PERRY TOWNSHIP MASTER PLAN



Adopted



Prepared by:
Perry Township
Planning Commission
Members:

Duane Wood, Chair Elizabeth Andrus, Vice-Chair Sandra Michalek, Secretary Laurence Place Joe Ocenasek Walter Saxton Mark Fraser

RESOLUTION OF ADOPTION

PERRY TOWNSHIP PLANNING COMMISSION, SHIAWASSEE COUNTY, MICHIGANPERRY TOWNSHIP MASTER PLAN

WHERE AS the Perry Township Board established a Planning Commission to prepare plans for the development of the Township, and

WHERE AS the Perry Township Planning Commission has prepared a draft update to the Perry Township Master Plan, and

WHERE AS that draft has been reviewed at a public hearing to gather public comments of the residents of Perry Township and surrounding jurisdictions following notice as required by Michigan Planning Enabling Act PA 33 of 2008, and

WHERE AS the Perry Township Planning Commission has determined that the Plan is appropriate for the future development of the Township, now

THEREFORE, BE IT RESOLVED that Perry Township Planning Commission does hereby adopt the updated Perry Township Master Plan including all maps and documents included and authorize its submission to surrounding jurisdictions.

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Moved by: Ase Ocensek Supp	ported by: Awry Place
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The Township Planning Commission would like to recognize the hours of time put into the maps, tables, graphs and text of this version of the Master Plan by our member, Beth Andrus. We thank her.

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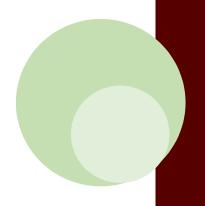
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LIST OF ANACRONYMS

- DDA Downtown Development Authority
- EGLE Environment, Great Lakes, and Energy Department
- EPA Environmental Protection Agency
- LDFA Local Development Finance Authority
- LOS Level of Service
- **PASER-** Pavement Surface Evaluation and Rating
- SEDP Shiawassee Economic Development Partnership



INTRODUCTION

Need for a Master Plan

A Master Plan for a community includes goals, objectives and policies based on the current and projected population, demographics, physical and environmental characteristics of the area. The Master Plan envisions what the community will look like in 20-30 years. Thence, integral to the Master Plan is Land Use.

Land use is a complex issue, dealing with the interrelationship of two basic resources: land resources and the human resources. Land is a fixed, irreplaceable, non-expandable resource with varying capacities. Population is a dynamic, mobile resource which is continually changing. We are faced today with the challenge of accommodating more people on a fixed amount of land.

Our relationship to the land resource is one of both dependence and dominance. We depend upon land and associated environmental systems for all of the necessities that sustain life. At the same time, human society has developed, to a high degree, the ability to dominate and utilize the resource. Land use planning is anattempt to establish and maintain a balance between the development and preservation of the land resource in order that it may provide a satisfying life for present generations and retain the ability to support the generations to come.

Historically, public opinion has favored unrestricted development of the land at the expense of natural systems. This attitude was due to the belief that the supply of land was virtually unlimited. However, our ever-increasing population and its mobility has changed how we must perceive development.

We cannot, nor should we, put an end to new development; however, we do need to re-think some of our basic attitudes toward land. Land is no longer a commodity to be exploited; it is an important resource, with varying capabilities and tolerances, which warrants protection.

In order to protect our land and related environmental systems, we need to determine both that a site iscapable of supporting a specific development, and also that the development is the best or most suitable use of the site.

Justification

The purpose of the Perry Township Master Plan (the "Plan") is to guide the future development of land within the township so that development takes place in an orderly, efficient, and attractive manner. According to Michigan's Township Planning Act, Act 168 of the Public Acts of 1959 as amended, such a plan shall be made with the general purpose of: Promoting public health, safety and general welfare; to encourage the use of resources in accordance with their character and adaptability; to avoid the overcrowding of land by buildings or people; to lessen congestion on public roads and streets; to facilitate provision for

a system of transportation, sewage disposal, safe and adequate water supply, recreation and other public improvements; and to consider the character of the township and its suitability for particular uses judged in terms of such factors as the trend in land and population development.

Scope

The Perry Township Master Plan is an advisory plan to assist township officials and the private sector in their day-to-day decisions on land use and development. The purpose of the Plan is to provide a broad public policy framework for the conservation of our natural and manmade environment, as well as for the use and development of land to meet the needs of the future.

The Master Plan is an official public document adopted by our local government. It is used as a policy guide to aid in making decisions affecting the physical development of the community based on the considerations of physical, social, economic and environmental elements of that community.

The Perry Township Master Plan seeks to achieve its advisory purpose within the context of the system of government established in the constitution and statutes of the State of Michigan. The constitution and the statutes clearly grant authority for land use decisions to local units of government.

a. Realization of the Plan:

The Plan was designed under the assumption that the township will be able to maintain and enhance its economic and environmental health. It is essential that the private sector work in concert with the public sector to stabilize older communities and to provide for new development when and where needed.

b. Basic Concepts of the Plan:

The basic concepts of land use in the Master Plan are as follows:

- flood prone areas, environmentally sensitive areas, natural areas and agricultural land in rural areas should not be urbanized;
- urban conservation and development activities should be centered in or adjacent to municipalities which have the full range of municipal, waste water, 3-Phase electricity, natural gas and transportation services; and
- local units of government cannot always economically extend their services to accommodate new development and thus require a cooperative effort with the city and village within the township to develop the plan.

c. Planning Process:

Plan adoption will mark the completion of the plan update phase of the Township Master land use planning process. The Township Master Plan is not simply a product of the Township Planning Commission. Citizens and units of government within the county have been involved in the process. The Plan, in large part, is a product of the advice, assistance, and comments of the people of the township.

Citizens and local governments have been involved in the process in each of the major steps in Phase One. It is the intention of the Township Planning Commission to maintain opportunities for citizen participation and increased local government involvement throughout the second phase, which consists of plan implementation activities and other comprehensive planning activities.

Within this Master Plan, the following components are contained:

- 1. A profile which discusses the various facets of the Township; its history, people, economy, natural resources, and the future outlook.
- 2. General goals which establish a philosophy for the Plan. The goal statements are long-range and set the tone for more detailed policy statements and objectives which follow.
- 3. Land use policies which specify the township position and actions to be taken regarding land use and related development. Some of the policies included in the Plan are short-range, which will give immediate impact on the attainment of a goal.
- 4. Implementation proposals and techniques are identified. No plan will implement itself. Implementation requires considerable effort devoted to a preconceived strategy. Thus, thosemechanisms available to the township, as well as to the units of government and the general public are identified and discussed in terms of their role in the implementation strategy. Keeping the Master Plan responsive to human needs will entail a watchful process of monitoring both land use trends and public opinions of land issues. The Township Planning Commission will continue to collect and analyze relevant information and to make it available to the public.

The Master Plan vs. The Zoning Ordinance:

A Master plan determines the basic pattern of the future use of land in a community. It shows how different types of land uses are situated relative to each other. A land use plan is only one component of amaster plan, which typically includes other elements such as a facilities plan, a thoroughfare plan, a recreation plan, and so forth.

A Master plan has no regulatory power, and depends primarily on a zoning ordinance for its implementation. The plan is prepared with the initial intent of being implemented by the Shiawassee County Zoning Ordinance. It is hopeful that a cooperative effort is established and maintained between the Perry Township Master Plan and the Shiawassee County Planning Commission to ensure that zoning district designations and densities, as well as district boundaries on the official county zoning map will be based closely on this plan and that strong consideration will be given this plan when making county zoning decisions.

Upon completion of the Master Plan, an evaluation will be made by the Township Planning Commission to determine the feasibility of preparing a Perry Township zoning ordinance to implement the plan.

The reason for maintaining a close relationship between the township Master Plan and the county zoning ordinance is that the courts stress the importance of a land use plan as a foundation for the zoning ordinance and zoning map. Zoning regulations must be based on legitimate public purposes such as promoting public health safety and welfare, promoting wise and efficient expenditure of public funds, and so forth. A land use plan contains documentation which substantiates that the public interest is being advanced in the provisions of the zoning ordinance.

Benefits of a Master Plan:

A master plan has many potential benefits for a community.

- » As discussed above, a land use plan provides a better legal footing for the zoning ordinance.
- » Property values can be protected and enhanced by the prevention of incompatible land uses locating close to each other.
- » A community's natural resources can be conserved, its environmentally sensitive areas can be protected, and its unique character can be preserved.
- » A land use plan administered by the planning commission promotes an orderly process by which officials and citizens can monitor and review proposed development.
- » It provides data which is useful to the community in its economic development efforts aimed at improving its quality of life.
- » A master plan can be a source of community pride; it demonstrates that a community desires to take an active role in shaping its destiny.

A master plan is not intended to be a permanent document. The factors considered in this Plan will change over time and the Plan will need to be updated. It is recommended that the Perry Township Master Planbe completely updated no later than ten years from the time of its adoption, although a comprehensive review after five years would be appropriate.

AREA HISTORY

A History of the Perry Area (Compiled by Ray Watkins & Msgr George Michalek)

Geologic evidence shows that with the retreat of the Wisconsin glacier, some 10,000 to 12,000 years ago, the physical features of the area where Perry Township is located were formed-its streams, soils, gravel deposits and lakes all being a part of that formation.

When European settlers entered the interior wilderness of Michigan, they found the native inhabitants of the greater Saginaw Valley area to be mostly of the Chippewa (Ojibwa) tribe. There were also smaller groups of Ottawa, Pottawatomie, and Wyandot. The two most famous native Americans were Chief Wasso and Chief Okemos, both Chippewas. Chief Okemos was born at what is now called Knaggs Bridge in Shiawassee County around 1769. The area of Perry Township was ceded to the United States government on March 17, 1807 by the Chippewas and other native American nations. The first Michigan territorial governor, William Hull, negotiated the Treaty. The only native American reservation in Shiawassee County was created at Knaggs Bridge in Burns Township in 1819 and was closed in 1851 when the land was opened to settlers.

An act of the state legislature in 1838 created a separate Township from the existing Shiawassee Township to be called Bennington after Bennington, Vermont. The present-day Perry Township was included in the new Bennington Township. Dr. Joseph P. Roberts (the first settler to locate where later the railroad would cross present-day M-52) served as clerk of the organizational meeting. Dr. Roberts was elected to be an assessor, a highway commissioner, and an inspector of schools as well as a justice of the peace. Others present at the organizational meeting were: George N. Jewett, Lyman Stevens, Josiah Purdy (the first settler in what is now Morrice), Phineas Austin, William Lemon, and William T. Stevens.

The first attempt to organize school districts in Bennington Township occurred on April 27, 1838 when the school inspectors ordered five school districts to be organized. The first school in the present-day city of Perry was taught in 1839 by Miss Julia Green in the home of her father Horace Green.

The first settlers in Perry Township were Josiah and Diantha (Hartwell) Purdy. They came in the fall of 1836. Their log cabin was located about where the house built by their son Francis stands near the corner of Mason Street and Purdy Lane in Morrice. A path used by native Americans ran in front of the Purdy home and native people were frequent over-night guests in the Purdy cabin. The first baby in the township (Minerva Whitford) was born in 1838; the first wedding (Harmon-Ward) took place in 1839; and the first death in the new settlement (Dr. Roberts) was in 1845. The first burial in what was to become Roselawn Cemetery was Arvilla Titus Locke in 1847. Settlers kept arriving, and community life revolved around the one room country schools which were often used on Sundays for Sunday School where circuit riding ministers held services.

During the 1850's settlers kept arriving, mostly farmers including the Bridger, Britten, Bunline, Calkins, Cooper, Hallock, Rann, and Watkins families to name a few. The population more than doubled in the decade 1850-1860. The 1860 federal census reveals the following statistics for Perry Township: number of dwellings-140; number of families-130; number of inhabitants-670; number of occupied farms-61. The township had six blacksmiths, one boot and saddle maker, four carpenters, three clergymen, one grocery store, one mason, one milliner, one pattern maker, one wagon maker, and one weaver. The township's only physician was the English native, Dr. Michell S. Baker.

Perry Center

In 1850, William P. Laing came to Perry and the following year opened the first store. The 37-year-old Laing was appointed the first postmaster of Perry in 1850, and the hamlet became known as Perry Center/Centre. William Laing is the only merchant listed in the 1850 Federal Census. Essential trades were: pump maker, Emasal Stevens; blacksmith, David T. Tyler; and trasher, John Whaley. There were also two carpenter-joiners and two masons.

The first building at "Perry Center" was a log cabin built by James Titus. Later, Richard Elliott, who came from Lansing, rented a room from Laing and opened a store with a small stock of dry goods and groceries.

Soon Perry Center was a flourishing settlement with the Perry Hotel, Hinckley's Sawmill, Dr. Marshall's Mercantile Store, a Harness Shop, Wagon Shed, Odd Fellow Hall and the Methodist Church. Much of Perry Center was located in the area of the present Perry Church of the Nazarene.

The original plat of the Village of Perry Center was registered at the county seat in Corunna on April 1, 1875. Petitioning for the approval of the plat were William A. Laing, A. M. Laing, L. M. Marshall, William F. Bellman, and B. C. Spalding, as Proprietors. Six streets were named: Main, Brayton, Shiawassee, Orchard, Laing, and Byron. Byron street on later maps has been identified as the present Ellsworth Road; and what was Main Street later became state highway M-47 (now M-52).

Prominent in many of the village's early enterprises were Dr. and Mrs. L. M. Marshall, who came from Cincinnati, Ohio. They reached Perry Center in 1865 and established a home and the doctor began practice. A year later, he embarked in the mercantile business, providing home luxuries, as well as medical relief to the sparsely settled community.

Village of Perry/City of Perry

The Village of Perry Center did not have its own governing body, but was under the jurisdiction of the Perry Township Board. It was not to experience its own individual form of government until it had moved, for the most part, a mile north to be situated on the railroad. In 1885, citizens petitioned the Shiawassee CountyBoard of Supervisors to allow incorporation as the Village of Perry. It then elected its own officials for the first time, but as a village, it still also remained a part of Perry Township until 1964 when voters elected to become a city. In the 1960 census, the Village of Perry had 1370 people. As of 1968, Michigan law now requires a population of 2000 to become a city.

Village of Morrice

The Village of Morrice is located in Perry Township. As already mentioned, the first settlement in the township was made by Josiah Purdy in the fall of 1836. Upon the north half of his land now stands the Village of Morrice. Purdy built a log cabin which was the first built in the township by a European. It stood just east of the present location of the Morrice Elementary School.

Several settlers came to this area about the same time in 1837, one of them being William Morrice, of Aberdeenshire, Scotland. His brothers, John, George, and Alexander came the next year. The Village of Morrice took its name from the Morrice family. William Morrice died in 1873.

Morrice was platted in 1877 by Isaac Gale. At the time the Chicago and Port Huron Railroad was finally completed, Gale was a vice-president of the company, which probably accounts for the establishment of the depot at Morrice, the first in the township. Gale had ownership of a portion of the land that had originally been settled by Josiah Purdy.

By 1880, Morrice had a population of 250, and a flour mill, stave and heading factory, two hotels, a hardware, implement store, a drug store, and a general store. The flour mill was built in 1877 by B. F. Rann, and the sawmill in the same year by Henry Horton. The stave and heading factory, built by J. F. Schultz in 1879, employed about 14 men and boys. The businessmen of the township contributed six hundred dollars to the proprietor of the flour mill, one thousand dollars to Schultz, and three hundred dollars to Horton, as inducements to establish their businesses in Morrice.

The Sager House was built by C. W. Sager in 1878 and was a well-furnished and commodious hotel. The first store was opened by Frederick Cummins. The first post office was a small wooden building in 1876. The first depot was in the sawmill, where one corner was boarded up for use in 1877.

Morrice was incorporated as a Village in November, 1884, and the first election was held on December 8 of that year, with twenty-three being the total number of votes cast. Elected were President, Dr. Henry P. Halsted; Clerk, J. W. Steadman; Treasurer, D. J. Holmes; Assessor, John A. Morrice; Trustees, B. F. Rann, Seneca Gale, Daniel Waters, Thomas Jones, B. F. Grout, and Henry Horton. Expenses of running the village for the first year were \$223.

In recent times, the village has seen the development of Morrice Meadows, a modular home community, Jewell Estates on the south side of town, and the Walker Drive area on the east side.

Morrice is now the largest village in the county by population with the 2020 census showing 949 people which is 68% more than the next largest village of New Lothrop with 565 people.

Perry Area Roads

Perry's Main Street in the early days was only a village street. It was planned wider than the rest to allowfor the angled parking of horses and buggies. After automobiles became popular, the street was paved with concrete. The rest was gravel road, both north and south of town. The main street was eventually designated a part of state highway M-47.

The highway remained gravel south of Perry for a long time, until finally it was blacktopped south to U.S. 16 (Grand River Avenue, now M-43). Even then, a connecting section down through a swamp commencing for a mile or so south of Rowley Road was not completed, and it was necessary to turn off at the road and proceed through Williamston, five miles to the west, or two miles to the east to Morrice Road. The highway south and north of Perry eventually was changed from M-47 to M-52.

In the 1930s, the main road from Perry to Lansing to the west and Flint to the east, called Lansing Road, was designated as M-78. Eventually it became a four-lane divided highway between Lansing and Flint, but it was not limited access. M-78 was not designated as part of the Interstate Highway System in the original Interstate Highway Act in 1956 but was added in 1958. The four-lane section from Morrice east to Flint was completed as a limited access road in the early 1970s and designated as I-69, but the route of the section from Perry to Lansing proved very contentious as MDOT proposed an entire new right of way built north of M-78 and striking out through farmland. After much public involvement, the route was made to keep the same general right-of-way as far as East Lansing when it then struck a new route that went around the city of Lansing on its west side. I-69 from Perry to East Lansing was completed in the early 1990s.

Schools

From 1871-1920 there were seven school districts in Perry Township. Number one was known as the Green (organized in 1839). The Green school was the nucleus of the Perry district organized in 1881. Number two was at the corner of M-52 and Miller Road called the Austin.

Number three was located on Beard Road west of M-52 and known as the Wallace. The last Hinckley school building, which was district number four, still stands in Roselawn Cemetery and is now designated as a National Historical Site. The Purdy school organized in 1858 became school number five. The school was not constructed until late in 1862. The Purdy was reorganized as the Morrice district. Number six district was the Lovejoy which relocated in Perry Township from Locke Township in 1871. The last Lovejoy school still stands on Munch Road between Locke and Lovejoy Rds. The seventh district in the north west quarter of Perry Township was organized in 1867 and known as the Bush.

The first high schools came into being with the advent of graded schools in districts one and five. The first year of the new Perry district (formerly number one, Green) occurred in the 1881 to 1882 school year. The first brick school on Horace Street was dedicated December 7, 1881. In the summer of 1883 Perry district adopted the graded system of primary, intermediate, and grammar. The first 10^{th} grade class to graduate was in 1885 and had six members. The 11^{th} grade was added in the fall of 1896 and the 12^{th} grade was added in the fall of 1900.

Meanwhile, in 1884 a new brick schoolhouse was built at the north end of Main St. in Morrice. The school was graded in 1885 to 10 grades. The first class of two boys graduated in 1888. The 11th grade was added in the fall of 1895 and the 12th grade in the fall of 1907.

The great event of 1920 was the beginning of the consolidation of country schools with high schools in Perry and Morrice which was not completed until the 1950s.

Student population in both the Morrice and Perry School Districts has been on the decline for 20 years due to the decrease in the birth rate, the existence of charter schools, and the popularity of home schooling. In Perry Public Schools which had 2000 students in the late 1990s, there are now 1092 students at the three schools. Morrice Area Schools currently have 511 students.

The Railroad and The Interurban

The 1870s was the decade of great growth and excitement. On July 11, 1874 the Chicago and Northeastern railroad company was incorporated. (This company existed till it merged with the Chicago and Grand Trunk line on April 7, 1880.) The Bennington Township farmer, Isaac Gale, was vice president of the railroad and was given the right to locate the stations in Shiawassee County.

Gale offered a proposition to the people of Perry Centre and north of it to build a depot at the previously proposed site for a monetary consideration. Having been burned in a previous railroad scheme in 1867 people refused to donate again. Gale then located a depot east of Perry and called the town Morrice after his good friend William Morrice. (See Village of Morrice above.) A stipulation was put in the contracts of the people whose land was purchased that no depot could be built within either 5 or 7 miles of the sites Gale selected.

The first social event held in Morrice occurred the day after the tracks had been laid through Morrice on November 17, 1876. The Lansing to Flint railroad line was completed January 1, 1877.

Also, in 1877. C. H. Calkins called in a surveyor and on June 2, 1877 the village of Perry was recorded at the county Register of Deeds. Still feeling overlooked by the location of the depot in Morrice, Perry citizens secured the services of a shrewd Lansing lawyer. A bill was soon passed in the state legislature which took effect in the summer of 1878. The compromise was that if the local people built the sidetrack and depot in Perry then the railroad would stop there to handle business. Since the railroad had not located or built a depot at a site within the proscribed number of miles from Morrice, this maneuver would be legal. Thus, Perry also now had a depot.

The end of October in 1909 the route from Owosso to Lansing for the long-discussed proposed electric train line was agreed upon. Originally the electric line was to go through Laingsburg but a joint venture of Morrice and Perry businessmen influenced the leaders of the third rail line to go through Perry and Morrice before turning north to Owosso. By early April 1910 the track was finished between Morrice and Perry. The interurban as it became known, expanded people's opportunities for shopping and amusement. Passenger service began on July 8, 1911. The Interurban systems across the country used a heavier-duty type streetcar. When it entered a city, it used the overhead electrical lines of the streetcars, but in the rural areas, there was an electrified third rail. The Interurban from Owosso to Morrice ran down Morrice Road where the current Consumers Energy right of way is today and turned at the railroad tracks in Morrice and went on to Perry and Lansing. It was abandoned in 1928 by order of the Michigan Public Service Commission.

The Railroad became the Grand Trunk Western which runs from Port Huron to Chicago and was purchased by Canadian National. 20-40 freight trains travel this line daily today and there is passenger service on Amtrak westbound in the morning and eastbound at night. The two closest depots are Durand and East Lansing.

Downtown Development Authorities

Both the Township and the Village have Downtown Development Authorities (DDA). The Township's was created in 1998 and the Village's in 2004. A DDA allows a municipality to set up a district which collects any incremental taxes that accrue to the area within the district, and then use these monies for development projects within the district.

In the Township, the DDA originally consisted of the area on Bennett Drive between Lansing and Britton Roads, but has been expanded over the years to take in Wild Rose Industrial Park and areas surrounding the M-52/I-69 interchange.

In the Village, the DDA consists of the business district on Main Street from Second St north to the Village Hall, west on Third St. to Morrice Rd and north to Lansing Rd. It, too, has been expanded to include the area on both sides of Britton Rd east of the Transfer station and on Morrice Road from Britton Road south to the Village limits.

The purpose of a DDA is to consolidate commercial/industrial development in areas best suited with infrastructure. Hence, they usually have major roads, natural gas, three-phase electricity, sewers and municipal water. If any of these amenities are missing, they are usually high on the list of places to spend the DDA funds collected.

The maps of both districts are available as Maps 7-10 on pages 63-66.

More information on commercial and economic development is provided in the Economic Base later in the Plan.

General Goals

Sound land use planning on the local level in Perry Township should remain active in order to direct future growth. Areas to be emphasized in the Master Plan are: agriculture, government, growth, community, economy and environment.

Agriculture

The preservation of agricultural land and other natural resources for present and future generations is a prime objective of this Plan.

Government

The Plan acknowledges that:

- » Planning should be coordinated between the Township and the City of Perry and the Village of Morrice as well as surrounding townships with a goal of greater cooperation. Communication should be increased between the planning commissions in the area so that each municipality is aware of the plans of its neighbors and has an opportunity to comment on development proposals that may affect them.
- » Conflicts arising between local and other governmental concerns should be settled at the level whichis closest to the grass roots and still embraces the scope of the issue. This supports a strengthening of local government functions.

Growth

It is assumed that growth in the Township will occur and the Plan will strive to guide its direction by:

- » Choosing controlled growth as it relates to achieving quality of life.
- » Providing for orderly growth so that services demanded to support that growth will not be beyond the ability of the people to provide through taxation.
- » Guiding the development of the Township urban areas so that the rural areas retain their character.

Community

The Plan recognizes its obligation toward serving the needs of the local community. This can best be implemented by:

- » Establishing population settlement levels and attaining a pleasant living environment throughout the Township.
- » Guiding development in the Township so that people within all economic levels can find housing, recreation and services appropriate to their life-style.
- » Developing a community pattern which will assure maximum public services.
- » Developing community awareness and identity.
- » Ensuring adequate housing for all residents in healthful, safe, convenient and attractive neighborhoods.
- » Cooperating with the school districts to achieve the best possible educational system.
- » Encouraging the development of an integrated transportation network which

provides efficient, safe, and pleasant movement of people and goods within the Township and throughout the region.

- » Attaining conditions conducive to health and safety throughout the Township.
- » Encourage the expansion of recreational opportunities

Economy

The Plan will encourage participation in the Township's economy by:

- » Achieving a balanced approach to land use allocations for industry and other economic activities in the long-range future.
- » Encouraging industrial and commercial development to provide work for the people of the Township, and providing a fair and equitable distribution of the tax burden with an improved taxbase.
- » Encouraging employment opportunities so that the need for residents to migrate outside the Township is reduced.
- » Providing public service facilities in the most efficient manner while meeting the existing and future needs of the Township's residents.
- » Providing planning and zoning techniques to achieve these goals.

Environment

The environment should be protected through:

- » A development pattern which respects natural features such as floodplains and soil characteristics.
- » Maximizing the capabilities of natural resources through sound planning and management techniques.

It is recognized that much of the soils within the Township provide severe limitations for development with and without sewers. Where such soils exist, this should be used as a base of support to denyfuture construction of development sites, in order to prevent problems of land misuse.

Residential Policies

The current and anticipated growth in residential housing from the growth of neighboring urban areas indicates that this topic could become a problem in the future if policies are not formed. Therefore, the following topics will be emphasized:

Plans for Development Zoning and Regulations Development and Balanced Environmental Settings Proper Land Use Patterns Residential Decay Design Transportation

Plans for Development

- » Sound and imaginative land development should be encouraged, which will allow increased density, while providing more usable open space and a more attractive residential environment.
- » New subdivision proposals should be encouraged to include a variety of lot sizes by incorporating average lot sizes rather than minimum, to be included in subdivision regulations to be adopted.
- » Zoning and subdivision regulation sections should provide incentives to developers to devise more innovative residential site planning through the use of cluster housing or planned unit development including the provision of density bonuses.

Development and Vacant Land

- » Vacant land should be subdivided only when a definite need exists.
- Premature subdivision of vacant rural lands should be discouraged in order that an efficient and economical utilities system can be maintained. In other words, development of residential areas should occur in an orderly sequence with the proper provision of public utilities.

Zoning and Regulations

- » A well-balanced land use pattern should be reflected in zoning and subdivision regulations.
- » Stricter enforcement of housing codes and the zoning ordinance dealing with housing andenvironmental conditions should be re-examined and continually updated.
- » Incompatible non-residential land uses within residential neighborhoods should be zoned non-conforming and eventually eliminated.
- » Perry Township should encourage developing local communities to provide a range of residential zoning from small lot to large lot districts.

Development and Balanced

Environmental Settings

- » Residential land uses should complement and accent natural features of topography, soils, woodlots, and other environmental features.
- » New residential development designs should provide for the preservation of existing trees and scenic features or provide for natural settings.
- » Open space pathways and linkages within residential developments should be related to the overall open space and recreation pattern of the Township.
- » Residential areas should be protected against activities which produce excessive noise, dirt, odors, or which generate heavy traffic.

Proper Land Use Patterns

» Residential areas should be separated from inharmonious land uses, such as commercial or industrial areas, through the use of open space or buffers, such as offices of public or semi-public uses.

- » Residential development should occur on a neighborhood unit basis and should be functionally unified through proper land planning and interior circulation design.
- » High density areas should be separated from lower density living areas except in the case of planned unit developments.
- » Residential areas should be located within relatively easy access to work, shopping and recreational areas, and yet provide adequate light, air, privacy, and quietude.
- » All new planned development (e.g., subdivisions, site condos, etc.) in the township will be required to have curb, gutters and sidewalks and to meet all Shiawassee County recommendations.

Residential Decay and Design

- » The size and architectural features of residential building within each neighborhood should be visually compatible and design transitions should be provided where different types of residential buildings occur in close proximity.
- » Existing housing should be protected from premature decay by appropriate maintenance.
- » Active encouragement and assistance should be given to groups organizing self-help and neighborhood improvement projects.

Transportation

- » Residential neighborhood units should not be penetrated by major arterial streets.
- » Subdivision design should be encouraged to face away from major thoroughfares.
- » Medium and high-density residential areas should be located in proximity to major arterial streets or freeway interchanges for good accessibility and to prevent extraneous traffic from penetrating lower density single-family housing areas.
- » Access control design standards are to be used in all new commercial, industrial, multifamily residential, subdivision or condominium developments or major redevelopments. This will maintain and protect the intended type of use that the roadway providing them access was designed for, i.e., residential, collector, minor arterial, arterial.
- » The traffic impact of rezoning proposals and special use permits anticipated to generate significant traffic should be analyzed prior to a decision being made on the request.

Commercial Policies

1

With future expansion and growth anticipated for Perry Township, plans for commercial areas will be formed that provide goods and services for the Township population. The following commercial policies are statedso as to direct future growth. They can be divided into four major areas:

Cluster Commercial Balanced Land Use Use Aesthetics Facility Improvement

Cluster Commercial Areas

The Plan acknowledges that the Commercial Areas should be compact and clustered.

- » Comparison shopping facilities should be clustered in order to strengthen the commercial core of the Township.
- » The existing Perry Central Business District in the City of Perry and the Village of Morrice Central Business District, as community centers, should be supported by the Township.
- » The Township identifies the Perry Township DDA as a viable highway service commercial cluster area.
- » Clustering is most cost effective in developing roads and utilities, by avoiding long costly runs.

Balanced Land Use

Commercial areas should be designed with forethought toward a comprehensive land use plan

- » The development of commercial facilities should be based upon a realistic determination of market potential so that excessive speculation and abandonment of commercial buildings will not occur.
- » Major commercial developments should be located in proximity to main traffic routes and utilities, near high density residential areas, and close to other functionally-related activities such as professional, financial and personal services.
- » Commercial areas should be developed in such a manner that they do not harm adjacent areas.
- » Incompatible non-commercial uses should be eliminated from commercial areas.
- » Commercial areas should be designed and suited so that they do not conflict with adjoining areas.

Aesthetics

The Plan encourages:

- » The design of both comparison-shopping facilities and neighborhood convenience facilities with inclusion of pedestrian circulation, landscaping and other amenities which create an attractive shopper environment.
- » Architectural and sign controls in commercial development areas.
- » The development of communities that have a strong physical identity.
- A high quality of development and attractive appearance so that the DDA district may continue to attract trade. A design plan should build on the recommendations of the DDA Development Plan and should prescribe a coordinated, street-scape treatment considering elements such as sign control and design, color coordination and illumination system, paving material and landscaping, etc.

Facility Improvements

This Plan recognizes that:

- Early signs of blight and decline in commercial areas should be reversed through resolution of traffic ingress and egress problems, prevention of excessive penetration of local driveways into arterial thoroughfares, elimination of excessive advertising and identification signs, and thorough provision of improved site planning design and landscaping in remaining developable parcels.
- » High standards of building construction and maintenance should be encouraged in commercial areas.

- » There should be adequate off-street parking within commercial areas for the convenience of the people and the business served.
- » Commercial opportunities such as gas stations, repair shops, etc., should use the best management practices to prevent site contamination and to protect surface and groundwater quality.
- » No open storage shall be permitted in commercial areas.
- » Adequate screening between the commercial and adjacent residential areas shall be provided, especially around parking lots and at the rear of business enterprises.

Industrial Policies

The industrial classification of land means that the predominant use of land in the areas so designated shall be for industrial uses, including warehousing, processing, manufacturing, assembling, railway uses and storage. In addition, certain other compatible uses may be permitted, including commercial uses primarily serving the industrial area, a caretaker's residence, and compatible public or institutional uses.

Industrial sites and parks should be located in areas affording direct access to efficient transportation routes: truck, rail, and/or air.

» Sites and locations with existing or planned utilities of power, water, sewer, natural gas and solid waste disposal, should form the basis for industrial development and expansion

Industrial sites should not be scattered among other land uses in an industrial park setting. They should be grouped together within a specific area with attractive site planning, landscaping, building setback, road and street access controls, buffer areas and coverage controls.

- » Adequate off-street loading facilities shall be provided.
- » Off-street parking will be provided to accommodate industrial employees.
- » Sight/sound screening shall be provided between the industrial areas and any adjacent residential area; such screening may include the provision of appropriate planting of trees or construction of screen walls, and distance may vary according to anticipated noise and odors which might be created with respect to a specific industry located on the site.
- » Best management practices should be used in industrial areas to prevent site contamination and to protect surface and groundwater quality in the area.

Industries which create adverse environmental conditions such as high air pollution, noise, excessive waste generation or high liquid wastes either in volume or toxicity shall be considered, provided the above environmental conditions can be adequately abated to satisfy any regulatory body.

Non-industrial uses, with the exception of a caretaker's residence and a commercial outlet forming part of an industrial operation, should be included in a separate zoning category. They should not be allowed to establish at random in the industrial area, but should be

located in such a manner that they in no way contribute to the detraction of the area for healthy industrial development. Existing non-conforming residences in industrial districts, however, should be permitted through a special use or "Class A/B Non- conforming Use" if provisions exists or other means, in order to ensure the homeowner may continue to maintain that residence if they so choose.

Agricultural Policies

There are areas in Perry Township where prime agricultural lands are still open, unsettled and capable of high value production for food and fiber for many years to come. Once developed, these lands cannot be regained with any conceivable efficiency or in any reasonable number of years. The forces that have irreversibly changed agricultural land to other uses have been discussed in the Inventory of this Plan. The Inventory also made the point that farming persists in Perry Township.

There are, in spite of urbanization, several commercial farms in the Township. Farming is a privately financed means of providing and maintaining open space and is an environmental asset valued by all citizens. Agricultural land uses do not require many of the expensive public services which must accompany urban land uses. Farming is a source of employment for young people and some full-time employment for farm laborers. Farming capitalizes on local resources; farming prevents urban sprawl; farming preserves the rural lifestyle; farming supports many farm-related businesses.

In summary, if farming is to survive on these prime agricultural lands, it must be realized that agriculture is an industry and not a residential land bank. The nature of farming is the processing of raw materials - much like industry. For that reason, and for all the factors considered above, we need to protect these highly productive agricultural lands from several things. We need to:

- » Protect them from scattered sprawl and development that challenge and frustrate legitimate farming operations;
- » Protect these lands from use as airports, highways, subdivisions, parks, and industrial development;
- » Protect these lands from destruction from extractive operations without adequate reclamation for future productivity; and
- » Protect these lands from ravages of soil erosion and its consequential effects upon the environment.

Perry Township's agricultural policies then become:

- 1. Well-defined, long-term agricultural areas exist in the Township where urban-style pressures for land conversion should be controlled. Also, more traditional rural development should occur less frequently or at lower densities in order to minimize their impact on the agricultural lands.
- 2. No commercial or industrial uses should be permitted in the long-term agricultural area except for agri-business facilities needed and normally associated with farm enterprises.
- 3. No residential subdivision should be permitted in the long-term agricultural area.

- Sanitary sewer lines and water mains should not be extended into the long-term agricultural area.
- 4. Restrictive ordinances limiting noise, animals, odors, etc., in the long-term agricultural area should be confined to those required for the health and safety of the public and be in line with the State law governing generally accepted agricultural and management practices. They should not inhibit normal agricultural practices and operations.
- 6. Agricultural should be designated the primary land use for the long-term area with all other land uses designated as exceptions.
- 7. Farmers in Perry Township should take a major part in the development of fair means to preserve prime agricultural lands. The Planning Commission should persist in its efforts to reduce conflicts between inevitable land use changes and the evident desire to continue farming in these areas.
- 8. Future development should occur on land designated as marginal or short-term agricultural areas.

Sensitive Lands and Natural Resources Policies

Natural Resource Policies can help shape the Township growth so that a balanced environment is created in the future. New developments should incorporate these policy statements to provide well-balanced and recognizable communities. The Township's open spaces are one of its defining characteristics and a natural resource that most residents are eager to protect. Preservation of the Township's open space and the community's rural character is a major goal of this plan. It is related to the Township goal of preservation of agricultural land, which shares with it the benefit of the reduction in urban sprawl, but seeks to protect areas besides those identified as prime agricultural. This goal of open space preservation must be balanced with the need to permit necessary and appropriate development in rural areas.

Six basic Open Space Resource Areas are considered under these policies. They are:

Woodlands Areas Flood Plains Major Slopes Lakes & Streams Prime Agriculture Natural Resources

Open Space and Natural Resource areas shall be identified and mapped by the Perry Township Planning Commission with the eventual addition of all mineral resources as they become known. Resource areas should be protected through the use of park and open space land allocations.

Open space planning should be encouraged to preserve, protect, and enhance the flood plain areas of rivers and creeks, wooded and scenic areas, unique habitat areas of rivers and creeks, wooded and scenic areas, unique habitat areas and other natural assets of the Township. These locations can be preserved either through public or private ownership and maintenance.

Open space should be utilized to delineate residential areas and to give individuality and character to various neighborhood communities. Future development designs should provide open space and recreation facilities as an objective.

Energy Policies

Consumers Energy is the sole source of electrical power and natural gas in the township. Much emphasis is being placed on renewable resources for electricity, and Consumers has determined that solar energy is the most logical form of renewable energy for most of Michigan.

Power companies were required to have 15% of their electricity provided by renewable resources by 2021. This is a goal all energy suppliers in Michigan met.

Consumers estimates it needs 60,000 acres of land on which they can install solar panels to generate the electricity needed for the future. Michigan has a total of 37,000,000 acres of which 10,000,000 are farmland. Many land use experts believe commercial solar energy systems should not be put on productive agricultural land.

It is most economical to place these solar energy systems near transmission lines and the state recommends that solar energy systems be within 0.2 miles from any 3-Phase power line. In Perry Township, the major transmission line runs along the old interurban line on Morrice Rd where it enters the northern part of the township and then turns west in the Village of Morrice and parallels the Canadian National Railroad until it exits the Township near Beardslee and Beard Roads. The areas along the railroad in Sections 19 and 20 in both the City and Township would be the best place possible for future development of commercial solar farms since they are crossed by the high transmission line, and they are on soils less productive than where the line enters the township in Sections 1 and 2.

These would be the most efficient for the transmission of power and disrupt the agricultural areas of the Township the least.

Also, solar energy systems are not an agricultural use and before it could be placed on agriculturally zoned land, the Plan calls for the land to be rezoned to commercial or industrial use and then meet all the requirements of that zoning designation along with the increase in taxation. Further, if any land is in the PA 116 program, it would need to be removed from PA 116 Since the land would no longer be used for agriculture.

ECONOMIC BASE

Industrial Land Use

A major factor in determining future land use in a community is development of that community's economy. In particular, the location of commercial and industrial facilities in the municipality help to define and influence other land uses, they impact the need for utility extensions, they influence traffic patterns and they impact the municipalities finances. Land use planning in turn effects the ability of a local economy to grow depending on if the plan provides appropriate areas with adequate infrastructure to support it.

Industrial land use is the smallest acreage category within Shiawassee County. Industrial development is primarily located in the Townships of Caledonia and Owosso, and the three largest cities of Owosso, Corunna, and Durand.

Industrial Park Development

Shiawassee County also contains several locations within the County that are currently zoned industrial and which appear to be favorable to industrial park development. One such area is located just east of the City of Perry in Perry Township. Currently, this area has no municipal water available but sewer service is available. The area is located on Lansing Road, just one mile from the I-69 interchanges on M-52, and consists of approximately 537 acres. Most of the parcels in the Perry Township Industrial Park are now occupied.

There is another industrial park in the Township also along Lansing Road just east of the Township Park named Wild Rose Industrial Park. Recently commercial lighting was erected on Lansing Road between the Perry City limits and Wild Rose Industrial Park to make it a more obvious commercial district and to attract and contain commercial and light industrial businesses to this area.

These areas represent the only industrially zoned areas in the southwest quadrant of the county and some of the only large parcels in the county that are relatively open, with access to state and federal highways, rail, sewer, natural gas, 3-phase electricity. and potential access to water,

Industrial Inventory and Analysis

There is substantial property currently zoned industrial that is either vacant or being farmed. The largestarea consists of several hundred acres previously mentioned, between the City of Perry and the Village of Morrice, north of the Grand Trunk railroad tracks and south of Lansing Road, which is zoned light industrial. Although some of the site has been platted as an industrial park the present development, has not been of a light industrial character. In addition, there is a large parcel adjacent to the west side of the City of Perry that is currently zoned M-1.

All of the vacant property zoned industrial in the township is adjacent to an all-weather road. All of the areas are either adjacent to areas where water and/or sewer are available or are located in areas where utility extensions are planned. According to the soil map of the Township all of these industrially-zoned areas have Miami-Conover-Brookston clay-loam soils which means they are not the best for drainage. Developers will need to take this into account when planning buildings and other major structures. The central part of the City of Perry is on a better drained soil, but the Village of Morrice is on the same type of soil as the industrially-zoned areas, and it has consistent drainage issues.

Commercial Land Use

Commercial development is an important link to any community's success. The goal of commercial development is to have stability and steady growth. A fundamental interrelationship exists between the commercial, industrial and residential sectors of a community. A thriving commercial development can stimulate and attract industry and other forms of community development but, generally, cannot be successful without first having residential and industrial base to rely on. Thus, community development becomes a cooperating cycle with one form of development relying on the other for stability and steady growth.

Commercial Development in Perry Township

The principle commercial district in the township surrounds the intersection of I-69 and M-52. Future commercial development can be expected to continue around the intersection radiating out to the north, east and west. There is an additional commercial area developing south of the city.

The remaining commercial development in the township is scattered throughout the township. The commercial uses are primarily businesses providing local services. They are generally located along major roads. The Village of Morrice also has a commercial district located along Main St and W. Third St.

Current zoning generally reflects existing use with some exceptions. There are some vacant areas in the triangle formed by Lansing, Britton, and Ruess Roads that are zoned commercial. A 330-foot-deep strip along the front of Countryside Village Mobile Home Park is zoned for commercial development but has not been developed as of yet. On the other hand, much of the land that could be expected to be developed commercially around the interchange is currently zoned A-2 (Rural Residential/Agricultural).

The primary locational advantages the township has for commercial development is existence of the interchange of M-52 and I-69 and the proximity of the two urban areas (City of Perry and Village of Morrice) to it. Initial development has been attracted due to the highway service but most of the businesses located there also serve township, village and city residents. As concentration of businesses increase, the attractiveness of the area for non-highway service-oriented businesses will increase. This could have significant impacts on the city and village commercial areas.

POPULATION

Population studies accompany all land use plans. Land use needs are estimated on the basis of an estimate of projected population increases for the area.

Several population studies have been completed for the Perry Township area and the Planning Commission weighed the merits of each. Assumptions about future trends were made on the following community development issues:

- 1. Sewer and Water Availability
- 2. Soil conditions
- 3. Commuter Patterns
- 4. Lansing Area and University Growth
- 5. I-69 Impacts
- 6. Perry Growth Potential and Policies
- 7. Township Growth Policies

These issues were discussed and entered into an evaluation of the population projections. The Township was able to make a good estimate of current population with the awareness of the number of occupied units and the numbers of persons/dwelling unit average from a census sample.

In Michigan, the areas with the most growth in population since 2010 are mostly in the West Michigan area, including Ottawa County (+12.3%) and Kent County (+9.2%), and in Metro Detroit, including Washtenaw County (+8%), Livingston County (+7.1%) and Oakland County (+6%).

By contrast, while overall the state gained almost 2% in population between the 2010 and 2020 censuses, Shiawassee County's population declined by 3.6% and Perry Township's by 4.3%. The village of Morrice, however, has increased population in both of the last two censuses by 12.8% and 2.4% respectively and remains the largest village in the county.

The population data is presented in several forms. The next three pages present County and area-wide data as follows:

- 1. Shiawassee County Local Units of Government Census Data, 1950-2020
- 2. Perry Township Area Population 1970-2020
- 3. Perry Township Area Population Percent Growth 1970-2020

Table 1 - Shiawassee C	County Census
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		iabic											
	1950	1960	1970	1980	1990	2000	2010	2020					
CITIES													
Corunna	2,358	2,764	2,829	3,206	3,091	3,381	3,497	3,046					
Durand	3,194	3,312	3,678	4,241	4,283	3,933	3,446	3,507					
Laingsburg	942	1,057	1,159	1,145	1,148	1,223	1,283	1,424					
Owosso	15,948	17,006	17,179	16,455	16,322	15,713	15,194	14,714					
Perry	1,203	1,370	1,531	2,051	2,163	2,065	2,188	2,091					
TOWNSHIPS													
(Includes Village Population)													
Antrim	807	890	1,277	1,752	1,679	2,050	2,161	2,116					
Bennington	1,241	1,447	1,973	2,758	2,726	3,017	3,168	3,119					
Burns	1,317	1,636	2,127	3,273	3,019	3,500	3,457	3,280					
Caledonia	2,557	3,434	4,292	4,785	4,514	4,427	4,475	4,360					
Fairfield	761	837	964	904	790	745	755	652					
Hazelton	1,614	1,746	2,132	2,411	2,294	2,206	2,071	2,054					
Middlebury	817	1,043	1,362	1,574	1,536	1,491	1,510	1,529					
New Haven	1,231	1,229	1,328	1,425	1,286	1,293	1,329	1,218					
Owosso	1,776	2,989	4,002	4,530	4,121	4,670	4,821	4,765					
Perry	2,775	3,170	2,598	3,467	3,698	4,438	4,327	4,141					
Rush	1,180	1,305	1,494	1,500	1,405	1,409	1,291	1,268					
Sciota	1,640	855	1,054	1,527	1,578	1,801	1,833	1,688					
Shiawassee	1,797	2,051	2,549	2,709	2,731	2,907	2,840	2,740					
Venice	1,435	1,893	2,576	3,063	2,812	2,588	2,578	2,422					
Vernon	2,466	3,138	4,422	5,003	4,989	4,980	4,614	4,273					
Woodhull	1,053	1,644	2,609	3,361	3,585	3,850	3,810	3,687					
VILLAGES													
Bancroft	615	636	724	618	599	616	545	484					
Byron	439	542	655	689	573	595	581	545					
Lennon	N/A	N/A	N/A	486	534	432	511	509					
Morrice	501	530	734	733	630	882	927	949					
New Lothrop	678	754	818	1,008	913	603	581	565					
SHIAWASSEE													
COUNTY	45,967	53,446	63,075	71,140	69,770	71,687	70,648	68,094					

Table 2 - Population Growth

Municipality			Census Year			
	1970	1980	1990	2000	2010	2020
Perry Twp	2598	3467	3698	4438	4327	4141
Bennington Twp	1973	2758	2726	3017	3168	3119
Woodhull Twp	2609	3361	3585	3850	3810	3687
Antrim Twp	1277	1752	1679	2050	2161	2116
Locke Twp	1370	1456	1521	1671	1791	1809
City of Perry	1531	2051	2163	2065	2188	2091
Village of Morrice	734	733	630	882	927	949
Shiwassee County	63,075	71,140	69,770	71,687	70,648	68,094
State of Michigan	8,881,826	9,262,078	9,295,297	9,938,444	9,883,640	10,077,331

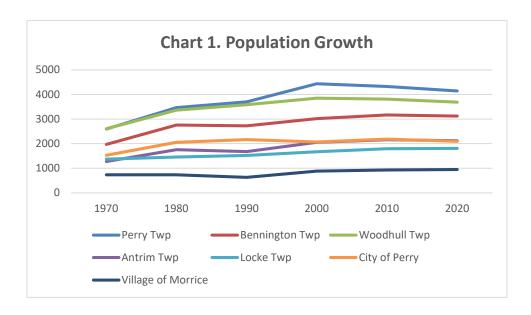


Table 3 - Population Percent Change

Municipality		Census Year										
	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020							
Perry Twp.	33.45%	6.66%	20.00%	-2.50%	-4.30%							
Bennington Twp.	39.79%	-1.16%	10.70%	5.00%	-0.49%							
Woodhull Twp.	28.82%	6.66%	7.40%	-1.00%	-1.55%							
Antrim Twp.	37.20%	-4.20%	22.10%	5.40%	-2.08%							
Locke Twp.	6.30%	4.50%	9.90%	7.20%	1.00%							
City of Perry	34.00%	5.50%	-4.50%	6.00%	-4.43%							
Village of Morrice	-0.10%	-14.10%	40.00%	12.80%	2.37%							
Shiawassee County	12.79%	-1.93%	2.74%	-1.40%	-3.62%							
State of Michigan	4.28%	0.36%	6.91%	-0.60%	1.92%							

Tables 4 and 5 compare the age distribution in the township, surrounding municipalities, the county and the state for 2010 and 2020. Table 4 illustrates the fact that the township population in the 2010 census was slightly younger than either the state or the county with higher percentages of persons in the 0-19-year age groups and lower percentages in the 45+ age groups. The township also had a slightly higher percentage in the family age groups (25 - 45).

Table 5, however, shows the Township still has a larger percentage in the 0-19 age group but no longer has a higher percentage in the family age group.

Table 4 - Age Distribution - 2010

	Peri Town:	•	Bennin Town:	J	Wood Town	-	Antı Town		Loc		City of Perry		Village of Morrice		Shiawa Coun	
Age	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
>5	270	6.2	171	5.4	154	4.0	94	4.3	86	4.8	148	6.8	78	8.4	3,987	5.6
5 - 19	1,065	24.6	755	23.8	792	20.8	381	17.6	411	22.9	511	23.4	215	23.2	15,269	21.6
20 - 24	231	5.3	123	3.9	171	4.5	107	5.0	80	4.5	135	6.2	50	5.4	3,823	5.4
25 - 44	1,134	26.2	697	22.0	819	21.5	505	23.4	391	21.8	656	30.0	283	30.5	16,878	23.9
45 - 64	1,161	26.8	1,049	33.1	1,368	35.9	715	33.1	604	33.7	542	24.8	186	20.1	20,586	29.1
65 - 74	309	7.1	284	9.0	338	8.9	177	8.2	147	8.2	116	5.3	74	8.0	5,558	7.9
75 - 84	117	2.7	145	4.6	133	3.5	73	3.4	59	3.3	59	2.7	23	2.5	3,155	4.5
85+	40	0.9	44	1.4	35	0.9	36	1.7	13	0.7	21	1.0	18	1.9	1,362	1.9
Median	36.6		43.8		44.5		42.5		42.6	-	34.1		32.6	-	40.3	
Total	4,327	100	3,168	100	3,810	100	2,161	100	1,791	100	2,188	100	927	100	70,648	100

Table 5 - Age Distribution - 2020

	Perry Township		Bennington Township			Woodhull Township		Antrim Township		Locke Township		City of Perry Morrice		_		ssee ty
Age	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
>5	239	5.8	106	3.4	160	4.3	62	2.9	78	4.3	170	8.1	71	7.5	3562	5.2
5 - 19	927	22.4	499	16.0	768	20.8	360	17.0	375	20.7	497	23.8	241	25.4	12686	18.6
20 - 24	147	3.6	177	5.7	216	5.9	114	5.4	112	6.2	155	7.4	30	3.2	4002	5.9
25 - 44	883	21.4	582	18.7	648	17.6	487	23.0	389	21.5	674	32.2	243	25.6	15731	23.2
45 - 64	1156	27.9	1130	36.2	1,115	30.2	814	38.5	536	29.6	374	17.9	272	28.6	20008	29.4
65 - 74	525	12.7	294	9.4	630	17.1	217	10.3	213	11.8	101	4.8	73	7.7	7169	10.5
75 - 84	114	2.6	149	4.8	116	3.2	49	2.3	89	5.0	101	4.8	218	1.9	3636	5.3
85+	150	3.6	182	5.8	34	0.9	13	0.6	17	0.9	19	1.0	1	0.1	1,300	1.9
Median	41.2		51.2		48.0		45.8		42.6		30.9	-	36.8		42.4	
Total	4141	100	3,168	100	3687	100	2116	100	1809	100	2091	100	949	100	68094	100

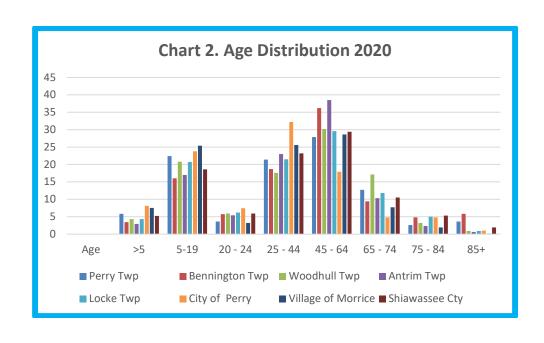


Table 6 - Population by 5-Year Increments for Perry Township

Age	Number of People	% Total Pop.
0 - 4	270	6.2%
5 - 9	369	8.5%
10 - 14	363	8.4%
15 - 19	333	7.7%
20 - 24	231	5.3%
25 - 29	240	5.5%
30 - 34	271	6.3%
35 - 39	290	6.7%
40 - 44	333	7.7%
45 - 49	374	8.6%
50 - 54	300	6.9%
55 - 59	268	6.2%
60 - 64	219	5.1%
65 - 69	196	4.5%
70 - 74	113	2.6%
75 - 79	68	1.6%
80 - 84	49	1.1%
85 and older	40	0.9%

3 113	% 1 Pop. 5.8% 7.3% 8.4% 6.7%
5-9 303 10-14 346 15-19 278	7.3% 8.4%
10-14 346 15-19 278	8.4%
15-19 278	
	6.7%
20-24 147	
-	3.5%
25-29 166	4.0%
30-34 204	4.9%
35-39 332	8.0%
40-44 181	4.4%
45-49 261	6.3%
50-54 418	10.1%
55-59 270	6.5%
60-64 208	5.0%
65-69 356	8.6%
70-74 168	4.1%
75-79 67	1.6%
80-84 47	1.1
85 and older 150	3.6%

Table 7 - Gender Types - 2010

	Perry Twp.	Bennington Twp.	Woodhull Twp.	Antrim Twp.	Locke Twp.	City of Perry	Village of Morrice	Shiawassee County
Males	50.4	50.2	50.9	51.4	49.9	48.3	50.8	49.4
Females	49.6	49.8	49.7	48.6	51.1	51.7	49.2	50.6

Table 8 - Gender Types - 2020

	Perry Twp.	Bennington Twp.	Woodhull Twp.	Antrim Twp.	Locke Twp.	City of Perry	Village of Morrice	Shiawassee County
Males	52.9	55.4	51.6	50.5	46.2	45.2	48.2	49.5
Females	47.1	44.6	48.4	49.5	53.8	54.8	51.8	50.5

In Tables 9-11, Perry Township and Shiawassee County are seeing racial distribution trends similar to the rest of the country, namely those identifying as white are decreasing over time and those identifying as non-white or more than one race are increasing. While the population of both the Township and the County continues to be predominantly white, the percentage has dropped by 5.6% in the Township and 4.7% overall in the County in the last 20 years.

Table 9 - Racial Distribution - 2000

	Perry Twp.		Bennir Tw	_	City of	Perry		ge of rrice	Shiawassee County	
	#	%	#	%	#	%	#	%	#	%
White	4,318	97.3	2,944	97.6	2,020	97.8	843	95.6	69,818	97.4
Black	13	0.3	5	0.2	4	0.2	6	0.7	139	0.2
American Indian, Eskimo or Aleut	19	0.4	9	0.3	9	0.4	6	0.7	334	0.5
Asian or Pacific Islander	13	0.3	14	0.5	8	0.4	3	0.3	209	0.3
Other	10	0.2	16	0.5	1	-	5	0.6	349	0.5
Hispanic origin (of any race) *	57	1.3	52	1.7	15	0.7	15	1.7	1,295	1.8

^{*}Hispanic is not a racial group. A person can be white and Hispanic, black and Hispanic, etc.

Table 10-Racial Distribution -2010

	Perry	Perry Twp.		Bennington Twp.		City of Perry		ge of rrice	Shiawassee County	
	#	%	#	%	#	%	#	%	#	%
White	4,177	96.5	3,089	97.5	2,119	96.8	899	97.0	68,315	96.7
Black	23	0.5	10	0.3	7	0.3	1	0.1	325	0.5
American Indian, Eskimo or Aleut	27	0.6	8	0.3	8	0.4	6	0.6	350	0.5
Asian or Pacific Islander	15	0.3	11	0.3	8	0.4	1	0.1	283	0.4
Other	12	0.3	20	0.6	10	0.5	3	0.3	349	0.5
Two or More Races	73	1.7	30	0.9	36	1.6	17	1.8	1,026	1.5
Hispanic origin (of any race)	71	1.6	81	2.6	37	1.7	15	1.6	1,695	2.4

Table 11 - Racial Distribution - 2020

	Perry Twp.		Bennington Twp.		City of Perry		Village of Morrice		Shiawassee County	
	#	%	#	%	#	%	#	%	#	%
White	3799	91.7	2883	92.4	1914	91.6	872	91.9	63132	92.7
Black	22	0.5	14	0.4	7	0.3	7	0.7	325	0.5
American Indian, Eskimo or Aleut	17	0.4	16	0.5	7	0.3	3	0.3	263	0.4
Asian	32	0.8	26	0.9	8	0.4	3	0.3	297	0.4
Hawaiian or Other Pac. Islander	3	0.1	0	0	2	0.1	0	0	22	0.1
Two or More Races	242	5.9	170	5.5	130	6.2	55	5.9	3556	5.2
Other	26	0.6	10	0.3	23	1.1	9	0.9	499	0.7

Table 12 - Average Persons Per Household

	1990	2000	2010	2020
Perry Twp.	2.91	2.83	2.75	2.71
Bennington Twp.	3.05	2.80	2.69	2.71
Woodhull Twp.	3.0	2.77	2.60	2.62
Antrim Twp.	3.04	2.95	2.70	2.53
Locke Twp.	3.07	2.93	2.84	2.82
City of Perry	2.94	2.73	2.66	2.64
Village of Morrice	2.85	2.79	2.53	2.85
Shiawassee County	2.78	2.64	2.54	2.43

Table 12 shows the average of persons per household in Perry Township has dropped since 1990 as have all of the surrounding jurisdictions.

Perry Township shows (in Tables 13-15) a precipitous drop in married couple households from 2000 to 2010 and 2020. In 2000 80.4% of households were married couples whereas by 2020, that group is only 57.4%. Neighboring townships have not seen such a large shift.

Table 13 - Household Types - 2000

	Perry	Twp.	Bennir Tw	•	Wood			trim vp.	Locke	Twp.		y of erry		ge of rrice	Shiawa Cou	
Type of Household	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Married	970	80.4	811	68.7	971	69.6	647	72.4	370	70.6	421	56.3	176	55.7	15,859	63.8
Single Head	252	7.3	95	9.4	153	11.3	99	11.1	50	9.5	142	19.0	57	18.0	3,271	13.2
Other-Non-family	346	12.3	168	22.0	266	19.1	148	16.6	104	19.8	185	24.7	83	26.3	5734	23.1
Total	1,568	100	1,074	100	1,390	100	894	100	524	100	748	100	316	100	24,864	100

Table 14 - Household Types - 2010

Type of Household	Perry	Twp.	Bennir Tw	_		dhull vp.		itrim wp.	_	cke vp.		y of erry		ge of rice	Shiawa Cou	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Married	895	57.0	816	69.3	951	64.8	517	64.9	529	84.0	420	51.0	170	46.3	14,779	53.5
Single Head	291	18.5	125	10.6	196	13.3	90	11.2	84	13.3	164	19.9	69	18.8	4,618	16.8
Other-Non-family	385	24.5	233	20.1	320	21.9	190	23.8	101	15.6	242	28.7	128	34.9	8084	29.4
Total	1,571	100	1,178	100	1,467	100	797	100	630	100	823	100	367	100	27,481	100

Table 15-Household Types-2020

Type of Household	Perry ⁻	Twp.	Bennington Twp.		Wood Twp.	hull		ntrim vp.		ocke vp.		y of rry	Villa Mor	ge of rice	Shiawa Cour	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Married	892	57.4	830	73.4	954	67.6	464	54.5	438	72.6	398	46.7	268	52.7	14,491	52.5
Single Head	226	14.5	82	7.3	228	16.2	112	13.2	43	7.1	175	20.6	108	21.2	4,318	15.7
Other Non- family	437	28.1	219	19.3	228	16.2	274	32.3	123	20.3	278	32.7	133	26.1	8,784	31.8
Total	1,571	100	1,131	100	1,410	100	850	100	604	100	851	100	509	100	27,593	100

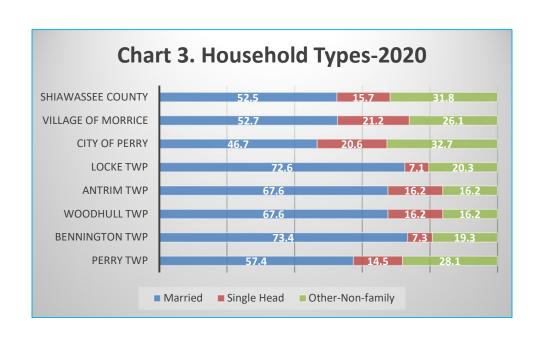


Table 16 shows the extent to which Perry Township is a "bedroom community" with a consistent trend of slightly less than 1/3 of the Township residents who work in the county and more than 2/3 who work outside the county.

Table 16 - Perry Township Place of Work

	1990	2000	2015
Worked in County of Residence	32.5%	28.3%	32.7%
Worked outside County of Residence	66.8%	71.5%	67.2%
Worked outside State of Residence	0.6%	0.2%	0.1%
Total Workers	1,758	2,282	1886

Table 17 shows that the mean travel time to work in 2000 was 32.3 minutes and that 8.6% of workers travel an hour or more to work.

Table 17 - Perry Township Travel Time to Work - 2000

Time (minutes)	Number of People	Total Workers
> 5	39	1.7%
5-9	196	8.7%
10-14	92	4.1%
15-19	88	3.9%
20-24	407	18.0%
25-29	194	8.6%
30-34	445	19.7%
35-39	130	5.6%
40-44	167	7.4%
45-59	224	9.9%
60-89	86	3.8%
90 or more	109	4.8%
Worked at home	81	3.6%
Total	2,258	100.0%
Mean Travel Time (minutes)		32.3

The 2020 Census, however, does not isolate just the Township so Table 18 includes all areas within the 48872-zip code—which would include Perry Township, the City of Perry, part of the Village of Morrice, and parts of Antrim Township, Locke and Conway Townships.

Table 18-Zip Code 48872 Travel Time to Work-2020

Time (minutes)	Number of People	Total Workers
> 5	110	3.3%
5-9	184	5.5%
10-14	155	4.7%
15-19	263	7.9%
20-24	453	13.7%
25-29	360	10.9%
30-34	669	20.2%
35-39	143	4.3%
40-44	78	2.4%
45-59	296	8.9%
60-89	121	3.6%
90 or more	144	4.3%
Worked at home	341	10.3%
Total	3317	100.0%
Mean Travel Time (minutes)		29.6

Both tables show the average commute time is about 30 minutes, although there is a larger percentage of people working from home in the 2020 numbers than in 2000 most likely due to the Covid-19 Pandemic. The percentage of people commuting for more than one hour, one way fell from 8.6% in 2000 to 7.9% in 2020.

Population projections which are commonly included in a Master Plan are left out of this Plan due to all projections in previous versions being proven to be so incorrect as to be of little use for planning purposes. The assumption is thus made that the population of the township will continue to fluctuate up and down by small amounts.

HOUSING

In 1977, a housing inventory of Perry Township was completed. The results can be seen in Table 19 below. Table 20 is an update of that inventory.

Table 19 - 1977 Housing Inventory

DWELLING SETTING	NUMBER	PERCENTAGE
Single Unit Detached	557	71.5%
Mobile Home	216	27.7%
Multi-Family	6	0.8%
Total	779	100.0%

Table 20 -2020 Housing Inventory

DWELLING SETTING	NUMBER	PERCENTAGE
Single Unit Detached	1365	84.3%
Mobile Home	241	14.9%
Multi-Family	14	0.8%
Total	1620	100.0%

The single unit detached home which was the most common in 1977 has an even greater percentage of the housing market in 2020. Total number of housing units has more than doubled in the intervening 43 years. In the 1977 Housing Inventory, 153 of the single unit detached homes were farm houses which were not originally built on a separate land-split division. New single unit detached homes are built on lots defined by a metes and bounds survey. The lots that are sold are usually a part of an effort by a landowner to sell the maximum number of lots allowed by the State Subdivision Control Act and the Shiawassee County Zoning Ordinance. In Perry Township, there is not as great a percentage of this development type as in other townships due in large part to the A-1 and A-2 zoning restrictions. A-1 zoning allows only one split per 40-acre parcel. A-2 allows more splits, but each one must have at least 200' of road frontage.

The mobile home parks and other mobile homes scattered around the Township are the second most common settlement style for the community. The rate in Perry Township (14.9%) far exceeds the County average (7.0%). This is due primarily to Countryside Village on Britton Rd and Morrice Meadows on the east side of the village. Individual mobile homes are allowed only for farm laborers, as temporary dwellings, e.g., the rebuilding of a home, or in cases of medical hardship.

In summary, Perry Township is a diverse community with several types of housing settings that describe several suburban-like complexes in the north, central, and west sectors of the Township. The southeastern area of the Township is largely zoned A-1, prime agricultural land, which prevents suburban-like complexes from being built in that area.

Tables 21 and 22 show the same type of housing inventory but this time for the last two censuses across the county. There has been a significant decrease in mobile homes in every municipality listed except the Village of Morrice with the continued development of Morrice Meadows. Multi-Unit Housing has also declined across the county while single unit detached homes have increased everywhere.

Table 21 - Housing Inventory Across the County - 2010

	Perry	Twp.	Benni Tw	ngton /p.	Wood Tw			trim vp.		cke vp.			Village of Morrice		Shiawa Cou	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1 Unit detached	1,230	70.6	1,157	98.1	1,331	88.0	951	96.5	575	97.5	644	74.5	280	68.8	23706	78.4
Multi-Unit	47	2.5	19	2.6	61	4.1	10	1.0	5	0.8	220	25.4	33	8.1	4107	13.6
Mobile	465	26.7	4	0.3	120	7.9	24	2.4	10	1.7	0	0.0	94	23.1	2425	8.0
Total	1,742	100.0	1,180	100.0	1,512	100.0	985	100	590	100.0	864	100.0	407	100.0	30,238	100.0

Table 22 - Housing Inventory Across the County - 2020

	Perry Twp.		Benni Tw	ngton /p.	Wood			trim vp.		cke vp.		y of erry		ge of rrice	Shiawa Cou	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1 Unit detached	1365	84.3	1057	93.5	1308	92.8	829	97.5	595	98.5	649	76.3	357	70.1	23042	83.0
Multi-Unit	14	0.8	5	0.4	9	0.6	0	0.0	3	0.5	202	23.7	7	1.2	3248	11.7
Mobile	241	14.9	69	6.1	93	6.6	21	2.5	6	1.0	0	0.0	146	28.7	1472	5.3
Total	1620	100.0	1131	100.0	1410	100.0	850	100.0	604	100.0	851	100.0	509	100.0	27762	100.0



Table 23 – Owner Occupied Housing Values - 2000

	Pei Tw	-	Bennington Twp.		Twp.			rim /p.	Locke	Twp.			_		Shiawassee County	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
< 50,000	26	3.3	14	2.0	24	2.8	11	3.2	9	3.5	32	5.9	13	6.8	1,114	54.8
50,000 - 99,999	234	29.7	185	26.9	199	23.1	85	25.1	77	30.4	326	60.3	113	58.9	7,674	40.6
100,000 - 149,999	357	45.4	243	35.3	252	29.3	167	55.2	65	25.7	165	30.5	62	32.3	4,662	3.5
150,000 - 199,999	137	17.4	153	22.2	133	15.4	52	15.3	55	21.7	14	2.6	2	1.0	1,638	0.8
200,000- 299,999	0	2.5	67	9.7	180	20.9	22	6.5	39	15.4	4	0.7	2	1.0	770	0.3
300,000+	13	1.7	26	3.8	73	8.5	2	0.6	8	3.7	0	0.0	0	0.0	183	0.1
Median \$	120	0,000	12	4,200	14	12,000	13	17,000	13	35,400	Ç	90,900	8	35,000	9	5,900
Total	787	100	688	100	861	100	339	100	253	100	546	100	192	100	16,041	100

Table 24 – Owner-Occupied Housing Values – 2020

	Perry T	wp.	Bennir Tw	_	Wood		Ant Tw		Locke	Twp.		ty of erry	Villa Mor		Shiawa Coun	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
< 50,000	202	15.1	38	3.5	70	5.9	15	1.9	8	1.4	15	2.8	96	22.9	1,695	7.9
50,000	164	12.3	171	15.9	85	7.1	98	12.4	27	4.7	174	32.5	134	32.1	5,623	26.3
99,999																
100,000	322	24.2	319	29.8	228	19.1	168	21.2	141	24.5	253	47.3	122	29.2	5,712	26.7
- 149,999																
150,000	286	21.4	206	19.2	274	23.0	243	30.6	138	24.0	58	10.8	64	15.3	3,877	18.2
199,999																
299,999	280	21.0	184	17.1	279	23.4	171	21.6	160	27.8	16	3.0	2	0.5	2,934	13.8
300- 499.000	49	3.7	142	13.2	172	14.5	76	9.6	69	11.9	19	3.6	0	0.0	1,159	5.4
500,000 and up	30	2.3	14	1.3	83	7.0	22	2.7	33	5.7	0	0.0	0	0.0	358	1.7
Median \$	145	,700	151,			3,700		8,200		92,900		3,800		500	127,5	
Total	1,333	100	1,074	100	1,191	100	793	100	576	100	535	100	418	100	21,358	100

Tables 23 and 24 illustrate the increase in the value of owner-occupied housing in various similar municipalities and the county as a whole between 2000 and 2020. The median value of this type of housing increases 21.4% in Perry Township whereas Antrim Township right next door increased 43.8% in median value. The main issue would seem to be the large increase in the number of homes valued at less than \$50,000 in the township. The county as a whole saw an increase in median value of 33.0%.



Table 25 - Housing Tenure - 2000

									-							
		erry wp.	Bennir Tw	_	Woodhull Twp.			trim vp.	Locke	Twp.	City of Perry		Village of Morrice		Shiawassee County	
Tenure	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Owner Occupied	812	87.1	1,304	83.0	1,105	83.8	791	86.0	476	88.6	555	70.8	278	79.9	19,321	74.8
Renter Occupied	65	7.0	210	13.4	164	12.4	103	11.2	48	8.9	193	24.6	38	10.9	5,543	21.5
Vacant	42	4.5	58	3.7	50	3.8	26	2.8	13	2.4	36	4.6	32	9.2	969	3.8

Table 26 - Housing Tenure - 2010

	Per Tw	•	Bennir Tw	•	Wood Tw			trim vp.	Locke	Twp.		y of rry	Villag Mor	,	Shiawa Cour	
Tenure	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Owner Occupied	1,326	79.2	1,116	89.1	1,340	86.0	725	84.2	574	85.4	547	60.6	290	71.8	21,281	70.2
Renter Occupied	245	14.6	62	5.0	127	8.2	72	8.4	56	8.3	276	30.6	77	19.0	6,200	20.4
Vacant	104	6.2	74	5.9	91	5.8	64	7.4	42	6.3	79	8.8	37	9.2	2,838	9.4

Table 27 - Housing Tenure - 2020

	Per Tw	•	Bennir Tw	٠	Wood Tw			trim vp.	Locke	Twp.		y of erry	Villag Mor	-	Shiawa Cour	
Tenure	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Owner Occupied	1333	82.3	1074	86.9	1191	75.4	793	91.9	576	89.2	535	61.6	418	78.1	21,358	70.6
Renter Occupied	222	13.7	55	4.4	219	13.9	57	6.6	28	4.3	316	36.4	91	17.0	6,404	21.2
Vacant	65	4.0	107	8.7	169	10.7	13	1.5	42	6.5	17	2.0	26	4.9	2,484	8.2

Tables 25-27 show a breakdown of housing tenure in the township and surrounding municipalities. It shows the townships have a higher percentage of owner-occupied dwelling units than the county as an average or the surrounding cities or villages. This is a normal characteristic for rural townships which tend to have fewer apartment buildings or older homes converted into apartments.

Future Housing Needs

Projecting future housing needs for a community would seem to be useful but actually doing it accurately has proven impossible. For this report, we will assume that the demand for the number and type of housing will remain similar to what it has been in the recent past.

PERRY TOWNSHIP EXISTING LAND USE

An important part of any plan for the future development of a community's land use is a study of its existing land use. It is necessary to know what the existing land use configurations are and what problems and opportunities exist as a result of those existing patterns in order to adequately plan future patterns.

One disadvantage of a conventional land use study is that it tends to be somewhat static. It shows what the current pattern of land use is but does not reveal the dynamics of that change in land use. In order to show the land use trends, a study must look at land use in an area over time.

Major changes in the land use in the Township since 1992 include the creation of the Morrice Sewer Lagoons west of the original boundary of the village on the south side of Britton Road to Grubb Creek. This property was still part of the Township even after the property was purchased by the Village in the late 1980s in order to complete the project. This property and the one on the northwest corner of Lansing and Morrice Roads became part of a 425 Agreement in 2005. Another change is the detachment of several properties from the city of Perry along Beard Road west of M-52. These properties were returned to the Township's tax rolls.

Other than these two changes, there has been very little change to the pattern of farms, commercial areas and residential areas. The detachments, annexations and 425 Agreement areas can be seen on Map 2, p. 47.

AGRICULTURE

The *Census of Agriculture* is completed every five years. The most recent one was done in 2017. That Census shows there were 177 farms in the Perry area zip code of 48872 which includes all of Perry Township, the City of Perry, part of the Village of Morrice and parts of Antrim, Conway and Locke Townships. The following was defined as a farm in the 2017 *Census of Agriculture*:

.... for 2017, a farm was defined to include all land on which agricultural operations were conducted at any time in the census year under the day-to-day control of an individual management, and from which \$1,000 or more of agricultural products were sold during the census year. Controlmay have been exercised through ownership or management, or through a lease, rental, or cropping arrangement. Places having less than the minimum \$1,000 sales in the census year were also counted as farms if they could normally be expected to produce agricultural products in sufficient quantity to meet the requirements of the definition."

(Page 25, 2017 Census of Agriculture)

Of those 177 farms, 47 listed farming as their primary occupation.

Other aspects of Perry Township Agriculture:

- 1. Perry Township has a total of about 18500 acres of which 11,744 are zoned A-1 (Agricultural Production) or A-2 (Agricultural/Residential)...
- 2. Perry Township farmer participation in the Farmland Open Space Preservation Act (Public Act116) included about 2714 acres of which 1912 acres are under active agreements and 802 acres are under a PA 116 lien.

Township agricultural data is not published or easy to collect. Most farm statistics are published by County and the following report briefly defines agriculture in Shiawassee County.

In the 2017 *Census of Agriculture*, there were a total of 972 farms averaging 217 acres with a median size of 47 acres in Shiawassee County.

A total of 175,854 acres of cropland were harvested in 2017 with a gross income over \$97 million.

Crop and livestock production is largely located on the more productive Conover and Brookston clay loam soils wherever they are found in the county. Production of crops has varied over the years according to the USDA and the Michigan Department of Agriculture statistics in approximate planted acres from 1975-2021 were as follows:

Table 28 – Shiawassee County Crop Production Acres 1975 – 2021

Стор	1975	1982	1987	1992	1997	2002	2017	2021	Low (Year)	High (Year)
Corn	51,000	49,343	41,765	48,606	45,943	50,049	48,751	48,900	33,200 (1969)	54,300 (1960)
Wheat	32,000	13,526	10,916	26,566	21,835	22,406	17,155	23,400	10,916 (1987)	42,300 (1967)
Oats	10,300					1,991	510		0 (several)	20,800 (1959)
Soybeans	45,000	63,900	68,441	77,544	81,564	90,209	94,305	89,300	13,500 (1959)	94,305 (2017)
Dry Beans	9,500	2,553	3,256	616	145	189	1,593		145 (1997)	24,900 (1959)
Hay	23,300	23,317	24,254	20,096	16,172	15,556	12,743		15,556 (2002)	24,254 (1987)

A review of county trends in crop production would indicate a decline of 3.3% total acres in the county's major crops being harvested between the 2002 and 2017 Ag Censuses. Oats and dry beans continue their significant declines. The amount of hay acreage is half of what it was in 1975. Soybean acreage, however, increased by 98% between 1975 and 2021.

Table 29 - Shiawassee County Livestock 1965 - 2017

Livestock	1965	1975	1982	1987	1992	1997	2002	2017	Low (Year)	High (Year)
All cattle and calves	33,200	28,000	24,463	20,691	17,456	13,691	11,926	18,570	11,926 (2002)	33,200 (1965)
Beef Cows	2.200(70)	3,000	2,169	1,617	1,545	1,105	1,445	1,252	1,105 (1997)	3,000 (1975)
Feed Cattle sold (>69)		3,100	8,796	8,485	7,151	5,287	4,452	7,221	3,100 (1975)	8,796 (1982)
Milk Cows	13,500	9,000	8,325	7,298	5,933	4,555	3,816	6,711	3,816 (2002)	13,500 (1965)
Hogs and Pigs	10,300	9,000	13,039	14,626	11,545	2,792	2,674	316	316 (2017)	14,926 (1987)
Sheep	8,000	3,000	1,841	2,055	2,356	1,041	2,113	1,085	1,041 (1997)	8,000 (1965)
Hen and Pullets	132,400	180,000	35,861	32,128	3,647	1,640	3,313	2,629	1,640 (1997)	205,500 (1970)

The numbers of all types of livestock continue their decline in the county with hogs being in the greatest decline as the consolidation of that industry into very large operations mostly in other states is virtually complete across the nation. It should be noted that there is no longer a single dairy farm in the entire township.

The 2017 U.S. Census of Agriculture indicates farms between 500 and 1,000 acres in size increased in the county from 45 in 1969 to 58 in number. Those exceeding 1,000 acres from 5 in 1969 to 48 in 2017. This source also indicates the number of farms showing sales over \$50,000 increased from 60 in 1969 to 234 in 2017.

This trend to fewer and larger farms is expected to continue at a similar or more rapid rate.

The table below summarizes the livestock farm make-up for the County in 2017:

Table 30 - Shiawassee County Livestock Farms 2017

27	Dairy
195	Beef Feeding
29	Swine
120	Beef Cow-Calf
54	Sheep
145	Laying Hens

The final aspect to the agricultural inventory is a collection of the reasons that have been mentioned for the loss of agricultural land. The chart on the next page is an efficient way to list the causes. Each problem is placed in no special order; some are so intertwined; it is difficult to isolate the factors. Interpretations by the reader may:

- 1. Combine unforeseen relationships
- 2. Add clarity or more definition to the brief phrases
- 3. Add or subtract additional aspects considered important or unimportant to the Shiawassee County/Perry Township setting.

Types Of Agricultural Land

- A. Important Agricultural land:
 - 1. Land having soils with demonstrated commercial productivity; and
 - 2. Having continued capital investment to sustain productive farming; and
 - 3. Not affected by existing or planned urban development; and
 - 4. Having no urban investments planned for it; and
 - 5. Being in large enough parcel sizes for economical farm units, and in ownership that will be interested in perpetuating the agricultural use.
- B. Short-term agricultural land:
 - 1. Land having soils with demonstrated agricultural commercial productivity; and
 - 2. Having adequate capital investment to maintain productive farming; and
 - 3. That is affected by existing or planned urban development, or
 - 4. That has urban investments planned for it, and/or
 - 5. Is in fragmented, uneconomical parcels, or in ownership that will not promote the continued agricultural use of land.
- C. Marginal agricultural land: Land that has not demonstrated productive agricultural use.
- D. Unique agricultural land: Lands that have been given intense management for uses such as orchards, commercial nurseries, and peat land farms.

Table 31 - Factors that People Say Cause the Conversion of Agricultural Land to Other Uses

1	History of Public Act 116 - helpful but still sporadic in its capability for protection of critical masses of farmland.
2	Inability of agricultural land to compete with other land uses in the free market.
3	Current agricultural zoning districts as only holding areas for urban expansion.
4	The high cost of subdividing land; prevents more efficient housing densities.
5	High taxes on rural farmland road frontage. Pressure to sell that land for the reason it is taxed so high - homes.
6	Federal and State funded projects into important agricultural areas.
7	Clash of farm/city folks - crop destruction - farm theft and traffic hazards to machinery.
8	Effect of urban sprawl - cropland is twice as likely as non-cropland to be urbanized.
9	Loss of farmland from the conclusion of family involvement. Attempt to sell for highest use, not necessarily for farmland.
10	In the past, intensive farming on lesser acreage. Soon to be - less fertilizer and environmental controls; need for more land to maintain production.
11	Increased community service costs to roadside rural homes - increase in taxes to all.
12	Lansing commuters moving into the Perry Area for country estate development and least cost land purchase in this "fringe" area.
13	Effect of Plat law - causes 10-acre parcels, i.e., fragmentation of farmable parcels.
14	Assessment of land on its potential, not the current agricultural use.
15	Nuisance complaints from rural country estates against normal farming practices.
16	Installation of artificial leach beds in otherwise prohibitive clay soil areas.
17	Effects of the high rate of rural residential growth.

The Township recognizes that farmland preservation is important for the following reasons:

- A. Preserving land that is a vital component to one of the key industries in the county and the state.
- B. Discouraging urban sprawl and the negative impact on the rural character of a community and increased costs for public infrastructure that results from sprawl.
- C. Reducing conflicts between neighbors caused by an influx of urban residences into areas with active farm operations.
- D. Protecting the groundwater recharge characteristics on farmland

INVENTORY OF EXISTING UTILITIES AND COMMUNITY FACILITIES

Land use directly impacts municipal services and is impacted by it. Municipal services such as water and sewer often permit more intensive development in an area of land than without it. This development can include types of commercial, industrial and high-density residential uses. A common land use planning policy is to not "waste" areas serviced, or planned to be serviced by water and/or sewer on low density or rural residential areas but to reserve at least a portion of that area for the commercial, industrial and high-density residential uses that require them.

Just as the availability of municipal services affects the distribution of future land uses, existing land usesoften effect the provision and cost of municipal services. Concentration of development into one area tends to reduce the costs of providing municipal services. Water and sewer systems have shorter lines, reducing construction and right-of-way acquisition costs. "Sprawl" development often requires the development of satellite stations for protective services such as fire and ambulance in order to service outlying areas of development or reduced service to those areas from existing stations, while concentrated development permits efficient use of existing facilities.

Because of this, planning requires consideration of existing and proposed municipal facilities in determining appropriate location of land uses.

Solid Waste Plan

Perry Township does not currently provide trash collection services to township residents or businesses. Each household and business contracts separately with a waste hauler to provide collection, or disposes of it by hauling it to the Morrice Transfer Station, to one of the landfills in the region, burning, or a combination of the above. The Shiawassee County Solid Waste Management Plan encourages local townships to enter into municipal contracts with private haulers to reduce collection costs to the township residents and encourage proper disposal of their solid waste. To date, none of the townships in the county, including Perry Township, have established municipal contracts. The Village of Morrice and the City of Perry provide curb-side pickup of waste to residents.

In comparison with other parts of the county, Perry Township residents are fortunate to have a convenient solid waste transfer station available for their use. This facility is owned and operated by the Village of Morrice, which allows non-resident use on a fee basis. The transfer station no longer offers recycling in a program that was funded jointly by the City of Perry, Village of Morrice and Perry Township due to improper use of the recycling bins. Currently the best option for recycling in the southern part of the county is the Greater Laingsburg Recycling facility in Sciota Township.

Water Systems

Neither the village nor the township provides municipal water. Within the village of Morrice, Morrice Meadows (the modular home community) has a water system for its residents. The City of Perry does have municipal water, and has had since 1913. The mobile home park in the Township, Countryside Village, does not.

All of the water systems in the township, public and private, depend upon groundwater. Availability of adequate groundwater supplies in the township appear to be questionable for major urbanization. An extensive search by the City of Perry in the 1980's for an aquifer to tap into for a third municipal well ended in a decision to locate the third well near the existing well. This is an experience shared by several communities in the county. The City of Durand, City of Corunna and Village of Vernon all conducted extensive searches for an adequate aquifer for a municipal water supply. This scarcity of available water supplies may pose a limiting factor in future development in the township of certain high water consumption land uses and definitely suggests that adequacy of a proven groundwater supply be a factor in consideration of rezoning requests and site plans.

In November 2003, Perry Township received a report from the engineering firm, Wade Trim, on the feasibility of a municipal water system. This plan was updated in September 2005 with information on a potential well field and revisions to the distribution plan. The reports identified a system which could be integrated into the City of Perry's current infrastructure and/or extended to the Village of Morrice, or work as a stand-alone system.

In 2015, a study funded by the Shiawassee Economic Development Program (SEDP) and the Cook Foundation was completed identifying options for providing water to the Taylor property in the northeast corner of the I- 69/M-52 interchange. Neither the 2005 nor 2015 studies have been implemented, nor is there any current plan to do so.

Currently, the Township is working with the City of Perry to provide water to the Township Industrial Park by extending the city's water system. They have formed a Local Development Finance Authority (LDFA) between M-52 and the east boundary of the Township Industrial Park along Lansing Road from the Canadian National Railroad north to I-69. The LDFA captures incremental tax increases and this fund can then be used to extend the waterline. The LDFA also hopes to obtain matching grants for the project.

The impact of the LDFA water system would be to increase the range of commercial and industrial uses and that could develop in those areas served by the system provided.

Sanitary Sewer Systems

The township currently provides sewer service to portions of the township from lines extending into the township from the Village of Morrice's system west along Britton Road and north on Bennet Drive into the township's Downtown Development Authority (DDA) district as shown in map 5.

The Village of Morrice system was developed with assistance from an EPA grant. The system is an unconventional design, using individual septic tanks for each unit and small diameter pressurized lines to pump the effluent from the tanks to the sewage lagoons.

The village lagoon system, located on Britton Road between Morrice Road and M-52, has an annual treatment capacity of 42 million gallons. The village estimates current usage at 29.2 million gallons per year; or 69.5% of existing capacity. Current surplus capacity would be capable of providing sanitary service to approximately 175 homes. The number of industrial or commercial facilities that could be serviced by the excess capacity is dependent on the type of business or industrial facility and its waste water generation characteristics.

The City of Perry provides a sanitary sewer system to its residents and businesses. The system's treatmentfacility is a lagoon facility located on the south side of Bath Road. Information on the systems current excess capacity is not available. The Sanitary Sewer map is available on the p.46.

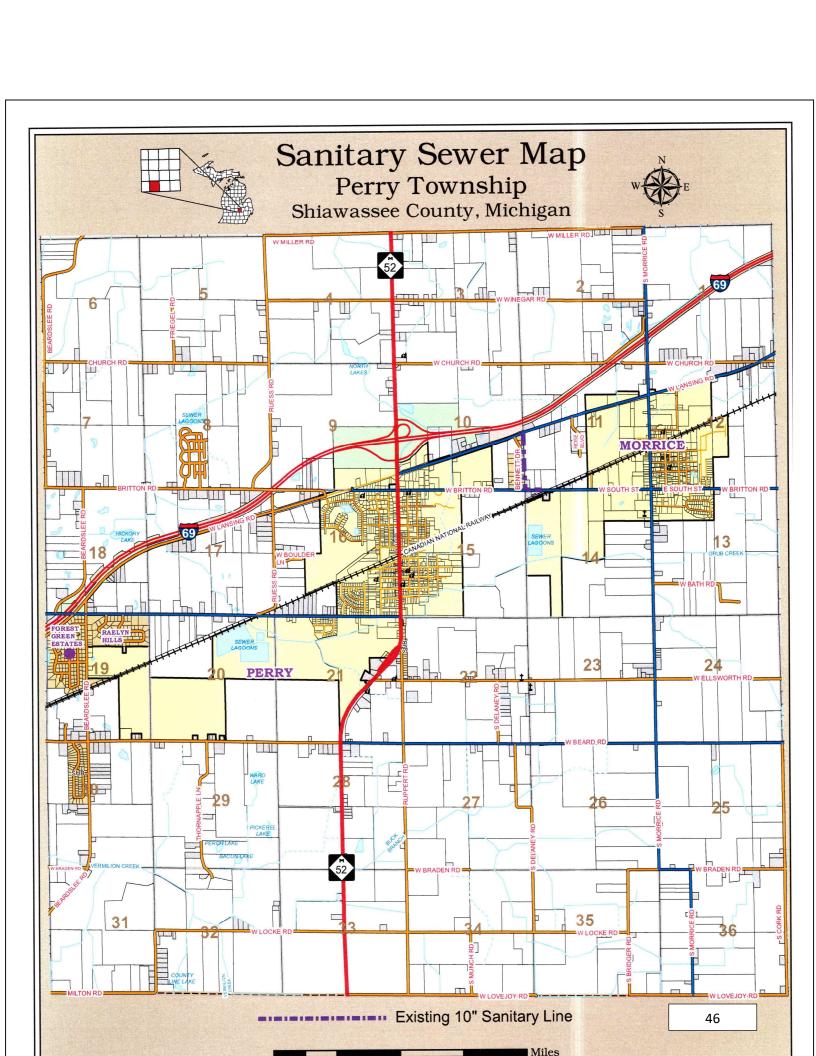
Annexation/425 Agreements

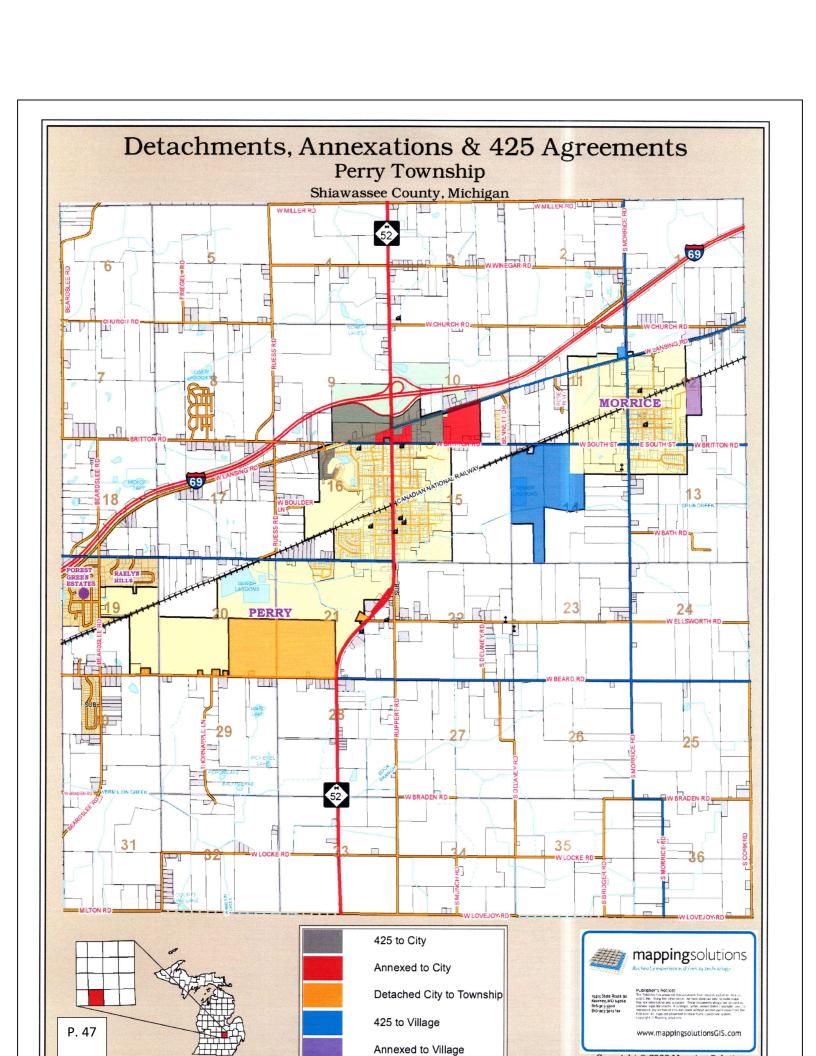
One way for the utilities to be extended into those portions of the Township without service is by annexation of that property by the City of Perry or the Village of Morrice, with those municipalities then providing the utilities. While annexation by the Village of Morrice has no financial impact on the Township because property within a village is also counted towards the tax base of the township, property annexed into a city is lost to the township. In those instances, where the township determines it is appropriate for land to be annexed into the City of Perry, the township should consider entering into a "425" agreement with the city, which would allow the city and township to share tax base over a period of up to 50 years with the option of a 50-year renewal.

An additional advantage to the Township of a 425 agreement is that land separated by an existing 425 agreement and a city or village cannot be annexed by that city or village.

In the past 20 years, there have been no annexations of township land. The Township, however, has chosen the option of 425 Agreements for the parcels at the intersection of Lansing Road and M-52 in the north, east and west directions; at the intersection of Lansing Road and Morrice Road on the northwest corner and the Morrice sewer lagoons as previously mentioned.

While there have been no annexations, there have been several detachments by property owners who were in the city of Perry on Beard Road west of M-52 who chose to have their property be returned to the Township from the City. As referenced earlier in the Plan, a map showing the 425 Agreements can be found on p. 47.





Fire Department/Ambulance Service

In August 2004, Antrim Township, the Village of Morrice, the City of Perry and Perry Township incorporated to form SSESA (Southwest Shiawassee Emergency Services Alliance) to provide both fire and ambulance service. A portion of Antrim Township is served by SSESA as well as a portion of Bennington Township and a small area of Shiawassee Township. The department consists of well-trained volunteer firefighters, and full-time ambulance crews.

The department has two stations, one in the City of Perry and the other in the Village of Morrice. SSESA has Medical First Responder, Basic Life Support and Advanced Life Support Service. Burns and Vernon Townships, and Durand contract with SSESA for ambulance service and ambulances are based in Durand and Vernon Township. The tables below show the equipment available at each station:

Table 32 - Station #1 - City of Perry

Equipment	Quantity
Engine 1 / 1750 gpm pump / 1000-gallon tank - Pumper	1
Tanker 1 / 500 gpm / 1800-gallon tank - Tanker	1
Engine3/ 1750 gpm pump / 1000-gallon tank - Pumper	1
Tower 1 / 85' tower w/platform / 2000 gpm / 500-gallon tank	1
Grass 1 / Pick-up w/tank and pump	1
Alpha 201 / Ambulance	1
Rescue 1/Explorer	1
Chief 1 / Tahoe	1

Table 33 - Station #2 - Village of Morrice

Equipment	Quantity
Engine 2 / 1250 gpm pump / 1000-gallon tank Pumper (current)	1
Engine 2 / 2000 gpm pump / 1000-gallon tank Pumper (new order)	1
Tanker 2 / 1250 gpm / 1800-gallon tank - Tanker	1
Grass 2 / Pick-up w/tank and pump	1
Squad 2 / Portable air fill / Special equipment	1
Rescue 212 / Tahoe	1

Table 34 - Station #3 - Durand

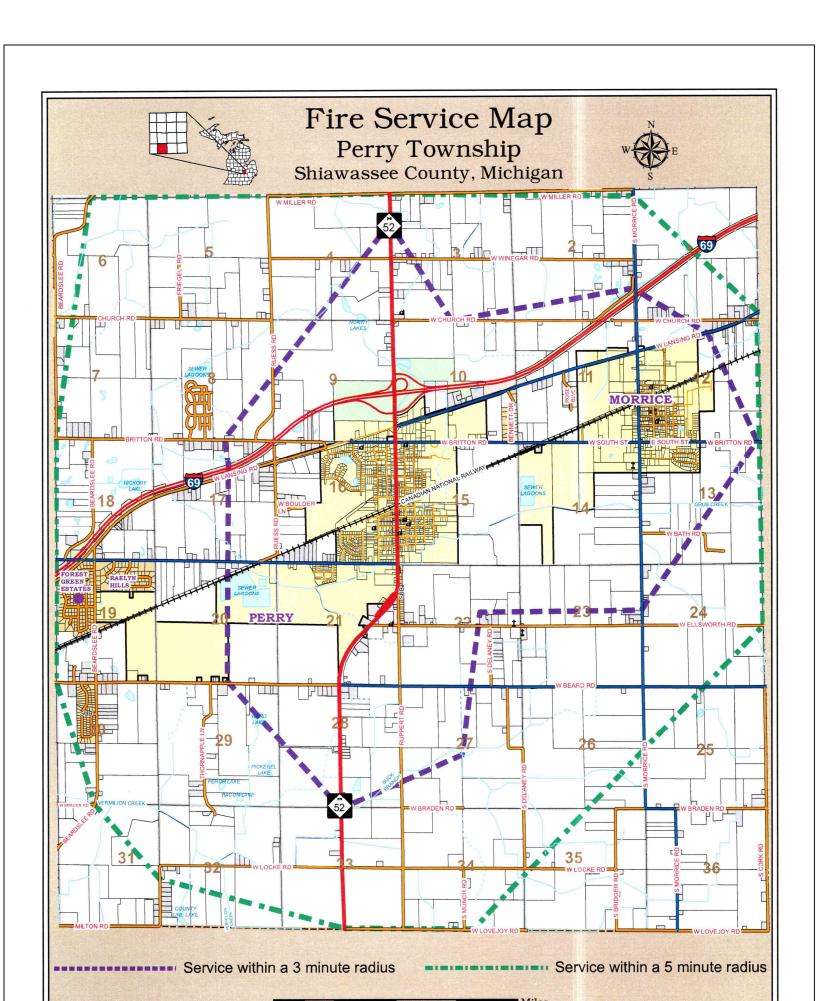
Equipment	Quantity
Alpha 203/Ambulance	1

Table 35 - Station #4 - Vernon Township

Equipment	Quantity
Alpha 204 / Ambulance	1

Currently SSESA is considering building a new fire and ambulance barn to replace the ones in the City of Perry and the Village of Morrice.

Proximity to developed areas is important for the fire and ambulance department because of its responsetime. Map 3 shows the parts of the township estimated to be within 5 minutes of either station.



TRANSPORTATION

A community's transportation system is important to understand in determining the appropriate land usepattern for the area. Transportation systems provide constraints and opportunities for development of adjacent land. In particular, a community's road system has certain capabilities as far as the type and quantity of traffic that can be accommodated. Knowing these limitations will help the township determine appropriate land uses.

Level of Service Analysis

Perry Township's Road system was analyzed in the 2021 Pavement Surface and Evaluation Rating (PASER) Survey that the Michigan Infrastructure Council performed. All state highways, county primary roads, and selected secondary roads were inventoried based on their width, surface type, shoulder type, general condition, capacity (or level of service), and road classification. A summary of the information is provided in Map 4 on page 53.

The PASER study rates all the paved roads in the township into three categories: Good, Fair and Poor. The gravel roads are in gray and are not rated.

This report shows that very few miles of the paved roads in the township are rated Good. These areas include parts of I-69 from Morrice east to the Township line, a couple small portions of Britton Road, Bennett Drive, and around the interchange between I-69 and M-52.

M-52, the majority of Britton and Beard Roads are considered Fair. Virtually all of Morrice Rd and Lansing Rd are considered Poor.

All-Weather Roads

Paved roads in Shiawassee County are classified based on their type of construction. Roads built to a certain standard are called all-weather roads. They are designed to hold up to heavy truck traffic even during the spring thaw when roads that are not all-weather can be severely damaged by heavy vehicles. For that reason, the non-all-weather roads have weight restrictions placed on them during the spring thaw that all-weather roads do not. Because of the restrictions, most industrial and some commercial uses that are dependent on regular truck traffic for business or for supplies should be located on all-weather roads. Map 4 shows that the all-weather roads in Perry Township are M-52, I-69, and Lansing Highway including a recent upgrade of a segment of Britton Road completed in 1997. All-weather roads are also referred to as Class A roads.

The All-Weather Road map is on Page 54.

Private Roads

The majority of residential development in the township over the past 20 years has been individual lots fronting on existing County roads. While this development pattern is the easiest for the developer, it often results in "land locking" the property behind it. As the pace of development increases, developers look at creating roads that access the interior of parcels. This often results in the development of private roads. Private roads are permitted under the Shiawassee County Zoning Ordinance. The roads are required to meet most but not all of the Shiawassee County Road Commission standards if it is accessing 6 or fewer lots. This provides an incentive to developers to build private roads rather than public (county) roads due to lowercosts.

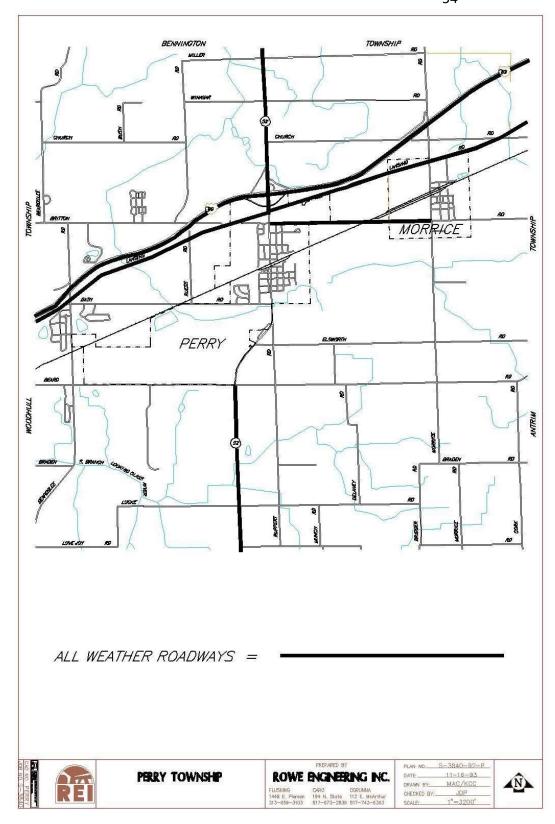
The township has the opportunity to review the proposed roads during site plan review, but the standards a private road is required to meet are those in the County Zoning Ordinance and the Road Commission's published standards. These standards include requirements for a maintenance agreement, which the Township feels are vital to preventing the deterioration of private roads into an impassable condition.

Mass Transit

Perry Township residents have access to on call transit through the Shiawassee Area Transportation Authority based in Owosso at the cost of the resident.

2021 PASER Survey Perry Township All Federal Aid Roads GLS Region V Planning & **Development Commission** 0.5 0.25 0.5 Rating 8-10 (Good, 13%, 9.8 lane miles) Rating 5-7 (Fair, 57%, 42.93 lane miles) Rating 1-4 (Poor, 30%, 22.58 lane miles) 75 23 15 Roads Under State Jurisdiction Local Road Miller PERRY TWP Winegar Beardslee Friegel Ruess Church Church Church **Britton** Britton MORRICE 69 Ruess Bath Bath Ellsworth Delane Morrice PERRY Beardslee Rupper Thornapple Delaney Braden Braden Bridger Morrice Locke P. 53 Munch Lovejoy

Map 5 - All Weather Roadways Map



ENVIRONMENTAL CONCERNS

Geology

A description of the physical character of the Township begins an understanding of its nature and adaptability to various land uses.

Perry Township is an area of glacially deposited earth materials and as such, the soil types and their potential uses quickly change. The surface landforms represent two ways in which the glacier behaved on the Township landscape.

The first landform is called a moraine. This is a triangle-shaped area with a 3-1/2-mile base from Section 6 south to Section 30. The form narrows easterly toward Morrice where it reduces to a mile in width. It is arolling, hillier area of different textures of earth materials (sands, clays, silts, and gravel) that were deposited at the front of a glacier. Interstate 69 follows the axis of this east-west landform, which is called the Ionia Moraine.

Elsewhere in the Township the land surface was formed from the glacial meltwaters laying down earth materials in sheets. This level is gently rolling. The earth materials are usually finer, clay-textured particles.

In several locations of the ground moraine and moraine local depressions are swamps or bogs.

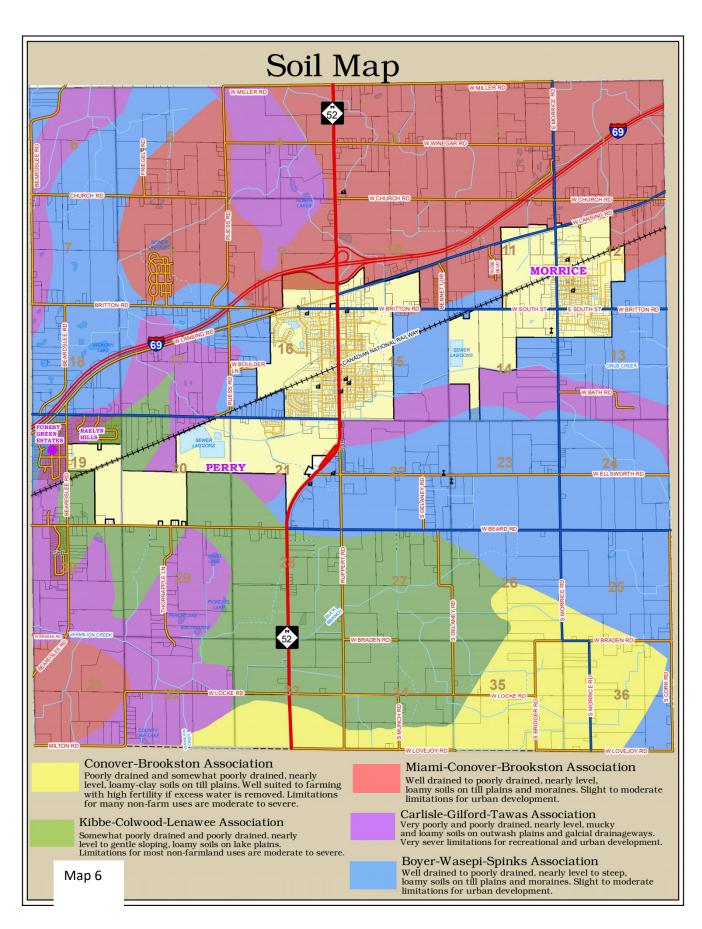
All the glacial landforms of the Township have been modified by stream, wind and weathering to create the detailed topography of the present-day landscape. To the casual observer, the township north of I-69 (and Lansing Rd) is hillier than the area south of these two landmarks.

Soils

The 1970 County Water and Sewer Plan generally describes the Township soil base:

"Perry Township has large areas of well drained sandy soils with slight use limitations in the areas along and south of highway M-78 (Lansing Road). The southern third of the Township has primarily poorly drained soils with severe use limitations. There are small areas of well drained and poorly drained soils in an irregular pattern throughout the area north of highway M-78. Most of the soils in this Township will not support extensive use of private sanitation system." (pp. 77-78)

The soil map developed by Michigan State University in the mid-1970's gives the general names and locations of the soils in the Township with a description of the textural and drainage characteristics. The map describes the limitations for two important land uses: 1) agricultural and 2) residential. The agricultural map shows a solid agricultural soil base for a large area in the south central and southeastern areas of the Township. Another area



in the northeast around Morrice is a mass of prime farmland. The various soils found in the Township can be found on Map 6, Page 56.

Ground Water

There is no public water supply system in Perry Township. Commercial and residential water users obtain their water from privately installed and maintained wells. The township is investigating the potential of apublic water supply for portions of the township. The Planning Commission and township citizens can avoid expensive water supply systems by becoming attentive to the problems associated with indiscriminate tapping of the ground water supply and forms of surface water pollution in probably aquifer recharge areas. For this master plan, a "primer" on ground water supply begins an education for the citizen with these topics:

- 1. Nature of ground water supply.
- 2. Cross section of the township ground water table.
- 3. Recent history and capabilities of wells drilled in Perry Township.

Ground Water Supply

The geology of an area will cause one township to differ from another in ground water characteristics. It is more significant to note that ground water conditions vary from one neighborhood to another. A particular sandstone formation may provide good water in adequate amounts in one area but not so for the same sandstone aquifer in another area nearby. There is a general description of ground water availability for the County and township. It may be said that of approximately 29.5 inches of average annual precipitation, about 6.0 inches may find its way into the ground and ultimately to some stream or other body of surface water. About 17.0 inches will be returned to the atmosphere by evaporation and evapotranspiration before ever reaching a major body of water, and about 6.5 inches will flow directly to streams, rivers or other water bodies. It should be realized that a ground water addition of 6 inches per year cannot be uniformly applied to all land form types. It is common that ground water addition is somewhat higher in areas of well-developed glacial outwash and lower in the moraines and till plains.

An estimate of ground water additions at 6 inches per year provides a good amount of replenishment to aquifers. Six inches of water over only one square mile of land returns about 100 million gallons of water to the ground water reservoir (annually). Spread over the township, this amounts to 3.6 billion gallons of water per year. The percentage of this water which may be economically withdrawn and used will vary with geologic conditions.

Wells in Perry Township

The Michigan Department of Environment, Great Lakes and Energy (EGLE) maintains the records of all wells dug within the state. It is of interest to note where ground water is sought--in either shallow sands and gravel or deeper sandstone and shale from the bedrock known as the Saginaw Formation. The table on the following page is a sampling of wells throughout the Township that were dug between 2005-2022. The depth of the well is

indicated along with the nature of the earth material at the bottom of the well (called an aquifer) and the gallons per minute capacity of the domestic well. The Health Department recommends 10 gallons per minute for a well serving a single-family home.

Table 37 - Domestic Water Use Wells in Perry Township Drilled from 2005-2022

Section	Well Depth (Feet)	Nature of Aquifer	Gallons/Minute
2	43	Sandstone	9
2	38	Gravel	20
3	118	Shale	10
3	46	Sandstone	30
3	47	Sand & Gravel	30
4	200	Sandstone	5
7	200	Shale & Sandstone	15
9	156	Sandstone & Shale	25
10	160	Shale & Sandstone	8
10	100	Gravel, Clay & Sandstone	13
10	155	Clay, Shale & Sandstone	35
10	115	Clay, Shale & Sandstone	15
10	240	Black Shale	4
11	60	Sand & Gravel	30
		Gravel, Clay &	
11	80	Sandstone	10
11	300	Shale	3
11	170	Sandstone	10
12	120	Sandstone & Shale	50
13	125	Clay, Shale & Sandstone	40
13	100	Gravel, Sandstone & Shale	60
13	125	Sandstone & Shale	15
13	95	Sandstone & Shale	25
13	40	Gravel	40
13	61	Gravel	25
13	120	Shale	13
14	45	Gravel	8
19	240	Sandstone	50
19	260	Sandstone & Shale	35
21	58	Clay, Sandstone & Gravel	15
22	75	Sand, Gravel & Clay	30
22	65	Sand & Gravel	20
22	220	Sandstone	150
23	40	Clay & Sandstone	20

23	120	Sandstone	65
25	44	Gravel & Sandstone	50
27	50	Sand	25
33	180	Sandstone	30

There is no prevailing trend in aquifer selection by the well diggers. The surface unconsolidated clays with slow percolation rates may have caused the well diggers to seek the deeper bedrock formation for a water supply. In other cases, shallow sand and gravel wells demonstrated their adequacy for private water supply. Still another factor is that rural subdivision development on the west side of the Township has caused wells there to be drilled deeper to provide isolation from surface septic systems on sandy, porous ground.

This elaboration of ground water conditions is intended to provide Perry Township Planning Commissioners and interested citizens with an understanding of its source of water supply as it may relate to a planning framework. Protection of ground water is a decision to protect township resources in the same way that soils are conserved and surface waters are kept clean.

FUTURE LAND USE AREAS

The future land use areas become designated places on the map only as a result of every aspect of this Plan. The Inventory and Goals and Policies, combine to establish a map that shows the township's interpretation of the favored land use areas in the future. The future land use map has a legend that labels the categories on the map, but the land use areas require more background to make their character description complete.

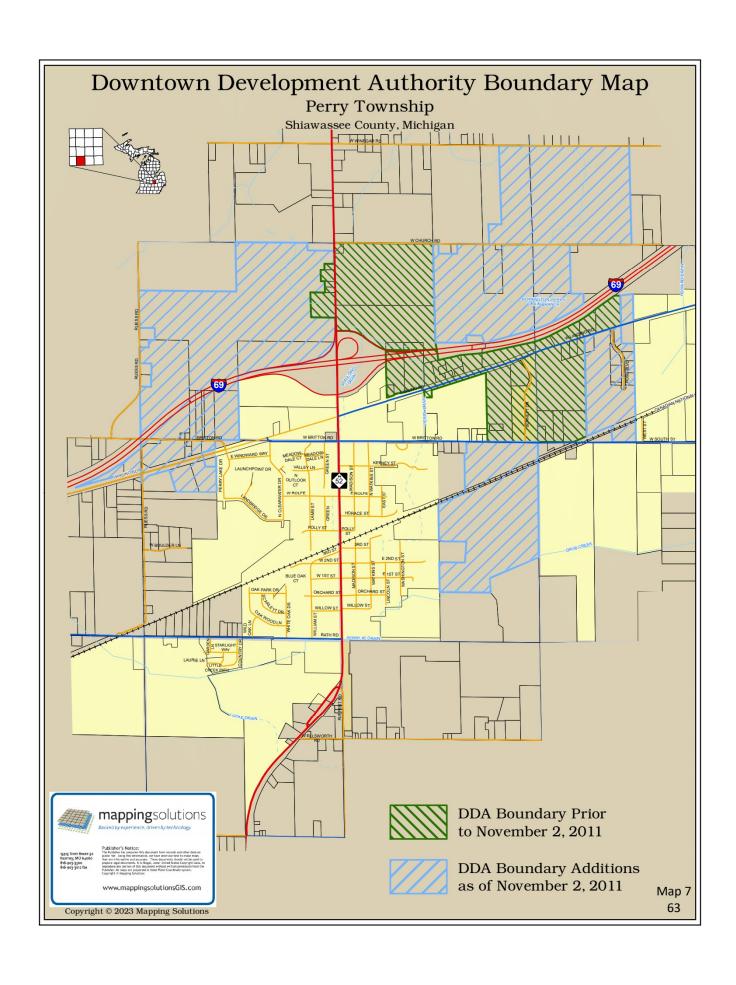
- 1. Important agricultural areas
- 2. Agricultural/rural residential areas
- 3. Low density residential areas
- 4. Mixed Use
- 5. Mobile home park/mobile home subdivision areas
- 6. Commercial areas
- 7. Industrial-Commercial areas
- 8. Wetland areas
- 1. IMPORTANT AGRICULTURAL AREAS They represent areas that: 1) consist of a concentration of prime agricultural soils, 2) where farming is currently the predominant land use, 3) that are adjacent to prime farmland areas in Locke Township to the south and 4) are not within areas proposed for extension of municipal water or sewer. These prime farmland areas are important to the economy of the farmers and the community. These areas are currently zoned A-1, which under the Shiawassee County Zoning Ordinance limit non-farm residences to one per 40 acres, and this settlement pattern would result invery low densities, in a way that would not weaken the strength of the efficient, productive farming that takes place in this region. In addition, these areas would be available for participation in the state's Purchase of Development Right's program (PA 116) through the county.
- 2. AGRICULTURAL/RURAL RESIDENTIAL AREAS Rural home development is common to farmscapes everywhere in Perry Township. This land use area recognizes development pressure for residential lots, yet discourages densities that would require expensive extension of urban type services. Agriculture is the predominant land use now and is expected to remain significant throughout the planning period. Farming is important in these areas to the point that impacts of proposed land use changes should be planned with minimal effects on nearby farm activity.
- 3. .LOW DENSITY RESIDENTIAL AREAS These areas are existing and proposed locations for subdivision. Other sites near urban places are based on locational advantage, good transportation, and optimal soil conditions. Planned unit developments or cluster housing is encouraged.

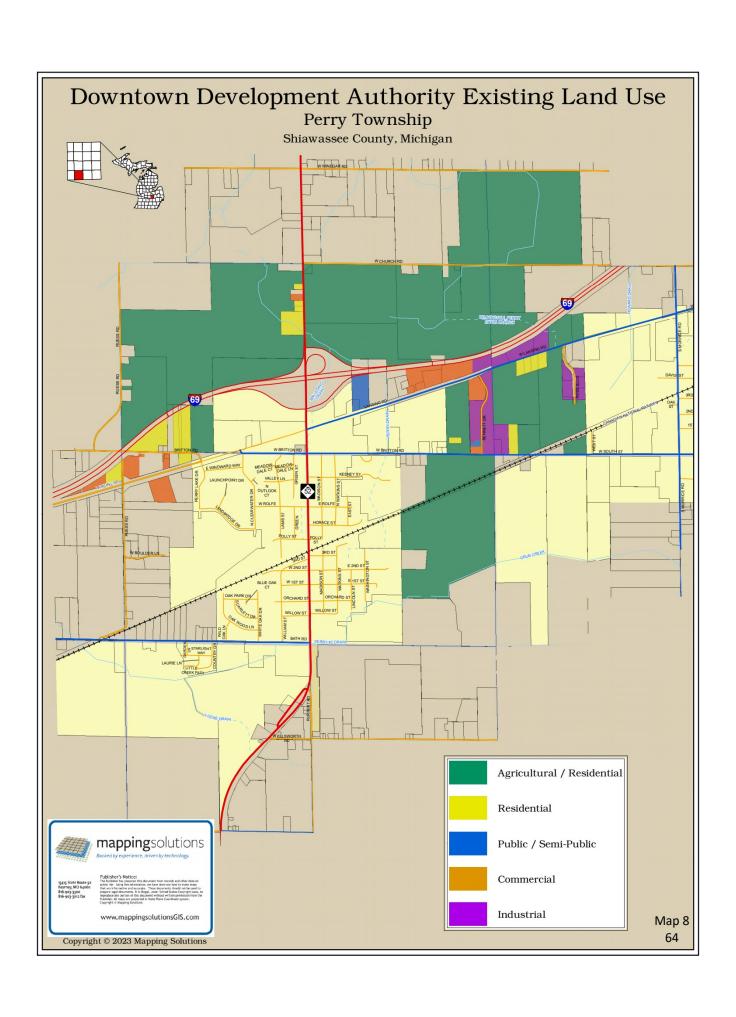
- 4. Mixed Use. Several areas in the Township currently have a mixed use. These areas have a mixture of Agricultural/residential and commercial uses. Many are adjacent to either the City of Perry or the Village of Morrice and are contiguous to a major thoroughfare. Since the land use in these areas is already de facto mixed, the Future Land Use Map recognizes that a mixed use will most likely continue for several decades. Also designated for Mixed Use is that area of the Township included in the Township's DDA boundary additions of 2011. Even though the vast majority of this area is still agricultural/residential, the Map recognizes that it is the Township's intent to develop this area into other uses as demand occurs provided the services necessary can be made available. See the discussion below regarding Industrial-Commercial Areas.
- 5. MOBILE HOME PARK/MOBILE HOME SUBDIVISION The existing mobile home park is identified alongwith an area north of the current development that is provided for future expansion.
- 6. COMMERCIAL Land already developed is recognized where commercial activity is concentrated. Some convenience intersections are recognized. Some existing spot commercial activities are included. Vacant areas have been mapped and include areas that have optimal locations for development.
- 7. INDUSTRIAL-COMMERCIAL AREAS The area between Britton Road and I-69 between the City of Perry and the Village of Morrice and the area bounded on Ruess Rd on the west, Church Road on the north, Morrice Road on the east and I-69 on the south is identified for a combination of commercial and industrial land uses which would be expected to develop with close attention paid to each site development. This would be to preserve the vitality of the enterprises with respect to the effect they may have on each other. The overall area could develop into a well-defined zone of activity without deterioration and blight common to poorly organized masses of commercial/industrial property development elsewhere.

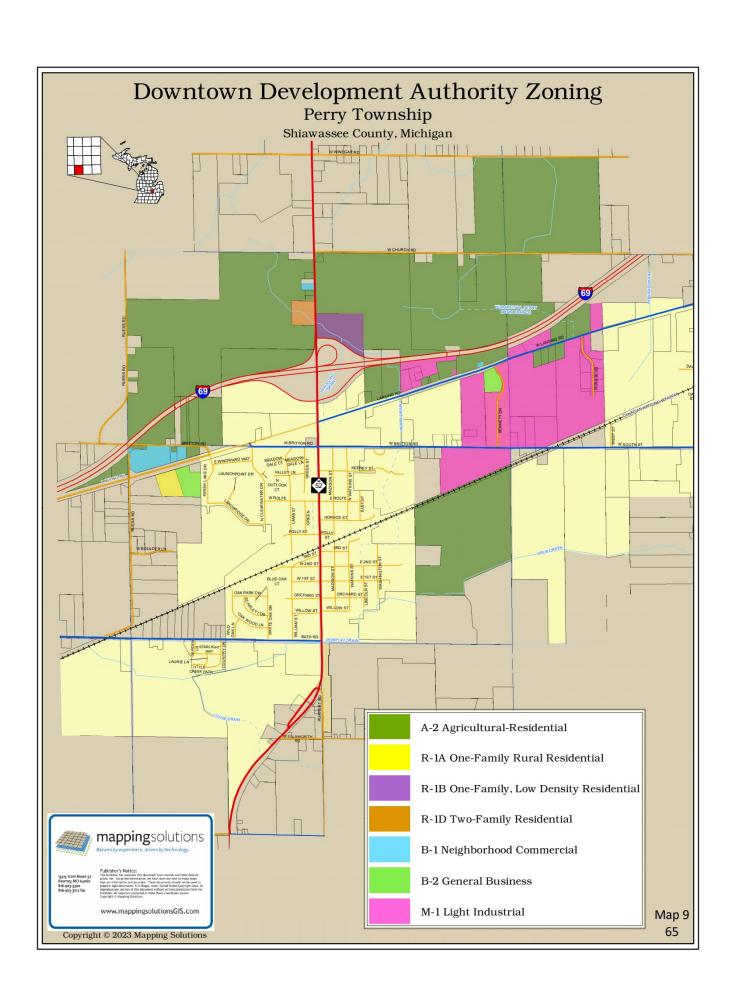
Commercial and industrial areas exist in the township that are not designated on the map. It is not the Township's intention that these areas be rezoned or made non-conforming, but that they not be expanded. The development of the area should be undertaken in a manner that minimizes the impact on surrounding residential areas, including the use of landscaping and existing woodlots to buffer the residential uses, restrictions on lighting and enforcement of performance standards for industrial uses in the county zoning ordinance. Water and sewer service is expected to be extended into the area as development in the area continues. In addition to the area described above, property owners' north of Church Road and south of WinegarRoad, who expressed an interest in being in the industrial area will be allowed to do, so at their request. None of the land in the identified industrial area will be rezoned except at the request of the property owner.

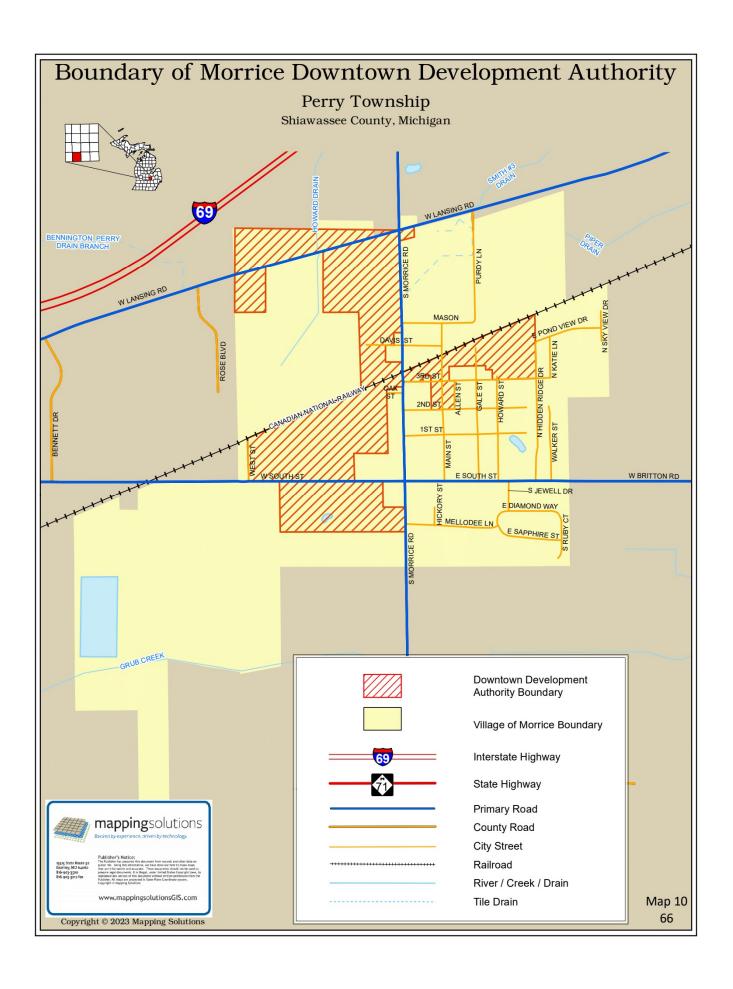
The DDA districts of both the Township and the Village can be seen in the maps on pp. 63-66.

8. WETLAND AREAS - The wetlands, floodplains, steeply sloped areas, and some depression soil areas are recognized. These locations are farmed or forested. Very few have experienced construction. Filling has been spotty. These areas are recognized for their natural benefits to the Township landscape. Examples of community values placed in these lands include probable aquifer recharge zones, sedimentation traps, wildlife habitat, oxidation of biological and chemical pollutants and floodwater retention. Without the broadly defined services of these lands, costs to replace these services with public works investments would reach many Township residents in the form of higher taxes. These lands would be protected but at the same time offer incomes to land-owners through agriculture, silviculture, and other less damaging land uses.









PLAN IMPLEMENTATION

Zoning

The purpose of an implementation plan is to ensure that the goals policies and plans of the township master plan are implemented and that the Plan is kept current and maintained. Implementation of this plan is the responsibility of Perry Township even though much of the implementing authority is with other jurisdictions. The township must work with these other jurisdictions to ensure implementation of the plan.

One of the preeminent tools used by communities to reach the goals of their master plan is zoning. Zoning is a regulatory power given by the state to local townships through the Rural Township Enabling Act. The act authorizes the local units to establish zoning ordinances controlling the use of property and the height, bulk, and location of buildings on that property. In order for an ordinance to be effective in implementing a master plan, it must be tailored to that plan. It follows, that when a plan is updated, the local zoning ordinance should also be updated to take into account those changes. Currently, however, by choice, the township falls under the authority of the Shiawassee County Zoning Ordinance. Any changes to the ordinance must be approved by the County Board of Commissioners and any text amendment could affect the other townships that operate under county zoning. This system was adopted in the 1970s. Of the 16 townships in the county, 2 do their own zoning: Owosso and Caledonia. Hazelton, Venice and Vernon are looking at doing their own. The current zoning in the Township is shown on Map 11, p. 72. Zoning needs to be confirmed with the County before making any alterations on any property.

Special Uses and Site Plan Review

One of the principal concerns with Plan Implementation is the lack of adequate access controls along M-52 and Lansing Road, and the fear that future development will bring increased problems. The site plan review process can be in order to implement the policies dealing with protection of the natural resources such as ground water and wooded areas, the standards used to consider SUP requests should be expanded to include specific consideration of natural features, including soil suitability in determining suitability of the use.

Site plan criteria should be amended to require or at least encourage the development of common driveways, shared signage and screening of parking areas in the concentrated commercial areas along Lansing Road and M-52.

Site plan criteria should be amended to encourage bicycle paths and sidewalks in major developments. Site plan criteria should be amended to require the evaluation of traffic impacts from certain developments. The criteria should be based on the recommendations included in the publication Evaluating Traffic Impact Studies - A Recommended Practice for Michigan Communities.

Subdivision Control Ordinance / Condominium Ordinance

Although the State's Land Division Act requires the developer of a subdivision to submit a proposed plat before a township for review and approval, it also authorizes a township if it wishes, to prepare a subdivision control ordinance. This ordinance may include stricter standards for subdivision design as long as they do not conflict with the provisions of the state act. It permits the community to establish design standards that conform with the land use plan and are therefore more effective in enforcing the plan.

In the last several years, developers have begun to use the state's Condominium Act as a vehicle to subdivide property. These developments are referred to as "site condominiums". The Condominium Act does not have the specific local review procedures required in the Land Division Act, but does specify that developments must comply with local zoning. Land divisions in Perry Township are regulated through the county zoning ordinance's site plan review process.

Wetlands

The Goemaere-Anderson Wetland Protection Act requires the Environmental, Great Lakes and Energy Department (EGLE) to enforce the act, but permits municipalities to adopt local ordinances.

If a local community does decide to establish a local ordinance as authorized in the state law, EGLE is required to coordinate their enforcement efforts with that community.

The advantage of adopting a local ordinance is that it provides local control over the administration of wetlands and permits the adoption of a more stringent definition of what constitutes a wetland and stricter regulations on their enforcement. The primary disadvantage for the community is the manpower and costs required to enforce an ordinance and the technical expertise needed.

Plan Maintenance and Update

A plan is not a static document. It must continuously be maintained and updated if it is to remain a valid document. Below are recommendations on methods that the Perry Township Planning Commission should adopt to ensure that the plan is adequately maintained.

Updating the Database

This plan is based on certain assumptions concerning the growth of the township. These assumptions are contained primarily in the plan's data base. It is important for the township to regularly monitor these assumptions to determine if they are still valid. If they become invalid, the planning commission must determine what the changes in circumstances mean for the plan goals and policies.

1) Population Growth - The plan is based on the projection of population growth contained in the population section of the data base. As noted in the narrative following the projections, there is always a certain amount of guessing that goes into population projections and they should be continuously monitored.

- 2) Housing Growth and Mix The plan makes assumptions on the growth of housing in the townshipover the planning period and the mix of single family, multi-family and mobile home units identified in Table 12. The township should monitor housing growth and mix to determine if it is following the projections. Differences in the mix of housing
 - types between what was projected and what is builtmay mean certain assumptions on market demand for various housing types was incorrect which could impact policies dealing with the provision of varied housing types. Differences in the total housing count will impact the population projections and also the land use need estimates contained in the plan.
- 3) Housing Cost Housing costs should be monitored to see if they are increasing more rapidly than household income during the planning period. A marked increase in housing costs in relation to income may require more aggressive efforts in providing low-cost housing, while stable costs may indicate that current strategies are working in providing a broad range of housing costs.
- 4) Adjacent Planning and Zoning Changes in the land use plans or zoning maps of adjacent townships or the City of Perry/Village of Morrice should be reviewed to consider their impact on the township's plan, preferably before that community makes a decision regarding the matter.
- 5) Agriculture The land use plan identified the pressure on agricultural land uses by non-farm development in the township as an issue of prime importance. The planning commission may wish to review the indicators of pressure on farmland conversion annually.
- 6) Transportation The township should monitor changes and proposed changes in the roads and streets in the township. The Road Commission's Road Improvement Schedule should be reviewed for its impact on the plan. Traffic count data is updated annually by the Road Commission and this information should be compared with capacity figures for various road sections along with accident data from the county sheriff's department to determine if traffic congestion is increasing at anunexpected rate or if traffic safety is deteriorating.
- 7) Utilities The plan anticipates limited extension of sewer lines. The sewer service area is then considered the determining factor in expansion of urban density development. Unanticipated expansion of the sewer lines should be reviewed to determine their effect on this type of development in the township.
- 8) Commercial Development The plan anticipates a need for continued commercial development along M-52 and Old Lansing Road. Rezoning requests and special use permit requests should be monitored for indications of a need for additional commercial area.

Reviewing the Plan Goals and Policies

After reviewing the updated information on the plan data base, the planning commission

should review the goals and policies every five years. Specifically, the commission is looking for goals or policies that are no longer relevant due to changes in conditions or policies that have proven ineffective in addressing a goal. Those items that are identified

should be deleted or modified in light of the new information. The plan should be officially amended to incorporate the changes in the goals or policies and the basis for the change should be reflected in public hearing record.

Incorporating Plan Review into Rezoning Request Review

Although an annual review of the plan is necessary for a comprehensive examination of the plan, many problems with a land use plan will become obvious during consideration of a rezoning or special land use permit request. It is important to incorporate review and amendment of the land use plan as part of the planning commission's consideration of such requests. This is covered in more detail in the subsection on using the land use plan for zoning reviews.

Using the Land Use Plan for Zoning Review

As noted earlier, the primary method of enforcing a land use plan is the zoning ordinance. In order for that to be done effectively, the community's rezoning and special land use permit request and site plan review procedure should be structured so land use goals and policies are considered.

Rezoning Requests

In considering a rezoning request, the primary question to ask is; "Does this request conform to our land use plan?". Three subsidiary questions follow that: "Was there an error in the plan?"; "Have there been relevant changes in conditions since the plan was approved?" and "Have there been changes in the goals and policies of the plan?". Answering these questions should answer the question whether or not a rezoning request is appropriate and that should frame the reason within the context of the plan.

This method of analyzing a request rests on the assumption that a request that complies with a validplan should be approved and that one that does not comply with a valid plan should not be. Further, it assumes that the three circumstances that would invalidate a plan are a mistake in the plan, a change in condition that invalidates the assumptions that the plan was built on or a change in the goals and priorities that the community set for itself.

Mistake - A mistake in a plan can be an assumption made based on incorrect data, an area on a land use map that is incorrectly labeled, or other factors that if known at the time of the plan adoption would have been corrected.

Changes in Conditions - A plan is based on the assumption that certain conditions will exist during the planning period. If those conditions change then goals, policies and land use decisions that made sense when the plan was adopted may no longer be valid and a rezoning that was not appropriate before is appropriate now.

Change in Policy - In the end, a plan is based on the planning commission's vision of what the best future for their municipality is. When that vision changes, the plan should change. When a zoning issue results in a change in vision, a decision can be made that is contrary to the current plan as long as that changed vision is explicitly incorporated into the plan.

Two points should be made. First of all, the three factors for consideration (mistake, change in condition, change in goals or policy) can work in reverse, making a proposal that otherwise seems appropriate, inappropriate. Secondly, these factors should not be used to create excuses for justifying a decision to violate the land use plan, or to change it so often that it loses its meaning.

Special Use Permits

The establishment of special uses in the zoning ordinance is based upon the goals and policies in the land use plan. The plan in turn should be used to determine when it is appropriate to permit a particular special use on a particular piece of property. To use the plan to help in making the determinations, the planning commission should look at the goals and policies that are appropriate to the type of use being proposed. The goals and policies of the plan should indicate the general intent of the plan regarding this activity and may be more specific in detailing what appropriate criteria are for approving the use. In most cases, the criteria will be reflected in the zoning regulations. In either case it is important that this connection with the land use plan goals and policies be stated so that the planning basis for the decision is clear.

