

SPEAKER TOWNSHIP MASTER PLAN

DRAFT
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(All Maps Dated 10-6-2015)

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Under The Direction Of The
**SPEAKER TOWNSHIP
PLANNING COMMISSION**
And
BOARD of TRUSTEES

SPEAKER TOWNSHIP
SANILAC COUNTY, MICHIGAN

Statement of Approval Page

(for future use)

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Chapter One OVERVIEW

Introduction

This Chapter provides an overview of the Speaker Township Master Plan and the Master Plan's role, importance, preparation process, and principal policies. Understanding the fundamentals of the Master Plan will enable township residents and officials to appreciate the role it plays in ensuring the future welfare of the community, its residents and its resources.

What is the Master Plan?

Purpose / Enabling Authority

Just as individuals and families plan for their future well-being, so must municipalities. This Master Plan is a "plan" – it is a specific tangible document consisting of text, maps, and figures that establishes a plan for how growth and associated land development should be guided to enhance the future welfare of Speaker Township.

The following key words and phrases can generally describe the Master Plan:

FUTURE ORIENTED: The plan concerns itself with long-range planning to guide and manage future growth and development, and the manner in which the township should evolve over the next ten to twenty years in response to growth, development and preservation interests.

GENERAL: The plan establishes broad principles and policies to address future land use and public services.

COMPREHENSIVE: The Plan is comprehensive in that it addresses all principal types of land use and the practical geographic boundaries of each.

DYNAMIC: The Plan is intended to be continually evolving in light of the aspirations of local residents, changing conditions in the township, and new strategies to manage growth.

This Master Plan was prepared by the Speaker Township Planning Commission under the authority of the Michigan Planning Enabling Act (P.A 33 of 2008, as amended).

Purpose of the Master Plan

Section 7(2) of the Michigan Planning Enabling Act (MCL 125.3807) provides:

The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

- (a) Is coordinated, adjusted, harmonious, efficient, and economical.*
- (b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.*
- (c) Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare.*
- (d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:*
 - (i) A system of transportation to lessen congestion on streets.*
 - (ii) Safety from fire and other dangers.*
 - (iii) Light and air.*
 - (iv) Healthful and convenient distribution of population.*
 - (v) Good civic design and arrangement and wise and efficient expenditure of public funds.*
 - (vi) Public utilities such as sewage disposal and water supply and other public improvements.*
 - (vii) Recreation.*
 - (viii) The use of resources in accordance with their character and adaptability.*

This Master Plan is not a law or regulatory document, but a "policy plan" to be implemented through, in part, zoning and other regulatory and non-regulatory tools. For example, though the Master Plan is not a zoning ordinance, the Master Plan's recommendations and policies serve as a basis for updating the current Speaker Township Zoning Ordinance.

services (Appendix A); natural features such as soils, topography, and water resources (Appendix B); and demographic features such as population growth, employment, and education (Appendix C).

Importance and Application of the Master Plan

The importance and application of the Speaker Township Master Plan are demonstrated in:

- the long-term interests of the township
- the day-to-day administration of the township's planning and zoning program

Long Term Interests

There are a number of interests shared by residents and officials today that can be expected to continue for years to come and be similarly shared by future residents and new officials. Some of these important interests include:

- Protecting the township's rural character.
- Protecting the quality of life.
- Protecting the township's natural resources, including farmland, woodlands, wetlands, and wildlife.
- Minimizing tax burdens.
- Ensuring appropriate land use and adequate services to protect the public health, safety, and welfare of residents and visitors.
- Ensuring compatibility with the use and development of neighboring properties.

The Master Plan supports these long-term interests by providing a future-oriented strategy that seeks to further these interests. Chapter Two establishes goals and objectives, and Chapter Three establishes future land use strategies, to secure these and other long-term interests.

Day-To-Day Administration

In addition to furthering the long-term interests of the township, the Master Plan also plays an important role in the day-to-day planning and zoning efforts of the township:

- Advisory Policies: The Plan is an official advisory policy statement that should be readily shared with existing and prospective landowners and developers. The Plan informs everyone of the long term intentions of the township regarding land use and encourages development proposals more closely integrated with the official policies of the Plan.
- Regulatory Programs: The Plan establishes a practical basis for the township to revise, update, or otherwise prepare regulatory programs

Zoning Ordinance Must be Based on a Master Plan

The Michigan Zoning Enabling Act, which provides Michigan municipalities with the statutory authority to adopt zoning regulations, requires that a municipality's land development regulations "...shall be based upon a plan designed to promote the public health, safety, and general welfare, to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, to conserve natural resources and energy..."

The Speaker Township Master Plan addresses this statutory requirement and ensures a strong legal foundation for the township's zoning program.

Elements of the Master Plan

This Master Plan consists of the following key components:

Chapter One (Introduction) presents an overview of the purpose and role of the Plan, the process followed in its preparation, key planning policies, and a summary of township conditions.

Chapter Two (Planning Issues, Goals and Objectives) presents important planning issues facing the township today, and associated goals and objectives that address these issues.

Chapter Three (Future Land Use Strategy) presents future land use policies and divides the township into various planning areas, with land use policies attached to each planning area.

Chapter Four (Coordinated Public Services) presents policies addressing the coordination of public services with the planned future land use pattern and the township's overall welfare.

Chapter Five (Implementation) presents key measures to implement the policies of the Plan.

The Appendices present an overview of existing conditions and trends in the township, addressing cultural features such as roads, land use, and public

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intended to ensure that the policies of the Plan are implemented.

- **Review of Land Development Proposals:** Chapter Two includes a list of township goals and objectives that should be reviewed when consideration is given to future proposed rezoning requests, site plans, and related land use proposals, to further establish a record upon which the proposal can be evaluated. Chapter Three provides policies regarding the planned future land use pattern in the township – valuable reference points upon which land use proposals should be evaluated.
- **Public Services Improvements:** The identification of a planned future land use pattern enables the township to prioritize areas in need of current or future public services improvements and plan accordingly. Chapters Four and Five provide important guidance in this area.
- **Intergovernmental Coordination:** This Plan provides the basis for township officials to communicate effectively with neighboring communities regarding both the impact of their planning and zoning actions and opportunities for mutual gain through coordinated land use and public services efforts.
- **Factual Reference:** This Plan includes a factual overview of trends and conditions in the township. This factual profile can educate local officials and residents and aid in the review of development proposals, encourage constructive discussion of planning issues and policies, and serve as a base line for future studies.

How The Plan Was Prepared

This Master Plan is the first official Master Plan for Speaker Township. One of the first tasks undertaken by the township for its development was the administration of a community-wide mail survey to gain insight into local perceptions about the township and aspirations for the future regarding land use and public services.

The Planning Commission's initial efforts were also directed at establishing a database about the Township for use during the planning process. This involved a review of physical and cultural conditions in the township including soils, topography, road network, existing land use patterns, public services, and demographic characteristics.

The Planning Commission then directed its efforts to identifying important planning issues facing the community and established a set of goal and

objective statements to address each and guide the development of the Plan.

Several alternative future land use patterns and strategies were then developed based on the data collected and the goals and objectives statements. The Planning Commission studied these alternatives and developed a concept upon which to base the policies of the Plan. The Planning Commission assembled a complete draft of the Plan suitable for presentation to the community. The Planning Commission held a public hearing on the draft Plan and subsequently finalized the Plan for adoption.

Throughout the development of the Plan, the township followed the procedural requirements of the Planning Enabling Act including notification of neighboring communities of its intent to prepare a plan, and the township's subsequent solicitation for input on the draft plan.

Some Themes from the Community-Wide Master Plan Survey

- Preserve natural features.
- Preserve rural character.
- Preserve farmland.
- Limit commercial expansion.
- 70% or more of respondents find these to be important in making Speaker Township a desirable place to live:

- Farmland
- Quality of schools
- Reasonable taxes
- Natural resources
- Police and fire protection
- Rural character/country living

- 70% or more of respondents find these services to be "okay" or "good":

- Road conditions
- Ambulance service
- Police and fire protection
- General township governance

Overview of Planning Policies

This Plan presents a coordinated strategy that addresses growth, development and preservation.

The Plan supports the continuation of Speaker Township as a predominantly agricultural community. The Plan provides opportunities for two residential settlement areas including around the Melvin area and in the W. Galbraith Line Road/M-19 intersection area. These settlement areas provide opportunities for comparably higher density living arrangements provided adequate measures are available for potable water and sewage disposal.

The Plan provides opportunities for limited commercial expansion, focused along M-19 approximately one-half mile north and south of Townhall Road. Industrial expansion is to be limited to the Mortimer Line Road/M-19 intersection area although limited additional opportunities along the KWA water line along Fisher Road may arise.

Public services improvements are to be focused in those areas of the community where heightened growth and development are anticipated, as described above.

Speaker Township Overview

The following is a brief overview of Speaker Township. A more detailed review of the township's trends and conditions can be found in Appendix A, B, C, and D.

Speaker Township is a rural community of approximately 1,300 persons, located along the southern edge of Sanilac County in the "Thumb Area" of Michigan's Lower Peninsula. The township is generally square in shape excluding the presence of the one-square mile Village of Melvin that sits in the southwest corner of the township. The township's exterior boundaries are approximately six miles by six miles and exhibit the congressional township boundaries common to most townships in southern Michigan. The northern edge of Speaker Township is one-half mile south of the Village of Peck and about 12 miles south of Sandusky, the county seat of Sanilac County.

Regional access to Speaker Township is provided by M-19 and M-90. M-19 travels north-south through the central region of the township. I-69, 13 miles to the south, provides direct access to M-19. M-90 extends east from M-53, ten miles west of the township, and travels through the central region of the township where it intersects with M-19. M-90 then travels north

along M-19 into Peck to the north, where it then heads east to Lexington. I-69 provides direct access to M-53 as well. Regional access is also available from several regional public airports, the closest being the Sandusky City Airport (15 miles to the north).

Like the predominant character of the regional area, Speaker Township is characterized by abundant open spaces including farmland, woodlands, and wetlands. Agriculture accounts for approximately 75% of the township's acreage, and woodlands, wetlands and other open space areas account for an additional 15%. The balance of the township is devoted principally to scattered single-family residences with the majority of the residences on parcels of five to ten acres and larger.

The 2010 Census recorded 543 dwelling units, 484 households and an average household and family size of 2.7 and 3.1 persons respectively. In 2010, 97.1% of the township population was white and 61.5% of the households included a married-couple. The township's median age of 41.6 years is 2.7 years higher than that of the state as a whole and 9.3 years higher than its 1990 median age of 32.3.

A five member Township Board governs Speaker Township. Government administration and services are funded principally by a millage. Speaker Township provides fire protection to area residents through the Speaker Township Fire Department. Ambulatory service is provided principally by the Marlette Regional Ambulance Service. Police protection services are provided principally by the Sanilac County Sheriff's Department, and the State Police provide emergency services along the M-19 and M-90 corridors and elsewhere during times of particular need.

The township owns and maintains a single cemetery. The township does not operate any recreation facilities. Speaker Township is served by four school districts -- Brown City Community Schools, Croswell-Lexington Community Schools, Peck Community School District, and Yale Public Schools. There are no public school facilities in the township.

There is no public sanitary sewer or water service in Speaker Township. The Karegnondi Water Authority (KWA) is a municipal water supply entity and is in the process of constructing a water main that will draw water from Lake Huron and carry the raw water west through portions of the counties of Sanilac, Lapeer and Genesee. The water line will run along the south edge of Speaker Township, generally along the Fisher Road corridor. The project is anticipated to be completed in 2016.

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Speaker Township's topography is largely level to gently rolling in character. Approximately 80% of the township reflects grades of 0% to 2% and the balance of the township is comprised principally of grades not exceeding 6%. The vast majority of the township is characterized by loam and silt loam soils. Approximately 65% of the township is classified as "prime farmland" by the Natural Resources Conservation Service

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Chapter Two PLANNING ISSUES, GOALS & OBJECTIVES

Introduction

The primary goal of this Plan is to establish a basis for future land use and public services. To effectively plan for the township's well-being with regard to future land use and public services, it is beneficial to identify important planning issues facing the community and clarify its long term goals and objectives. This chapter discusses important planning issues facing the Speaker Township community and presents associated goals and objectives.

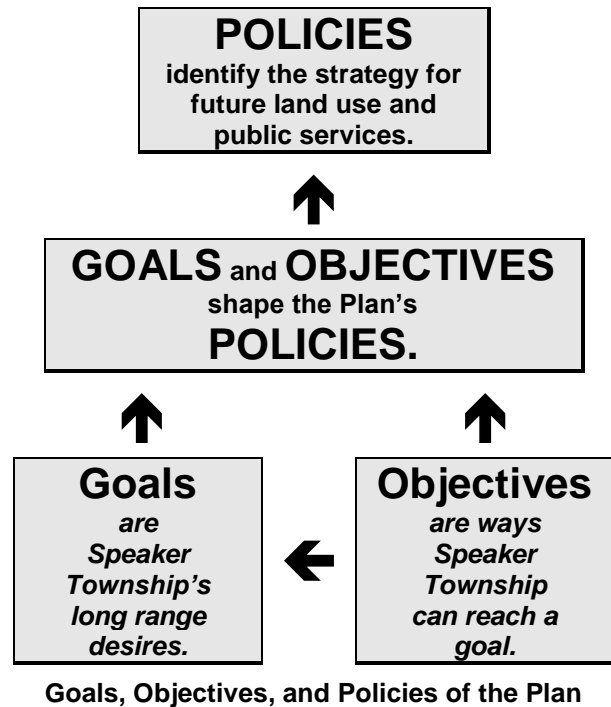
Planning Issues, Goals & Objectives

A number of key planning issues are apparent today. These issues vary in scope and are clearly inter-related. The future quality of life and character of the township will be largely shaped by the township's strategy to address these issues.

Each issue presented in this Chapter is followed by a set of goal and objective statements. Planning goals are statements that express the township's long range desires. Each goal has accompanying objectives that are general strategies that the township will pursue to attain the specified goal.

The Importance of Goals and Objectives

- **Speaker Township Vision:** The goals and objectives provide current and future residents with an overview of the intended future character of the community.
- **Shape Policies:** The goals and objectives identify and outline the basic parameters that should be used in guiding land use and public services policies.
- **Evaluate Development Proposals:** The goals and objectives serve as references upon which future rezoning and land development decisions can be evaluated.



The planning issues and associated goals and objectives are divided into the following major categories:

- Growth Management and Public Services
- Community Character
- Natural Resources and the Environment
- Farming
- Housing
- Commercial Services, Industry and Economic Development
- Circulation
- Regional Coordination

The planning issues presented in the following pages are not intended to be all inclusive. Rather, they are presented as the primary issues that the community must address as it establishes a future for itself. These issues will evolve over time and should be reexamined periodically and the appropriate modifications made.

The objectives listed on the following pages should not be interpreted as limitations on the township's efforts to reach its goals. The township's commitment to the following objectives does not preclude it pursuing other objectives that it determines are beneficial. In addition, the objectives listed are not time specific. The township may choose to act on certain objectives within a shorter time frame than others.

GROWTH MANAGEMENT and PUBLIC SERVICES

Speaker Township is a very desirable place to live for many, with abundant natural resources and open spaces; good access to highways and more distant employment centers; and is of an overall rural character. It is reasonable to expect the township's positive growth between 1990 and 2010 to continue into the future.

The township's character and quality of life will be impacted by the way the township chooses to manage growth and development. Successful growth management includes:

- minimizing unnecessary loss or degradation of natural resources including farmland, woodlands and water resources
- coordinating the amount and rate of new development with adequate public services including emergency services
- accommodating growth and development in a manner that preserves the desired character of the community and its environmental integrity
- encouraging economic development compatible with the character of the township
- ensuring compatibility between adjacent land uses

It must be recognized that tax revenues dictate, in part, the extent and quality of public services. Although development will increase the township's tax base, the same development will place additional demands upon public services. Contrary to traditional planning wisdom, research has shown that development does not necessarily "pay its way," particularly as it applies to traditional single family residential development. Farming and commercial and industrial development has been shown to typically have a more positive impact upon the economic stability of a community. Maintaining the current quality of public services, let alone the pursuit of improvements, can be challenging.

GOAL: *Guide future development in a manner that assures land use patterns compatible with public facilities and services and the cost-effective use of tax dollars, preserves the township's natural resources and rural character and minimizes conflicts between differing land uses.*

Objectives

- 1) Develop a rational land use strategy that provides an appropriately balanced scope of uses and which considers the constraints and opportunities presented by the township's natural features and public services and facilities.
- 2) Preserve the township's natural resources in a manner that enables reasonable use of land while discouraging unnecessary destruction or loss of natural resources including farmland, woodlands, wetlands and water resources.
- 3) Encourage forms of growth and development that minimize public service costs and adverse impacts to the community's natural resources, including higher intensity and compact forms of development in heightened public services and infrastructure areas.
- 4) Guide development into areas where public facilities and services have adequate capacity to accommodate the anticipated growth and increased development intensities, and/or where the provision or expansion of public facilities is cost effective.
- 5) Discourage public services improvements that will have the effect of encouraging development at a rate beyond the township's ability to ensure adequate public health, safety, and welfare, or development in areas of the township not designated for such growth.
- 6) Wherever legally permissible, require new developments to pay the township for the direct and indirect public services costs associated with that development. These costs should not be imposed on existing residents except where public interests and benefits may be at stake.
- 7) Continually monitor local attitudes about public facilities and services and provide regular opportunities for substantive public input on growth and public services issues.
- 8) Separate incompatible land uses by distance, natural features, or man-made landscape buffers that adequately screen or mitigate adverse impacts.
- 9) Evaluate rezoning petitions, site plans, and other development decisions according to the policies, goals and objectives of this Plan.

- 10) Update zoning and other tools to implement the Plan's policies, goals and objectives.

COMMUNITY CHARACTER

Speaker Township can be described as quiet and rural. "Rural character" is a subjective quality, but is typically associated with an overall perception of limited development, and extensive open spaces. The township's rural character is largely shaped by abundant farmland and pockets of woodlands, wetlands and other open spaces.

The township's character is also shaped by the presence of the Village of Melvin in its southwest quarter and for many, Melvin is perceived as a small settlement area part of the greater Speaker Township community. As one travels near the village, traffic levels are somewhat higher, the rural open spaces are replaced with residential streets and areas of commerce, and there is a more "hustle and bustle" atmosphere. Though the village is small, it contributes to the overall fabric of the township and its character.

M-19 and M-90 are the most heavily traveled thoroughfares in the township and for many, these corridors define the character of the community.

The diversity of the area's character contributes to the area's desirability as a place of residence. The preservation of the township's unique character and identity is an important part of its long term welfare. Preservation efforts can protect property values, minimize negative impacts between adjacent land uses, and enhance the overall quality of life.

GOAL: *Protect and enhance the character of the township in a manner that encourages a sense of identity, an overall rural character along with more urbanized elements, and an atmosphere that defines the community as a desirable place to live.*

Objectives

- 1) Encourage development designed in scale with the immediate surroundings and the dominant rural character of the community, through reasonable standards addressing density, building size and height, and other development features.
- 2) Introduce appropriately designed and landscaped signage along key entrances into the township, which highlight the township's identity and place within the region.
- 3) Encourage the placement of signs or markers at designated historic sites, buildings and areas, to highlight the historic resources and identity of the township.

- 4) Work with Melvin and other local communities to emphasize, for the benefit of the public, the unique character of the region and the assets that each community offers in shaping the desirability of the area as a place to live and do business.
- 5) Encourage development which actively strives to preserve natural open spaces (woodlands, wetlands, and fields) as part of a development project.
- 6) Consider rural character preservation interests as one of the relevant factors in determining appropriate development densities throughout the township.
- 7) Encourage the maintenance of historically significant structures.
- 8) Encourage a structurally sound housing stock and the rehabilitation or removal of blighted structures and yard areas.
- 9) Encourage the preservation of the township's natural resources including their visual character, environmental integrity, and recreational value.

See also "Natural Resources and the Environment" below for additional objectives addressing community character.

NATURAL RESOURCES and the ENVIRONMENT

One cannot speak of community character preservation in Speaker Township without acknowledging the tremendous impact its natural resources play in defining the community's character. These resources are comprised principally of its abundant farmland acreage in addition to its many small streams and drainage ways, pockets of forested lands of both an upland and lowland character, and wetlands. These elements are important in shaping the character of Speaker Township and also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality enhancement. These same resources play a role in recreation in the community including hunting. Input received during this Plan's preparation suggests that residents strongly support the preservation of the township's natural resources.

The township's ground water is a critical part of the community's network of natural resources, serving as its primary source of drinking water. This resource is particularly vulnerable to pollution due to the permeable soils that dominate the township's landscape.

Of particular concern is the preservation of the environmental integrity of the township's streams and drainage ways due to their impact on public health, safety and welfare. Proactive site development practices are critical in this regard, including the prevention of stream bank erosion and sedimentation of water courses, maintaining shade-producing stream bank vegetative cover, minimizing the discharge of pollutants into surface waters, and minimizing impervious surfaces.

Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation.

GOAL: *Preserve the integrity of the township's natural resources including its streams and drainage ways, wetlands, woodlands, farmland resources, and groundwater.*

Objectives

- 1) Document and periodically update resource inventory data such as water bodies and drainage courses, wetlands, woodlands, and sites of contamination, for use in land planning studies and land use and development decisions.
- 2) Encourage land development that actively strives to preserve natural open spaces as part of the development plan, including woodlands, wetlands and streams, and recognizes the importance of preserving environmental corridors across multiple parcels and the community as a whole.
- 3) Ensure that the quantity and quality of new development does not unreasonably create increases in air, noise, land, and water pollution, or the degradation of land and water resource environments including groundwater.
- 4) Discourage the expansion of public utilities into areas dedicated to resource protection.
- 5) Guide more intensive land uses away from environmentally sensitive areas and important natural features.
- 6) Ensure that all development is in compliance with applicable local, county, state, and federal environmental regulations.
- 7) Review proposed development in light of its potential impact upon on-site and regional natural resource areas.
- 8) Explore the acquisition of important open space resources for recreation and environmental preservation purposes.
- 9) Encourage the use of conservation easements to preserve important open spaces in association with land development projects.

- 10) Educate the public about measures that help to protect the environmental integrity of area wetlands, stream corridors and ground water resources including management of yard waste and fertilizer use, minimizing impervious surfaces and the discharge of pollutants into the soil, maintenance of drainage way vegetation, avoidance of erosion, and properly operating septic systems.
- 11) Update zoning provisions to address resource preservation measures including preservation of stream bank and corridor vegetation, minimizing impervious surfaces, preserving natural drainage patterns, and protecting against ground water contamination.

FARMING

Farming has always been a fundamental part of the Speaker Township landscape since its settlement. Today, it occupies approximately 75% of the township's land area. There exists a demonstrated and increasingly critical need in the state for land devoted to agricultural use. Farm operations produce the food and fiber that our society relies on as well as the society of other countries. Agriculture has long been recognized for contributing to the economic stability of local communities and is a leading industry in Michigan. Farmland has been found to be one of the few land uses in rural areas that typically produce more revenue than the cost to provide such land with public services.

However, competing land uses, particularly residential uses, frequently result in escalating land prices that undermine the economic viability of local farm operations. This is especially critical for the next generation of farmers who may not be able to afford to buy farmland or otherwise maintain an existing family farm. In addition, land use conflicts between farm and non-farm residents frequently heighten as residential encroachment increases.

The importance of farmland preservation is illustrated by the considerable attention the matter has received by the state legislature including the authorization of the purchase of development rights (PDR) and the transfer of development rights (TDR).

PDR enables a farmer to voluntarily sell the farm parcel's development rights to a governmental body interested in purchasing the rights, in turn for placing the farm in a perpetual open space status. TDR enables a farmer to transfer (through sale) the farm parcel's development rights to another parcel in a planned growth zone, under a procedure specified in the local zoning ordinance.

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Both PDR and TDR provide landowners the opportunity to better realize the development value of their land without having to actually develop it, and the land is placed in a protected status. Under both programs, all other private property rights remain intact.

Input received during this Plan's preparation suggests that residents strongly support the preservation of the township's farmland resources.

Ultimately, effective farmland preservation is dependent upon the management of the number and size of new non-farm lots, to avoid both the excessive encroachment of residential uses and the wasteful conversion of excess tillable land for each home site.

The township recognizes the economic and other challenges facing the local farming community. The township also recognizes the economic benefits of local farming not only for its productive capacity and contribution to the local economy, but for its limited demand on public services, infrastructure, and township revenues. The challenge before the township is to encourage farmland preservation while, at the same time, accommodate limited opportunities for reasonable alternatives that do not undermine the long-term welfare of farming community-wide.

GOAL: *Encourage the continuation of local farming operations and the long-term protection of farmland resources.*

Objectives:

- 1) Identify areas that are supportive of long-term farming and designate such areas for agriculture as a primary use.
- 2) Minimize potential land use conflicts in designated agricultural areas by limiting the encroachment of non-farm land uses while similarly providing flexibility for the conversion of limited farmland to reasonable alternative uses.
- 3) Discourage the wasteful consumption of farmland resources due to unnecessarily large residential lot size requirements, while still exploring other options for managing the extent of new residences in agricultural areas.
- 4) Support P.A. 116 farmland preservation agreements.
- 5) Explore the viability of a voluntary PDR or TDR program in the township.
- 6) Discourage the extension of municipal utilities (such as sewer and water) into designated agricultural areas.

- 7) Minimize obstacles to the farming community that unnecessarily hinder local farm operations and "value-added" income sources, such as agritourism, farm markets, corn mazes, and other revenue generating activities that do not cause unreasonable impacts on surrounding properties.

HOUSING

Residential development will likely be the major land use change in the coming ten to twenty years and it will have the greatest long-term impact on the township's natural resources, demand for public services, and overall community character.

Speaker Township is interested in providing reasonable options for additional and varied housing opportunities. Opportunities for rural and suburban residential lifestyles are plentiful as soil conditions generally support home sites of approximately one acre or more in size. The lack of municipal sewer and water service significantly restricts opportunities for more varied and affordable housing. However, private community sewer systems may be a reasonable alternative in some instances.

Not only does the establishment of suburban and urban development areas facilitate varied housing opportunities to meet the varying housing and lifestyle needs of current and future residents, it also limits the extent of residential encroachment into less prudent areas such as farm areas. In addition, research has documented that higher density housing, including multiple family development, typically has lower public services costs than less dense single family suburban housing.

Whether of low or higher density, the proper placement and design of residential areas is critical if such development is to have limited impact upon the character of existing residential areas, the community's dominant rural character, and the cost-effective delivery of public services.

If Speaker Township's population grows by 500 persons during the next 20 years, approximately 275 acres of farmland and other undeveloped land would require conversion to residential use to accommodate the additional 200 dwellings (based on an average lot size of 1.0 acre and a household size of 2.5 persons). However, the same 200 dwellings can consume as much as 2,000 acres (almost 10% of the township) or more if located on large lots of ten acres or more in size. This less efficient development pattern can dramatically accelerate the rate at which the township's farmland and other natural resources are converted to residential use including accessory yard/lawn areas.

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It must also be recognized that small acreage zoning across the entire township without any density limitations, such as one acre zoning, provides for a build-out population of approximately 12,000 dwellings and more than 25,000 persons. This build-out population is based on all land being developed at an average density of 1 dwelling per acre, exclusive of wetlands and future road rights-of way. Such a growth pattern over an extended period of time will have dramatic effects on community character, natural resources, taxes, and public services demands.

GOAL: *Provide a healthy residential environment in which persons and families can grow and flourish, and which recognizes the opportunities and constraints of the township's public services and natural features, and preserves the overall rural and single family housing character of the community.*

Objectives:

- 1) Encourage the continued dominance of single family housing of an overall low density.
- 2) While maintaining single family housing of an overall low density as the primary housing option, provide opportunities for alternative housing to meet the varying preferences of current and future residents, including small lot single family dwellings, senior citizen living arrangements, and small-scale multiple family housing, provided adequate measures are available for potable water and sewage disposal.
- 3) Coordinate higher density housing areas with locations that have greater access to improved thoroughfares, necessary public services, emergency services and/or within walking distance of consumer services.
- 4) Discourage strip residential development along the frontage of existing county roads such as M-19, M-90, Galbraith Road and Melvin Road, to minimize traffic safety hazards and congestion and preserve the existing rural character of the thoroughfares.
- 5) Encourage residential development that incorporates in the site planning process the preservation of on-site natural resource systems and open spaces, and the preservation of the township's rural character.
- 6) Encourage opportunities for special housing for senior citizens to enable their continued stay in the township, including apartments, assisted living arrangements and nursing homes.
- 7) Encourage a housing stock that ensures affordable housing to all, including starter homes, while also ensuring all dwellings are of appropriate design to complement nearby conditions and the community as a whole.
- 8) Discourage uses and structures in residential areas that undermine the residential character and peacefulness of such areas, such as commercial encroachments and accessory buildings of excessive size or inappropriate location.
- 9) Encourage the rehabilitation of blighted homes and properties.

COMMERCIAL SERVICES, INDUSTRY and ECONOMIC DEVELOPMENT

Speaker Township includes a limited number of businesses of a traditional commercial or industrial character, all of which are situated along or within one-half mile of the M-19 corridor. These include a convenience store, veterinary hospital, propane supplier, crop production services, and the manufacturing of sensor devices. A golf course and orchard farm market are also present.

The limited extent of commercial and industrial uses is not surprising. The township exhibits conditions that do not support such activity including the lack of public sewer and water, a limited local and regional population base, and the presence of numerous village centers in the nearby regional area. In addition, many types of industry rely on immediate proximity to a highway interchange and other regional urban centers present more appealing opportunities. Still, the presence of M-19 and M-90 offer improved opportunities for access and visibility – important factors for most traditional commercial activity such as retail sales, offices and consumer services.

Addressing commercial and industrial expansion includes considerations of need, location and character.

Input received during this Plan's preparation suggests that residents do not support significant expansion of commercial or industrial activity. Nearly all present and future township residents will be within two to three miles of the day-to-day commercial services available in Melvin, Peck, and Yale, and many pass through regional urban centers during their daily commutes. Further, the township's current four acres of commercial land (office, retail and service) approaches the acreage commonly recommended for a neighborhood center (five to ten acres) serving 3,000 to 4,000 persons – a population more than twice that of Speaker Township.

However, it must be recognized that commercial and industrial development can improve the community's overall economic stability and provide additional local

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employment opportunities. Economic development efforts can strive to capitalize on unique assets of the township including its state highways, its agricultural industry and its rich rural character, which may support and compliment more specialized commercial endeavors such as agricultural service establishments and small businesses that cater to the local population and highway traveler.

Commercial uses can vary significantly in character. The character of Speaker Township does not support commercial uses of a "big box" nature or similar uses that draw from a more regional market and which contribute to excessive traffic levels and public services demands. Similarly, intensive industrial uses that result in excessive public services demands, or produce external impacts such as noise, odors and similar features, are not compatible with the current and desired future character of the community.

The viability of future commercial and industrial development of a more traditional character is directly linked, in part, to access, visibility, proximity to activity areas, and improved levels of public services such as road infrastructure.

GOAL: Encourage economic stability through opportunities for commercial and industrial development of a comparatively limited scale and intensity, and which caters to the needs of the local population and supports the desired character of the community.

Objectives

- 1) Encourage business centers that exhibit an attractive appearance and foster an inviting character.
- 2) Encourage commercial and industrial development that is in character and scale with the township's rural character and surrounding land uses, considering such features as building size and height, architectural design, setbacks, signage, lighting, landscaping and screening, and open spaces.
- 3) Focus industry, and commercial development of a retail, service, office and similar character, toward segments of the M-19 and/or M-90 corridors.
- 4) Limit commercial uses to those that cater to local consumer needs and the highway traveler, or are otherwise of a character that do not generate excessive traffic levels and demands for public services.
- 5) Limit industrial uses to those that are predominately characterized by assembly activities and similar "light" operations that do not require the processing of raw materials, nor negatively impact surrounding land uses and the community as a whole.

- 6) Encourage industrial uses within industrial park settings, characterized by ample open spaces and landscaping.
- 7) Encourage economic development through the marketing of the special assets of the greater Speaker Township and Melvin area including the township's rural character and opportunities for agri-tourism.
- 8) Encourage economic stability in a manner that balances development with the preservation of the township's natural resources.
- 9) Discourage commercial and industrial encroachment into residential areas.
- 10) Maintain reasonable controls on commercial and industrial uses such as noise, odors, glare, vibration, and similar operational features.
- 11) Provide opportunities for home-based occupations under conditions that will support the desired character, appearance, and quality of life for surrounding residential areas.

CIRCULATION and MOBILITY

As new residential and non-residential land uses are introduced into the township, demands on the roadway network will increase. Even low density residential development can significantly increase local traffic levels, and unpaved roads can accommodate only limited levels before they necessitate constant and costly maintenance. Increased traffic demands can be minimized through the coordination of road improvements with the planned future land use pattern and designated growth and development areas. The extent to which higher intensity land uses, including commercial and industrial uses, are in comparatively close proximity to improved thoroughfares will minimize future maintenance costs and traffic levels along other roads of lesser infrastructure.

Maintaining adequate vehicular circulation is not solely dependent on the road system itself. The future pattern of residential lot splits and subdivisions will have a significant impact upon the functioning of the township's roads. Residences "stripped" along the existing county road frontages can be debilitating:

- the increased number of driveways directly accessing the county roads increases the level of congestion and safety hazards
- travel times are increased
- the township's rich rural panoramic views of woodlands, fields, and other open spaces, as experienced from the roads, may be reduced to images of driveways, cars, and garages

Community circulation extends far beyond just accommodating vehicular traffic. More and more attention is being focused on ensuring road systems take into consideration all potential user needs including pedestrians, bicyclists, persons restricted to wheel chairs, and persons of all ages and physical conditions. Similarly, the value of circulation systems between communities that facilitate non-motorized travel have also been recognized as an important part of long range planning. Well planned and designed community and inter-community circulation systems can limit the reliance on the automobile and enhance environmental conditions, the health of local residents, and the quality of leisure time.

GOAL: *Maintain a transportation network throughout the township that encourages efficient and safe travel, by vehicular, pedestrian, and other non-motorized modes, consistent with the rural character of the community and coordinated with the planned future land use pattern.*

Objectives

- 1) Identify priority road segments for systematic maintenance and improvement, based upon the planned future land use pattern and existing and projected traffic patterns.
- 2) Discourage high-traffic generating land uses and development patterns along the township's secondary roads.
- 3) Pursue access management measures to minimize the potential for traffic congestion and safety hazards, including limitations on the number, size, and shape of new land divisions and limitations on curb cuts.
- 4) Encourage future residential lot split patterns that maintain the integrity of the township's roadway network and rural character.
- 5) Work with the Sanilac County Road Commission to discourage road improvements that will increase growth and development pressures in areas of the township not specified for such growth.
- 6) Encourage the inclusion of pedestrian/bicycle paths in association with new residential subdivisions and non-residential development to facilitate safe and convenient non-motorized movement for all potential users.
- 7) Encourage the linking of residential and commercial centers through pedestrian and bicycle trails.
- 8) Maintain communication and cooperative efforts with the Sanilac County Road Commission to improve opportunities for safe non-motorized travel along all road segments.

- 9) Encourage the development of non-motorized linkages between the township and nearby village centers including Melvin, Peck and Yale, as part of a coordinated regional trail system.

REGIONAL COORDINATION

Speaker Township exists within a regional network of communities, none of which are islands unto themselves. Speaker Township abuts the principal townships of Elk, Fremont, Brockway and Maple Valley; fully surrounds the Village of Melvin, and is within one mile of the Village of Peck and two miles of the Village of Yale. Speaker Township and nearby municipalities can greatly benefit by cooperatively pursuing common goals in the areas of land use and public services where mutually beneficial. Planned land uses, public services and preservation efforts should take into consideration conditions in these abutting communities. Land use planning efforts should seek to establish a land use pattern compatible with surrounding conditions provided the goals of Speaker Township are not undermined.

GOAL: *Guide future development and public services in a manner that recognizes the position of Speaker Township within the larger region and the mutual impacts of local planning efforts.*

Objectives

- 1) Where practical, identify a planned future land use pattern that seeks to ensure compatibility among land uses along municipal borders.
- 2) Encourage the vitality of downtown Melvin through appropriate restrictions on the character and extent of commercial uses in Speaker Township.
- 3) Maintain a meaningful communication program with area municipalities and county agencies to discuss local and area-wide public facilities and services needs, land use conditions and trends, preservation goals and objectives, planning issues including vehicular and non-motorized modes of travel and recreation, and mutually beneficial strategies to address short and long-term needs.

Chapter Three FUTURE LAND USE STRATEGY

Introduction

Speaker Township's principal planning components are contained in the Future Land Use Strategy, as discussed in this Chapter Three, and Chapter Four, Coordinated Public Services. The Future Land Use Strategy identifies the desired pattern of land use, development and preservation throughout the township. Chapter Four presents guidelines regarding public services to help ensure that future public services are coordinated with the planned land use pattern, and the achievement of the Plan's goals and objectives.

The Future Land Use Strategy consists of policies addressing future land use and development in the township. Implementation of these policies rests, in part, with the regulatory tools of the township – most importantly the Speaker Township Zoning Ordinance. The Zoning Ordinance regulates the type, location, and intensity of land development. The township may use other tools to further the implementation of the policies of this Plan. Chapter Five discusses implementation of the Plan in more detail.

The foundation on which the Future Land Use Strategy is rooted is the goals and objectives in Chapter Two, based in part on public input. These include the desire to guide future development in a manner that ensures land use patterns compatible with public facilities and services, the cost-effective use of tax dollars, the preservation of natural resources and the rural character of the community, and compact development where it is of a higher intensity. The Future Land Use Strategy is based upon an analysis of the township's natural and cultural features such as community attitudes, road network, and existing land use patterns. Also considered were nearby conditions in neighboring municipalities. The opportunities and constraints presented by these features were evaluated in the context of the goals and objectives in Chapter Two to arrive at a planned future land use pattern.

Planning Areas

The Future Land Use Strategy divides the township into "planning areas" and identifies the predominant land use pattern planned for each. These areas collectively formulate the planned land use pattern. These areas are as follows:

- Agricultural / Rural Residential Area
- Residential Settlement Areas
- M-19 Commercial Corridor
- M-19 Industrial Area

This Plan presents broad-based policies regarding the dominant land uses to be accommodated in each of the above Areas. Specific permitted land uses will be determined by the township's zoning provisions, based upon considerations of compatibility. There may be certain existing land uses that do not "fit" with the planned future land use pattern. This should not be necessarily interpreted as a lack of township support for the continuation of such uses. Zoning regulations will clarify this matter.

Boundaries: The boundaries of the planning areas are illustrated on the Future Land Use Map. The map depicts the boundaries in more detail than the explanatory text in this chapter. There is frequently room for discretion at the exact interface between the boundaries of two planning areas and appropriate uses at these points of interface. However, the approximate boundaries presented in this Plan have been considered carefully. Significant departures are strongly discouraged except for unique circumstances and only when the public health, safety and welfare will not be undermined.

Neither the Future Land Use Map nor the explanatory text of this chapter is intended to stand on its own. Both the policy discussions and map are inseparable and must be viewed as one.

Densities/Private Sewer Systems: The discussions of each planning area intended to accommodate residences include policies about appropriate maximum development densities. Private community sewer systems are not to serve as a basis for development patterns and densities contrary to the policies presented.

Agricultural / Rural Residential Area (A/RR)

Intent and Basis: The Agricultural/Rural Residential Area (A/RR) includes the vast majority of land in the township. The A/RR Area is comprised nearly entirely of farmland and farming operations, and scattered residences, in addition to woodlands and wetlands and other natural open space areas associated with farm and residential parcels. The intent of the Area is to provide opportunities for farming and encourage the preservation of farmland resources and the long-term viability of local farming, while also providing opportunities for low-density residential development in a predominantly rural setting that encourages the preservation of natural resources and other open spaces. The A/RR Area is established in recognition of the importance of agriculture and the importance of encouraging the preservation of farmland resources and viable farm operations.

This Plan recognizes that farming plays an important role in the history and character of Speaker Township, contributes important food and fiber to local and regional populations, encourages economic stability, and is an important source of income. The A/RR Area encourages the continuation of all current farming activities as well as the introduction of new agricultural operations. All typical farming activities, including the raising of crops and livestock and the erection of associated structures, are encouraged provided that they meet Department of Agriculture and Rural Development requirements for "*generally accepted agricultural management practices*" and any requirements of applicable township ordinances. In light of the township's interest in maintaining the quality of life for existing households, reasonable care should be exercised in accommodating specialized agricultural operations that may have heightened impacts on surrounding land uses (such as large concentrated livestock operations).

Lands in the A/RR Area are largely characterized by conditions that support their long term agricultural economic viability including: 1) classification by the U.S. Department of Agriculture of substantial "prime farmland" areas; 2) majority of acreage contained within minimum parcel sizes approaching 40 acres or more; 3) limited encroachment by non-agricultural land uses; 4) partial enrollment in the P.A. 116 Farmland and Open Space Protection Program; and 5) adjacency to other farmland considered to offer

similar opportunities for long term economically viable farming.

Uses and Densities: Agriculture and low-density residential development is intended to be the primary uses of land in this Area. Secondary uses should typically be limited to those that are particularly compatible with the intended agricultural and rural residential character of the Area such as kennels, stables, campgrounds and golf courses.

There are some existing small settlement areas in the A/RR Area that are of a higher density than recommended. The Plan recognizes the viability and desirability of these settlement areas but does not support the expansion of these areas.

Development densities in the A/RR Area are to be comparatively low, not exceeding one dwelling per approximately two acres. Low densities are supported by a number of factors including: 1) minimize the loss of farmland and conflicts between farm operations and neighboring land uses; 2) the lack of public sewer and water; 3) the township's commitment to managing growth, providing cost effective public services, and limiting urban development densities to specific and compact portions of the community; 4) the township's commitment to protecting its natural resources and rural character; and 5) the presence of a market for low-density rural home sites.

Farming Operations: Potential new residents in the A/RR Area should recognize that the traditional noises, odors and agricultural operations associated with responsible farm operations are a significant component of the Area and will continue on a long term basis. Speaker Township does not consider such activities and operations as nuisances. Rather, the township supports the long term continuation and protection of responsible farm operations and the local farming industry. Local developers and real estate agents should disclose this information to prospective buyers of land.

Residential Settlement Areas

Location, Intent and Basis: The Residential Settlement (RS) Areas extend approximately one-half mile from Melvin and the M-19/Galbraith Line Road intersection area. The RS Areas provide for residential development of a more suburban and urban character than planned elsewhere in the township. These Areas include existing settlements of a suburban/urban character as well as vacant land where new residential development of a similar character is considered most appropriate. These higher density development opportunities should ensure healthy living environments including

sufficient open space and safe motorized and non-motorized circulation.

The RS Areas are characterized by conditions that support their particular appropriateness for higher density residential development. In the case of the Melvin RS Area, these include:

- improved access via county primary roads
- existing suburban/urban development
- immediate proximity of commercial and public services including fire protection services

In the case of the M-19/Galbraith Line Road RS Area, supporting factors include:

- improved access via county primary roads and M-19
- existing suburban/urban development
- proximity of commercial and public services of Melvin and the planned M-19 Commercial Corridor to the north, including the township hall and existing fire station

Uses and Densities: Long-term primary uses in the RS Areas are to be single family and two-family residences, including opportunities for comparatively higher density small-lot subdivisions where adequate provisions are made for potable water and sewage disposal. Secondary uses should be limited to alternative living arrangements such as townhouses, apartments, retirement centers, and similar housing options, and for uses that directly support and enhance desirable residential areas such as schools, religious institutions, and recreation facilities.

The continuation of the abundant farming operations currently in these Areas is encouraged until such time where the respective landowner prefers to pursue alternative uses.

Maximum development densities should typically not exceed one dwelling per approximately one-half acre, and in no case should residential development occur on a site on which the site's area, soils, or other characteristics do not support the issuance of public health permits for potable water and sewage disposal.

Development densities greater than two dwellings per acre may be reasonable but only after special review to determine if the project is appropriate on the proposed property. Minimum guidelines that should be considered are:

- available infrastructure and services.
- environmental impacts.
- anticipated impacts upon existing residential development and/or neighborhoods.

M-19 Commercial Corridor

Location, Intent and Basis: The Future Land Use Strategy identifies a single area as the township's commercial center – an approximately one-mile segment of M-19 extending one-half mile to the north and south of Townhall Road. This corridor is intended to extend approximately 500' to either side of the M-19 right-of-way. The Plan recognizes the importance of encouraging convenient services and employment opportunities and enhancing the economic stability of the township.

Commercial centers typically require a heightened level of road infrastructure, access, and visibility. These factors directly impact the identification of future commercial areas along with other concerns including minimizing conflicts between existing and proposed land uses and encouraging compact development.

This segment of M-19 includes several existing commercial enterprises and affords excellent access and visibility. This area is in immediate proximity to the fire station housed at the township hall in the central region of the Corridor, and the presence of the township hall will encourage potential consumers to the area on a regular basis.

Use and Development Character: The M-19 Commercial Corridor is to provide an opportunity for the accommodation of locally oriented commercial uses and services catering to the needs of the local population and the highway traveler, including retail sales, offices, personal services, and eateries.

Secondary commercial uses should be limited to those that provide additional benefits but which may not cater to the local population or highway traveler. Secondary commercial uses may also include those that have a greater potential to undermine the intended locally-oriented character of the Corridor. "Big box" developments and similar uses are not envisioned for the Corridor.

Site layout, principal buildings and accessory facilities should be of a character and design that encourages compatibility with adjacent and nearby land uses and the desired rural character of the area. Compatibility should be based on, in part, appropriate signage; building height, size, and bulk; lighting; and landscaping/screening.

Commercial areas should incorporate appropriate access and circulation measures that encourage safe and convenient pedestrian, vehicular and other modes of travel, including the management of driveways to minimize congestion and safety hazards.

Existing Residences: The M-19 Commercial Corridor includes farmland and residences. The Plan supports the continuation of these existing farm operations and residences until such time that a landowner prefers to pursue alternatives in coordination with the intent of the M-19 Commercial Corridor.

While the Plan supports the continued presence of the scattered residences along portions of the M-19 Commercial Corridor, to the extent desired by those residing within, the Plan also recognizes the past incremental commercialization of this segment of M-19 and the value of accommodating additional commercial uses in this Corridor. Special provisions are to be employed where nonresidential uses are proposed adjacent to residential lots to ensure that adequate site layout, including buffer yards and screening, minimize negative impacts. At the same time, the Plan also finds the incremental conversion of residences to non-residential uses to be reasonable provided measures are taken to minimize impacts upon nearby residences.

Prospective residents should be aware that nearby parcels may transition into commercial uses.

M-19 Industrial Area

Location, Intent and Basis: The Future Land Use Strategy identifies a single area for the accommodation of industrial activity, centered at the M-19/Mortimer Line Road intersection and extending radially approximately one-quarter mile. This location for future industrial growth is supported by a number of factors including the enhanced year-round trucking capability of M-19, the presence of the township's primary industrial operation in the immediate proximity, and limited residences in the immediate area.

Use and Development Character: The M-19 Industrial Area is to provide an opportunity for comparatively light industrial activities that generate minimal impacts on neighboring uses and limited demands on the township's limited public services. Uses may include, by example, small-scale product testing, technology research, calibration services, and the assembly of electrical components and other pre-manufactured items.

Site layout, principal buildings and accessory facilities should be of a character and design that encourages compatibility with adjacent and nearby land uses and the desired rural character of the area. Such compatibility should be based on, in part, appropriate signage; building height, size, and bulk; and landscaping/screening.

Industrial sites should incorporate appropriate access and circulation measures that encourage safe and convenient pedestrian, vehicular and other modes of travel, including the management of driveways to minimize congestion and safety hazards.

Alternative Fisher Road Location: The Future Land Use Strategy recognizes that the Karegnondi Water Authority (KWA) is in the process of constructing a water main that will draw water from Lake Huron and carry the raw water west including past the M-19/Fisher Road intersection. Though the Plan does not officially identify Fisher Road as a "planned" industrial area, the Plan recognizes that certain industries may benefit from the availability of raw water and, in combination with the enhanced access afforded by M-19, Fisher Road may be attractive for certain industries as an alternative industrial location.

This Plan supports industry along Fisher Road only where the following conditions are met:

- upon a determination that the M-19 Industrial Area does not provide an appropriate location for a particular industrial proposal due to the proposed use's demand for excess volumes of raw water
- that the proposed use demands the volumes of raw water only available from the KWA line
- that an agreement is reached between the applicant and the KWA for water service
- that the industrial proposal is conditioned on hooking into the KWA line
- upon a determination that the Fisher Road infrastructure is capable of adequately accommodating the type and volume of traffic anticipated
- upon a determination that the proposed use can be appropriately accommodated on the proposed site based on other conditions including site conditions and the surrounding land use pattern

Conservation of Natural Resources

Speaker Township includes areas of woodlands, wetlands and water courses. In light of the importance of these resources, the Plan supports their protection. Preservation should take precedence over the unnecessary disturbance and/or destruction of these resources. The presence of such resources in areas designated for development should be recognized in the deliberation of rezoning, site plan, and similar proposals. Land uses requiring state and/or federal permits (especially for wetland or floodplain alterations) should not receive final township approval until satisfactory evidence has

been submitted verifying the acquisition of all necessary permits. Where a portion of a parcel contains environmentally sensitive areas, development should be directed elsewhere on the site where practical alternatives exist.

Phased Zoning

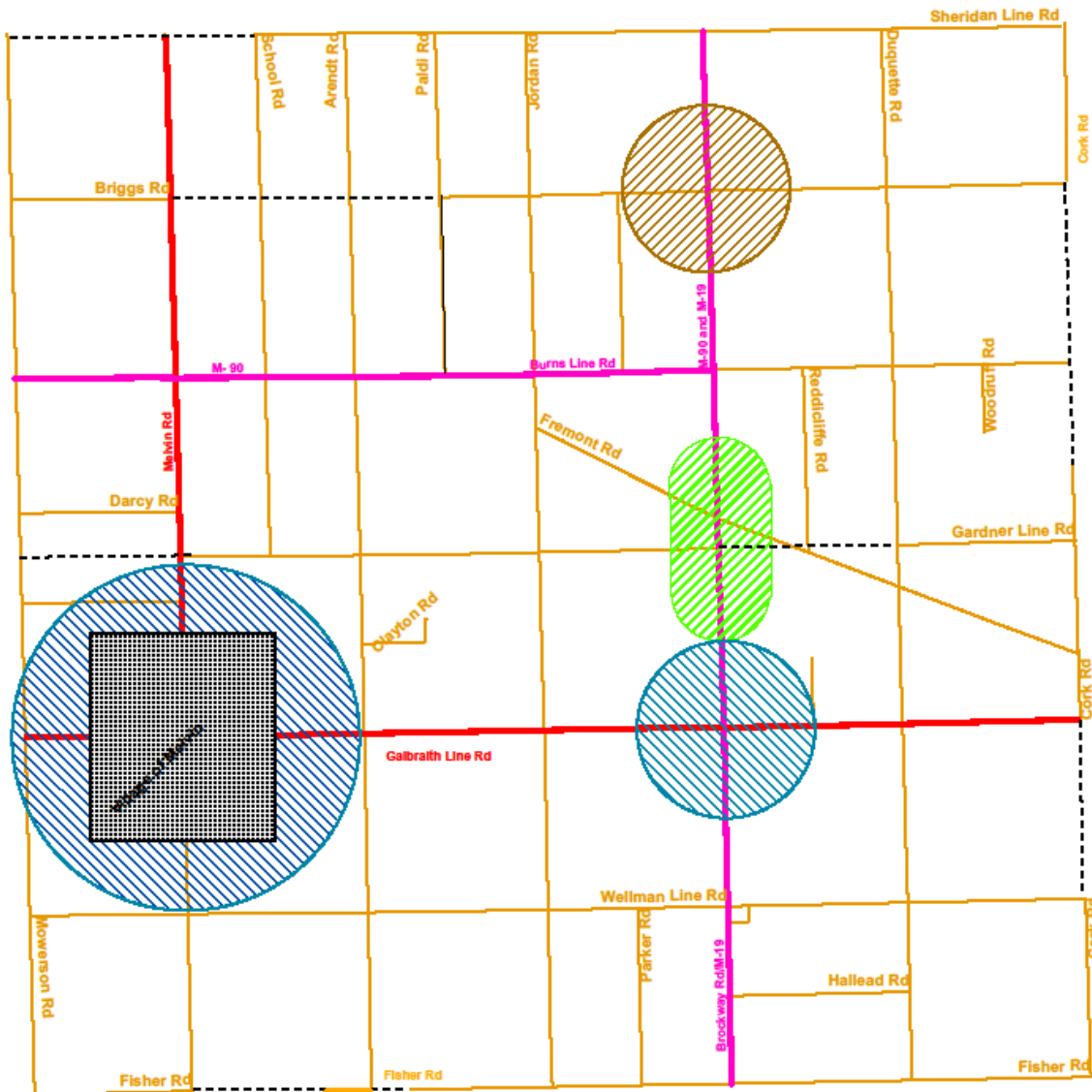
This Plan recommends the rezoning of land to a more intensive zoning district in a phased or incremental manner only. For example, while the Plan may identify township locations that are appropriate to accommodate suburban residential development, the Plan does not recommend “*across the board*” or immediate rezonings of such land from existing low density residential districts to high density districts. The Plan recommends that

rezonings to more intensive districts occur incrementally over time to ensure the township is capable of:

- meeting the increased public service demands
- managing township-wide growth and development
- adequately reviewing rezoning requests as they apply to the specific subject property
- minimizing unnecessary hardships upon the landowner as a result of the unintended creation of nonconforming lots, uses and structures





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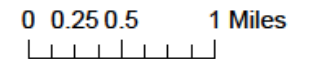
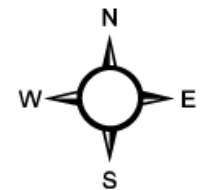
**Speaker Township
 Master Plan
 Sanilac County,
 Michigan**

Future Land Use Map

-  Ag/Rural Residential Area
-  M-19 Industrial Area
-  M-19 Commercial Corridor
-  Residential Settlement Area

See Chapter Three of the Master plan for a description of each area depicted on the map

-  State highways
-  Primary Roads
-  Local Roads
-  Section Line



10-6-2015

This Map Prepared by Speaker Township Planning Commission.

The Data source for this Map is USDA Geospatial Data Gateway and Township Planning Commission.

Chapter Four COORDINATED PUBLIC SERVICES

Introduction

Chapter Three described the planned pattern of land use throughout the township. Chapter Four discusses the public services strategy to be coordinated with the planned pattern of land use. The character and feasibility of land use and development is influenced by the extent to which public services are available. In addition, the character of public services can directly impact the perceived quality of life among residents in the community.

An important principle of this Plan is that no development should occur unless public services are adequate to meet the needs of that development. On the other hand, public service improvements and the increased development that may result from the improvements should not jeopardize the township's interest in managing growth and development. Thus, it is important that public service improvements be coordinated with the planned future land use pattern.

Circulation / Complete Streets

As new residential and non-residential land uses are introduced in the township, demands upon the road network will increase. The additional residential development anticipated in this Plan will result in higher traffic levels, particularly in localized areas. This increased traffic may lessen the level of service along some of the township's roads. Conversely, it must be recognized that road improvements may well attract new development which, in turn, will create additional demands.

The township's road system currently fulfills its function well for vehicular traffic, within the context of the system layout. This is due, in large part, to the existing low development density throughout most of the township, the several county primary roads that cross the township and collect and move traffic, and the presence of M-19 and M-90. On the other hand, much of the secondary road network is unpaved and surface conditions can be problematic. This is not to suggest such roads should be paved, as this will encourage further development pressures. Still, it must be recognized that as the township grows, the

need for increased road maintenance and associated public costs will increase.

Opportunities for safe pedestrian and non-motorized travel are comparatively limited. U.S. Bike Route 20, travelling north along M-19 and west along M-90, is the only designated non-motorized facility in the township. Safe pedestrian and non-motorized travel has received greater and greater focus within the planning arena, on local, regional, state and federal levels. The provision of opportunities for safe and comprehensive pedestrian and non-motorized travel has been found to encourage health in individuals, provide alternative means of recreation, and lessen congestion, air pollution, consumption of fossil fuel, and the cost of living. The importance of safe and comprehensive pedestrian and non-motorized travel led the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan.

"Complete streets" generally refers to the design of road corridors that take into account the circulation needs of all potential users including pedestrians, bicyclists, motorists, and public transportation users. The "complete streets" program emphasizes safety along roads for all users including all age groups. While recognizing that there is no single "complete streets" design solution that applies to all roads in all communities, the program emphasizes the need for new roads to be designed, and existing roads be improved, to facilitate their safe and efficient use by all prospective users within the context of the particular community's needs and character.

As a rural community, implementation of a "complete streets" program in Speaker Township is different than that of an urban center. While an urban community may pursue sidewalks, bike lanes or paved shoulders, bus lanes, convenient public transportation stops, median islands, frequent and well marked crosswalks, and other measures, rural communities such as Speaker Township typically have fewer options and frequently focus on paved shoulders. However, even in rural communities, the feasibility and importance of implementing a wider scope of "complete streets" measures increases in the community's planned residential settlement areas and commercial centers.

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Speaker Township recognizes that the Sanilac County Road Commission and MDOT has jurisdiction over the township's public roads. Still, the township does have the opportunity to provide input regarding road maintenance, design and improvements.

Policies:

- 1) Functional classification of roads will dictate the priority of improvements when all other conditions are generally equal, with primary roads being of greatest priority. Among the county primary roads, greatest priority for improvements should be placed on those segments serving the Future Land Use Strategy's Residential Settlement Areas and planned commercial and industrial centers.
- 2) All future roads will be designed and constructed to Sanilac County Road Commission standards.
- 3) All proposed road construction will be evaluated carefully for local and regional impacts on traffic flow, congestion, public safety, and land use. Road construction should be coordinated with other local and regional road improvements to address traffic movement in a unified and comprehensive manner.
- 4) The township will monitor development patterns and periodically explore the development of a non-motorized circulation plan to facilitate the provision of safe non-motorized travel, with particular focus on linkages between designated Residential Settlement Areas and the M-19 Commercial Corridor.
- 5) The township will work with the Sanilac County Road Commission to incorporate "complete streets" measures in all future road construction, maintenance and improvements. Emphasis should be placed on paved shoulders of adequate width and clearly visible crosswalks.
- 6) The township will evaluate proposed private sector developments within the context of "complete streets" to ensure all users of the developments are afforded opportunities for safe and efficient travel, including within and between neighborhoods and commercial areas.

Sewage Disposal and Potable Water

There is no public sewer or water in Speaker Township although the Karegnondi Water Authority (KWA) is in the process of constructing a water main that will draw water from Lake Huron and carry the raw water west including along Fisher Road in Speaker Township. Nearly all residents rely on septic systems for sewage disposal and private on-site potable water wells. Improperly operating septic systems can contaminate potable groundwater resources. Local ground water quality is variable, with instances of "hardness" and in more limited

occurrences, the presence of arsenic. Intensive industrial, commercial, and residential development generally have greater sewage disposal and potable water needs than can often be met by traditional on-site facilities. It must also be recognized that development pressures frequently coincide with the availability of public sewer and/or water improvements.

Policies:

- 1) All on-site sewage disposal and potable water facilities will be constructed and maintained in accordance with the requirements of the Sanilac County Health Department and other applicable local, county, state and federal agencies.
- 2) Any future decision by the township to introduce public sewer or water service will be based on an in-depth analysis of all available options, including services provided by cooperative agreements with neighboring municipalities and regional entities.
- 3) Public sewer or potable water service will not be undertaken except upon a finding by the township that it is necessary to maintain the public health, safety and welfare in response to a demonstrated existing or anticipated contamination threat, or that it will address a demonstrated demand for development intensities in excess of those available relying on safe on-site sewage disposal and potable water measures, and such development is in coordination with the Future Land Use Strategy.
 - a. Sewer and water service improvements should be limited to the Residential Settlement Areas.
 - b. Introducing public sewer or water service into the Agricultural/Rural Residential Area for reasons other than to address a serious health risk is not considered prudent and will only undermine efforts to preserve farmland and other natural resources, and manage growth and development.
- 4) In addition to coordination with the Future Land Use Strategy, any public sewer or water service improvements should occur in a phased and incremental manner so that an overly large geographic area is not intensely developed at a rate beyond the township's ability to effectively manage growth and development.

Storm Water Management

As buildings, parking lots and other impermeable surfaces associated with new development cover portions of the township's land surface, the quantity of storm water runoff increases. The vegetated landscape that previously absorbed and slowed much of the water associated with rainfall is replaced by impervious surfaces. Unless specific preventive measures are taken, this condition encourages flooding, soil erosion, sedimentation and pollution of area water resources. The township's water resources, including the Speaker and Maple Valley Drain and the Potts Drain, are vulnerable to degradation.

Though flooding, soil erosion, sedimentation and pollution may originate from site-specific circumstances, their impact can extend to adjacent properties and more regional areas including other downstream communities. Storm water management aims to minimize flood conditions and control the quality and quantity of runoff that is discharged into the watershed system (streams, rivers, wetlands, lakes, etc.) from a development site.

Policies:

- 1) Increased runoff that may occur as a result of development will be appropriately managed to avoid placing excess demand on the capacity of the storm water system into which the runoff is discharged.
- 2) Increased runoff that may occur as a result of property development will be appropriately managed to ensure that the quality of the runoff discharged does not undermine the environmental integrity of the township's surface and ground waters.
- 3) Storm water management measures will emphasize "green infrastructure" – planned networks of natural lands, functioning landscapes and other open spaces that minimize alterations to the natural landscape and lessen the reliance on storm sewer and similar "grey" infrastructure.
- 4) Proposed land uses will not be permitted if the level of service currently provided by existing storm water management systems and/or existing drainage patterns will be decreased, unless necessary improvements to such infrastructure or drainage courses are part of the coordinated development plan.
- 5) New and existing land uses will comply with all local, county, state, and federal regulations regarding storm water management and soil erosion, including the regulations of the Sanilac County Drain Commissioner.

- 6) All development will be reviewed within the context of its impact on nearby water courses to ensure discharge practices do not undermine the environmental integrity of these resources.

Emergency Services

Speaker Township provides fire protection to area residents through the Speaker Township Fire Department, with fire stations located in Melvin and on M-19 as part of the township hall facilities. Police protection services are provided principally by the Sanilac County Sheriff's Department. The State Police also provide emergency services, limited primarily to the M-19 and M-90 corridors, and elsewhere during times of particular need. Ambulance service is provided principally by the Marlette Regional Ambulance Service.

As community growth and land development increases, so does the demand for emergency services.

There are no widely accepted standards for police protection levels. Adequate police levels are typically dictated by local public perceptions. Commonly referenced standards regarding fire protection suggest a maximum service radius from a fire station in low density residential areas of approximately three miles, and an approximately three-quarters to two mile radial service area in commercial, industrial, and high density residential areas. The more distant portions of the township's northwest, northeast and southeast quarters fall short of these recommended ranges in regard to residential service.

Policies:

- 1) The township will require the provision of fire protection infrastructure (wells, water lines, etc.) for all new developments which are of such size and density that on-site infrastructure is considered necessary. On-site fire protection infrastructure will generally be considered necessary for subdivision and similar residential neighborhood developments that concentrate building sites on lots less than approximately one-half acre.
- 2) The township will continually monitor police and fire protection needs, and ambulance service, to minimize emergency services deficiencies and explore improving service levels. Considerations for service improvements will include joint services with neighboring municipalities.
- 3) Priority for improvements to emergency service levels will be directed toward areas identified as being most underserved where financially practical and feasible.

Recreation

Speaker Township does not operate any local recreation facilities and there are no county, state or federal facilities within the township. Recreation in the township is generally limited to a golf course. Local residents do have access to a number of regional recreation opportunities including the Minden City, Port Huron, Deford and Tuscola State Game Areas, and regional school and municipal facilities.

Like many other public services, demands for recreation facilities and opportunities will likely grow as the township's population grows.

The type and accessibility of nearby recreational opportunities can impact the well being of local residents of all ages. "Accessibility" includes the ease and safety of getting to a park facility without the reliance on an automobile and the ease of moving comfortably throughout a park site by all users including all age groups and the physically challenged.

Policies:

- 1) The township will periodically monitor the extent to which area residents are satisfied with the scope and accessibility of recreation opportunities in the local area.
- 2) Should sufficient public sentiment warrant, the township will pursue the development of a MDNR-approved five year recreation action plan that provides a specific action plan aimed at providing needed township facilities and enable the township to compete for state and federal recreation grants to provide such opportunities.
- 3) Where there is a demonstrated demand for recreation improvements, and as financial resources may become available, the township will strive to provide recreation facilities in a manner that recognizes the particular needs of its residents.
- 4) The township will encourage the provision of open space and recreation areas within future residential development projects such as platted and condominium subdivisions, to facilitate close-to-home recreation opportunities.

Chapter Five IMPLEMENTATION

Introduction

This Master Plan establishes a strategy for growth, development and preservation in Speaker Township. The Plan is comprised of graphic and narrative policies intended to provide basic guidelines for making reasonable, realistic community decisions. It establishes policies and recommendations for the proper use of land and the provision of public services and facilities. The Plan is intended to be used by local officials, by those considering private sector developments, and by all residents interested in the future of the township.

The Plan is a policy document. *As a policy document, this Plan's effectiveness is directly tied to the implementation of its policies through specific tools and actions.*

The completion of the Plan is one part of the planning process. Realization or implementation of the goals, objectives and policies of the Plan can only be achieved by specific actions, over an extended period of time, and through the cooperative efforts of both the public and private sectors.

Implementation of the Plan may be realized by actively:

- 1) Ensuring knowledge, understanding, and support of the Plan by township residents and the business community, and the continued communication with and involvement of the citizenry.
- 2) Regulating the use and manner of development through up-to-date reasonable zoning controls, building and housing codes, and other regulatory and non-regulatory tools.
- 3) Providing a program of capital improvements and adequate, economical public services to accommodate desirable land development and redevelopment.

The purpose of this Chapter is to identify implementation tools and where applicable, specific actions to be pursued.

Public Support, Communication and Community Involvement

Citizen participation and understanding of the general planning process and the specific goals, objectives and policies of the Plan are critical to the success of the township's planning program. Understanding and support of the Plan by local citizens can greatly enhance its implementation. This enhancement may be found in citizen support for bond proposals, special assessments, zoning decisions, and development proposals.

In order to organize public support most effectively, the township must emphasize the necessity of, and reasons for long-range planning and the development of the Master Plan. The Township must encourage citizen participation in on-going community planning efforts.

Specific actions to be undertaken to encourage public understanding and support of the township's planning program, and the continued communication with and involvement of the citizenry, are as follows.

- 1) Ensure that copies of the Master Plan are readily available at the Township Hall.
- 2) Post the Future Land Use Map of the Master Plan in the Township Hall where it is clearly visible.
- 3) Post the Master Plan on a township web site.
- 4) Post a regularly updated listing of current events pertaining to planning and zoning matters at the township hall and on a township web site.
- 5) Through public notices, a newsletter, township hall postings, and other means, apprise residents of the township's planning efforts and of meetings that will address development and public service improvement proposals as the projects move through each stage of review and deliberation.
- 6) Periodically hold special meetings for the specific purpose of discussing the township's planning efforts and providing residents with the opportunity to share concerns and suggestions.

Land Development Codes and Programs

Zoning Ordinance

A zoning ordinance is the primary tool for implementing a Master Plan. A zoning ordinance regulates the use of land. The ordinance generally divides a community into districts and identifies the land uses permitted in each District. Each district prescribes minimum standards that must be met such as minimum lot area, lot width, and building setbacks.

Since 2006, zoning regulations for Michigan communities are adopted under the authority of the Michigan Zoning Enabling Act, P.A. 110 of 2006. The purpose of zoning, according to the Act, is to (in part):

“regulate the use of land and structures; to meet the needs of the state’s citizens for food, fiber, energy, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land; to insure that use of the land shall be situated in appropriate locations and relationships; to limit the overcrowding of land and congestion of population, transportation systems, and other public facilities.”

Speaker Township has had zoning in place since 1980 along with occasional amendments to its zoning provisions over the years. With the adoption of this Master Plan, the township’s zoning ordinance should be carefully reviewed to identify updates that may be beneficial to implement the policies of the Plan and facilitate efficient day-to-day zoning administration.

The ultimate effectiveness of a zoning ordinance in implementing a master plan is dependent, in part, on the overall quality of ordinance administration and enforcement. If administrative procedures are lax, or if enforcement is handled in an inconsistent, sporadic manner, the result will be unsatisfactory. The Planning Commission, Township Board, and staff are responsible for carrying out zoning/development related functions including the review of development plans and site inspections. These functions can require special expertise and a substantial investment of time. Adequate staff and/or consulting assistance are necessary to ensure that these essential day-to-day functions are met and appropriate development is facilitated.

Zone Plan: The following pages present a Zone Plan for Speaker Township. The Zone Plan establishes a foundation for the township’s zoning regulations. The Zone Plan is comprised of three elements.

- 1) Critical Components of the Speaker Township Zoning Ordinance
- 2) Overview of Zoning Districts
- 3) Zoning District Site Development Standards

Zone Plan, Part One – Critical Components of the Speaker Township Zoning Ordinance. The following identifies important general elements that the Speaker Township Zoning Ordinance should include to ensure its ease of use and effectiveness in advancing the goals, objectives and policies of the Master Plan. *The ordinance should be reviewed within the context of these elements:*

- 1) **Procedural Matters/Plan Review:** The Zoning Ordinance should be reviewed to ensure it includes clear and comprehensive step-by-step provisions addressing procedural matters such as the application for and issuance of zoning permits, application procedures and approval standards for special land uses, application procedures and approval standards for ordinance amendments including the zoning map, application procedures and approval standards for matters before the Zoning Board of Appeals such as variance requests and appeals of administrative decisions, and violation and enforcement procedures.

The zoning permit application procedures should include clear requirements for the submittal of a plot plan or site plan illustrating proposed alterations and improvements to a parcel. Such a plan is critical in assisting local officials to determine if the development complies with all standards of the Zoning Ordinance and if it is designed to encourage compatibility with surrounding land uses.

The provisions should ensure such plans include comprehensive information pertinent to the development including (but not limited to) the delineation of existing natural features, the extent of alterations to such features including limits of clearing and grading, and the salient features of the development including buildings, parking, screening, lighting, grading and storm water management. The provisions should also provide for a comprehensive set of approval standards addressing such matters as access management and vehicular/pedestrian circulation, emergency vehicle access, environmental protection, conformance with the purposes of the respective district, and compatibility with surrounding conditions.

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- 2) **District Provisions/Special Land Uses:** The ordinance should include a clear and comprehensive presentation of zoning districts including the purpose, authorized uses, and site development standards for each district. To this end, the districts should differentiate between uses authorized “by right” versus as “special land uses.”

Uses permitted by right are the primary uses and structures specified for which a particular district has been established. An example may be a dwelling in a residential district. Special land uses are uses that are generally accepted as reasonably compatible with the primary uses and structures within a district. However, because of its particular character, a special land use may present potential injurious effects upon the primary uses within the district or is otherwise unique in character, and it may not be appropriate in certain situations or on certain parcels. These unique or special circumstances may be a result of traffic, noise, public services demands, or visual or operational characteristics.

As a result, special land uses require special consideration in relation to the welfare of adjacent properties and to the township as a whole. An example may be a kennel in a residential district or a mining operation in an agricultural district.

- 3) **Site Development Standards:** In addition to the standards presented in the Zoning Ordinance for each district, such as minimum lot area and width, the Ordinance should be reviewed to ensure it presents clear and comprehensive standards addressing more general fundamental site development issues such as:

- proper access to ensure public safety and welfare including access management along thoroughfares, accessibility to property for general and emergency vehicles, and proper design and maintenance of private roads.
- off-street parking and loading to ensure adequate facilities are provided on a development site and are of adequate design to encourage safe and efficient circulation.
- landscaping and screening provisions intended to ensure new development (commercial, industrial, institutional, etc.) is compatible with surrounding conditions and supportive of the desired character of the community.
- sign regulations that ensure local signage does not contribute to traffic safety hazards, visual clutter, confusion for vehicle drivers, visual blight, and decreased property values.
- environmental safeguard provisions to ensure new development minimizes disturbances to

the township’s natural resources including standards addressing sewage disposal, grading, impervious surfaces, natural features setbacks and storm water management.

- 4) **Nonconformities:** The Zoning Ordinance should address lots, uses and structures that are nonconforming due to changes to the zoning ordinance, and the extent to which such lots, uses and structures can be replaced, expanded, enlarged, or otherwise altered.

- 5) **Site Condominium Regulations:** The Zoning Ordinance should address site condominiums. Site condominiums come in many forms, but they typically involve residential developments that look identical or nearly identical to platted subdivisions. The principal differences between the two is that while privately owned lots comprise the entirety (or near entirety) of a platted subdivision, site condominiums are comprised of privately owned (or rented) building envelopes where there are no “lot lines” and greater portions of the development are commonly owned. Site condominiums are not comprised of “lots” in the traditional sense but the condominium units function in a similar manner. Zoning regulations must clearly address this form of development and correlate site condominium development with “lot” regulations to ensure such development is subject to the same review procedures and standards as otherwise applicable to other residential development of similar physical character (platted subdivisions).

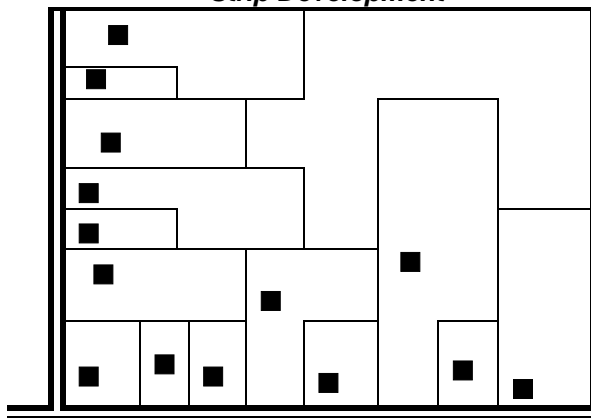
- 6) **Clustering / Open Space Developments:** As a tool to facilitate the conservation of important natural resources and ecosystems, this Plan supports what are commonly referred to as “cluster developments” and “open space developments” in association with platted subdivisions, condominium subdivisions, and similar neighborhood developments. This development option is a beneficial alternative to large lot “rural sprawl,” which consumes open space and creates lots that are too small for farming or meaningful habitat protection.

This form of development provides for the clustering of smaller lots than what is normally required, on only a portion of the development parcel, so that the balance of the parcel can be retained as open space and for the preservation of important environmental resources. As much as 50% or more of a site, and preferably the most environmentally significant, may be preserved in its existing natural state, with individual house lots occupying the remaining acreage. These “open space” areas can be reserved by the use of conservation easements, deed restrictions, or similar tools. A critical component of clustering should be the inclusion of new interior roads to

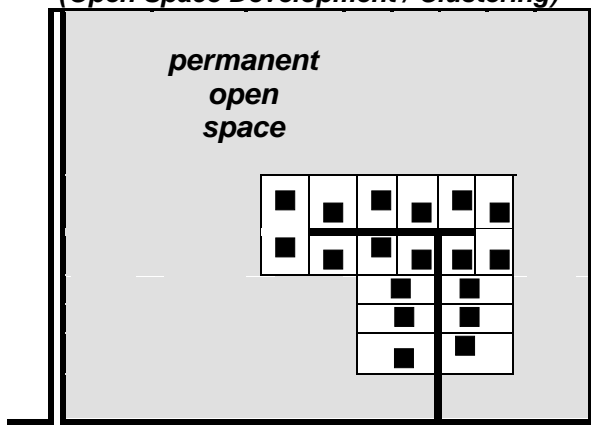
serve the new lots, rather than stripping new dwellings along existing road frontages. Provisions must recognize the specific requirements of Sec. 506 of the Michigan Zoning Enabling Act.

More traditional strip residential development along the township’s major roads is illustrated in Example A below. This is the easiest form of development but it impacts public safety due to the many driveways directly accessing the road and it can significantly undermine the rural character of the township. Example B, illustrating an open space development, improves public safety along the road, and more effectively preserves the existing character of the community including its open spaces and environmental resources and habitats. Clustering can also save infrastructure costs by reducing the length of roads and utility lines.

Example A
Strip Development



Example B
(Open Space Development / Clustering)



One of the most effective means to encourage the open space development option is through more flexible development standards than otherwise available, such as standards pertaining to permissible densities, lot sizes, and setbacks. This Plan supports appropriate incentives to facilitate this preferred form of development provided such

incentives are not contrary to the principal policies of the Plan including the intended character of each Area comprising the Future Land Use Strategy. Accordingly, moderate increases in recommended maximum development densities presented in Chapter Three may be reasonable.

7) **Planned Unit Developments (PUDs):** “Planned unit development” provisions in a Zoning Ordinance typically permit a more flexible form of development that normally permitted by the district in which the site is located or the other districts established in the Ordinance. PUDs are expressly authorized by the Zoning Enabling Act with the intent to facilitate development that, in part, encourages innovation in land use and variety in design, layout, and type of structures constructed; achieves economy and efficiency in the use of land, natural resources, energy, and the provision of public services and utilities; encourages useful open space; and provides better housing, employment, and shopping opportunities. PUDs are sometimes used as a means to facilitate residential cluster development discussed in (6) above, but are more frequently used to facilitate development that provides a mix of housing units and nonresidential uses in one unified site design. The specific PUD provisions of an ordinance dictate the character and scope of development that may occur under such a development option. Officials should seek professional guidance regarding the suitability of PUD provisions for Speaker Township.

8) **Special Issues:** A very beneficial part of a zoning ordinance, commonly referred to as “Special Provisions”, can be used to address a host of land use issues that have relevance to the particular community. The particular scope of issues addressed under “Special Provisions” should be tailored to the particular community. However, common issues addressed under “Special Provisions” in rural communities include, but are not limited to, some of the following:

- conditional approvals
- moving buildings
- essential services
- one dwelling per lot
- single family dwelling standards
- temporary dwellings
- accessory uses, buildings, and structures
- outdoor furnaces
- home occupations
- keeping of livestock (dwelling related)
- roadside stands
- swimming pools
- outdoor display, sales, and storage

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- outdoor recreational vehicle storage
- temporary non-residential buildings/uses

- 9) Clarity: The clarity of a zoning ordinance's wording and organization will greatly impact the ability of officials to administer the ordinance in a consistent manner, validly enforce the ordinance's provisions, and facilitate a user-friendly document for officials, applicants and the general public. This clarity must be reflected in the wording of individual provisions as well as linkages between chapters including the avoidance of conflicting provisions.
- 10) Compliance with Current Law: The Zoning Ordinance's provisions must comply with current law to ensure its validity and the ability of officials to enforce the Ordinance. The Township Zoning Act, under which Speaker Township first adopted zoning regulations, was repealed in 2006 and replaced by the Zoning Enabling Act (Public Act 110, as amended). The township's zoning regulations should be continually updated to address any changes to the Zoning Enabling Act, which has been amended multiple times since its adoption in 2006.

Zone Plan, Part Two – Overview of Recommended Zoning Districts and Relation to Future Land Use Strategy/Map. Table 5-1 presents guidelines for the presentation of zoning districts in the Speaker Township Zoning Ordinance to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan (including the Future Land Use Map).

Zone Plan, Part Three – Zoning District Site Development Standards. Table 5-2 presents guidelines for basic site development standards for zoning districts to implement the Future Land Use Strategy presented in Chapter Three of the Master Plan (including the Future Land Use Map).

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Table 5-1

Overview of Recommended Zoning Districts and Relation to Future Land Use Map

The following table presents guidelines for the presentation of zoning districts in the Speaker Township Zoning Ordinance to implement the policies of Chapter Three including the Future Land Use map. The table identifies how each example zoning district is intended to implement each of the planning areas discussed in Chapter Three, including the principal and secondary types of uses envisioned for each district.

Secondary uses identified in the table, or others specified in the Zoning Ordinance, should typically be subject to comprehensive review to determine if the proposed use is appropriate on the subject site based on, in part, compatibility with surrounding land uses, environmental conditions, road infrastructure, and public services.

Speaker Township may find the establishment of the example districts to be best undertaken in a phased manner over a period of time. The example districts do not preclude the township from pursuing other special purpose districts to further implement the Master Plan including “overlay districts” to address special issues and/or concerns.

Zoning District (example names)	Primary Relationship to Future Land Use Map	Primary Intended District Uses	Examples of Secondary District Uses
<u>AR</u> Agricultural Residential	Agricultural/Rural Residential Area	Agriculture and low density single family residences	Veterinary clinics, kennels, golf courses, mineral extraction, religious institutions, parks, public and recreation facilities, day care facilities and bed and breakfasts.
<u>R-1</u> Low Density Residential	Residential Settlement Area	Single -family residences.	Schools, religious institutions, golf courses, community centers, day care facilities and parks.
<u>R-2</u> Medium Density Residential	Residential Settlement Area	Single and two-family residences.	Schools, religious institutions, golf courses, community centers, day care facilities and parks.
<u>R-3</u> High Density Residential	Residential Settlement Area	Single and two-family residences.	Schools, religious institutions, golf courses, community centers, day care facilities and parks.
<u>R-MHC</u> Manufactured Housing Comm	Residential Settlement Area	Manufactured housing communities.	Day care facilities and mobile home sales.
<u>R-MF</u> Multiple Family	Residential Settlement Area	Apartments, townhouses, and similar living arrangements.	Day care facilities, golf courses, and assisted living facilities.
<u>C-1</u> Local Commercial	M-19 Commercial Corridor	Retail, office and personal service uses catering to local population and highway traveler.	Use that are likely to draw from a somewhat more regional population and other uses that are not principally intended to cater to the local population or highway traveler.
<u>I-1</u> Light Industrial	M-19 Industrial Center	Industrial uses of a comparatively “light” character such as the assembly of small parts and tool and dye.	Junk yards, communication towers and other industrial activities that are more marginal than the primary intended use.

Table 5-2
Zoning District Site Development Standards

The following table presents general guidelines for basic site development standards of the zoning districts to implement the Future Land Use Strategy (Chapter Three). All guidelines are approximate and serve as a framework for detailed standards. The guidelines establish a realistic concept for each district, with recognition that specific conditions may suggest variations from the guidelines such as height provisions for farm buildings, setback provisions for non-residential uses that abut residential uses, and lot width provisions for lots fronting on principal thoroughfares. It is also recognized that conditions may surface that suggest the need for divergences from the guidelines to resolve conflicts or otherwise ensure the public health, safety and welfare.

In addition to the district guidelines below, the Zone Plan supports the exploration of the inclusion of a Planned Unit Development (PUD) District according to the Zoning Enabling Act to provide opportunities for flexibility while supporting the overall goals of the Zoning Ordinance and Master Plan.

Zoning District (example name)	Minimum Lot Area	Minimum Lot Width and Frontage	Maximum Building Heights	Maximum Lot Coverage	Minimum Yard Setback (each)		
					Front	Side	Rear
AR Agricultural Residential	2 acres	150 ft.	35 ft.	15%	100 ft.	25 ft.	25 ft.
R-1 Low Density Residential	2 acres	150 ft.	35 ft.	15%	100 ft.	25 ft.	25 ft.
R-2 Medium Density Residential	1 acre	125 ft.	35 ft.	20%	70 ft.	20 ft.	25 ft.
R-3 High Density Residential	1/4 acre	70 ft.	35 ft.	30%	55 ft.	10 ft.	25 ft.
R-MHC Manufactured Housing Community	10 acre project parcel	330 ft. Project parcel	Conformance with Rules and Regulations of the Michigan Manufactured Housing Commission				
R-MF Multiple Family	1 acre, with additional acreage based on number of units.	100 ft.	35 ft.	35%	100 ft.	25 ft.	25 ft.
C-1 Local Commercial	1 acre	150 ft.	35 ft.	50%	100 ft.	25 ft.	25 ft.
I-1 Light Industrial	2 acres	150 ft.	40 ft.	50%	125 ft.	25 ft.	30 ft.

General Notes to Table 5-2

1. The above front yard setback guidelines assume measurements from the road centerline.

Subdivision and Land Division Ordinances

When a developer proposes to subdivide land, the developer is, in effect, planning a portion of the township. To ensure that such a development is in harmony with the Master Plan, the subdivision or

resubdivision of residential and nonresidential land must be adequately reviewed. A subdivision ordinance establishes requirements and design standards for the development of plats including streets, blocks, lots, curbs, sidewalks, open spaces, easements, public utilities, and other associated subdivision improvements. The Land Division Act,

P.A. 571 of 1996, as amended, provides the authority for municipalities to adopt local ordinances to administer the provisions of the Land Division Act including the platting of subdivisions.

With the implementation of a subdivision ordinance, there is added insurance that development will occur in an orderly manner and the public health, safety and welfare will be maintained. For example, subdivision regulations can help ensure developments are provided with adequate utilities and streets, and appropriately sized and shaped lots. Adopting a local ordinance addressing the creation of subdivisions can encourage a more orderly and comprehensive manner for the review and approval of subdivision plats.

Of equal importance is the reliance on a “land division ordinance.” While a subdivision ordinance addresses unified residential developments of multiple units (plats), nearly all of the residential development in Speaker Township during recent years has been incremental land divisions for the purpose of establishing individual home sites. A land division ordinance assures that incremental divisions not part of a subdivision meet certain minimum standards such as access and lot area and width. The Land Division Act also provides municipalities with the authority to adopt a land division ordinance. Such an ordinance can ensure consistency in review and approval practices. Speaker Township has adopted such an ordinance and it should be reviewed and updated as may be necessary.

Other Special Purpose Ordinances

While zoning and subdivision regulations are the most frequently used tools for the regulation of land use and development, the control of land use activities can extend beyond their respective scopes. Special purpose ordinances can complement zoning and subdivision regulations and further the implementation of the Master Plan. Such ordinances may address matters pertaining to noise, public nuisances, outdoor assemblies, junk, weeds, and other conditions. Township officials should evaluate its current special purpose ordinances and determine what new ordinances, and/or amendments made to current ordinances, may be beneficial to further implement the Master Plan.

Capital Improvements Programming

The use of capital improvements programming can be an effective tool for implementing the Master Plan and ensuring the orderly programming of public improvements. In its basic form, a Capital Improvements Program (CIP) is a complete list of all proposed public improvements planned for a six year period (the time span may vary), including costs, sources of funding, location, and priority. It is a schedule for implementing public capital improvements that acknowledges current and anticipated demands, and recognizes present and potential financial resources available to the community. The CIP is not intended to encourage the spending of additional public monies, but is simply a means by which an impartial evaluation of needs may be made.

The CIP outlines the projects that will replace or improve existing facilities, or that will be necessary to serve current and projected development within a community. Advanced planning for public works through the use of a CIP ensures more effective and economical capital expenditures, as well as the provision of public works in a timely manner. Few communities are fortunate enough to have available at any given time sufficient revenues to satisfy all demands for new or improved public facilities and services. Consequently, most are faced with the necessity of determining the relative priority of specific projects and establishing a program schedule for their initiation and completion.

The importance of a CIP is illustrated by the fact that Sec. 65 of the Planning Enabling Act requires that a municipality prepare an annual six-year capital improvements program if the municipality owns or operates a water supply or sewage disposal system.

This Master Plan does not recommend specific increases in public services or infrastructure at this time. As the township grows and increased demands for public services and infrastructure improvements surface, the benefit of a comprehensive capital improvement program for the township will likely grow.

Maintaining a Current Master Plan

Successful planning requires the maintenance of a current Master Plan. The Master Plan should be updated periodically. The Plan must be responsive to community changes if it is to be an effective community tool and relied upon for guidance. Periodic review of the Plan should be undertaken by the Planning Commission, Township Board, and other officials to determine whether the Plan continues to be sensitive to the needs of the community and continues to chart a realistic and desirable future.

Community changes that may suggest updates to the Plan include, but need not be limited to, changing conditions involving available infrastructure and public services, growth trends, unanticipated and large-scale development, and changing community aspirations. The importance of maintaining a current Plan is reflected in the Planning Enabling Act's requirement that a Planning Commission review its Master Plan at intervals not greater than five years to determine whether amendments or a wholly new Plan is necessary.

Important questions that should be asked during a review of the Plan should include, at a minimum:

- Does the Plan present valid and current inventory data (Appendices and elsewhere)?
- Does the discussion of planning issues and specific goals/objectives continue to be appropriate today?
- Do the future land use and public services policies of the Plan continue to reflect preferred strategies to address development, preservation and public services?

- Have there been any new and/or significant development projects that have raised concerns about the township's future, or the future of a particular area of the township, that may suggest changes to the Master Plan's goals, objectives and/or policies regarding development, preservation and public services?
- Have there been any other major changes in the township that were not anticipated under the current Master Plan?
- Have any specific development decisions been made (such as rezonings and site plan approvals) that may have appeared contrary to the Master Plan and, if so, do such decisions suggest the need to revise the Plan to be more responsive to local conditions?
- Have any text amendments been made to the Zoning Ordinance that suggest Master Plan revisions in association with the Plan's goals, objectives and/or policies?
- Is the character of local growth and development (residentially, commercially and other) since the Plan was adopted (or last updated) in keeping with Plan's vision (goals, objectives, and policies)?
- Are there significant discrepancies between the Future Land Use Map and the Zoning Map, recognizing that the Zoning Map is current law and the Future Land Use Map portrays the future vision?
- Does the Master Plan comply with current law?

Amendments to the Plan, or the preparation of a wholly new Plan, should follow the minimum procedures delineated in the Planning Enabling Act in addition to measures the township believes will enhance the planning process. The township should seek substantive community input during the early stages of deliberations.

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Appendix A CULTURAL FEATURES

Regional Context

Speaker Township is a rural community of approximately 1,300 persons, located along the southern edge of Sanilac County in the “Thumb Area” of Michigan’s Lower Peninsula. The township is generally square in shape, excluding the presence of the one-square mile Village of Melvin that sits in the southwest corner of the township. The township’s exterior boundaries are approximately six miles by six miles and exhibit the congressional township boundaries (based on the U.S. Public Land Survey System) characteristic of the majority of townships in Lower Michigan. Excluding the Village of Melvin, the township is approximately 34.6 square miles in area. The township sits within a triangular area formed by the Village of Peck one-half mile north (approximately 630 persons), the Village of Yale 1.5 miles south (approximately 1,955 persons) and Brown City six miles west (approximately 1,325 persons). Principal surrounding townships are Elk to the north, Fremont to the east, Brockway to the south (St. Clair County), and Maple Valley to the west.

Approximate driving distances to more regional urban centers of a population of 30,000 persons or more, within approximately 75 miles, are:

Port Huron, MI:	30,200 persons	40 road miles southeast
Flint, MI:	102,450 persons	60 road miles southwest
Saginaw, MI:	51,500 persons	70 road miles northwest
Detroit, MI:	713,800 persons	75 road miles south

The regional landscape within fifty miles of Speaker Township, and Michigan’s Thumb Area in general, is dominated by agriculture, woodlands, wetlands and other open spaces, and scattered residential development, in addition to periodic small villages and cities and other similar urbanized pockets.

Access and Circulation

Regional Access

Regional access to Speaker Township is provided by M-19 and M-90. M-19 connects the northern Greater Detroit area to the south with Sandusky to the north and travels north-south through the central region of the township. Exit #184 along I-69, 13 miles to the south, provides direct access to M-19 (near Emmett). M-90 extends east from M-53, ten miles west of the township, and travels through the central region of the township where it intersects with M-19. M-90 then travels north along M-19 into Peck to the north, where it then heads east to Lexington. Exit #164 along I-69 provides direct access to M-53 (near Davison). Regional access is also available from several regional public airports including the Sandusky City Airport (15 miles north), the St. Clair County International Airport in Port Huron (35 miles southeast), and the Bishop International Airport in Flint (60 miles southwest).

Local Roadway Network

Speaker Township's local public road network generally exhibits the near square mile grid that dominates much of the Lower Michigan rural landscape. All public roads are under the jurisdiction of the Sanilac County Road Commission (SCRC) except M-19 and M-90 (state highways).

In compliance with the requirements of Michigan Public Act 51 of 1951, the SCRC classifies all roads under its jurisdiction as either "*primary*" or "*local*" roads. Primary roads are considered the most critical in providing regional circulation throughout the county and between counties. The classification of roads by the SCRC has important financial implications with regard to maintenance and improvements. Under Michigan law, townships have no responsibility for funding road improvements and maintenance. The SCRC is responsible for local road maintenance and must maintain and improve primary roads at its own expense. However, state law limits the participation of Road Commissions to no more than 50% of the cost for improvements (versus maintenance) to local roads. Requests by local townships for local road maintenance levels beyond those considered adequate or feasible by the SCRC, and requests for improvements to local roads, frequently require local funding. In reality, nearly all Michigan townships are actively involved in funding road maintenance and improvements.

The road segments in Speaker Township that the SCRC classifies as "*primary*" are paved and are limited to:

- Galbraith Line Road
- Melvin Road, north of Galbraith Line Road

All other public road segments in the township are classified as "*local*" (excluding state highways) and are of a gravel surface.

Also of importance is the functional classification of township roads as established by the Federal Highway Administration (FHA). The FHA classifies road segments according to the extent to which the road is intended to facilitate traffic movement over long and short distances versus access to abutting property. This classification is referred to as the National Functional Classification (NFC). The relative hierarchy of the classification as applied to Speaker Township follows.

Interstates and Other Freeways are at the top of the NFC hierarchical system and frequently include freeways and state highways between major cities. Interstates and freeways function to primarily facilitate long distance travel including access to important traffic generators such as major airports and regional shopping centers. *There are no roads in Speaker Township classified as interstates or freeways.*

Principal arterials function similarly to interstates and freeways except that they facilitate shorter travel distances and access to lesser traffic generators. Principal arterials frequently include state highways between large cities. *There are no roads in Speaker Township classified as principal arterials.*

Minor arterials are similar in function to principal arterials except they carry trips of shorter distance and to lesser traffic generators. Minor arterials frequently include state highways between smaller cities. *M-19 and M-90 are the only roads classified as minor arterials.*

Major collectors function with a much greater focus on providing access to property rather than long distance travel, and frequently funnel traffic from residential or rural areas to arterials. *Galbraith Line Road is the only road classified as a major collector in Speaker Township.*

Minor collectors are similar to major collectors except for the still greater focus on providing access to property rather than long distance travel. *Melvin Road, north of W. Galbraith Line Road, is the only minor collector segment in Speaker Township.*

Local Roads serve primarily to provide access to adjacent properties and minor collectors. *Local roads in Speaker Township include all public roads not noted above.*

Federal aid for road projects is limited to roads classified as *major collectors or higher*. Roads classified as minor collectors have only limited eligibility and roads classified as local roads are not eligible for federal funding.

Land Use and Development

The landscape of Speaker Township is very rural in character and comprised nearly entirely of woodlands, wetlands, farm operations, and scattered residences. Several commercial and/or industrial businesses are present. Table A-1 provides a general breakdown of general land use/cover.

Table A-1
Approximate General Land Use/Land Cover Allocation, 2014

Land Use-Land Cover	Approximate Acreage	Approximate Portion of Township
Agriculture	16,500	75.1%
Open Spaces such as woodlands, wetlands, meadows golf courses	3,295	15.0%
Residential, assuming an average of 2.5 acres of yard area per home site	1,400	6.4%
Public road right-of-ways	775	3.4%
Public other than roads such as churches, cemeteries, schools, and township hall	15	0.1%
Commercial	4	Less than 0.1%
Industrial	10	Less than 0.1%

Table is based on aerial imagery, township records and “windshield” survey.

A review of some of the more significant characteristics of land use and development in the township follows.

Agriculture

Farming operations occupy approximately 75% of the township’s area. The approximately 16,500 farm acres are evident in all areas of the township. Agriculture accounts for approximately 50% or more of the area of each of the 34.5 sections comprising the township except in the case of Sections 22, 23 and 27. The area of each section devoted to agriculture approaches 90% or more among 16 of the township’s 34.5 sections. Farming activities include principally crop operations, most particularly corn, wheat and soybeans.

In an effort to better protect Michigan’s farming interests, Public Act 116 of 1974 was adopted by the state and has since been amended and made part of the Michigan Natural Resources and Environmental Protection Act. The Act establishes a program whereby farmers can enroll their properties to gain property tax relief provided the farmland is maintained in an agricultural/open space status. The minimum enrollment period in the program is seven years and many landowners opt to enroll for a much longer period. Speaker Township acreage enrolled in the PA 116 program in 2015 comprised approximately 3,500 acres – just over a 15% of the township. More than 95% of the enrolled acreage is evenly distributed within the north and south thirds of the township, with the

central third of the township being nearly entirely void of enrolled acreage. Approximately half of the 49 current enrollments extend to year 2025 or beyond, including ten enrollments that extend to year 2040 and beyond.

Residential Development and Land Division

The 2010 Census recorded 543 dwelling units, 70 more than as recorded by the 2000 Census. The 2009 – 2013 American Community Survey (Census Bureau) revealed that 99.6% of all dwellings in the township were single family dwellings, approximately 12.7% of which were mobile homes (66). 89.1% of the dwelling units were occupied and of the occupied units, approximately 90.9% were owner-occupied. The balance was occupied by renters. Of the 9.1% of the units that were not occupied (59), approximately one-half were for sale or rent, or for seasonal, recreational or occasional use only.

The 2009 – 2013 American Community Survey (Census Bureau) reported that approximately 38.3% of the dwelling units were constructed since 1990. This proportion is approximately 39% greater than that of the county and state, suggesting that Speaker Township has witnessed a comparatively higher rate of residential growth during the past two decades. The median value of the owner-occupied housing stock in the township was \$88, 600, 8.2% less than the county and 39.9% less than the state. See Table A-2.

According to the 2009 – 2013 American Community Survey (Census Bureau), the township’s housing stock had an average of 6.0 rooms per dwelling and 62.1% of the dwellings had three bedrooms. Bottled, tank or LP gas accounted for 46.8% of the dwellings’ heat source and utility gas accounted for an additional 25.5% of the dwellings’ heat source. The balance relied principally on wood or electricity.

**TABLE A-2
Selected Housing Characteristics**

Source: 2010 Census and 2009 – 2013 American Community Survey, U.S. Census Bureau

DWELLINGS	SPEAKER TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
Year Built (%)			
1990 or later	38.3%	24.6%	23.0%
1950 to 1989	33.7%	44.4%	53.1%
Before 1950	28.0%	31.0%	23.9%
Median Value/Owner Occupied	\$88,600 ¹	\$96,500	\$147,500
Median Monthly Owner Costs Among Mortgaged Dwellings	\$1,054 ²	\$1,072	\$1,349
Median Monthly Owner Costs Among Non-Mortgaged Dwellings	\$345 ³	\$397	\$461
Median Rent Payment	\$839 ⁴	\$619	\$709

¹ Includes Village of Melvin, with a village-specific median value of owner-occupied dwellings of \$76,000.

² Includes Village of Melvin, with a village-specific median monthly owner costs of mortgaged dwellings of \$650.

³ Includes Village of Melvin, with a village-specific median monthly owner costs of non-mortgaged dwellings of \$292.

⁴ Includes Village of Melvin, with a village-specific median rent payment of \$928.

Residential development in Speaker Township exhibits two principal forms. The first and original form, and vastly dominant in land area, is the farm homestead and other large land tracts. During the early half of the 1900s, large parcels of 80 to 160 acres and more characterized the land division pattern in the community. Parcel sizes of 40 acres and more comprised 99% of the township’s acreage and parcel sizes of 160 acres and more comprised nearly 13% of the township’s acreage. The original homes were occupied, in part, by farming families including those in the timber industry. Many of

these original homesteads are still evident today. While this large-tract land division pattern continues to comprise the vast majority of the township's landscape today, the presence of large parcels has decreased somewhat. In 2014, parcel sizes of 40 acres and more comprised approximately 79% of the township's acreage and parcel sizes of 160 acres continued to comprise approximately 13% of the township's acreage.

The second principal form of residential development, and which comprises approximately 21% of the township's land area, is residences located on parcels of 30 acres or less and fronting on the township's principal road network (section-line and similar roads). The majority of these land splits are less than 15 acres, with parcels of five to ten acres in area being most dominant. This form of housing evolved as some of the original large tracts were incrementally split up. This land division pattern began to show itself in the 1960s and 1970s though this pattern is not nearly as present in Speaker Township as it is across much of the state where local farm acreage has declined. This trend of parcel splitting along a township's section-line roads is commonly referred to as *strip development*. This development pattern has been of increasing concern in the transportation and land use planning arena due to its negative impacts on traffic safety, congestion, farmland preservation, and rural character preservation.

Commercial and Industrial Development

Speaker Township includes a limited number of commercial and industrial uses, the principal being:

Crop Production Services at the southeast corner of Brockway (M-19) and Galbraith Roads, providing crop production and management services and products. Crop Production Services occupies approximately four acres of land.

Ametek is located on the west side of Brockway Road (M-19), approximately 1,500' north of Mortimer Line Road, and manufactures various sensor devices including control devices, panels, and relays. The Ametek facility occupies approximately 10 acres.

The Willow Tree Golf Course is located on the north side of Galbraith Line Road, one-half mile west of Brockway Road (M-19). The golf course is open to the public and includes nine holes and covers approximately 120 acres.

The Lone Oak Orchard is located on the east side of Brockway Road (M-19), approximately 800' north of W. Fremont Road. The Lone Oak Orchard includes a farm market that sells orchard and other farm products as well as garden and home décor. The farm market facility covers approximately one-half acre.

Big Dave's is a convenience store located at the northwest corner of Brockway (M-19) and W. Fremont Roads, and occupies approximately one-quarter acre.

The South Sanilac Veterinary Hospital is located on Brockway Road (M-19) just south of E. Burns Line Road and provides medical services to small and large animals. The hospital facility occupies approximately one acre.

Kohler Propane is located on the west side of Brockway Road (M-19) immediately north of the township hall, and provides propane supply services. The facility occupies approximately two acres.

Also present are various utility providers such as Thumb Electric, Semco Energy, DTE Energy, AT&T, and Comcast, in addition to local farm stands and home-based occupations carried on within private residences.

Community Facilities and Services

Township Administration

A five member Township Board governs Speaker Township. Township offices are located in the Township Hall on the west side of M-19, approximately 1,500' south of Townhall Road. The hall includes approximately 2,500 sq. ft. of floor area and houses a meeting room, administrative areas, and restrooms. The township hall is available for rent for private or other special functions. Government administration and services are funded by a millage, user fees, and profit-sharing revenue.

Cemeteries

Speaker Township owns and manages one cemetery located on the east side of Brockway Road between Fremont and Burns Line Road.

Education

Four public school districts serve Speaker Township residents. The Peck Community School District serves the vast majority of the township including nearly all of the north half of the township and most of the area within one mile of M-19 in the township's southern half. Brown City Community Schools serves the balance of the southwest quarter of the township. Yale Public Schools serves the majority of the balance of the southeast quarter of the township. Croswell-Lexington Community Schools cover less than one square mile of the township, in the eastern portions of Sections 13 and 24. The principal school facilities of each school district are located in Peck, Brown City, Yale, Croswell and Lexington respectively. There are no public school facilities in Speaker Township.

Sewage Disposal and Potable Water

There is no public sanitary sewer or water service in Speaker Township. The Karegnondi Water Authority (KWA) consists of the Genesee County Drain Commissioner, Lapeer County Drain Commissioner, and Sanilac County Drain Commissioner, and the cities of Flint and Lapeer. The KWA is a municipal water supply entity and is in the process of constructing a water main that will draw water from Lake Huron and carry the raw water west through portions of the counties of Genesee, Lapeer and Sanilac Counties. The water line will run along the south edge of Speaker Township, generally along the Fisher Road corridor. The project is anticipated to be completed in 2016.

Emergency Services

Speaker Township provides fire protection to area residents through the Speaker Township Fire Department. The fire department serves the entire township and maintains a fire station in Melvin and on M-19 as part of the township hall facilities. Fire protection services are funded through a township-levied tax in addition to a user fee and profit-sharing revenue. Ambulatory service is provided principally by the Marlette Regional Ambulance Service. Police protection services are provided principally by the Sanilac County Sheriff's Department, funded through a county-levied tax. The State Police also provide emergency services, limited primarily to the M-19 and M-90 corridors, and elsewhere during times of particular need.

Recreation

Speaker Township does not operate any recreation facilities. Local residents do have access to the Willow Tree Golf Course in the township and a number of regional recreation opportunities including the Flynn Township State Game area in south Sanilac County, the Minden City State Game Area in north Sanilac County, the Port Huron State Game Area in northeastern St. Clair County, and the Deford and Tuscola State Game Areas in western and central Tuscola County. Residents also have access to outdoor recreation fields and facilities, outside of the township, that are part of the local school systems or otherwise operated by neighboring communities and nearby villages and cities.

Appendix B

ENVIRONMENTAL FEATURES

Geology & Topography

During the Paleozoic era of geological history, Sanilac County and the state as a whole was inundated by successive warm, shallow seas during which large amounts of sediment were deposited. These deposits subsequently lithified to form bedrock. Speaker Township sits upon bedrock comprised of Coldwater Shale and Marshall Sandstone, with Coldwater Shale being more dominant. Shale is the principal component of Coldwater Shale, with interbedded siltstone, sandstone, dolomite and limestone. Marshall Sandstone is comprised principally of very fine to coarse-grained sandstone. The Ice Age brought four successive continental glaciers across the Great Lakes area. As these ice sheets moved southward from Canada, they scoured and abraded the surface of the land leaving behind deeper valleys and more rounded hilltops. The advancing glaciers carried large quantities of rock materials scraped and gouged from the land's surface. These materials were then deposited during the melting of the ice to form drift materials covering the bedrock below. While the depth to bedrock exceeds 800 feet in some parts of Michigan, bedrock depth in Speaker Township generally ranges from approximately 100 to 200 feet and generally increases as one moves toward the center of the township.

The township's topography is largely level to gently rolling in character. Approximately 80% of the township reflects grades of 0% to 2% and the balance of the township is comprised principally of grades not exceeding 6%. Approximately 1% of the township reflects grades greater than 12% and these areas are dispersed and each being of small acreage. The most extensive and contiguous area of the township that reflects increased topographic relief, including many of its higher elevations, extends along the Jordan Road corridor approximately one mile to the east and west between Fisher Road and M-90, and extending further west to include Sections 17 and 20. Topographic elevations in the township range from approximately 765' to 865' above sea level. The highest region of the community is centered near the Jordan and Galbraith Roads intersection, and extends outward approximately three-quarters of a mile. The lowest elevations are generally found along several of the townships water courses where they exit the township, most particularly the Potts Drain in the township's northeast corner (765' above sea level).

The character of an area's geology and topography can have bearing on development and land use planning. Speaker Township's topography does not generally present challenges for development. It is generally recommended that development be restricted in intensity where grades exceed approximately 12%, and be strongly discouraged where grades exceed 18%. As grades increase in severity, significant challenges arise for septic systems and there is an increased potential for soil erosion and sedimentation of water courses and wetlands. Construction costs frequently increase as well.

Drainage & Water Resources

Speaker Township is characterized by limited water resources, although minor streams and watercourses are plentiful.

The majority of the southern third of the township drains in a southerly direction by way of the Sanilac and St. Clair Drain, which exits the township in its southeast corner before flowing into Mill Creek in St. Clair County. Mill Creek ultimately empties into the Black River which flows into Lake Huron at Port Huron.

The majority of the northern two-thirds of the township drains in a northerly direction. The principal watercourse that facilitates this drainage is the East Branch of the Speaker and Maple Valley Drain. This drain flows north through the northwest quarter of the township and ultimately empties into Elk Creek near Watertown which, in turn, also flows into the Black River. The majority of the eastern third of the township is drained by the Potts Drain, which flows north through the township's northeast corner and empties into Elk Creek. There are many smaller drains and water courses that collect runoff and channel the runoff to these principal water courses. Speaker Township sits fully within the Black River watershed, which extends across nearly half of Sanilac County and the northern third of St. Clair County, and limited eastern portions of Tuscola County.

Drainage in Speaker Township is also facilitated through a network of wetland areas that collect and store significant volumes of runoff. Wetlands are discussed in more detail on the following page.

Lands abutting or in close proximity to drainage courses, such as streams, ponds, and lakes, are subject to flood conditions where the drainage courses do not have the capacity to accommodate the rate of runoff from a single heavy rainfall or numerous lighter rainfalls over a relatively short period of time. The Federal Emergency Management Administration has identified no flood hazard areas in Speaker Township. This is due in large part to the comparatively limited development (impervious surfaces), the network of drainage courses and wetlands that carry and store runoff, and the predominantly loamy soils that facilitate the absorption of rainfall. Improperly managed land development practices can impact flood conditions both locally and in the communities downstream.

Groundwater

As runoff flows across land surfaces and travels through drainage courses, a portion of the runoff seeps into the ground and collects in great quantities in the underlying soils and deeper bedrock. These reservoirs of water are referred to as aquifers and serve as the sources of drinking water for nearly all residents of Speaker Township. Wells in Speaker Township are variable, some extending only into the glacial drift below the surface while many other extend into the bedrock further below. The glacial drift in Speaker Township is not considered a particularly good source of potable water in regard to the water carrying capacity of the drift, and the shale bedrock is not considered a preferred aquifer as well. Conversely, the Marshall Sandstone bedrock is one of the most productive aquifers in the state.

The overall quality of the groundwater throughout the township is variable. It is common for well water to be "hard" – containing comparatively high levels of mineral deposits including calcium, magnesium and iron. Hard water is generally considered not to present health risks to humans but can cause staining and have an odor. "Water softening" devices are commonly used to address this condition. There have also been detections of arsenic in some of the township's water wells and throughout Sanilac County. Arsenic is classified as a known human carcinogen and, at high levels, has been linked to skin, bladder, lung and prostate cancer.

Aquifers can be “*confined*” or “*unconfined*” systems. Confined systems have an impermeable soil layer (typically clay) above them which acts to confine the aquifer and protect the aquifer from contaminants seeping into the subsurface above the confining soil layer, such as petroleum products, fertilizers, and improperly disposed household liquids. Unconfined systems do not have this protective layer of clay soil and are much more prone to contamination. Even confined systems can be contaminated due to hazardous material entering the groundwater as a result of groundwater flows from non-confined aquifers. Local well logs suggest there is a confining layer of clay across much of Speaker Township but the extent and depth of the clay liner is variable with increased opportunities for ground water contamination. Particularly shallow wells, drawing from the glacial drift above the bedrock and where a confining clay layer is not present or is otherwise fragmented, are especially vulnerable to groundwater contamination.

Contamination of ground water resources can originate from a number of sources including, but not necessarily limited to poorly operating septic drain fields, floor drains that discharge to the outdoors, the storage of hazardous and toxic substances without the necessary safeguards, the improper disposal of fuels and oils, excessive use of fertilizers, and improper disposal of wastes by industrial, commercial and residential activities. Thus, the protection of groundwater quality requires appropriate land use management along various fronts.

Woodlands and Wetlands

Speaker Township is comprised of approximately 3,000 acres of shrub lands and woodlands, or 13.5% of the township’s area. About two-thirds of the woodlands are of an upland character including maple, elm, beech and cherry. The balance is comprised of wooded wetlands including red maple and willow. The township’s approximately 1,000 wetland acres are characterized nearly entirely by lowland woodlands and shrub lands, with herbaceous non-woody wetlands accounting for less than 20 acres of all wetlands. The township woodlands are scattered across the community, with a greater presence in its southern half. The majority of the woodland acreage is contained in stands that approach 40 acres or more, with the greatest expanses of woodlands being located in Sections 15, 22, 23, 25, 26, 27, and 31.

Conversely, the township wetland areas are typically less than 20 acres in area. The principal exception and largest expanse of wetlands is located in the township’s southwest corner in association with the Sanilac and St. Clair Drain, and cover approximately 225 acres. Wetland acreage is most prevalent in the southeast half of the township.

Of particular significance is the network of interconnected wetlands and upland woodlands. The network is important because of the vital role these resources play in flood control, runoff purification, groundwater recharge, wildlife habitats, recreational opportunities, and supporting the rural character of the township.

Wetlands are environmentally sensitive resources and can experience degradation and destruction due to changes in water levels, erosion and sedimentation, filling, dredging, and draining. The degradation or pollution of a wetland area can have a destructive impact upon wetlands and related woodland resources distances away due to the frequent physical linkages between these resource areas. In addition to the environmental constraints wetlands pose for development, they present severe physical constraints for land development due to flooding and instability of soils.

Because of the important environmental role of wetlands, they are protected by the Michigan Environmental and Natural Resources Protection Act, Part 303. Wetlands are regulated by the state if they meet any of the established criteria including, but not limited to, wetlands connected to one of the

Great Lakes or located within 1,000 feet of one of the Great Lakes, wetlands located within 500 feet of an inland lake, pond, river or stream, and other wetlands of five acres or more in area. The law requires a permit be obtained from the state for depositing fill in a wetland, dredging or removing soil from a wetland, constructing or operating a use in a wetland, or draining surface water from a wetland. The Michigan Department of Environmental Quality will not issue a permit unless it finds, in part, that there would be no unacceptable disruption to aquatic resources and that the proposed activity is wetland dependent or no feasible and prudent alternatives exists.

Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), has prepared a soil survey for Sanilac County. The survey reveals that, like much of the county as a whole, the vast majority of Speaker Township is characterized by loam and silt loam soils. Soils classified as “loam” typically have near equal proportions of sand, silt and clay. Silty loam soils have a heightened presence of silt.

According to the NRCS, nearly the entire township presents considerable limitations for on-site sewage disposal (septic systems). A primary concern in this regard is the soil’s ability to absorb and break down the leachate from the septic drain field before it reaches underground water supplies. The limitations presented by the soils are typically due to increased wetness, ponding and/or a reduced ability to provide the necessary filtering capabilities. Limitations on septic systems by soils can often be overcome with increased lot sizes and/or specially engineered systems at additional cost. “Mound” systems are not uncommon, where the septic system is raised above the normal ground elevation as a means of modifying the soil conditions below to provide adequate septic field conditions.

The Sanilac County Health Department is responsible for issuing permits for on-site sewage disposal. A permit will not be issued unless all Department requirements have been met.

It should be noted that while a site may be classified by the NRCS as presenting a particular limitation to septic systems and building construction, on-site investigation may show the classification to be less than fully accurate and/or show that the deeper soils (more than five feet deep) present different characteristics than the upper layer soils and thus, varying limitations. On-site investigations should be carried out before specific land development projects are initiated.

Approximately 65% of the township is classified as “prime farmland.” The Natural Resources Conservation Service generally defines *prime farmland* as land that is, under proper management, particularly well suited to food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields. Prime farmland soils are present in all 36 sections of the township, with the northwest quarter reflecting the greatest concentration of such soils.

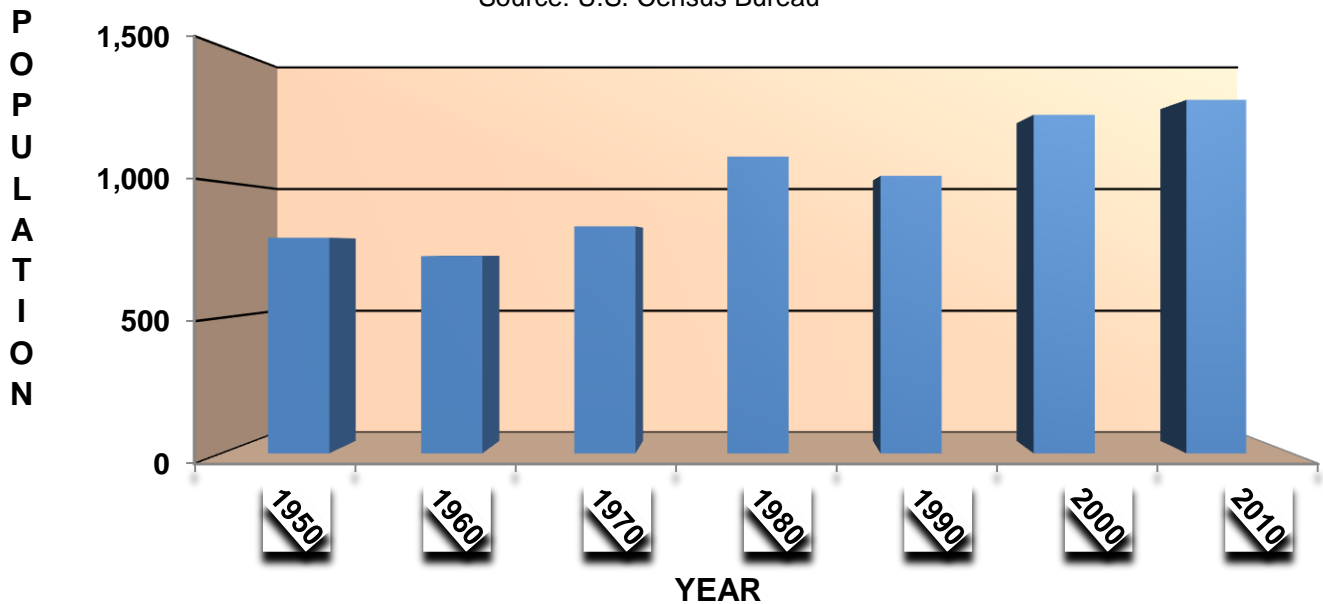
Appendix C DEMOGRAPHIC FEATURES

Population Growth Trends

The 2010 U.S. Census (Census) recorded a Speaker Township population of 1,303 persons, an increase of 4.4% from its 2000 population of 1,248. The township's 2010 population was a 63.9% increase over its 1950 population of 795. Twice during this 60-year period the township witnessed decreases in population – an 8.6% decrease during the 1950s and a 6.5% decrease during the 1980s. The township's strongest growth occurred during the 1970's when it witnessed a 30.7% increase in population. See Figure C-1 and Table C-1.

In contrast to the township's 63.9% growth since 1950, the county and state recorded growth rates of 39.8% and 55.1% respectively, and the township's 4.4% growth during the past decade was in contrast to the decrease in population for both the county and state as a whole. The county and state population decline was a reflection of the economic and housing market decline across the nation and particularly evident in Michigan. Michigan as a whole experienced a 0.5% decline in population during this period -- the only state to witness a population decline. Prior to the county's recent population decline, the county experienced continued positive growth during the previous five decades. The 2010 Census recorded a total county population of 43,114.

FIGURE C-1
Speaker Township Growth
Source: U.S. Census Bureau



The township’s growth since 1950 is also in contrast to the Village of Melvin’s population trend, with a 2010 population of 180 and a higher 1950 population of 204.

The varying growth rates of the township and county since 1950 have resulted in a 15.4% increase in the proportion of Speaker Township residents comprising the total county population. The township’s population comprised 2.6% of the county population in 1950 and 3.0% of the county’s population in 2010.

**TABLE C-1
Population Trends & Growth Rates Comparison**

Source: U.S. Census Bureau

(previous ten-year growth rate indicated by “%”)

YEAR	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
1950	795	30,837	6,371,766
1960	727 -8.6%	32,314 4.8%	7,823,194 18.6%
1970	837 15.1%	35,181 8.9%	8,881,826 11.9%
1980	1,094 30.7%	40,789 15.9%	9,262,078 4.1%
1990	1,023 -6.5%	39,928 -2.1%	9,295,297 0.4%
2000	1,248 22.0%	44,547 11.6%	9,938,444 6.9%
2010	1,303 4.4%	43,114 -3.2%	9,883,640 -0.5%

*Township population excludes Village of Melvin.

The township’s overall rising population has increased population density. Its land-based population density was 23 persons per square mile in 1950 and 38 persons per square mile in 2010, five persons less per square mile than that of the county as a whole (43 persons). By comparison, the City of Sandusky, the county seat of Sanilac County and one of more densely populated communities in the county, had a population density in 2010 of 1,251 persons per square mile.

POPULATION PROJECTIONS

Estimating future population growth can provide important insights into identifying future land use and public services needs. Projecting the growth of a community's population over a prescribed period of time is not an exact science. The many unpredictable factors that affect growth make population projections somewhat speculative. Because of the severity of the housing and financial market that surfaced in 2007, both in Michigan and nationally, projecting population growth at this particular time is uniquely challenging. By using several projection techniques, a range of growth estimates can be generated. These shed light on potential growth scenarios provided planning policies and land development regulations do not limit or encourage growth any more than in the past.

The historical trend assumes the township will grow 9.5% every ten years – the same average 10-year growth rate for the township between the years 1950 and 2010. The low growth trend assumes the township will grow at a rate 50% less than that of the historical trend rate, or 4.7% every ten years. The very low growth trend assumes the township will grow at a rate 75% less than that of the historical trend rate, or 2.4% every ten years. The high growth trend assumes the township will grow at a rate 50% greater than that of the historical trend rate, or 14.3% every ten years. The low or very low growth trends may be the most likely over the next 20 years given current economic conditions in Michigan. See Table C-2.

TABLE C-2
Speaker Township Population Projections

Projection Trend	Population In 2010	2020 Projection	2030 Projection	2040 Projection
Very Low Growth Trend (2.4%)	1,303	1,334	1,366	1,399
Low Growth Trend (4.7%)	1,303	1,364	1,428	1,495
Historical Trend (9.5%)	1,303	1,427	1,562	1,711
High Growth Trend (14.3%)	1,303	1,489	1,702	1,946

SOCIAL and ECONOMIC CHARACTERISTICS

RACE

The 2010 Census showed Speaker Township to have a very homogeneous racial composition, with 97.1% of the township population classified as “white.” This rate was slightly higher than that of the county as a whole and far greater than the state percentage of 78.9% (Table C-3). The township’s homogeneity is typical of rural Michigan communities.

TABLE C-3
Race Profile Comparison, 2010 (By Percent)

Source: 2010 U.S. Census

RACE	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
White Only	97.1	96.6	78.9
Black/African American Only	0.7	0.3	14.2
American Indian, Alaska Native Only	0.7	0.5	0.6
Asian Only	0.1	0.3	2.4
Native Hawaiian/Other Pacific Islander Only	0.1	0.0	0.0
Some Other Single Race Only	0.5	1.1	1.5
Two or More Races	0.9	1.2	2.3

*Township race statistics exclude Village of Melvin.

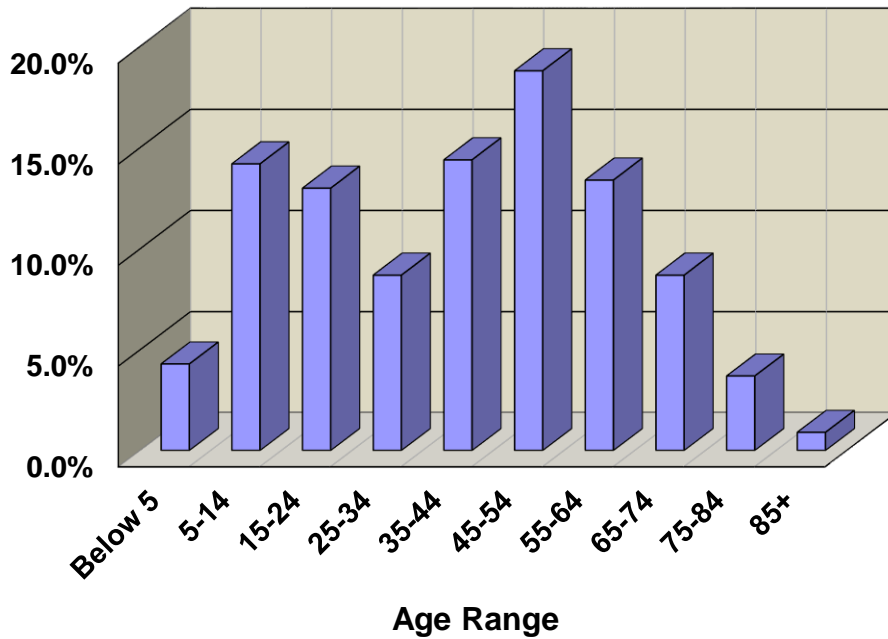
AGE

The township’s population in 2010 can be divided into near equal thirds according to the following approximate age groups:

- Less than 28 years of age
- 28 – 52 years of age
- 53 years of age and greater

Speaker Township’s overall age composition in 2010 was not noticeably different than that of the county and state as a whole – with the percent of residents within each age category being within 3.5 percentage points of the county’s and state’s percentages. When viewed more generally, the township exhibited a somewhat higher rate of residents under 18 years of age (25.5%) as compared to both the county (23.6%) and state (20.8%), and a somewhat lower rate of residents 65 years or more in age (13.3%) as compared to the county (17.6%). The township’s largest single ten-year age group, persons from 45 – 54 years of age, comprised 18.8% of its population compared to 15.8% and 15.2% for the county and state respectively. This age category also reflects the greatest combined disparity between the township and both the county and state.

FIGURE C-2
Speaker Township Age Profile
 Source: 2010 U.S. Census



The township's approximate median age of 40.8 years in 2010 fell in between that of the county (42.8) and state (38.9). Like the balance of the state and nation, the township's residents are maturing. The township's 2010 median age of 40.8 years reflects a 15.2% increase over its 2000 median age of 35.4 years, and a 26.3% increase over its 1990 median age of 32.3.

TABLE C-4
Age Profile Comparison (By Percent, except where noted)
 Source: 2010 U.S. Census

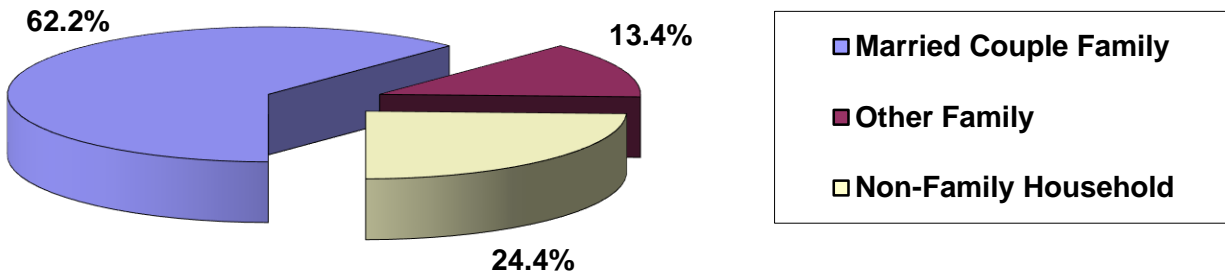
AGE	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
Under 5 yrs.	4.3	5.8	6.0
5 - 14 yrs.	14.2	13.2	13.3
15 - 24 yrs.	13.0	12.0	14.3
25 - 34 yrs.	8.7	10.0	11.8
35 - 44 yrs.	14.4	11.9	12.9
45 - 54 yrs.	18.8	15.8	15.2
55 - 64 yrs.	13.4	13.7	12.7
65 - 74 yrs.	8.7	9.6	7.3
75 - 84 yrs.	3.7	5.8	4.5
85 yrs. or more	0.9	2.2	1.9
Under 18 yrs.	25.5	23.6	20.8
65 yrs and over	13.3	17.6	13.8
Median Age	41.6 yrs.*	42.8 yrs.	38.9 yrs.

*Township age statistics exclude Village of Melvin except in the case of median age. The village alone has a median age of 39.5 years.

Households and Families

The 2010 Census recorded 484 township households, 75.6% of which were family households. The 484 households reflected an increase of 47 households since the 2000 Census. The township's average household size of 2.7 persons was slightly higher than that of the county and state (2.5). The township's average family size of 3.1 persons in 2010 was identical to that of the state and slightly above the county's (3.0).

FIGURE C-3
Speaker Township Household Type
 Source: 2010 U.S. Census



62.2% of the township households in 2010 included a married-couple. This proportion is 11.1% greater than that of the county (55.3%) and 22.8% greater than of the state (48.0%). Of the 13.4% of families not comprised of a married couple, approximately two-thirds of the families were headed by a female. With the township reflecting a comparatively high proportion of married-couple families, it is not surprising that the 24.4% of all households comprised of non-family households was 18% to 28% less than the county (30.6%) and state (34.0%). Of the township's non-family households, 86.4% were comprised of the householder living alone. See Figure C-3 and Table C-5.

TABLE C-5
Household Type and Size Comparison
 (by percent, except where otherwise noted)
 Source: 2010 U.S. Census

	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
HOUSEHOLD TYPE			
Married-couple family	62.2	55.3	48.0
Other family:	13.4	14.1	18.0
(Male householder)	4.8	4.3	4.8
(Female householder)	8.6	9.8	13.2
Non-family household	24.4	30.6	34.0
PERSONS Per HOUSEHOLD	2.7 persons	2.5 persons	2.5 persons
PERSONS Per FAMILY	3.1 persons	3.0 persons	3.1 persons

*Township household statistics exclude Village of Melvin.

Labor Force and Prosperity

The township's civilian labor force in 2009 was comprised of approximately 550 persons. The three principal employment industries for employed Speaker Township workers were: 1) manufacturing; 2) education, health, and social services; and 3) professional, scientific, management, administrative, waste management, and other services excluding public administration. These three industries alone accounted for 63.5% of township workers' employment. While manufacturing and education, health, and social services were also the top two employment industries for the county and state, their third principal employment industry was retail trade. Retail trade ranked as the fourth principal employment industry for the township (9.0%). The 3.7% of township workers employed in the agriculture, forestry, fishing, hunting, and mining industries was approximately three times greater than that of the state as a whole but less than half the proportion for the county (9.8%). See Table C-6.

For those township and Melvin residents who commuted to work, the mean travel time was 36.0 minutes, compared to 27.8 and 36.0 minutes for the county and state respectively. This is a reflection of the comparatively limited employment opportunities in the immediate township and surrounding areas. 6.6% of the township's workers worked from their place of residence compared to 7.9% for the county and 6.2% for the state.

TABLE C-6
Employment by Industry Comparison
(employed persons 16 years and older, by percent)
 Source: 2009 American Community Survey, U.S. Census Bureau

INDUSTRY	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
Manufacturing	27.8	21.8	18.3
Education, health, and social services	19.2	20.6	22.4
Professional, scientific, management, administrative, waste management, other services not listed (excluding public administration)	16.5	8.8	13.5
Retail trade	9.0	12.8	11.6
Construction	7.9	5.7	5.6
Art, entertainment, recreation, accommodations, and food services	7.0	5.4	9.0
Agriculture, forestry, fishing, hunting, mining	3.7	9.8	1.2
Public administration	3.7	4.0	3.7
Finance, insurance, and real estate	2.9	3.5	5.7
Transportation, warehousing, and utilities	0.8	4.4	4.2
Wholesale trade	0.8	1.6	2.9
Information	0.4	1.4	1.9

*Township employment statistics exclude Village of Melvin.

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The prosperity of the combined Speaker Township and Melvin work force is variable when compared to the county and state as a whole. The township/village 2009 median household income of \$45,083 was between that of the county and state but its median family income of \$49,205 was slightly below that of the county (\$50,468) and far below that of the state (\$60,635). Similarly, the township/village per-capita income of \$19,417 was slightly below that of the county (\$20,713) and far below that of the state (\$25,172). The 15.6% of the township/village residents that were below poverty level was between that of the county and state but its 13.0% of families below poverty level was noticeably higher than that of the county (11.3%) and state (10.3%). See Figure C-4 and Table C-7.

FIGURE C-4

Income Characteristics Comparison, 2009

Source: 2009-2013 American Community Survey, U.S. Census Bureau

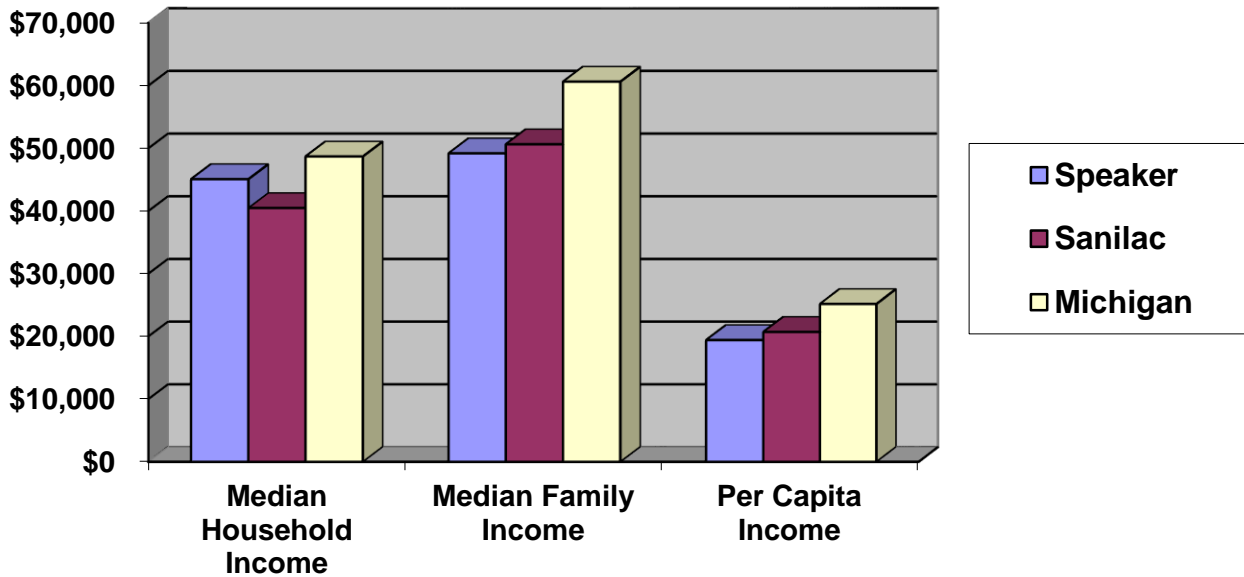


TABLE C-7

Income Characteristics Comparison

Source: 2009 American Community Survey, U.S. Census Bureau

INCOME CHARACTERISTIC	SPEAKER TOWNSHIP (and Melvin)	SANILAC COUNTY	STATE of MICHIGAN
Median household income	\$45,083 ¹	\$40,478	\$48,700
Median family income	\$49,205 ²	\$50,648	\$60,635
Per capita income	\$19,417 ³	\$20,713	\$25,172
Families below poverty level	13.0% ⁴	11.3%	10.3%
Persons below poverty level	15.6% ⁵	16.8%	14.5%

¹ Includes the Village of Melvin, with a village-specific median household income of \$37,500.

² Includes the Village of Melvin, with a village-specific median family income of \$46,875.

³ Includes the Village of Melvin, with a village-specific per capita income of \$17,317.

⁴ Includes the Village of Melvin, with a village-specific rate of 15.6% of families below poverty level.

⁵ Includes the Village of Melvin, with a village-specific rate of 20.5% of persons below poverty level.

Education Attainment

86.9% of Speaker Township residents of 25 years of age or older had attained an education level of high school graduation (or equivalent) or higher, and 10.8% had attained a bachelor's or graduate degree (including professional degree). Formal education levels for Speaker Township residents in 2009 were somewhat comparable to that of the county as a whole but noticeably lower than the state. While a high school diploma (or equivalent) was the highest level of education attained by 44.9% of township residents of 25 years of age or older, the state proportion for the same level of education was 31.8%. While 10.8% of township residents of 25 years of age or older had acquired a bachelor's degree or higher level of education, the state proportion for the same level of education was 24.5%. See Table C-8 and Figures C-5 and C-6.

TABLE C-8
Highest Level of Education Attainment Comparison
(for persons 25 years of age, by percent)

Source: 2009 American Community Survey, U.S. Census Bureau

HIGHEST EDUCATION ATTAINMENT	SPEAKER* TOWNSHIP	SANILAC COUNTY	STATE of MICHIGAN
Less Than 9th Grade	3.0	4.0	3.7
9th to 12th, no diploma	10.2	9.1	8.9
High School Diploma	44.9	46.1	31.8
Some college, no degree	23.6	21.0	23.1
Associates Degree	7.6	8.3	8.0
Bachelor's Degree	7.2	7.1	15.2
Graduate/Professional Degree	3.6	4.3	9.3
High school graduate or higher	86.9	86.8	87.4
Bachelor's degree or higher	10.8	11.4	24.5

*Township education attainment statistics exclude Village of Melvin.

FIGURE C-5
Highest Level of Education Attainment, Speaker Township
(for persons 25 years of age)

Source: 2009-2013 American Community Survey, U.S. Census Bureau

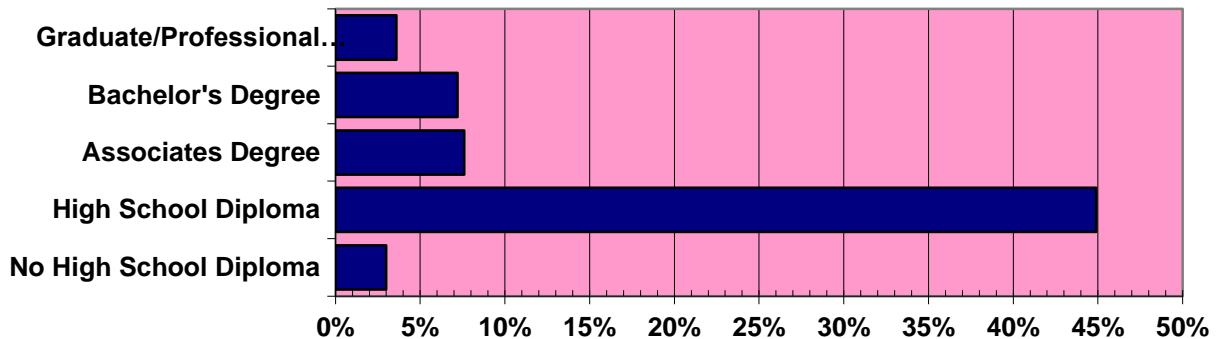
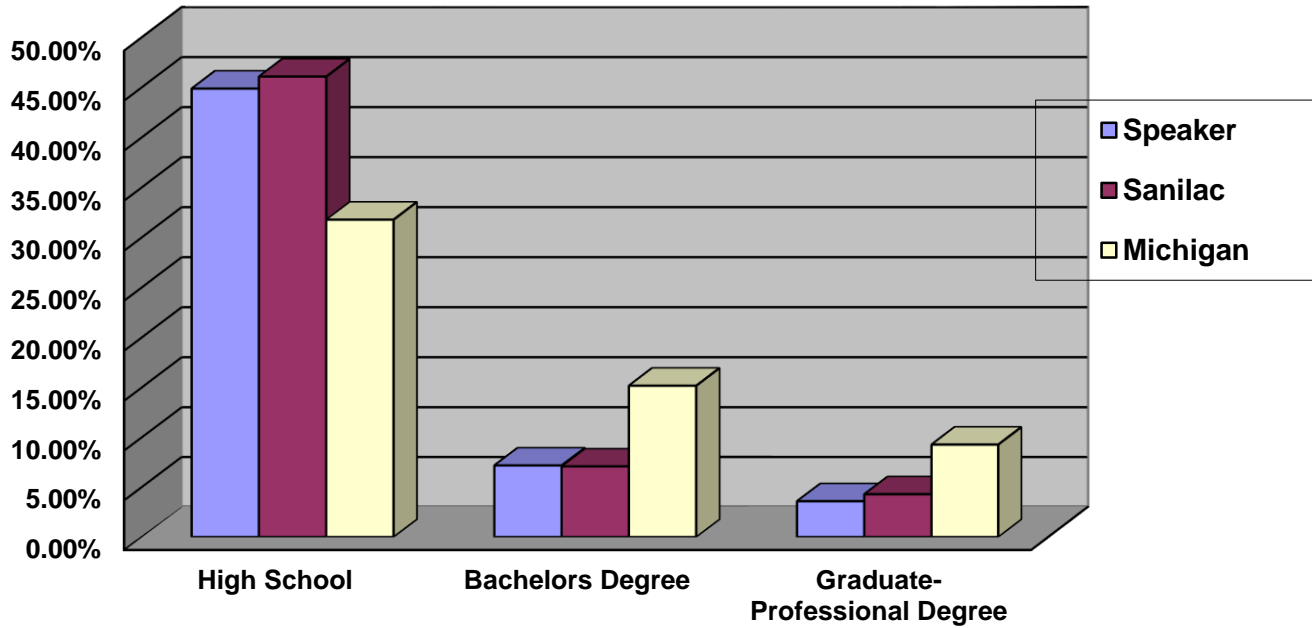


FIGURE C-6
Highest Level of Education Attainment Comparison
(for persons 25 years of age)

Source: 2009 American Community Survey, U.S. Census Bureau



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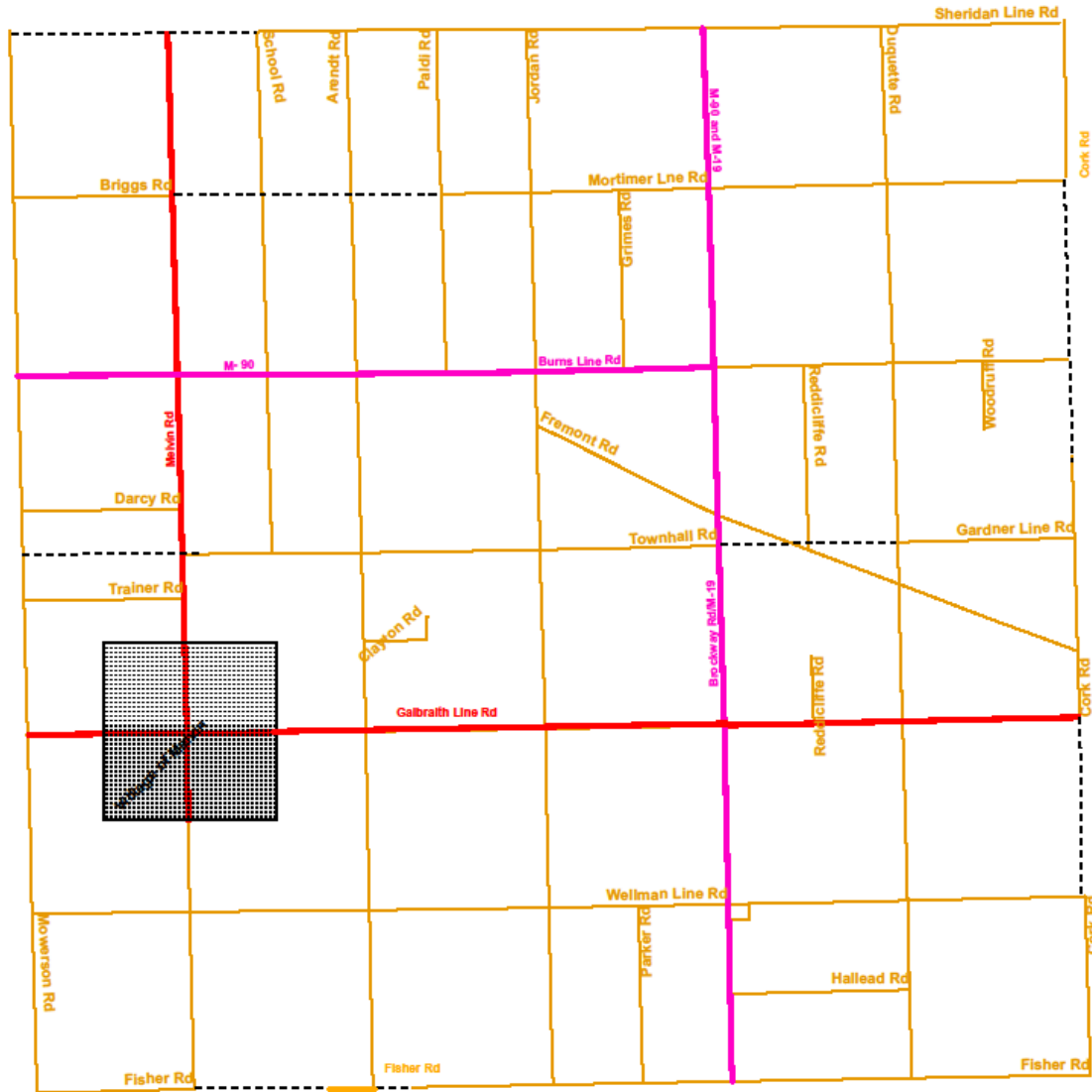
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Appendix D INVENTORY MAPS

Public Roads
General Existing Land Use
Water Courses
Wetlands
Prime Farmland
School Districts

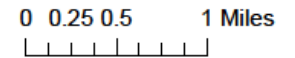
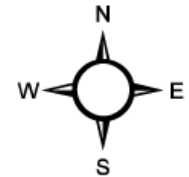
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**Speaker Township
 Master Plan
 Sanilac County,
 Michigan**

Public Roads

- State highways
- Primary Roads
- Local Roads
- - - - Section Line

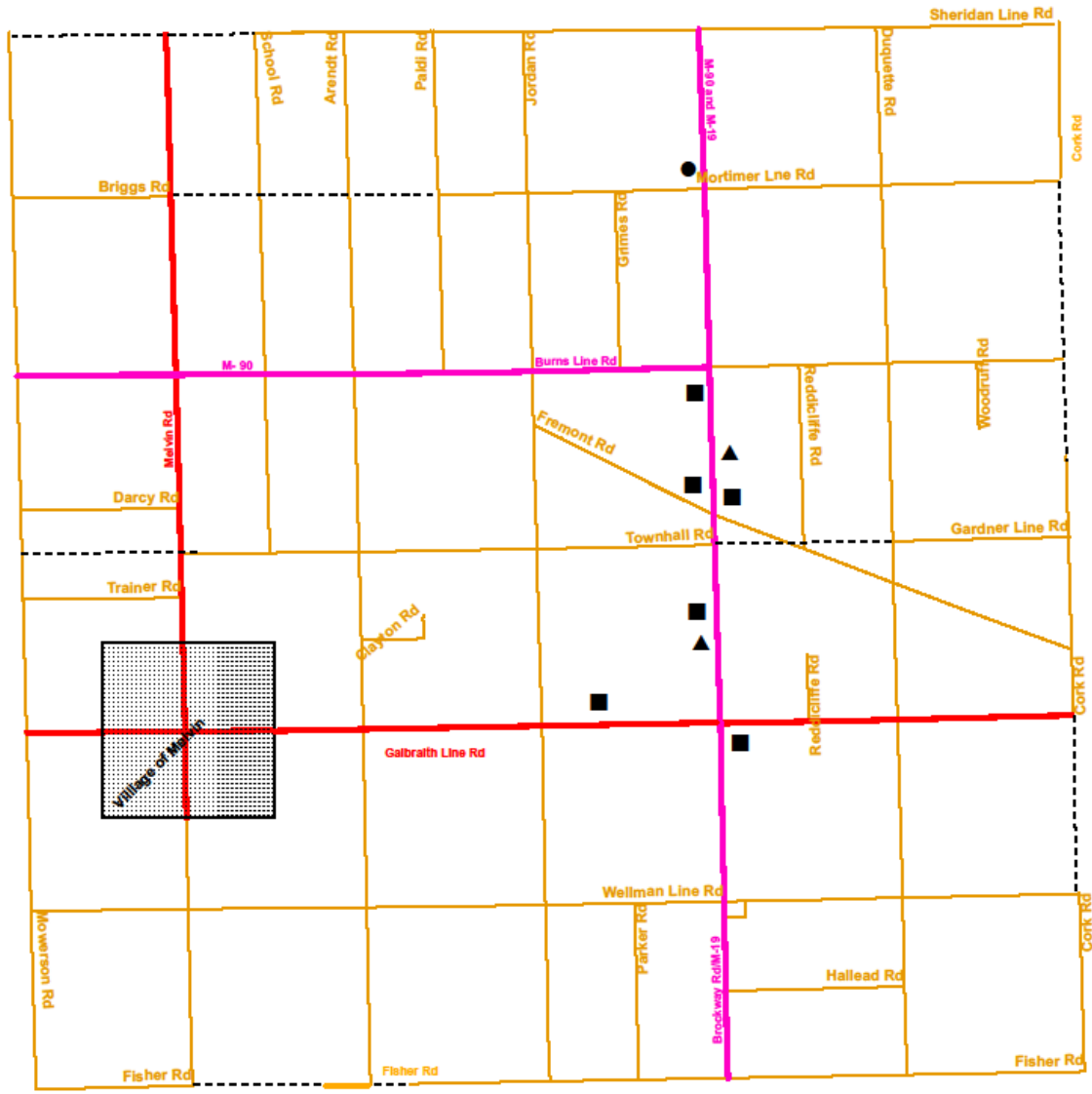


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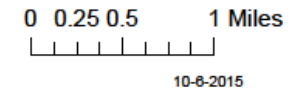
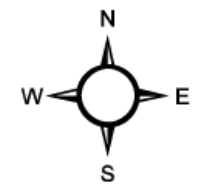
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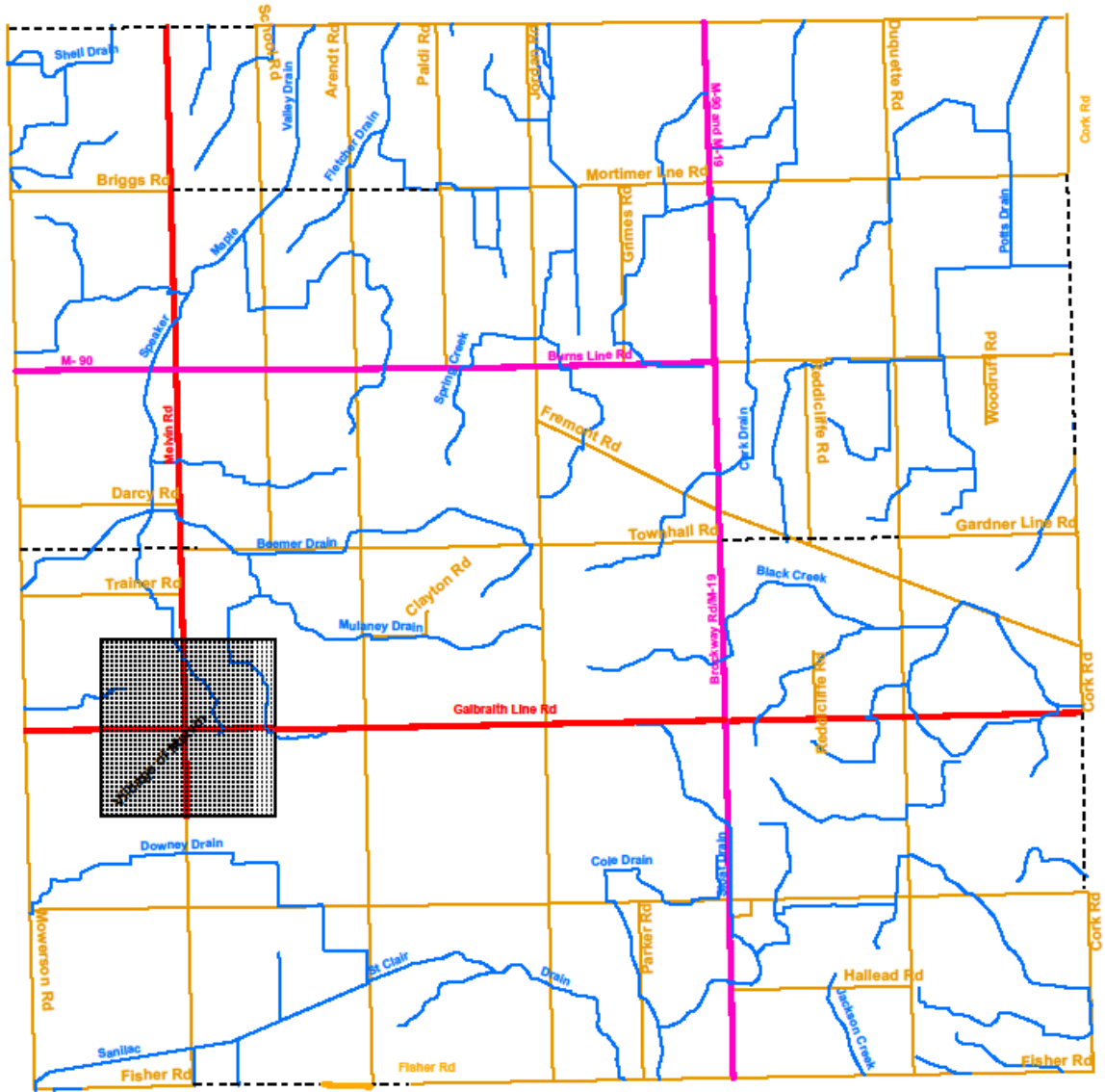
**General Existing
 Land Use Map**

- Areas comprised primarily of farmland, other open spaces, and scattered residences
- Industrial Property
- Commercial Property
- Public Property
- State highways
- Primary Roads
- Local Roads
- Section Line



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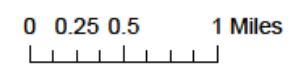
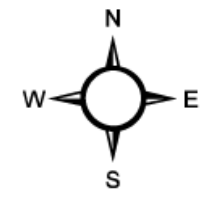
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**Speaker Township
 Master Plan
 Sanilac County,
 Michigan**

**Speaker Township
 Water Courses Map**

- Water Courses
- State highways
- Primary Roads
- Local Roads
- Section Line

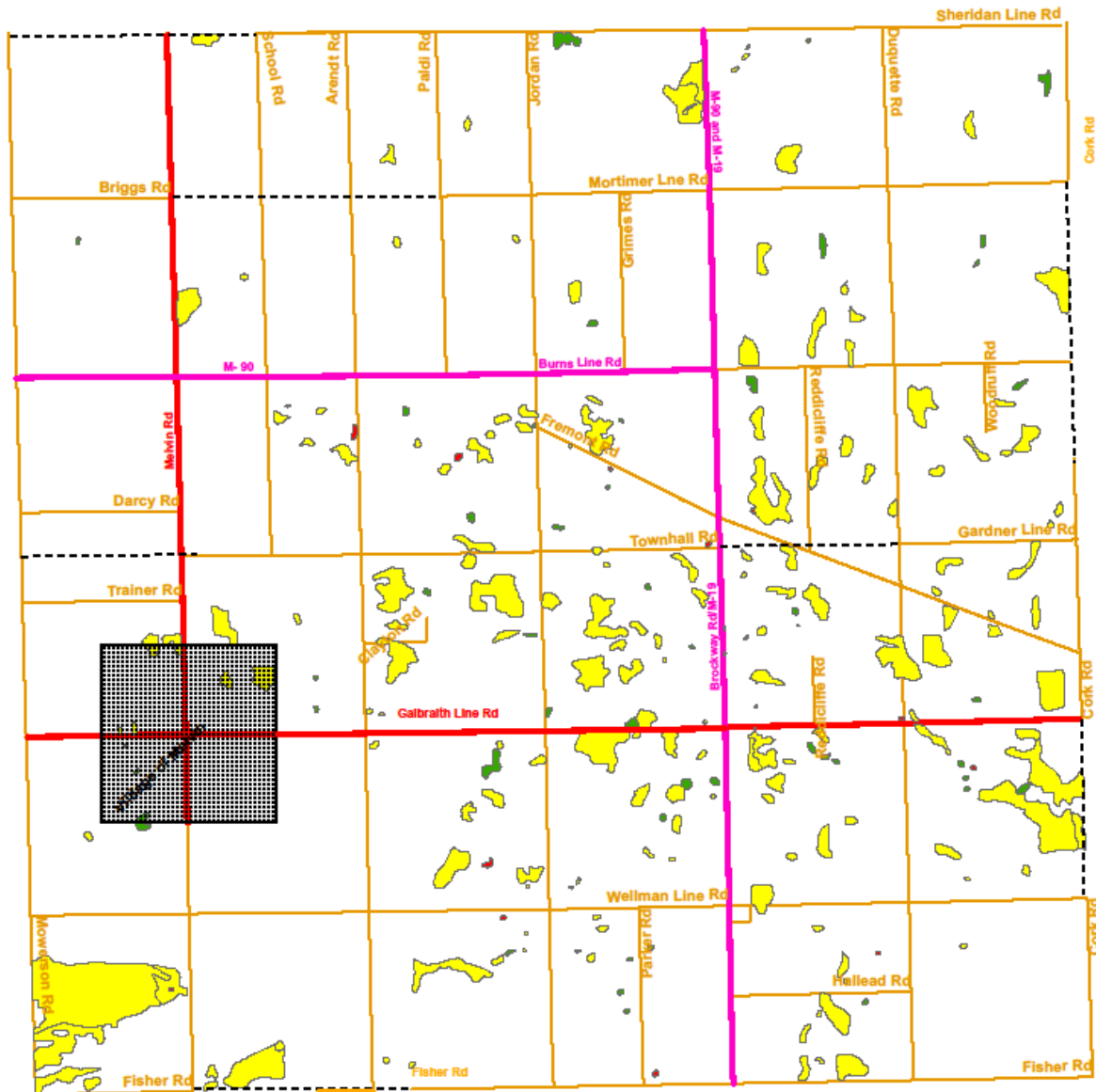


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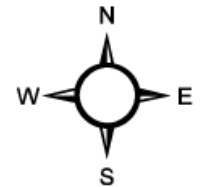
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**Speaker Township
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 Sanilac County,
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Wetlands Map

- Wetland type**
- Freshwater Emergent Wetland
 - Freshwater Wooded Wetland
 - Freshwater Pond
 - State highways
 - Primary Roads
 - Local Roads
 - Section Line



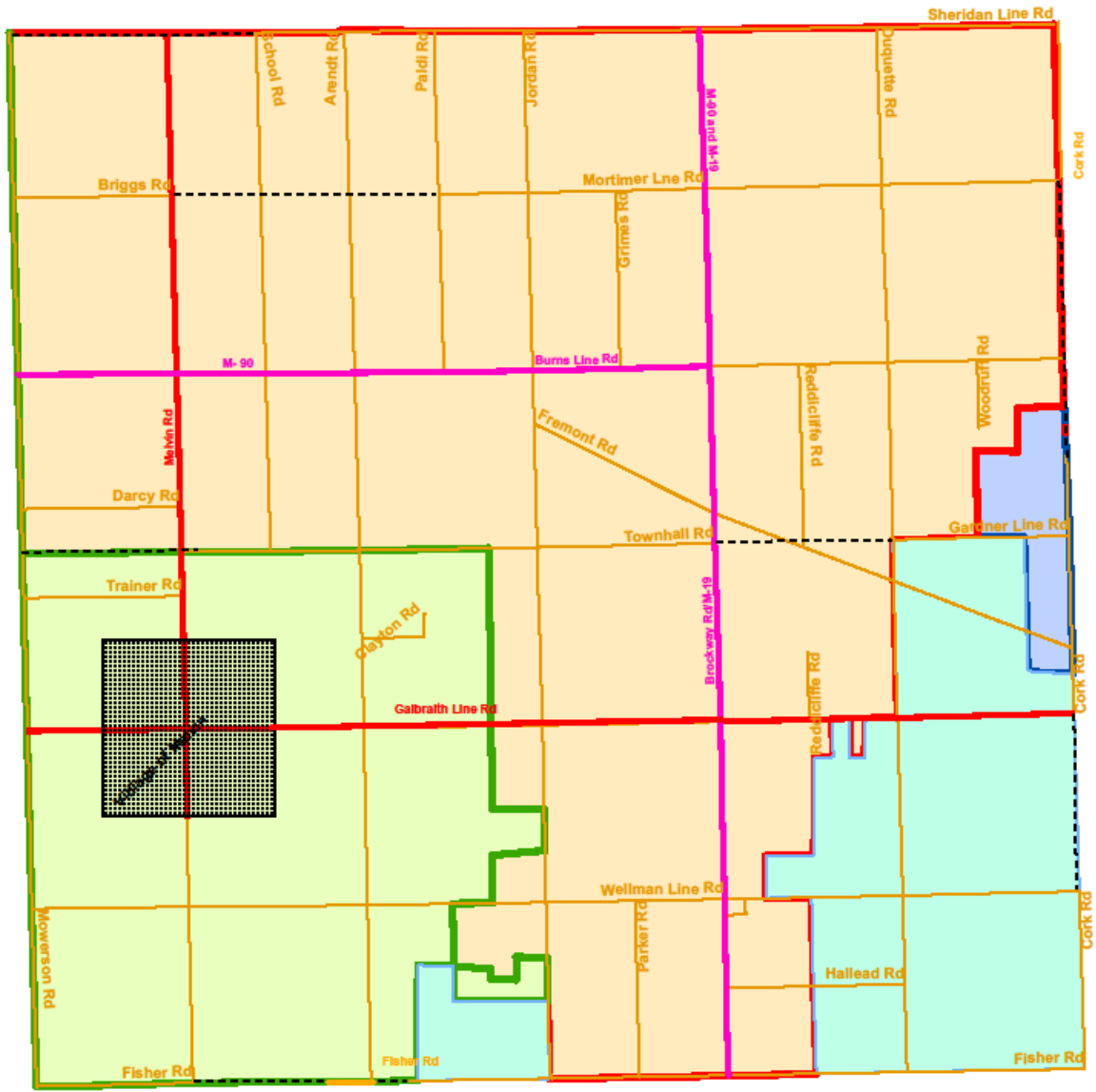
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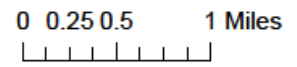
**Speaker Township
 Master Plan
 Sanilac County,
 Michigan**

School Districts Map

- Public Roads**
- State highways
 - Primary Roads
 - Local Roads

- School Districts**
- Brown City
 - Croswell-Lexington
 - Peck
 - Yale

----- Section Line



10-6-2015

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