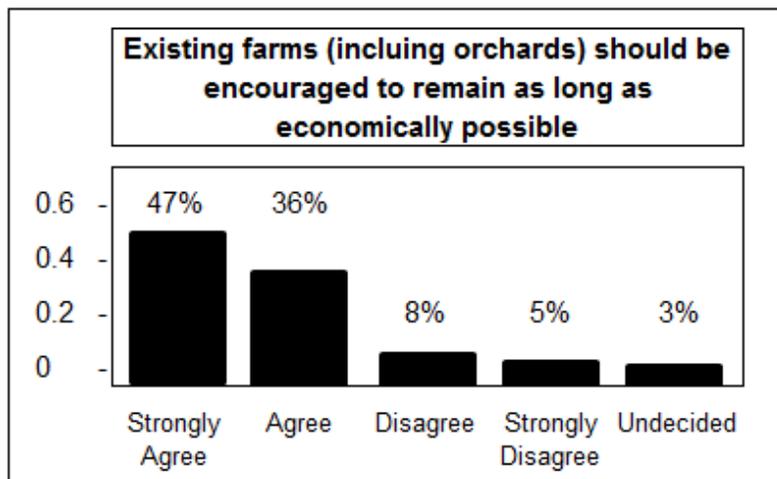
- A majority of residents responded in agreement that home businesses should be permitted, that higher density developments should provide collective water and sewer and that owners should be allowed to keep livestock (in addition to traditional pets) on their property. An average of 64.4 percent of respondents either agreed or strong agreed with each of these topics. With respect to keeping livestock on residential property, there was less agreement with respect to the level of regulation of this practice: while 63.7 percent of respondents agreed livestock should be permitted, only 47.9 percent agreed that it be limited to no more than three animals on lots less than 10 acres.

Agricultural Land Uses

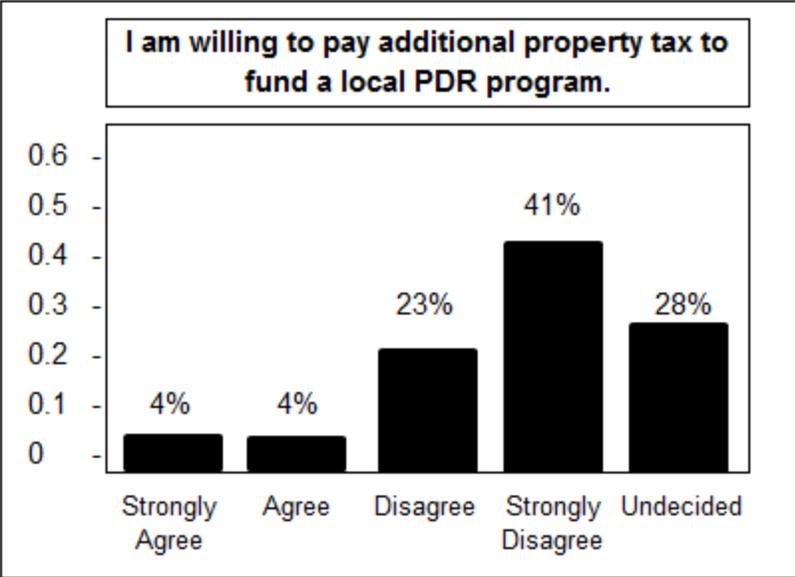
As may be expected from the respondents' views on maintaining the rural character of the Township, a majority of resident believe that the existing farms and orchards have intrinsic value that should be encouraged to remain. The level of public support to preserve farms is significantly lower.



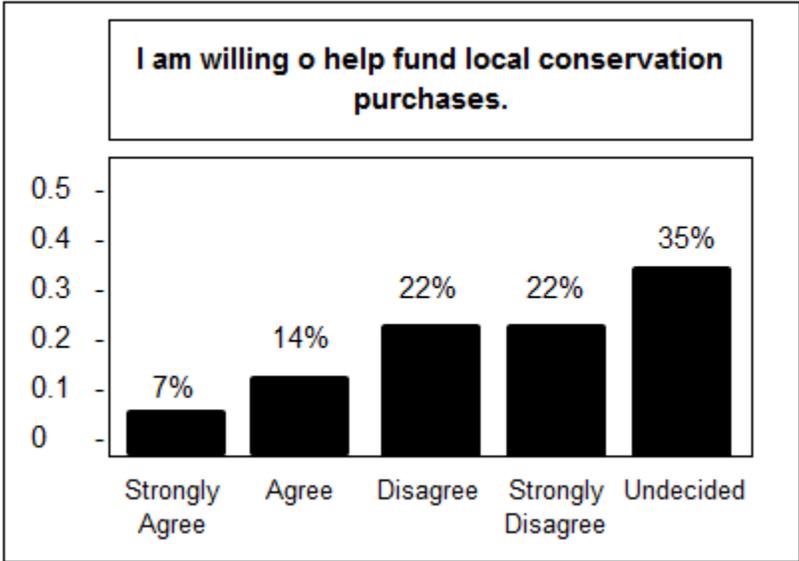
- While a majority of respondents would like to see farms and orchards remain as long as is economically possible (83.1 percent), support wanes when asked if farms should be preserved regardless of economic cost (47.9 percent in agreement).



- Respondents tend not to support methods to conserve farmland (clustered lot splits and non-encroachment) as strongly as they stated the land was valuable.
- The rate of undecided responses regarding the purchase of development rights (PDR's) and conservancy purchases suggest that if the Township chooses to pursue these methods, it should implement an education program to gain support.



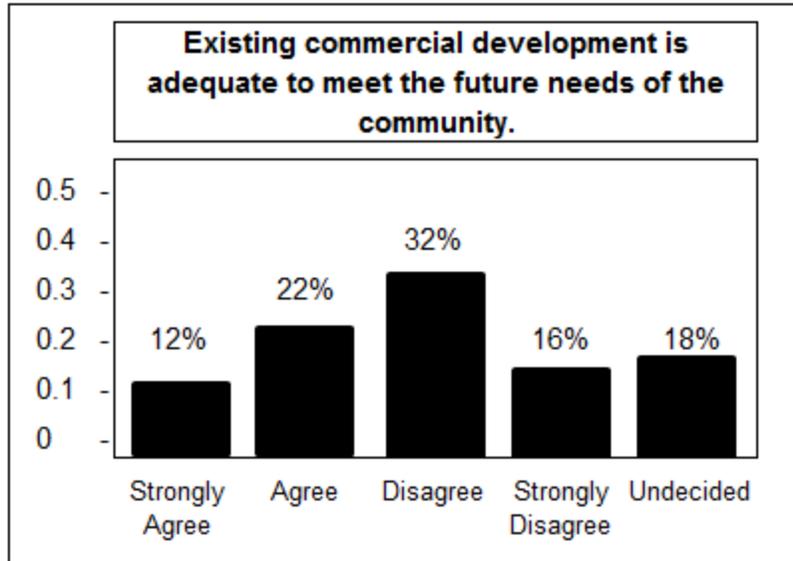
- The low level of support to fund both PDRs and conservancies further indicates that if the Township wishes to pursue either program it will have to not only educate those who are undecided, (presumably due to lack of understanding about the programs) but it will also have to work hard to convert opposition to support. The question of taxes to support PDRs and conservancy purchases were two questions that generated many write-in comments, mostly regarding the respondent's opinion that more taxes are not needed.



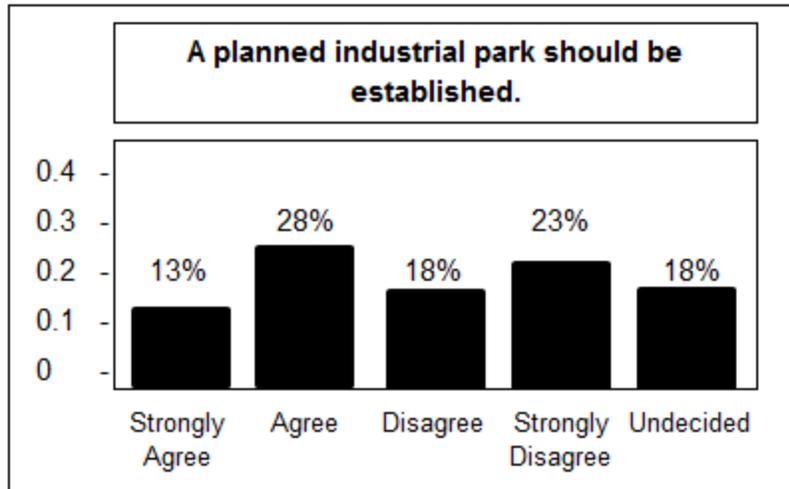
Commercial and Industrial Land Uses

Generally, respondents feel that commercial uses should be allowed, but their appearance, including signs, should be controlled. Most feel that new commercial development should be located near the old M-21/M-19 intersection.

- The majority of respondents feel that commercial development should be oriented to meet the needs of local residents (77.7 percent). The respondents were divided with respect to whether they believed that the existing commercial land uses in the township were adequate to meet the future needs of the community.



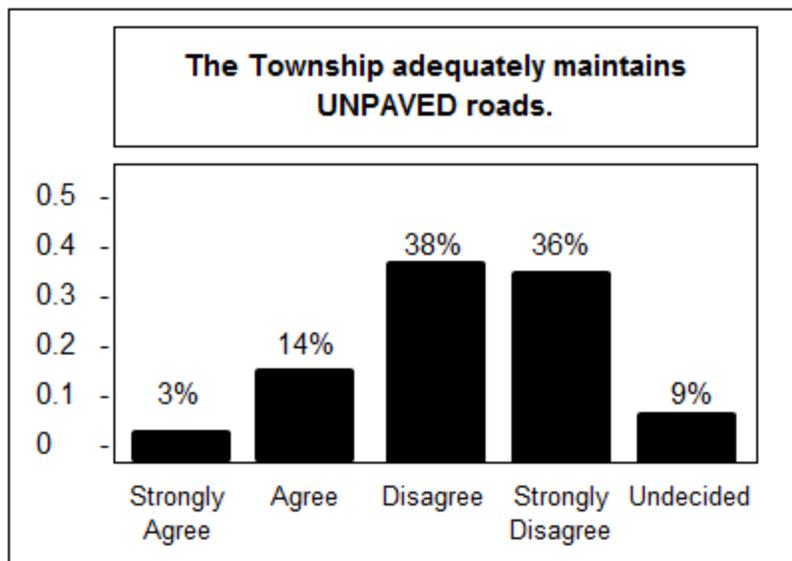
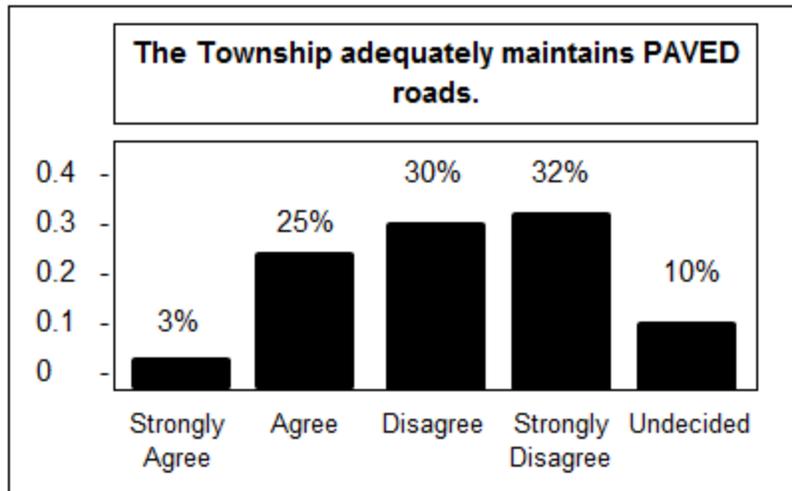
- Respondents were not as supportive of an industrial park in the Township. However, if allowed, the appearance should be regulated and the best location would be near the railroad.



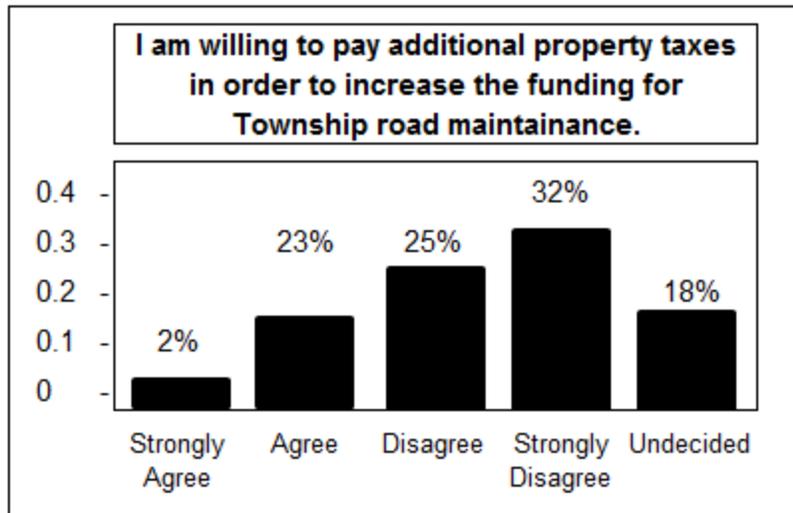
Other

The questions in this category related primarily to road maintenance and recreation facilities. With the longer term goal of reviewing the Township's zoning ordinances, one question addressed opinions on the minimum lot size for pond development. Slightly more than half of the respondents (54.0 percent) disagreed that the minimum lot size should be increased. However, nearly one-fifth (19 percent) of respondents were undecided with respect to minimum lot size for pond development.

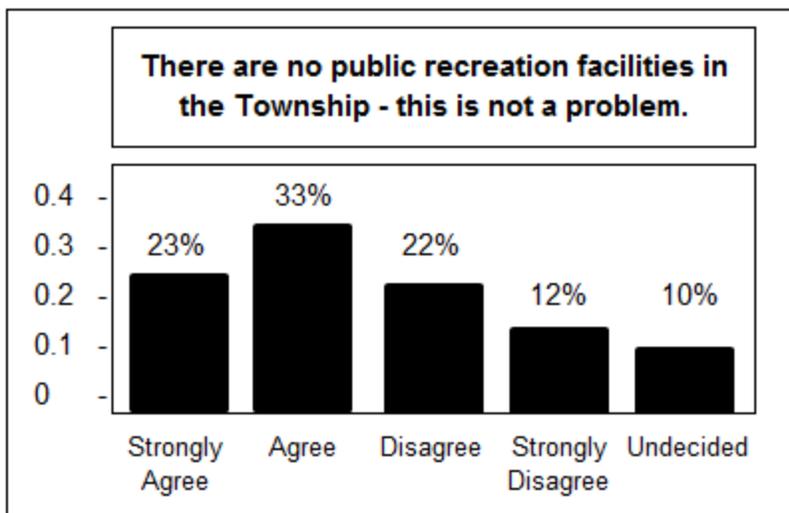
- Respondents did not indicate that they believed roads especially unpaved, were well maintained.



- Although respondents believe that roads are not well maintained, the level of support for increased funding through property taxes was not supported. Just 26 percent of respondents stated they would be willing to pay additional taxes to fund road maintenance and 57 percent were opposed to additional property taxes to pay for road maintenance.

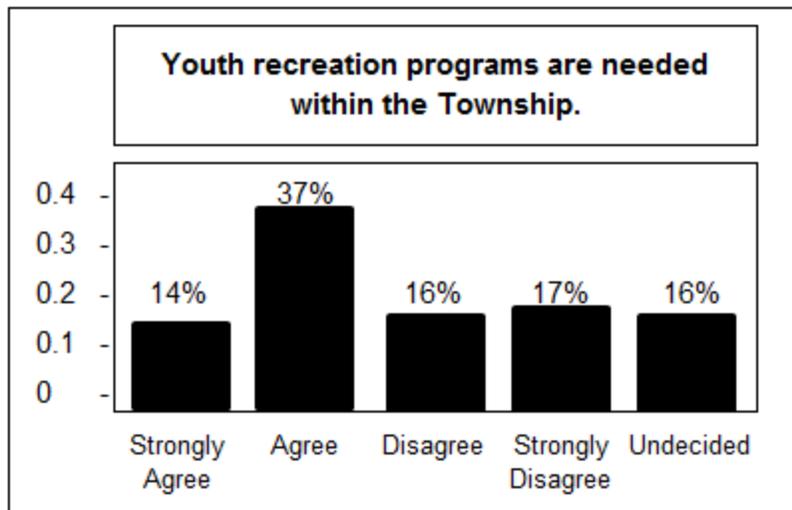


- The majority of respondents (55.7 percent) generally believe that the lack of recreation facilities in the Township is not a problem.



- Respondents were almost evenly split between agreement and disagreement over whether certain types of recreation (i.e. picnic tables, ball fields) should be provided. On average 41.6 percent of the respondents felt these recreation facilities should be provided and 43.2 percent felt none were needed. The remaining respondents either did not respond or were undecided

- Slightly more than half of respondents (51.7 percent) agreed that youth recreation programs/leagues are needed.



Summary

Respondents/Demographics - The 215 returned surveys indicate that the majority of the respondents have lived in the Township for over fifteen years, are married with children living at home; however, there exists a fairly large number of long-time residents who are over the age of sixty-five. The majority of the residents also live in non-farm rural residences.

Overall Community Character - The survey respondents indicated a strong desire to maintain a rural character and maintain the natural features of the area, while preventing the Township from developing into a self-contained community with its own shopping and employment base.

Residential Land Uses - The survey respondents believed there to be a need for additional residential development considerations within the Township. The responses noted a need for more senior housing, a policy to discourage strip residential developments, policy for design standards, and a policy noting provisions for accessory apartments and home businesses. However, over sixty-one percent of the respondents are against residential developments for affordable/low-moderate income households. In addition, the respondents believe that residents should be allowed to keep livestock on their property, in addition to family pets.

Agricultural Land Uses - Farms and orchards were noted by a large number of the respondents as having intrinsic value that should be preserved; however, very few of the respondents were willing to support conservation methods (such as a publicly funded Purchase of Development Rights (PDR) program or land conservation purchases).

Commercial and Industrial Land Uses - Generally, respondents feel that commercial uses should be allowed, but their appearance and location should be controlled. In addition, respondents believe that commercial developments should be oriented to meet local needs. Nearly half of the respondents believe that the existing commercial developments are not adequate to meet the residents' needs. Respondents are divided over allowing an industrial park to be developed within the Township, but are in support of design and location guidelines should such a use be developed.

Other - Additional concerns noted by the respondents related to inadequate maintenance of both paved and unpaved roads; however, over fifty percent of the respondents were not will to pay additional taxes to cover the necessary repairs. The lack of recreational facilities is of little concern to the respondents, but over fifty percent of the respondents believe that youth recreation programs/leagues are needed, with residents being split on providing additional facilities such as picnic tables and ball fields.

Chapter Eight - Market Assessment

Introduction

The following section assesses the market potential for future residential, commercial, and industrial uses within the Township based on nationally recognized planning and design standards. This database will be used to determine the amount of each land use which can reasonably be expected to be required in Emmett Township by 2020.

Residential Needs Analysis

The characteristics of the existing structures will largely determine the type of housing that will likely be constructed during the planning period. Housing unit projections are based upon existing and projected demographic patterns as well as existing housing characteristics. Demographic characteristics analyzed include projections of the total population and persons per household. Housing characteristics analyzed include the ratios of year round, seasonal, and vacancy rates, and recent residential housing unit construction.

In Chapter 6, Socioeconomic Profile, it was estimated determined that the planning year (2020) population would be approximately 3,334 persons. The first step in assessing the residential needs of the Township in 2020 is to estimate the average household size of the future. This is an increase of 119.8 percent. SEMCOG forecasts that average household size will increase from 3.22 to 3.42 in 2020. Since this plan is projecting a slightly higher total population than the SEMCOG forecast, a correspondingly higher persons per household of 3.46 is used for the residential needs analysis.

After estimating for the impacts from population and household size it is also necessary to calculate how much of the total housing stock in the plan year will be vacant for sale or rent. Generally, five percent of a community's habitable housing stock should remain vacant to provide diversity in housing selection, permit housing rehabilitation or replacement activities, and to ensure that asking prices for housing are indicative of actual market conditions, while at the same time protecting private investment. Vacancy rates below five percent demonstrate a restricted housing environment, affording little opportunity for potential households to be absorbed by available units. In calculating future housing needs, it is assumed that this vacancy rate will be five percent.

Data in Table 20 summarize the projected changes to population, persons per household and housing stock through 2020. Based on this analysis, it is anticipated that an additional 505 year-round dwelling units will need to be constructed by 2020 in order to house the projected population. This equates to construction of approximately 17 units per year, over the 1990-2020 period. The eight year average since 1990 has been 27.9 new units per year.

Table 20 Emmett Township 2020 Housing Unit Requirements				
Category	1990	2020	Change 1990-2020	
			Number	Percent
Total Population	1,519	3,334	1,821	119.8
Persons per Household	3.22	3.46	.24	7.5
Total Occupied Units	472	964	492	104.2
Vacancy Rate (%)	1.6	5	--	--
Vacant for Rent/Sale	38	51	13	34.2
Total Housing Units	510	1,015	505	99.0
Data compiled by Wade-Trim				
Source: Tables 2, 7, and 14, Chapter 6.				

It should be noted that during the next twenty years, there is likely to be some demolition of existing structures. This is due to the fact that by 2020, approximately 264 housing units will be at least 50 years old. Of this group, 115 homes were constructed in 1939 or earlier, making these at least 80 years old. While many of these can continue to be occupied with continued maintenance and rehabilitation, many may become so obsolete or deteriorated over time that the most economical choice will be to demolish and rebuild. The estimate of an increase of 505 homes does not include replacements of demolished homes.

Commercial Needs Analysis

Commercial development can be an important part of a community's economy. Commercial establishments provide goods and services to consumers, promote economic stability and diversity, and generally enhance the quality of life for area residents. However, if commercial districts are not suitably located and carefully planned, they can be a disruptive element and ultimately detract from the community.

Commercial Land Use Standards

There are four primary types of planned shopping environments: neighborhood centers, community centers, hypercenters and, regional centers. Data in Table 21 present the market base standards for these four types of commercial centers.

Neighborhood centers generally require a site between three and five acres in area. Such centers often have a supermarket as the principal tenant with other stores providing convenience goods or personal services. The typical gross leasable area is 30,000 to 100,000 square feet. The required trade area population ranges between 2,500 and 4,000 people living within a 1 to 1 1/2 mile radius or six minute drive of the center.

Community centers generally require a site that is ten acres in area. Such centers often have a junior department store (K-Mart, WalMart, etc.) or variety store as the major tenant in addition to a supermarket and other retail stores. The typical gross leasable area is 100,000 to 300,000 square feet. The required trade area population ranges between 40,000 and 150,000 people living within a three mile radius.

Table 21 Typical Shopping Center Standards*				
Center Type	Compositon	Site Size	Population Base	Service Area
Neighborhood Center	Supermarket as the principal tenant with other stores providing convenience goods or personal services. Typical GLA of 30,000 to 100,000 square feet.	3-5 acres	Trade area population of 2,500 to 4,000 people.	Neighborhood, 6-minute drive time 1 to 1-1/2 mile radius.
Community Center	Junior department store or variety store as the major tenant, in addition to the supermarket and several merchandise stores. Typical GLA of 100,000 to 300,000 square feet.	10 acres	Trade area population of 40,000 to 150,000 people.	3-mile radius.
Hypercenter ^a	Single store with multiple departments that offers large selections of fast moving general merchandise and food products and relies on its lower prices to draw customers from a wide reaching market area. Typically 175,000 and 330,000 square feet.	50-70 acres	Trade area population figures not available.	25-30 miles.
Regional Center	Built around a full-line department store with minimum GLA of 100,000 square feet. Typical center GLA of 300,000 to 1,000,000 square feet.	30-50 acres	150,000 or more people	10-15 mile radius.

*Urban Land Institute, Shopping Center Development Handbook, (Washington, D.C.), 1977.

^aUrban Land Institute, Development Trends, March 1989.

NOTE: GLA represents gross leasable area.

Regional centers are typically constructed on a site of 30 to 50 acres in area. Such centers are built around a full-line department store with a minimum gross leasable area of 100,000 square feet. Regional centers may have a total gross leasable area of 300,000 to 1,000,000 square feet. The required trade area population is 150,000 people or more living within a 10 to 15 mile radius.

Hypercenters range in size from 50 to 70 acres. They typically consist of a single store with multiple departments with large selections. They rely on low prices to draw customers from a wide reaching market area of 25 to 30 miles from the center. Store sizes typically range from 175,000 to 330,000 square feet.

Table 22 shows the distribution of major retail developments in St. Clair County. The City of Port Huron, Port Huron Township, Kimball Township and Fort Gratiot Township are the primary sites of community and/or regional shopping centers for the residents of Emmett Township. The City of Port Huron is also the site of major employment and government services. It is expected that these communities will continue to serve as the prime locations for these larger shopping centers thus obviating the need for these land uses to be supplied within the Township.

Table 22				
Major Retail Development in St. Clair County^a				
1996				
Community	Amount of Retail Space Constructed^b		Number of Buildings	
	1990-1996	Total	1990-1996	Total
Algonac	0	58,760	0	1
Fort Gratiot Twp.	1,170,277	1,431,059	5	7
Kimball Twp.	187,467	187,467	1	1
Marine City	0	147,339	0	1
Marysville	0	239,786	0	3
Port Huron	158,200	363,200	1	3
Port Huron Twp.	342,000	580,330	1	3
St. Clair	0	136,020	0	1
Total St. Clair County	1,857,944	3,143,961	8	20

Source: "Major Retail Centers Within Southeast Michigan, 1996", SEMCOG Memorandum, July 18, 1997.

^a Retail facilities 50,000 sq. ft. or more in gross retail space.

^b In square feet

Not all commercial uses are sited within pre-planned shopping centers. Attention must also be given to uses which occupy freestanding structures or which are part of strip commercial areas. Most of these uses are considered highway-oriented businesses, since much of their trade results from exposure and accessibility to passing motorists.

Data in Table 23 present the market base standards for many of these types of uses. For land use planning purposes, it is recommended that 10 acres per 1,000 people be allocated for such development.

Table 23
Market Criteria for Selected General Commercial Land Uses

Store or Service Use	Population	Market Penetration	Rental Revenue Potential	Typical Building Size in Square Feet
Food Stores	4,000	low	low	20,000
Drug Stores	9,000	high	medium	5,400
Liquor Stores	3,100	high	high	2,000
Restaurants & Taverns	varies	low	high	3,300
Laundries (coin-operated)	12,400'	high	low	1,600
Dry Cleaners	3,000	high	low	1,300
Beauty Shops	2,100	high	medium	1,200
Barber Shops	3,300	high	medium	750
Television Repair	5,300	medium	low	1,400
Real-Estate Offices	nJa	high	high	1,000
Branch Banks	4,500	low	high	4,000
Accounting Offices	nJa	nfa	nJa	nJa
Nurseries	16,200	high	medium	1,300
Travel Agencies	varies	high	high	800
Women's Apparel Stores	6,000	low	medium	2,500
Sporting-Goods Stores	18,000	medium	medium	nJa
Books & Stationery	6,500	low	medium	2,000
Furniture & Home Furnishings	6,200	low	medium	10,200
Camera Stores	55,100	medium	medium	2,000
Automotive Service Stations	2,800	low	high	varies
Hardware, Paint & Building Supply	8,700	medium	medium	5,700
Convention Hotels	b	varies	nfa	varies
Bowling Alleys & Billiard Parlors	c	c	c	c
Doctors Offices	1,000	low	high	1,000
Legal Offices	6,000	low	high	800
Stock-Brokerage Offices	15,000	low	high	800

Note: Population base refers to the number of actual customers each store or service requires for its support. Market penetration is each one's relative ability to withstand competition; a store with low penetration needs a greater number of residents in the area than one with the same population base and high penetration. Assume a 3:1 site to building size ratio to determine total land area need.

Source: Darley/Gobar Associates, Economic, Real Estate, and Marketing Consultants, as published in *House and Magazine*,

^a Figure is approximate, depending on whether residents have their own machines.

^b Not applicable; does not depend on residential population.

^c Current figures not available. Popularity is declining.

Data in Table 23 also document the population base necessary to support different types of office development (doctors, real estate, accounting, travel agencies, legal offices, and banks). To provide for office development, 3 acres per 1,000 people is the recommended guide.

Estimated Commercial Land Use Needs

Based upon its projected 2020 population of 3,334 persons and its land area, Emmett Township could support up to one planned neighborhood center - probably closer to three acres in size than the maximum five acres stated in the planning standard. For non-center commercial development, the standard indicates that by 2020 approximately 33 acres may be required by Emmett Township residents for general business purposes. Similarly, the office development standards indicate that by the end of the planning period approximately 9 acres of office development will be needed to support the Township population needs.

In total, based upon these standards, the commercial needs analysis predicts that Emmett Township will require approximately 45 acres of commercial development by 2020 to serve its population. Currently, the existing land use analysis reveals that the Township has approximately 10 acres of commercial land uses. Therefore, according to the planning standards, the potential demand of 45 acres of commercial land uses in Emmett Township exceeds the existing supply by 35 acres. However, given the rural and agricultural character in Emmett Township, lack of water and sewer infrastructure and proximity of other commercial facilities in other communities, the figure of 35 acres should be viewed as a maximum. While it is unlikely that more than 35 additional acres will be needed for future commercial land use, it is prudent to plan for more than this additional amount of land area for commercial in order to prevent artificial shortage of land for commercial land usage.

Industrial Needs Analysis

Industrial Land Use Standards

The quantity of developed industrial land a community will need in the future is dependent upon its current employment base, infrastructure capacity, local political philosophy, as well as the myriad of other factors industries consider when choosing a location for a new facility. Data in Table 24 list the more important location criteria industries analyze when selecting a site.

For land use planning purposes, it is necessary to estimate the amount of land that can reasonable be expected to be developed; for industrial uses. This ensures that capital improvements will be programmed in advance and that an ample supply of land is available to support local employment opportunities. Three methodologies commonly used for calculating future industrial land needs are: employment/density ratios method, land use ratios method, and population rations method. These are summarized in Table 25.

The employment/density ratios method is considered the most accurate predictor of industrial land use demand. If employment by industry can be projected, a worker density factor can be applied, resulting in a total acreage requirement for three distinct intensities of industrial land use. Intensive industries include electrical equipment and supply; printing and publishing; apparel and textile products; transportation equipment; and similarly uses. Intermediate extensive industries include lumber and wood products; furniture and fixtures; food and kindred

**Table 24
Locational Criteria Used by Industry**

Availability of Adequate Sites	The trend is to one-story plants with adequate space for parking, loading, a reserve for expansion, and, if the industry abuts a residential area, a landscaped buffer strip.
Reasonable Tax Rates	Two of the more frequently stated reasons for an industrial move are the lack of an adequate site or the lack of a reasonable tax rate
Location of Production Material	Improved methods for moving bulk products are lessening the importance of this factor.
Power	Electric power is the type most often required today, and there should be no local problems in this respect.
Water	Many industries require large quantities of water, either raw or treated, in their manufacturing process, and some find it desirable to have water as a means of cheap transportation.
Waste Treatment Facilities	A prerequisite to industrial operations locating in a particular area is its ability to handle the disposal of wastewater. Either public utilities with readily available access to or on-site waste treatment facilities with sufficient capacity to meet operational requirements have become integral location criteria, requiring careful consideration.
Industrial Fuel	Industries requiring gas are limited as to their potential locations. If coal is required in large quantities, the industry should be located along railroads or waterways.
Transportation Facilities	The importance of rail sites has diminished for some industries. Many rely solely on major highways as the means of bringing in production materials and distributing the finished product.
Favorable Competitive Pattern	Certain industries are finding it worthwhile to establish branch plants and to decentralize in order to maintain competitive advantages.
Living Conditions	An industry will also investigate a community's resources in terms of educational and recreational facilities, housing, availability of professional services, nature of shopping facilities, and public attitudes.
Compatible Laws	Up-to-date industrial thinking recognizes the desirability of sound zoning, building, and other codes.
Site Characteristics	Such things as soil and topography, amount of grading required, drainage conditions, waste disposal service, etc., are important to certain industries.
Labor	The cost of labor as a factor of production is important to industries where added costs cannot be shifted to the consumer without sacrificing competitive advantage.

Compiled by Wade-Trim.

**Table 25
Estimating Industrial Land Use Requirements**

Employment Density Ratios

<i>Industry</i>	<i>Average Number of Employees per Net Site Acre</i>
Intensive Industries ^a	30
Intermediate Extensive Industries ^b	14
Extensive Industries ^c	8

Land Use Ratios

<i>Community Size</i>	<i>Percent Industrial Land Average</i>
Small Cities & Towns (under 42,000)	8%
Large Cities (Over 200,000)	12%

Population Ratios

<i>Category</i>	<i>Ratio</i>
Total gross land required for all industry	12 acres per 1,000 population
Land required for light industry	2 acres per 1,000 population
Land required for heavy industry	10 acres per 1,000 population

Source: Urban Land Institute, Industrial Development Handbook, 1975; American Planning Association, PAS Memo: Land Use Ratios, May 1983; Joseph DeChiara and Lee Koppleman, Planning Design Criteria, 1969.

^a Industries include electrical equipment and supply; printing and publishing; apparel and textile products; transportation equipment; and similar uses.

^b Industries include lumber and wood products; furniture and fixtures; food and kindred products; chemicals; and similar uses.

^c Industries include tobacco products; petroleum and coal products; wholesale trade; and similar uses.

products; chemicals; and similar uses. Finally, extensive industries include tobacco products; petroleum and coal products wholesale trade; and similar uses.

Land use ratios can be used as a benchmark to estimate the future need for industrial land uses. By developing an inventory of the amount of land devoted to industrial uses in other communities, an average can be calculated and used as a standard for planning purposes. It is important to note that the percent of industrial land use is based on developed land area, not total land area (which includes vacant land and agricultural land area). The third methodology is similar in that it uses a benchmark ratio as a standard, but the ratio uses population as the base for comparison.

In each instance the standards should be used with care and consideration of the methodologies that were used to develop the benchmarks. The employment density ratio uses shift share analysis of national averages to determine projected employment densities. The data base used is drawn from more economically intensive regions than is Emmett Township. In addition, over time, changing technologies tend to impact the density demands by decreasing the amount of land area for capital intensive industries. The land use and population ratio methods are based upon data collected from relatively more urbanized areas than is Emmett Township, thus results from using these two estimates should be considered a high maximum value.

Estimated Industrial Land Use Needs

While this Master Plan did not include an estimate of future employment patterns, the 1994 SEMCOG Regional Development Forecast (RDF) does include projections for employment. According to the RDF, manufacturing employment in Emmett Township in 2020 will be 10 persons. Wholesale trade, which is considered an extensive industry is projected to be 12 persons. Using the employment density ratios, the potential range of land area that may be required for industrial land uses would range between just under ½ acre for 10 employees of intensive uses to 2.75 acres for 22 employees of extensive uses.

Using the developed land use ratios, the potential area of land that could be required for industrial land uses would be 71 acres. Using the population ratios method yields a range of 6.7 acres for light industry to 33.3 for heavy and 40.0 for all industry.

The three methods yield widely divergent acreages for industrial land uses from ~ acre to 71 acres. Currently industrial uses account for 2.4 acres of land area in the Township. The median acreage of approximately 35 to 40 acres is a more likely amount to ever be developed. Like the estimates for commercial land use needs, the lack of utilities, relatively small population base and the availability of land elsewhere are factors that tend to depress the demand for industrial land uses, at least in the near term. For future land use planning purposes, while it is unlikely that more than 70 acres or even 40 acres will be demanded by the future market, it is prudent to plan for more than this amount in order to prevent an artificial shortage of land.

Chapter Nine - Goals, Objectives and Policies

A community's Master Plan uses maps (the Future Land Use Plan) and words (the written statements describing future land use pattern) to convey its desired future development pattern. However, before a community can actively plan for its growth patterns, it must first establish goals and policy statements that define the boundaries of and the means to achieve its desired character. These goals and policies must reflect the type of community desired and the kind of lifestyle its citizens wish to follow, given realistic economic, social and natural constraints.

Goals are the general statements that define the direction and character of future development; they describe the ultimate purpose or intent of the Emmett Township Master Plan. The objectives for each issue are structured to support the goals. Policies are guideposts which set forth the framework for action and form the basis upon which more detailed development decisions are made. They do not commit the Township to any particular course of action in future reviews, but they do commit the Township to execute their actions consistently. Taken together, the goals, objectives and policy statements will assist the Planning Commission review future development proposals.

Goals

Emmett Township adopts the following eight goals to guide future development in the Township and to enhance the agricultural and rural residential environment which makes Emmett Township a desirable place to live and work.

Emmett Township shall:

- Goal 1:* Guide new development in a manner that conserves natural features and environmentally sensitive areas (such as wetlands, woodlands, and drainageways) and \ meets the long-term needs of the community.
- Goal 2:* Promote the conservation of local agricultural resources and the continuation of farming activities and related agricultural uses.
- Goal 3:* Maintain a residential environment that provides for the needs of current residents and offers variety and choice as well as opportunity to move to larger or smaller homes within the Township.
- Goal 4:* Provide for economic development that provides local employment in all economic sectors (such as agriculture, commerce, and industry); but balance the growth with the ability of the Township to provide for public services and with the Township's existing rural and agricultural character.
- Goal 5:* Balance the rate of land development with the Township's ability to provide public facilities and services.
- Goal 6:* Promote intergovernmental cooperation with surrounding local units of government, particularly in the coordination of long-term land use and infrastructure planning.
- Goal 7:* Balance the rights of the individual property owner with the needs of the public interest.

Objectives and Policies

The goals of Emmett Township can be achieved if the Township adheres to the following objectives and related policies regarding agricultural land use; natural features and open space; residential, commercial, and industrial development; and community facilities.

Agricultural Land Use

Objectives

- To encourage the retention of the best soils and most productive lands in agricultural production.
- To protect agricultural lands from fragmentation and the negative impacts of residential encroachment.

Policies

- Review lots splits proposed in agricultural areas to assure well designed land divisions and prevent unnecessary land fragmentation.
- Encourage residential development to be located away from farming operations, and sited to conserve agricultural lands and the agricultural character of the area.
- Encourage the use of cluster development designs that conserve agricultural land area through creative design and techniques such as density bonuses.
- Consider implementation of tiered agricultural zoning districts with distinct development densities. For example, one district could seek to conserve the agricultural industry by permitting only agricultural activities, related uses and very low density residential uses. Another district could serve as a buffer between the more restrictive agricultural district and rural residential areas. This district would permit agricultural, low density residential and other low intensity uses.
- Encourage the retention of productive agricultural land through available mechanisms such as in the state's farmland and open space protection program (such as PA 116), conservation easements, land trusts and purchased development rights as well as local zoning incentives.

Natural Features and Open Space

Objectives

- Maintain the Township's rural character by minimizing the impacts of development on environmental features such as wetlands, woodlands, open space and steep slopes.
- Encourage the retention of important farmlands and open space areas.
- Prevent the premature conversion of open space to residential and suburban development.
- Conserve natural features and protect residents and property from natural hazards (such as flooding, soil erosion) associated with development that infringes on natural systems.

Policies

- Investigate, enact guidelines for, and encourage the use of cluster development and planned unit developments (PUDs) that follow a creative design, provide density bonuses in exchange for open space and recreation provisions, encourage innovative septic system design, and retain open areas, native vegetation, and other natural features.
- Encourage the retention of natural features and open spaces through available mechanisms such as open space agreements, conservation easements, land trusts and purchased development rights as well as local zoning incentives.
- Promote efficient use of land through application of modern land division standards.
- Ensure that all county, state and federal environmental regulations are adhered to in the development of land.

Residential Development

Objectives

- Provide a range of residential styles and densities based on, at minimum, the capacity of the land to support development, provide on site water and wastewater support and other factors such as open space conservation.
- Provide for the free market construction of new housing units in all price ranges and for families of all income levels as indicated by the Township's projected population growth.
- Ensure that, while meeting objectives for affordable housing and varied housing options, detached single family homes remain the predominant housing type in the Township.
- Encourage higher density housing developments to be located with direct access to primary roads, with adequate on site water and/or sewer (community sewer systems) and be designed to minimize negative impacts upon surrounding land uses, be these agricultural, low density residential, commercial or industrial land uses.

- Maximize the amount of preserved open space and natural features by integrating open space protection within new housing developments through the use of clustering, conservation easements, provision of active and passive recreation and other applicable techniques.

Policies

- Encourage the conservation of existing vegetation, topography and other natural features in the design of all new residential developments.
- Encourage new residential construction to be sited in a manner that enhances natural features, rural character, and open space views.
- Require that planned residential developments provide interior access to all lots and prohibit creation of building sites which front or are directly accessed from a County primary or section line road.
- Encourage new residential development to logically relate to existing residential areas to permit utilities and streets to be extended in an efficient and economic manner.
- Identify lands that are particularly suited for single family housing, and lands that are particularly suitable for higher density housing, and where appropriate, zone these lands for such uses at such time when the need is apparent and/or a responsible rezoning request comes before the Township.
- Require that higher density housing developments be sited to minimize negative impact on neighboring land uses, be sensitive to existing development character, and provide buffering or screening to mitigate negative impact on existing views.
- Permit the development of housing options for elderly residents by providing flexibility in zoning to permit alternative housing arrangements such as "granny flats" and Elder Cottage Housing Opportunity (ECHO) and temporary mobile units.
- Encourage the maintenance of housing quality and enforce local ordinances which govern lot and structure maintenance.
- Discourage a pattern of scattered rural housing development on overly large lots (for example those 5-10 acres) particularly in productive agricultural lands.
- Promote the use of grassed swales, natural on-site retention, vegetative preservation, and pathways made with natural materials instead of curb and gutter, concrete walkways and other typically suburban elements within rural residential areas.

Commercial Development

Objectives

- Provide reasonable opportunities for the establishment of commercial uses which meet the demonstrated market needs of Township residents.
- Improve and expand, as necessary, existing commercial areas to provide for convenient and attractive commercial districts which meet the needs of Township residents.
- Ensure that the architecture, landscaping, and signage associated with commercial establishments is compatible with Emmett Township's agricultural and rural residential character.

Policies

- Recognize that Emmett Village, Imlay City, City of Yale, Capac, and Port Huron are the primary business centers serving both the local consumer population and subregional market base, these are the areas where larger, more intensive types of commercial uses will continue to be developed.
- Encourage commercial development in locations where compact and coordinated development can occur without impacting agricultural and residential land uses. These will typically be along paved roads and at paved road intersections on primary roadways. Discourage strip commercial or isolated commercial development.
- Require all commercial uses to have direct access to a County primary or section line road and prohibit access from private roads.
- Encourage the use of shared access and/or service drives. Discourage the establishment of multiple access points for freestanding commercial uses.
- Require the use of landscaping, signage, pedestrian amenities, lighting and transitional uses and/or landscape screening between commercial and all other land uses to enhance the appeal of commercial uses.

Industrial Development

Objectives

- Create a light industrial district with proximity to existing major roadways and/or railroad, and encourages such development to occur in a campus-like setting.
- Encourage new industrial land uses to locate in areas that have sufficient public facilities and services to support such activities.
- Ensure that the architecture, landscaping, and signage associated with industrial establishments is compatible with Township's rural character.

Policies

- Utilize the concept of planned industrial areas that emphasize access control, building and site design, and controlled signage and lighting.
- Identify those land areas that are particularly suited for light industrial uses and appropriately zone these lands for such time when the need is apparent and/or a responsible rezoning request comes before the Township.
- Discourage industrial development which will negatively impact environmentally sensitive areas or require substantial changes to natural systems.
- Transitional uses, buffering, and/or landscaping shall be established and maintained between industrial and all other land uses.
- Appropriate commercial and/or office uses shall be permitted in conjunction with industrial uses.
- Locate industrial areas where they have reasonable boundaries and are not subject to encroachment by incompatible land uses.
- Establish enforceable performance standards for all industrial uses, and coordinate the standards and enforcement with county standards.

Community Facilities

Objectives

- Encourage the development of an active and passive recreation and open space system that conserves the Township's unique natural features and open spaces and meets the needs of Township residents.
- Support the development and maintenance of a transportation system that safely and efficiently moves motor vehicles, bicycles and pedestrians.
- Provide for the proper location of public facilities and increased efficiency in public services.

Policies

- Encourage the development of parks and open space areas in conjunction with future residential developments.
- Discourage non-local traffic in residential areas.
- Limit curb cuts and encourage shared access drives, marginal access roads and coordinated on-site circulation for uses located along primary roadways. Encourage the development of collector or local roads in connection with larger developments.

- Encourage the underground placement of all utilities.
- Work cooperatively with other public and private agencies seeking to establish public and semi-public uses.
- Participate in interjurisdictional planning efforts to assure the representation of Township residents in regional decision-making on the provision of infrastructure and community services.
- Work cooperatively with other public agencies to facilitate the improvement or construction of public facilities, such as roads and other forms of public transit.
- Update the Master Land Use Plan and other policy-related documents at least every five years, with updates to objectives and policies as-needed.
- Develop an integrated land use control code, which has such elements as zoning, land division, and environmental protection regulations in one document.
- Develop and execute a sign program in the Township to include speed limit signs and "zoned community-permits required" signs at all entry points.

Chapter Ten - Future Land Use Plan

The Future Land Use Plan identifies the desired pattern of land development in Emmett Township for a period extending approximately 20 years. This chapter describes the basis for the plan and the intended character of each land use classification. When using this chapter for development reviews (site plans, rezoning, variances) and other planning decisions, please keep in mind the general nature of a future land use plan. Boundaries between land use classifications are not intended to be parcel specific or related to property lines. Also remember that a future land use plan is a flexible document. It does not prescribe specific land uses for legally described property; rather, it describes a desirable pattern of future development.

Basis for the Plan

The Future Land Use Plan was created in consideration of existing development patterns, environmental constraints, demographic trends and projections, and refined with the input of Emmett Township residents. In addition to reflecting local conditions, trends and aspirations, the Future Land Use Plan also recognizes Emmett Township's relationship to other communities in St. Clair County.

It is the intent of this Plan to:

- Conserve the rural character of Emmett Township as long as practicable. Emmett Township is a well-established rural residential community. Some of the principal elements of that character include: farmland, woodlands, some low hills and wetlands, low population density, a neat, well-kept appearance, and family orientation. Existing residents have come to Emmett Township to enjoy the quiet and scenic lifestyle that a rural residential community offers and the Township wishes to conserve that opportunity for future residents.
- Establish a future land use pattern that will be compatible with existing and proposed development patterns of the adjacent townships. It is only through integrated and coordinated land use planning that the Township, county and region will be able to preserve its unique environmental heritage.
- Recognize the unique role each community plays in serving the residential, commercial and industrial needs of residents of the region. As other communities have provided suitable locations for large scale commercial and industrial developments, the need for these type of developments has been reduced in other parts of the region, including Emmett Township. Implementation of the Future Land Use Plan recommendations will be strongly influenced by questions

The recommended future land use pattern is shown on Map 5. The acreage distribution is presented in Table 26.

Residential Development Pattern

Residential development will continue to be the predominant developed land use in Emmett Township. Since the Township does not have public sewer or water services, future residential densities will be based on the natural limitations and suitability of the soils, preservation of significant open spaces and natural features, proximity to community services including shopping and employment opportunities, and access to safe and convenient transportation routes.

To provide the basis for a zoning program that allows flexibility in residential development, this Plan recommends development densities as a means of describing the recommended development intensity within different areas of the Township. References to "development density" means the density that results by dividing the total acreage of an area by the number of dwelling units planned for that area-it does not mean a uniform minimum lot size. Thus, a landowner who has 20 acres could have a number of development options where a development density of one dwelling unit per two acres is recommended by this Plan and so regulated by the Zoning Ordinance. For example, the landowner could elect to develop ten, two acre lots, or 10, half-acre lots with ten acres reserved as open space, or an attached single-family or multiple-family development with a greater open space reservation.

Table 26
Future Land Use Plan Summary

<i>Land Use Classification</i>	<i>Estimated Planned Acres^a</i>	<i>Percent of Total</i>
Agricultural/Rural Residential^a	21,100.6	97.3
Rural Estate Residential	98.8	0.5
Village Residential	283.1	1.3
Commercial	77.3	0.4
Industrial	103.5	0.5
Public/Semi-Public	11.6	0.04
Recreation/Open-Space	14.0	0.06
Total		100.0

^a Includes rights-of-way and water bodies
Compiled by Wade-Trim

Agricultural/Rural Residential

The Agricultural/Rural Residential area covers the largest portion of the Township and provides opportunities for residential development within a rural setting. The Agricultural/Rural Residential also encourages the continuation of current farming activities, irrespective of their location, as long as it is economically viable for the landowner to do so. This Plan recognizes that farming has played a significant role in the history and character of Emmett Township. It also recognizes that farming, as an industry, is a challenge in Emmett Township due to the limited extent of prime agricultural soils and economic pressures to split the large acreages for residential development. Therefore, the Plan seeks to provide farmers and other landowners with land development options should they have a need or interest in selling a portion of their land for development purposes.

The Agricultural/Rural Residential includes parcels which have been developed for single-family residential use as well as lands which are currently farmed. The location and recommended development density within the Agricultural/Rural Residential is based on the Township's interest in protecting the community's rural and environmental character and the lack of public water and sewer facilities. It is anticipated that more than one zoning district may be required to implement this land use recommendation effectively and fairly.

The recommended development density in the Agricultural/Rural Residential is one dwelling unit per five acres. Specific permitted development densities will depend on site conditions and the development objectives of the landowner. As landowners take increased measures to preserve the Township's open spaces and rural character and minimize public impacts, greater development densities could be permitted. Thus, a strong incentive will exist to develop land in a responsible manner as it relates to preserving the Township's current character.

The principal measure for allowing higher development densities should be the use of clustering utilizing permanently designated open space, direct access to paved roads, public or community water and sanitary systems, and other measures to minimize the demand on the Township's limited public services. Further, a special emphasis should be placed on the visual character of developments which will be visible from a county road right-of-way to preserve the rural attributes of these road corridors and prevent road hazards related to too many access points.

In addition to low density residential uses, all typical farming activities such as the raising of crops and livestock (excluding intensive livestock operations) would be considered compatible land uses in this area. (Intensive livestock operations, due to odor and animal wastes, would not be considered compatible with the current or future residential character of the area.) Outdoor commercial recreation and open space uses such as riding stables, golf courses, campgrounds, nature preserves, and similar uses, should also be considered compatible uses.

Rural Estates

The Rural Estates Area encompasses those portions of the Township which are located close to or adjacent to a similarly envisioned area in Riley Township. The intent of this designation is to provide opportunities for more densely developed residential areas than would be permitted in the Agricultural/Rural Residential area. This area is located close to Emmett Village which provides a more urban setting than the more rural and agricultural setting in the bulk of the Township. In addition, it is located close to Emmett Township in order to provide better freeway access. The recommended development density in this area is one dwelling unit per 2 ~ to 5 acres. Other neighborhood-oriented uses which would be compatible with the intended character of this area are day care facilities, schools, churches, commercial recreational uses such as golf courses or swim clubs, public facilities and buildings, and similar uses.

Village Residential Area

The intent of the Village Residential Area is to expand the residential options available to Emmett Township residents without causing a large scale change in the community's existing development pattern or low density residential character. It is located adjacent to the Village of Emmett and straddles the M-19 corridor. These two characteristics provide continuity with the more urban setting of the rural village as well as ease of access to the highway and major employment centers. The recommended development density in this area is one dwelling unit per 2 acres. Greater average densities can be permitted depending on the provision of a safe potable water supply and suitable sewage treatment system. Recommended optional densities are 4 per acre for single family homes and up to eight units per acre for multiple family dwelling units and/or manufactured housing.

The Village Residential Area abuts the north border of the Village of Emmett and is directly accessible to M-19. It is located within 1 ~ miles of the M-19 and 1-69 interchange south of the Village. Its location next to the nearest, relatively densely developed area to the Township builds upon the existing development pattern. Village residential uses may include higher density single-family developments, duplexes, townhouses, apartments, manufactured home developments, and/or elderly housing developments.

Commercial Development

The residents of Emmett Township clearly voiced their satisfaction with the limited nature of commercial and industrial development in the community and does not support increases in the location and/or amount of development or intended to serve a regional need.

Nevertheless, the Township is compelled by state statute to identify areas of the community most suitable for all classes of land use, commercial and industrial uses, included. Commercial and industrial land uses require a high level of road accessibility and visibility as well as police and fire protection. The availability of water and sanitary sewer disposal (via septic systems or public services) is also important.

As a result, the Plan recommends restricting general commercial development to M-19 and M-21. Both are paved roads that provide good access by customers. Two of the three areas identified as well suited for commercial development already have commercial land uses. The third, located on M-19 at the northeastern border with Brockway Township is identified as commercial in recognition of the small commercial node located in Brockway Township at Metcalf and Emmett Roads.

The Commercial Areas are intended to provide opportunity for business owners to offer retail goods and personal services which may be demanded by community residents. Uses which could be compatible with the intended character of these areas are professional offices, medical/dental clinics, financial institutions, business service establishments, personal service establishments, retail businesses, and restaurants.

The commercial areas on M-19 lend themselves to more automobile oriented nature of most general commercial uses, outdoor storage and display needs and visibility needs. Given the need for these businesses to have both direct accessibility and visibility from a major transportation route, this type of use should be focused along the M-19 frontage. These uses may include automobile service stations, home and garden improvement centers, and grocery stores.

Industrial Development

Industrial uses require access to major transportation routes and segregation from residential areas. There is one small non-conforming industrial use within the Township; given its location, this plan holds the view that its location is not the most appropriate for an industrial use. Lacking other industrial land uses to build upon should the demand for industrial use development occur, this plan has identified the land area at the junction of Burt Road and the I-69 off ramp (from Riley Township to the south) in the southwest area of the Township for light and heavy industrial development. This site accords high visibility and access to I-69. The interchange with I-69 is just feet away from the specified land area and, all roads are paved.

Careful site planning will help mitigate any impacts on residential development, which may occur in the adjacent area planned for Agriculture/Rural Residential use.

Light industrial operations include uses, which are primarily confined to, enclosed structures or whose outdoor storage needs can be easily screened. Typical light industrial uses include parts assembly, packaging, warehousing, tool and die shops, and small manufacturing operations.

The Heavy Industrial Districts are established primarily for manufacturing, assembling, and fabrication activities, including large scale or specialized industrial operations whose external physical effects will be felt to some degree by surrounding districts. The district is so structured as to permit, in addition to Light Industrial uses, the manufacturing, processing, and compounding of semi-finished or finished products from raw materials.

Mobile Home Park

The purpose of mobile home parks is to encourage a suitable environment for persons and families who, by preference, chose to live in a mobile home rather than a conventional stick-built structure. The Mobile Home Park land use classification includes lands assembled for the purpose of locating a planned mobile or manufactured home community. Development should be in a subdivision design with related service and recreational areas. The location has paved roads, easy access, close to recreational facility and electrical utility source.

Residential

A residential district shall be defined as the Single-Family Residential District and the Multiple-Family Residential District.

Recreation/Open Space

The Recreation/Open Space Area is located in the northeastern section of the Township along the Mill Creek floodplain which is an environmentally sensitive natural system. Disturbances caused by intense land use or development in this area may negatively impact the use and enjoyment of the waterway.

Since this area is designated as the Mill Creek floodway the land area encompassed within the Recreation/Open Space Area should not be developed with the exception of passive recreation uses.

Public/Semi-Public

This area, located along Dunnigan Road is the site of the new Township hall and surrounding land area. Given its location and public use, it is an ideal site for future development of park facilities such as picnic tables, outdoor pavilion, and playscape equipment. It is the only land that is publicly owned within the Township.

Road Corridor Development

There is an explicit relationship between land development and transportation improvement needs. As residential development occurs in the Township, it is envisioned that private roads will be constructed to provide primary access to new dwelling units and connect these likely to have direct access to the county road network.

The county road network is the primary means of travel of people and goods passing through Emmett Township. Travel along the county road corridors is also one of the primary means for residents and visitors to experience the rural landscape that is typical of Emmett Township. The preservation of scenic qualities and levels of road service through regulated access and controlled turning movements are directly tied to the successful implementation of this plan.

Future growth and development must be guided by measures which will assure the efficient movement of traffic in a safe manner. An increasing number of access points along county roads will result in a corresponding potential for increased traffic congestion and hazards and a centers. Limiting direct access, spacing access points, and providing marginal access drives will help insure the functional integrity of the county road network.

Similarly, future growth and development within the Township must be guided by measures which will preserve, or enhance, the landscape's visual quality from the road right-of-way. The future perception of rural character will, in a large part, be derived from the landscape as experienced traveling along the roadways. Assuring that development along these corridors is appropriately setback and screened from view is essential.

Agricultural Preservation in Emmett Township

Why Emmett Township Should Preserve Farmland

Farmland is a critical component of our state and county economic landscape, benefiting local economies through sales, related business enterprises, processing and distribution industries and local job creation. Farmland also provides critical ecosystem management functions. The absorption and filtration of stormwater eases the burden on communities in having to fund stormwater management programs and helps to maintain good water quality. Furthermore, privately owned agricultural land generates more in tax revenue than it requires in public services. Once farmland is lost to development, it is irretrievable for future generations. Wide-scale fragmentation of farmland will lead to a complete transformation in the community character of Emmett Township.

Emmett Township residents are proud of the community's strong agricultural heritage. According to the Southeast Michigan Council of Governments (SEMCOG), 68.4% - or 14,817 acres – of the township was active agricultural land in 2000. Between 1990 and 2000, the township lost 8.7% - or 1,403 acres – of active agricultural land. During that same time period, there was a 65% increase in single-family residential development and an 18% increase in commercial and office uses.

Emmett Township is blessed with prime farmland soils when drained and also has an abundance of important local farmland. Prime farmland is defined by the U.S. Department of Agriculture (USDA) as land with soils best suited to produce food, feed, forage, and oilseed crops. Prime farmland differs from unique farmland, which refers to land used to grow high-valued vegetables and specialty crops. Pastures, woodlands and other land that is not urban or built upon are considered cropland by the USDA. Roughly 89% of the soils in Emmett Township are classified as prime farmland. Crops grown on these soils will produce the highest yields with the smallest input of energy and economic resources. The topography of the township is generally flat to gently sloping. The highest elevations are in the western half of the township, with flatter and lower elevations in the eastern half of the township.

The dominant soil association in Emmett Township is Blount-Parkhill. Dairy farming and cash crop are the primary farming activity on these soils throughout St. Clair County.

Because of these soils and the desire of the community to preserve farmland and protect the township's unique rural character, the township should take advantage of and implement the various mechanisms that are available at the local, county and state levels to preserve farmland.

In a 1998 Community Opinion Survey conducted during the update of the township Master Plan:

- 84% agreed that the township should remain rural in character;
- 84% agreed that the farm and orchard land is valuable for the open space it provides;
- 83% agreed that existing farms (including orchards) should be encouraged to remain as long as economically possible;
- 48% agreed that existing farms should be encouraged to remain regardless of economic cost;

Clearly, there is a high level of support for agricultural preservation in the township. Although there was low support by residents for being taxed to fund agricultural preservation, the township does not need to establish and administer a local purchase of development rights (PDR) program. St. Clair County has a countywide PDR program that is administered by the Agricultural Preservation Board. The county program does not require local funds. It is described in more detail below.

Agricultural Preservation Eligibility and Prioritization

Emmett Township is a rural community with a small number of existing and future land use classifications. Like many other rural communities within the region, the agricultural land use classification is “Agricultural/Rural Residential,” described above and depicted on the future land use map.

In “Agricultural/Rural Residential” areas, landowners with 35 acres of farmland or more are eligible to voluntarily apply to enroll their agricultural land in state and/or county farmland preservation programs. The Agricultural Preservation Eligibility Map highlights eligible parcels based on parcel size. This map is intended to supplement the future land use map and provide more detail on prioritized agricultural preservation areas. Property that is planned for non-agricultural uses as detailed on the future land use map are colored gray and are not eligible for agricultural preservation programs because they are planned for uses such as “Village Residential,” “Rural Estate,” “Commercial,” “Public/Semi-Public” and “Industrial.”

Priority for agricultural preservation eligibility will be given to parcels that are 80 acres or larger. The prioritization scale is as follows:

- **Very High Priority:** Parcels that are 80 acres or more receive bonus points when ranked in the state of Michigan Agricultural Preservation Fund scoring system. The highest priority for preserving farmland in Emmett Township is large tracts of productive farmland that also have prime farmland soils that are most conducive for successful agriculture. This priority level includes contiguous parcels under the same ownership, even though individual parcels – independent of the adjacent parcels – may have fewer than 80 acres (example: three separate, contiguous parcels under the same ownership, with parcel 1 being 30 acres, parcel 2 being 30 acres and parcel 3 being 25 acres for a total of 85 acres).
- **High Priority:** Parcels that are between 50 and 79 acres in size with prime farmland soils are the next level of prioritization. These properties are still large, attractive tracts for preserving productive farmland in perpetuity.
- **Moderate Priority:** Parcels that are 35 to 49 acres in size are at the minimum threshold of eligibility in state and local farmland preservation programs. Typically, there is a 40-acre minimum parcel size to qualify for various programs. However, smaller farms can sometimes qualify based on the type of crop being grown, whether the farm is considered unique farmland, or if the farm is located adjacent to other preserved land.

The state of Michigan Agricultural Preservation Fund Program – in which the St. Clair County Farmland Preservation Program participates – requires that potential preservation areas include the following:

- A) Farmland that has a productive capacity suited for the production of feed, food, and fiber.
- B) Farmland that would complement and is part of a documented, long-range effort or plan for land preservation by the local unit of government in which the farmland is located.
- C) Farmland that is located within an area that complements other land protection efforts by creating a continuous block of farmland.
- D) Farmland in which a greater portion of matching funds or a larger percentage of the agricultural conservation easement value is provided by a local unit of government or sources other than the state fund (this includes donations by the landowner).
- E) Farmland that will help to enhance other local open space initiatives in the community such as connecting an open space or wildlife habitat corridor, or in preserving unique habitats/natural features that benefit local conservation efforts.

The St. Clair County Farmland Preservation Program has its own ranking system that scores PDR applications that come in from the townships participating in the program. The county ranks all of the PDR applications that come in from participating townships and then forwards its highest ranking applications to the state program. The county’s best applications then compete for grant funds against the best applications from other county and local PDR programs. The county program is explained in more detail below in the “Potential Strategies for Preserving Agriculture” section.

Emmett Township

Agricultural Preservation Eligibility Map

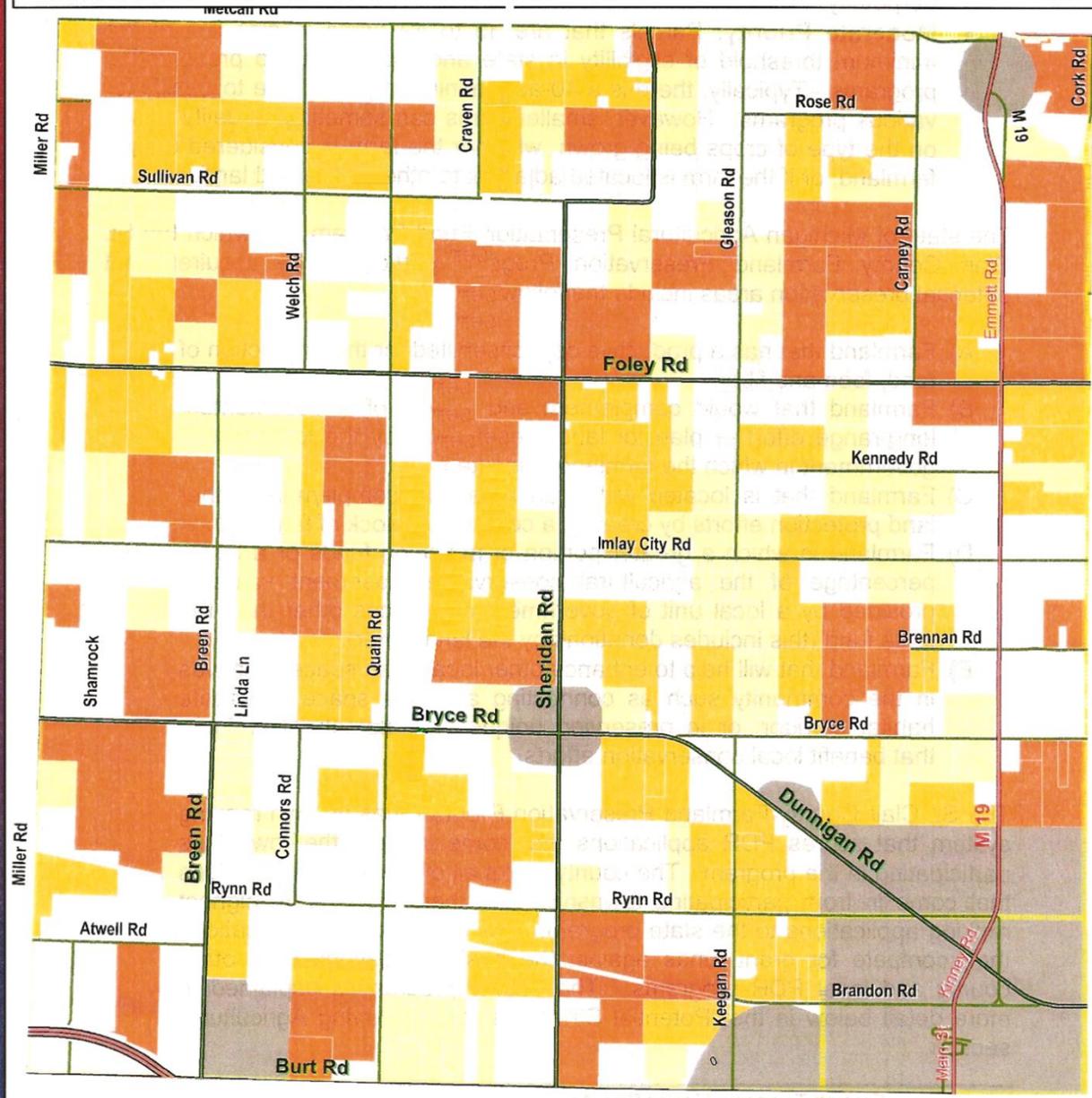
Legend

ACRES

-  < 35 acres (Not Eligible)
-  35 to 49 acres (Moderate Priority)
-  50 to 79 acres (High Priority)
-  80 or more acres (Very High Priority)

Legend

-  Planned Non-Agricultural



0 0.15 0.3 0.6 0.9 1.2 Miles

Template Produced by:
Metropolitan Planning Commission
200 Grand River STE 202
Port Huron MI
COUNTY OF ST. CLAIR
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The intended outcomes of the Agricultural Preservation Eligibility priorities are:

- To promote farming activities as the primary land use in the areas of the township best suited for such use;
- To preserve woodlands and wetlands associated with farms which because of their natural characteristics, are valuable as water retention and ground water recharge areas, as habitat for plant and animal life and which have important aesthetic and scenic value which contribute to the existing and desired future character of the area.
- To prevent the conversion of viable agricultural land to scattered non-farm development, which, when left unchecked, unnecessarily increases the cost of public services to all residents and results in the premature disinvestment in agriculture.
- Landowners with property located within the eligible areas, as depicted on the map, would have the opportunity to voluntarily apply to preserve their farmland in perpetuity through a variety of agricultural preservation programs, including the Michigan Agricultural Preservation Fund and the St. Clair County Farmland Preservation program.

Potential Strategies for Preserving Agriculture

Agriculture preservation techniques that could be considered by the township are detailed below. In addition to these concepts, the township should continue to serve as a resource of information to farmers on the components and benefits of available local, state and federal conservation programs to support farming operations. In addition, continuing education for non-farm landowners, homebuyers, and others on the effects of rural living and agricultural operations can help avoid misunderstandings and complaints land use conflicts.

There are numerous agricultural preservation techniques that should be considered for all property owners in Emmett Township that seek to preserve agricultural land and open space. The following sections describe strategies, tools and regulations that, when used – both individually and in combination – may be useful in preserving agricultural land in the township.

St. Clair County Farmland Preservation Program

The St. Clair County Agricultural Preservation Board was formally established on June 9, 2004 to develop and oversee a county farmland preservation program. The Board consists of nine members who represent a variety of agricultural interests, including township government, real estate development, and city/village interests. All members are appointed by the St. Clair County Board of Commissioners to three year terms. The Farmland Preservation Program seeks to acquire agricultural conservation easements on viable farmland within the county.

The purpose of creating a preservation board was to capitalize on P.A. 262 of 2000, the State Agricultural Preservation Fund. This funding program was established to provide local units up to a 75% funding match from the state to purchase development rights on farmland, with at least 50% of the acreage devoted to agricultural use. The 25% local match can come from a variety of sources: county funds, township funds, private conservancies, or donation by landowners who wish to take advantage of attractive tax benefits.

Creation of a formal board positioned the county to take advantage of state agricultural preservation funds for local farmland preservation programs. The adoption and establishment of a local program is a requirement for qualification. County programs greatly increase the efficiency of administration for both the state and communities within a county.

Among other things, the Agricultural Preservation Board developed an Agricultural Preservation Fund Scoring and Application System to be used for scoring applications for agricultural preservation grants and produced the county's first Purchase of Development Rights (PDR) ordinance, which was also adopted in 2004. Under a PDR program, a landowner voluntarily sells his or her rights to develop a parcel of land to a public agency or a charitable organization interested in natural resource conservation – in this case the St. Clair County Agricultural Preservation Board and/or the Michigan Department of Agriculture. The landowner retains all other ownership rights attached to the land, and a conservation easement is placed on the land and recorded on the

title. The buyer, generally a local government, purchases the right to develop the land and retires that right permanently, thus ensuring that development will not occur on that piece of land.

The county's PDR program compensates landowners for the difference between the developmental value and the agricultural value of the property in exchange for a permanent conservation easement that prohibits future development. Landowners are compensated for the value of lost development potential in exchange for maintaining the property as farmland. It is important to remember that the PDR program is a voluntary program which does not establish or imply county zoning.

Emmett Township has passed a resolution #05-03 on June 1, 2005 supporting the county's Farmland Preservation Program, which makes landowners in the township eligible to apply for the program if they so choose. Applications are scored and ranked based on the county's scoring system. All applications from Emmett Township are also prioritized and ranked among applications from all of the participating townships in the county. The county then forwards the highest priority parcels to the Michigan Department of Agriculture, which ranks the prioritized applications from around the state.

Michigan Farmland and Open Space Preservation Program (PA 116)

The Michigan Farmland and Open Space Preservation Program allows farmers to enter into development – limiting contracts with the state of Michigan for a period between 10 and 99 years. The state rewards farmers for their participation with income-tax incentives, and exemption from certain special assessments. In 1996, Michigan's Governor approved amendments to the Act in H.B. 4325. These changes are designed to keep PA 116 a desirable program for landowners.

The PA 116 program results in temporary conservation easements with the following conditions:

- Agreements can range from 10-99 years.
- A parcel of 5-39 acres in size with at least 51% devoted to agricultural use and that earns at least \$200 per cleared and tillable acre.
- Must be a parcel 40 acres or larger with at least 51% devoted to agricultural use.
- Land may not be developed for any use other than agriculture.
- Landowner is eligible for a property tax credit and special assessment exemption.

In the PA 116 program, the land is to remain enrolled for the number of years stated in the agreement. However, if the landowner wishes to convert or develop farmland before the agreement expires, the owner must repay the past seven years of taxes saved plus interest compounded annually from the time the credit was received. Emmett Township should encourage farmers to participate in the PA 116 program.

Conservation Easement

A conservation easement is the voluntary donation of land to have restrictions placed on it for the protection of agriculture and open space. The landowner still owns the land and can use it for specific conditions that the landowner and the nonprofit easement holder have agreed upon. Agricultural easements are designed to benefit the landowner and to assist in keeping agricultural lands productive and protected from development.

The easement is considered a charitable contribution for which the landowner does not receive direct income benefits. The landowner benefits from the donation through federal and state income tax deduction, lower property taxes, and reduction in estate and inheritance taxes. The value of the conservation easement is the difference between the fair market value and the value of the land after restrictions have been imposed.

Conservation easements are flexible to the landowners needs and may have limited provisions for use and development. The easement holder assumes the responsibility to make sure that all the restrictions are enforced.

The length of the easement may vary, from a limited number of years to perpetuity. However, federal tax benefits are only available on permanent easements. The conservation easement runs with the land, meaning

it remains in effect if the property is bought, sold, given or transferred to another owner. The new owner then assumes all responsibility of the conservation easement.

Sliding Scale Zoning

This technique limits the number of times that a parent parcel (a parcel existing on the date of ordinance adoption) can be split, based on its size, i.e. the larger the parcel, the more splits that may occur, up to a maximum established number.

Unlike exclusive use zoning, sliding scale zoning allows some non-farm residential development without special land use or other reviews. Sliding scale zoning can be useful in agricultural areas that are being affected by residential development and land speculation by allowing some increased use of land for development of non-farm uses.

Minimum and maximum building lot sizes can be used to encourage the location of non-farm development is more concentrated, and to direct growth onto already fragmented land. The use of sliding scale zoning is most effective in areas where a wide range of parcel sizes exists and non-farm residential development and agriculturally-related activities, such as pesticide spraying.

Quarter-Quarter Zoning

Quarter-quarter zoning is a density-based zoning technique which is most appropriate only in areas eligible to participate in agricultural preservation programs and where average parcel sizes generally exceed 40 acres. Quarter-quarter zoning refers to a quarter of a quarter section of land (1/16 of 640 acres, or 40 acres) where a limited number of non-farm homes are allowed for every 40-acres of land.

A related technique establishes a density or number of housing units to be permitted in a square mile of land. Generally this is only effective where very large parcels are present, or where many of the existing parcels are under the same ownership.

Agricultural Buffers

Buffers between active agricultural areas and other uses, such as residential development, can help reduce land use conflicts. Agriculture contributes heavily to the image of rural character. Balancing the need to preserve rural character and continue agricultural practices with the desire to develop land for non-agricultural purposes can be challenging. Residential and agricultural conflicts are occurring with greater frequency in developing areas as more people are moving from urbanized to traditionally agricultural areas. The use of buffers can aid in easing land use conflicts and improving the relationship of agricultural uses and new residents.

Buffers are generally imposed on residential developments rather than on farming operations, principally because the farm usually exists before new development occurs. Buffers should be sufficiently wide to protect the farming operation from lawn fertilizers, playing children, and other conflicts. At the same time, they cannot be so burdensome as to require excessive land commitments from residential property owners.

Open Space (Cluster) Development

Another approach to preservation is to concentrate less on restricting development of property and work instead on the efficient use of land. An open space development permits areas of agricultural lands, natural systems, and other desirable site features to remain, even as other parts of the property are developed for residential use.

Clustering provides for a denser concentration of development in a limited area, with no increase in the overall, or "gross density" of the site. The gross density must conform to the requirements of the Zoning Ordinance. In most zoning ordinances the preparation of a conventional plan is usually required to demonstrate the number of lots or dwelling units that are allowed. The object of clustering is not to increase the number of units developed, but to regulate the amount of land disturbed by structures, lawns, and drives. This concept applies

to all residential areas because of its ability to preserve farmland, natural systems, and open space other than active farmland.

Farmland provided as part of a cluster development could be incorporated in a long-term lease agreement with a local farmer. Farm operations may also take advantage of this option by developing only a portion of the property to gain additional financial resources, while retaining the remainder for agricultural purposes. For those developments that do not include farmland, the open space should be protected in perpetuity through covenants, deed restrictions or conservation easements as described above.

Transfer of Development Rights/Planned Unit Developments with Non-Contiguous Open Space

Transfer of development rights is another voluntary preservation option that compensates the land owner for not developing the land by allowing the development rights to be transferred to a development district.

For TDR to work properly two districts need to be established. A preservation, or “sending” area, where no development will occur, and a “receiving” area that uses the rights for higher development densities above that which is otherwise allowed under current zoning.

TDR has characteristics similar to PDR. Each focuses on the protection of agricultural land and natural systems while allowing the landowner to be compensated for not selling and developing the land. Compensation benefits include reduced tax assessments and the right to buy, sell or transfer the property.

At present, TDR is not explicitly enabled by Michigan statute; however, the Michigan Zoning Enabling Act (PA 110 of 2006) has provisions that authorize planned unit developments (PUDs) with non-contiguous open space. PA 110 states that:

“Unless explicitly prohibited by the planned unit development regulations, if requested by the landowner, a local unit of government may approve a planned unit development with open space that is not contiguous with the rest of the planned unit development.”

It is important to note that like PDR, PUDs with open space that is not contiguous cannot be mandated, it must occur at the request of the landowners involved.

Supporting and Promoting Agri-Business and Agri-Tourism in Emmett Township

One way to ensure that farming remains viable in Emmett Township is to ensure that farmers have every opportunity to maintain successful businesses and pursue value-added endeavors that will contribute to their financial success. Value-added agriculture involves using innovative methods to increase the market value of existing farm products. By taking advantage of value-added opportunities, farmers can improve the marketability of their products and bring in additional revenue long after harvesting their crops.

The township should ensure that its zoning ordinance contains language that permits value-added operations or agri-business opportunities, which include:

- U-pick operations
- Direct marketing/sales
- Haunted hayrides
- Corn Mazes
- Petting farms/Pony rides/Play areas for children
- Roadside stands
- The sale of baked goods containing produce grown primarily onsite
- Retail sales/gift shops

Clearly, many of these value-added operations are directly related to agri-tourism, which takes advantage of agricultural and rural attractions to provide entertainment and education for tourists and local residents alike.

Agri-business and agri-tourism opportunities help keep farms viable and can help to keep farms in the family. They also help generate additional income or off season income and help farmers diversify the market. Accompanying a growing national movement toward leading healthier lifestyles is a shift in consumer spending toward locally-grown produce, farmers' markets, organic and niche produce and community-supported agriculture. Emmett Township farmers are well-positioned to take advantage of these emerging trends.

Recreation/Open Space

The Recreation/Open Space Area is located in the northeastern section of the Township along the Mill Creek floodplain which is an environmentally sensitive natural system. Disturbances caused by intense land use or development in this area may negatively impact the use and enjoyment of the waterway. Since this area is designated as the Mill Creek floodway the land area encompassed within the Recreation/Open Space Area should not be developed with the exception of passive recreation uses.

Public/Semi-Public

This area, located along Dunnigan Road is the site of the new Township hall and surrounding land area. Given its location and public use, it is an ideal site for future development of park facilities such as picnic tables, outdoor pavilion, and playscape equipment. It is the only land that is publicly owned within the Township.

Road Corridor Development

There is an explicit relationship between land development and transportation improvement needs. As residential development occurs in the Township, it is envisioned that private roads will be constructed to provide primary access to new dwelling units and connect these residences to the county road network. Future commercial and industrial developments are likely to have direct access to the county road network.

The county road network is the primary means of travel of people and goods passing through Emmett Township. Travel along the county road corridors is also one of the primary means for residents and visitors to experience the rural landscape that is typical of Emmett Township. The preservation of scenic qualities and levels of road service through regulated access and controlled turning movements are directly tied to the successful implementation of this plan.

Future growth and development must be guided by measures which will assure the efficient movement of traffic in a safe manner. An increasing number of access points along county roads will result in a corresponding potential for increased traffic congestion and hazards and a reduction in the intended function of these roads which is to move traffic between population centers. Limiting direct access, spacing access points, and providing marginal access drives will help insure the functional integrity of the county road network.

Similarly, future growth and development within the Township must be guided by measures which will preserve, or enhance, the landscape's visual quality from the road right-of-way. The future perception of rural character will, in a large part, be derived from the landscape as experienced traveling along the roadways. Assuring that development along these corridors is appropriately setback and screened from view is essential.

Appendix

Community Opinion Survey

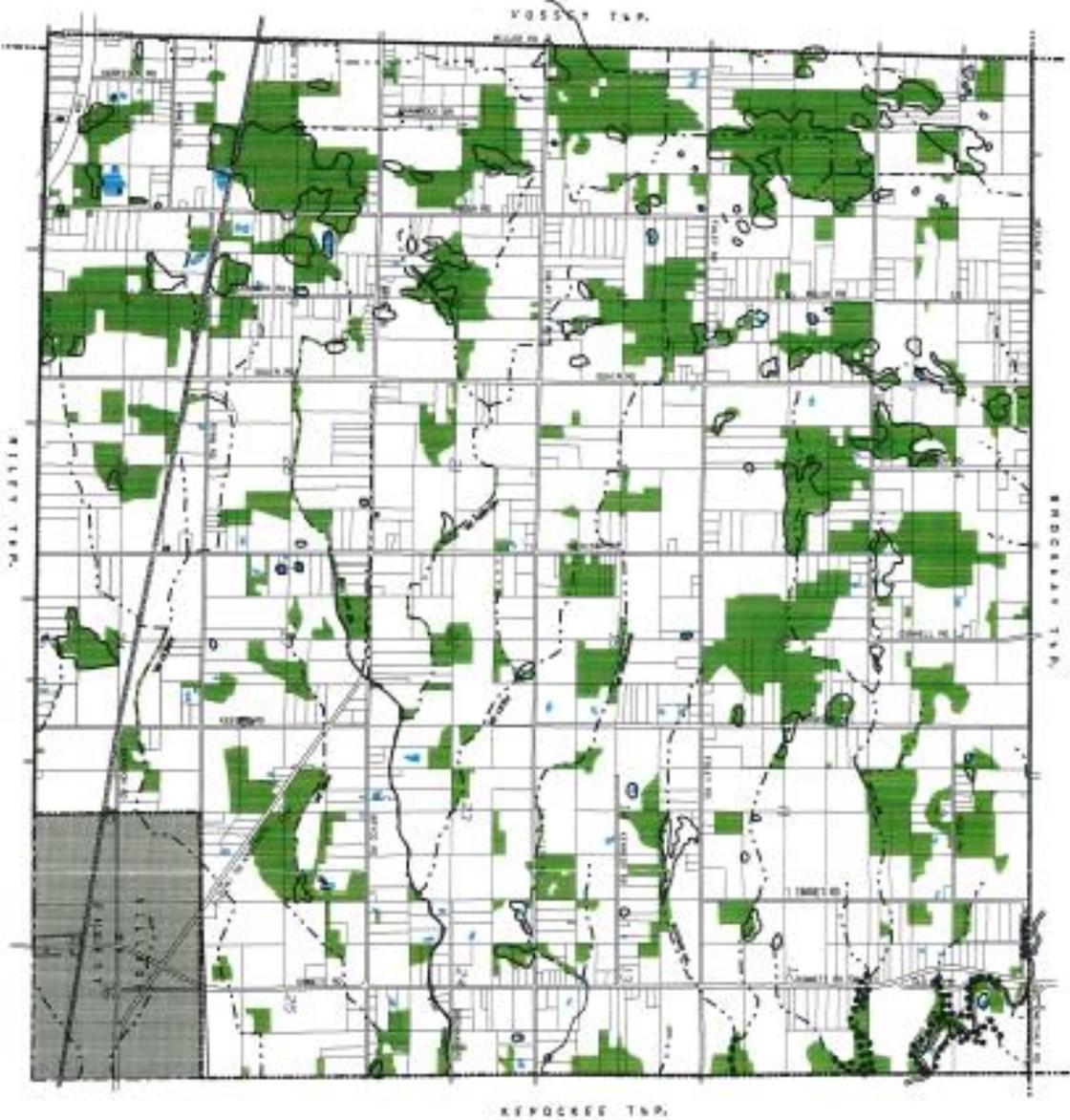
{See Document at Township Hall} not available electronically

**Emmett Township
St. Clair County, Michigan**

Maps

- Map 1 Regional Setting
- Map 2 Natural Features
- Map 3 Soil Associations
- Map 4 Existing Land Use
- Map 5 Future Land Use

Emmett Township
St. Clair County, Michigan

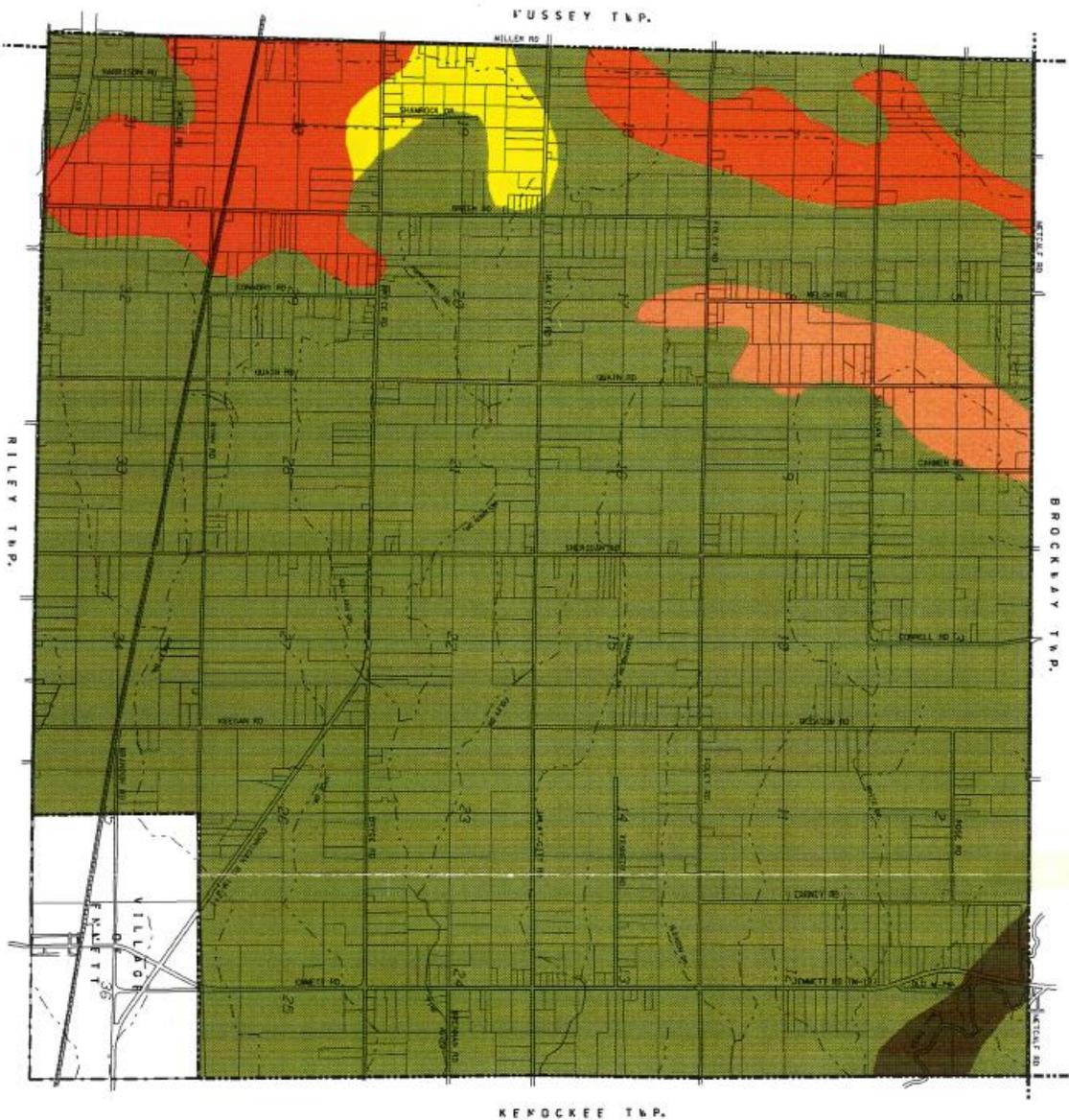


**MAP 2:
NATURAL
FEATURES**

EMMETT TOWNSHIP
ST. CLAIR COUNTY, MICHIGAN

Wade-Triem

DATE: 10/15/2010
BY: J. W. WILSON
SCALE: 1" = 100'



- BLOUNT-PARKHILL**
NEARLY LEVEL TO GENTLY SLOPING. SOMEWHAT POORLY DRAINED AND POORLY DRAINED SOILS THAT HAVE A DOMINATELY LOAMY SUBSOIL ON TILL PLAINS.
- HOYTVILLE-ALLENDALE-**
NAPPANEE
NEARLY LEVEL TO GENTLY SLOPING. VERY POORLY DRAINED AND SOMEWHAT POORLY DRAINED SOILS THAT HAVE A DOMINATELY SANDY SUBSOIL ON TILL PLAINS AND MORAINES.
- WAINOLA-DEFORD**
NEARLY LEVEL. SOMEWHAT POORLY DRAINED AND VERY POORLY DRAINED SOILS THAT HAVE A SANDY SUBSOIL ON ACIAL LAKE BEACHES, OUTWASH PLAINS, AND DELTAS.
- BACH**
NEARLY LEVEL. VERY POORLY DRAINED. DOMINATELY HIGH-LIME SOILS THAT HAVE A LOAMY SUBSOIL IN GLACIAL DRAINAGEWAYS AND ON THE LAKE PLAIN.
- ALLUVIAL LAND-ROUGH**
NEARLY LEVEL TO GENTLY SLOPING. WELL-DRAINED TO POORLY DRAINED SOILS ON FLOOD PLAINS AND THE ADJACENT STEEP TO VERY STEEP SOILS ON BLOPPS.



MAP 3:
SOIL ASSOCIATIONS
EMMETT TOWNSHIP
ST. CLAIR COUNTY, MICHIGAN



STANDARDS: BASE MAP FROM ST. CLAIR COUNTY COMMISSIONER'S OFFICE.
DATE: SERVICE OF AGRICULTURE, SOILS DIVISION, MICHIGAN DEPARTMENT OF NATURAL RESOURCES, NOV. 1974.



- AGRICULTURE
- SINGLE FAMILY RESIDENTIAL
- TWO FAMILY RESIDENTIAL
- SEASONAL RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- EXCAVATION
- PUBLIC / SEMI-PUBLIC
- VACANT, R.O.W. OR OTHER
- PA 116 LANDS



1" = 200' 0" 1" = 100' 0" 1" = 50' 0" 1" = 25' 0"

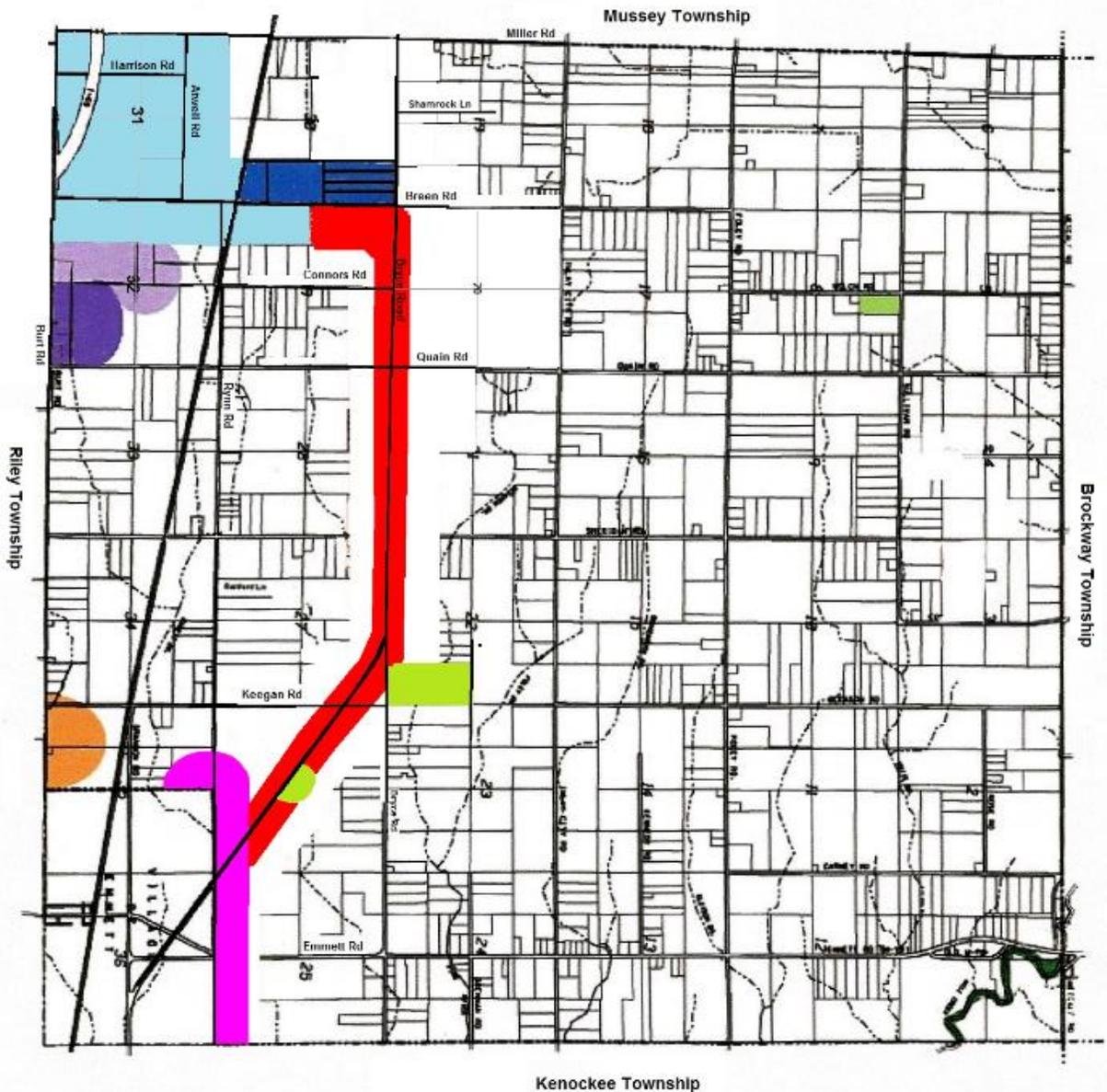
MAP 4: EXISTING LAND USE

EMMETT TOWNSHIP
ST. CLAIR COUNTY, MICHIGAN



Wade-Trim

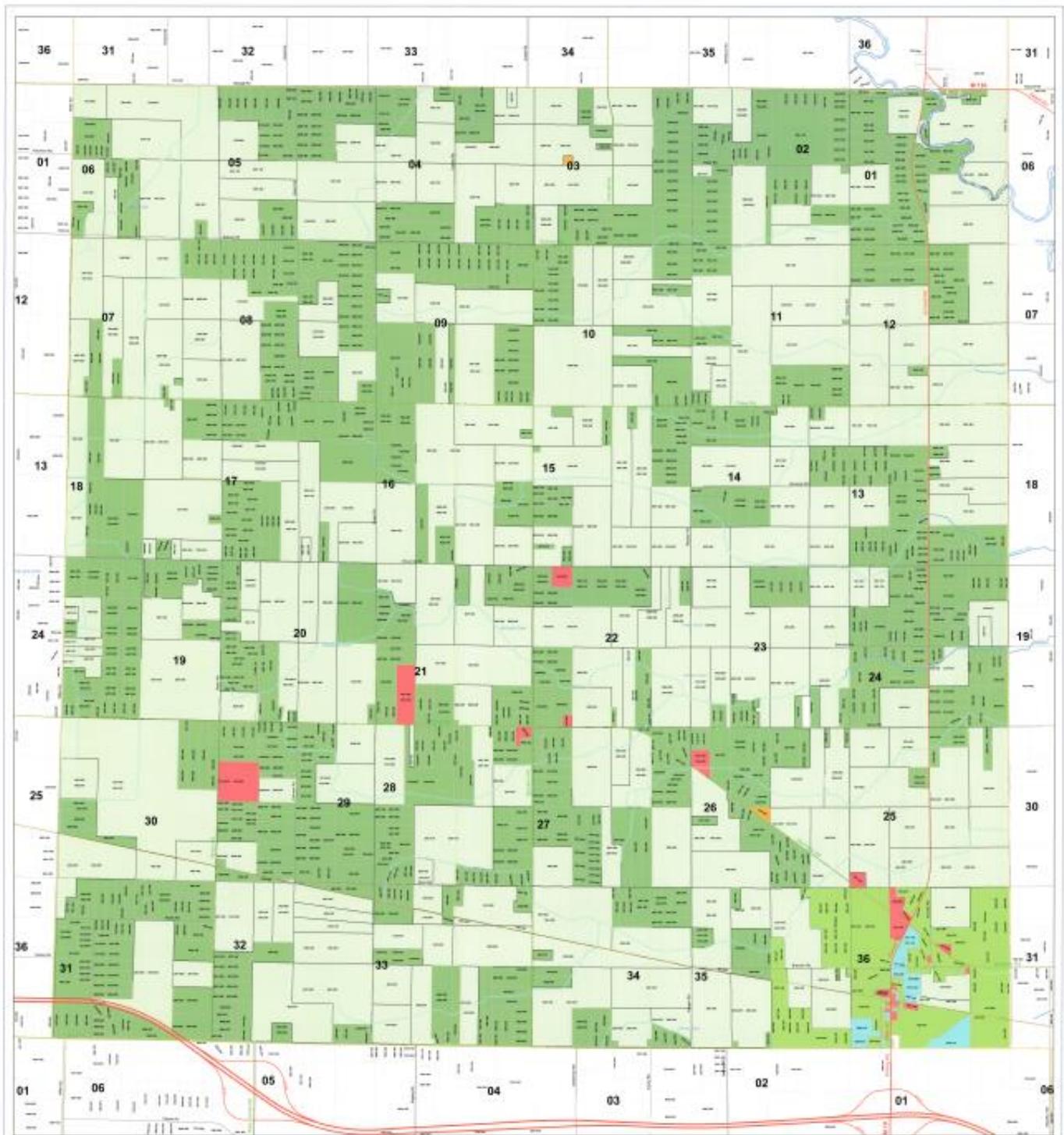
SOURCE: AISC MAP FROM ST. CLAIR COUNTY
AIRCRAFT DATA FROM ST. CLAIR COUNTY



-  AGRICULTURAL / RURAL RESIDENTIAL
-  Village Residential
-  RURAL ESTATE
-  COMMERCIAL
-  LIGHT INDUSTRIAL
-  HEAVY INDUSTRIAL
-  PUBLIC / SEMI-PUBLIC
-  RECREATION / OPEN SPACE
-  Mobile Home Park
-  Residential



MAP 5:
FUTURE LAND USE
 EMMETT TOWNSHIP
 ST. CLAIR COUNTY, MICHIGAN
 AUGUST 2013



Legend

- Interstate
- Local Highways and Ramps
- Major Roads
- Local Roads
- Active Rail
- CSS Community Boundary
- Major Watercourses
- Designated County Drain

Parcels (website version)

Emmett

Land Table "Neighborhood"

- 101AG
- 201CM
- 401MB
- 401VE
- EMMET
- VILL

