

# **LAKE TOWNSHIP MASTER PLAN**

*August 21, 2023*

Approved By The  
Lake Township Planning Commission  
December 13, 2023

Approved By The  
Lake Township Board Of Trustees  
January 15, 2024

**LAKE TOWNSHIP  
HURON COUNTY, MICHIGAN**

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# Statements of Approval

## Lake Township Planning Commission

This is to certify that this Master Plan dated August 21, 2023, is the Lake Township Master Plan approved by the Lake Township Planning Commission on December 13, 2023.

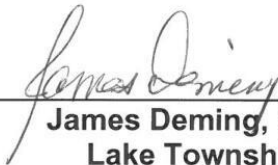


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Robert Siver, Chairperson  
Lake Township Planning Commission

## Lake Township Board of Trustees

This is to certify that this Master Plan dated August 21, 2023, is the Lake Township Master Plan approved by the Lake Township Board of Trustees on January 15, 2024.



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James Deming, Clerk  
Lake Township

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# Chapter One OVERVIEW

## Introduction

This Chapter provides an overview of the Lake Township Master Plan and the Master Plan's role, importance, preparation process, and principal policies. Understanding the fundamentals of the Master Plan (also called the "Plan") will enable Township residents and officials to appreciate the role it plays in ensuring the future welfare of the community, its residents, its visitors and its resources. Embracing this Plan as a vital tool in preserving and enhancing the public health, safety and welfare of the township is essential if this Plan is to be effective.

## 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 long-term welfare of Lake 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 and property owners, changing conditions in the township, and new strategies to manage growth.

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

topography, and water resources (Appendix B); demographic features such as population growth, employment, and education (Appendix C); and maps illustrating Township features (Appendix D).

### Importance and Application of the Master Plan

The importance and application of the Lake 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 Lake Township residents, property owners 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 character of the M-25 corridor
- protecting the Township's natural resources including its Lake Huron shoreline and coastal environments, water resources, productive farmland, forests, 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
- protecting the quality of life of residents

This Plan supports these long-term interests through a future-oriented strategy that seeks to further these interests. Chapter Two establishes goals and objectives, and Chapters Three and Four establish future land use and public services strategies, to secure these and other long-term interests.

**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 Lake Township Master Plan addresses this statutory requirement and ensures a strong legal foundation for the Township's zoning regulations.**

### 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 Lake Township today, and associated goals and objectives that address these issues.

**Chapter Three (Future Land Use Strategy)** presents land use policies including the planned geographic boundaries for principal land uses.

**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 effectuate the policies of the Plan.

**The Appendices** present an overview of Lake Township conditions and trends, addressing cultural features such as roads, land use, and public services (Appendix A); natural features such as soils,

### Balancing Development with Services and Natural Resources

Development without adequate public services to meet the demands of the development, as well as development which places excessive demands on the Township's natural resources, can lead the Township into a future of social and environmental risks that may threaten the public's health, safety, and welfare.

## 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 residents, landowners and developers. The Plan informs all 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 intended to ensure that the policies of the Plan are implemented including zoning and land division regulations.
- **Review of Land Development Proposals:** Chapter Two includes a list of Township goals and objectives that should be reviewed when considering proposed rezoning requests, site plans, and related land use proposals, serving as criteria 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

Lake Township adopted a master plan in 1999. In an effort to maintain a current planning program and in association with efforts to develop a new Zoning Ordinance, the Township undertook the development of a new Master Plan in the spring of 2019.

With the assistance of a professional planning consultant, an initial draft of a new Master Plan was prepared. The initial draft was based on several key elements including the general theme of the 1999 Plan and the extended deliberations on planning issues that surfaced during the preparation of the new Zoning Ordinance – an endeavor that overlapped in timing with the preparation of the new Master Plan.

During the preparation of the initial draft Plan, several alternative future land use patterns and strategies were explored. The Planning Commission studied these alternatives and developed a concept upon which to further refine the policies of the new Plan.

The Planning Commission assembled a complete initial draft of the new Plan and refined the draft to arrive at a document 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 comment on the draft plan.

### **Important Themes of the Master Plan**

**Preservation of natural features.**

**Preservation of farmland and the local farming industry.**

**Protect and enhance the M-25 corridor character.**

**Manage growth and development.**

**Limit commercial and industrial expansion.**

**Encourage the preservation of rural character.**

## Overview of Planning Policies

This Plan presents a coordinated strategy that addresses growth, development and preservation. The Plan supports the continuation of Lake Township as a lakefront residential and agricultural community.

The M-25 corridor is to continue to be predominantly residential in character, with suburban and semi-urban densities similar to those that dominate the corridor today. Proposed development densities and neighborhood layouts are to take into consideration measures for potable water and sewage disposal, on-site environmental conditions, surrounding land use conditions, and similar factors. Development densities of approximately six dwellings or more per acre, including manufactured housing communities, are to be guided to the Oak Beach Road corridor in the north half of the Township.

The southern portion of the Township is to continue to be rural in character, dominated by farming, woodlands, wetlands and other open spaces; and low density residential development with densities generally not exceeding one dwelling per two acres.

Commercial and industrial uses are to be limited and located in the general areas where they exist today – primarily along the east side of State Park Road just south of M-25, along the west side of Oak Beach Road in the general area of Sand Road, and several small commercial sites on M-25 near State Park Road and Oak Beach Road.

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

## Lake Township Overview

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

Lake Township is a Great Lakes community of about 657 persons (2020 U.S. Census) on the northwest edge of Huron County in the “Tip of the Thumb” area of Michigan, along the Lake Huron shoreline. The Township occupies a total area of approximately 13,250 acres (20.7 square miles). There are no cities or villages immediately adjacent to Lake Township, with the City of Caseville being just one mile west of the Township. Caseville, with a population of about 650, is the largest urban center in the regional area though there are multiple small urban centers within 20 miles including Port Austin, Kinde, Elkton, Bad Axe, Pigeon, and Bay Port. The regional landscape within

fifty miles of Lake Township is dominated by agriculture, woodlands, wetlands and other open spaces, and scattered residential development, along with periodic small villages and larger cities.

Principal regional access to Lake Township is via M-25, which travels around the entire “Thumb” of Michigan. The nearest interstate is I-75, traveling north-south through Michigan and within approximately 55 road miles of the Township at the I-75/M-25 interchange near Bay City.

The traditional one-mile local road grid so dominant throughout Michigan is noticeably less present in Lake Township due to the presence of the Lake Huron shoreline where residential development is denser and served by a far more developed road system, the presence of extensive wetlands, the Rush Lake State Game Area, and the Albert E. Sleeper State Park. All roads in the Township are under the jurisdiction of the Huron County Road Commission except for M-25 and various private roads owned and maintained by the property owners they serve. Approximately one-half of the road miles in the Township are of a gravel surface.

The dominant land cover in Lake Township is of an “open space” character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 62% of the land area of Lake Township. The more urbanized areas of the Township are along the M-25 corridor including a nearly continuous pattern of residences and residential neighborhoods. The principal exception to the residential character of the M-25 corridor is the presence of the Sleeper State Park in the Township’s northwest quarter and which straddles M-25. Commercial and industrial sites are generally limited to two convenience stores, a mini-storage facility, an auto repair service, and a sheet metal fabricator, with each less than an acre in area.

The 2020 Census recorded 1,502 dwelling units in the Township, a 6.3% increase over the 1,413 dwellings in 2010. Based on an average dedication of 0.4 acres per residential lot for each home and maintained lawn area, the dwelling itself, and related site modifications such as driveways, decks and similar accessory features, residential development comprises approximately 4.5% (600 acres) of the Township’s total acreage. Approximately 98.2% of the Township’s dwellings are single-family dwellings. The vast majority of all dwellings in the Township are along the Lake Huron shoreline or otherwise within one-quarter mile of M-25.

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There are two major facilities in Lake Township devoted to outdoor recreation and/ conservation – the Albert E. Sleeper State Park and the Rush Lake State Game Area. There are also several beachfront parks in the Township including Philp County Park, Oak Beach County Park, and a Michigan Department of Transportation roadside park (Thompson Park).

The topography of Lake Township can be described as generally level to nearly level. Drainage is facilitated by several systems – the very permeable sandy soils that dominate its northern half, the Township's substantial wetlands, and the presence of the Pigeon River (southwest corner) and the Pinnebog River (east periphery).

Approximately one-quarter of the Township is comprised of wetlands and they are principally contained within the Sleeper State Park and the Rush Lake State Game Area. Nearly all soils in the Township are classified as loam, sand or muck, and nearly 80% are hydric in nature.

A five-member Township Board governs Lake Township. Township offices are located in the Township Hall at the northeast corner of the W. Kinde and N. Elkton Roads intersection. There is no public sewer or water service in the Township. Lake Township receives fire protection services from CAFPA – the Caseville Area Fire Protection Association. The fire station is on Main St. in Caseville. Police protection services are provided by the Huron County Sheriff's Department, and the State Police during times of need and most particularly along the M-25 corridor. Ambulance service is provided to Township residents by the Village of Elkton, located approximately 13 road miles south. The Lake Township Board currently funds nearly all services and the maintenance of all Township facilities through local tax revenues.

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## Chapter Two PLANNING ISSUES, GOALS & OBJECTIVES

### Introduction

The primary goal of this Plan is to establish a basis for and present future land use and public services policies, and the means to implement the policies. 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
- clarify the Township's long term planning goals and objectives.
- establish a basis for more specific land use and public services policies

This chapter discusses important planning issues facing the Lake Township community and presents associated goals and objectives.

### Planning Issues, Goals & Objectives

A number of key planning issues are apparent today in Lake Township. 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 to attain the specified goal.

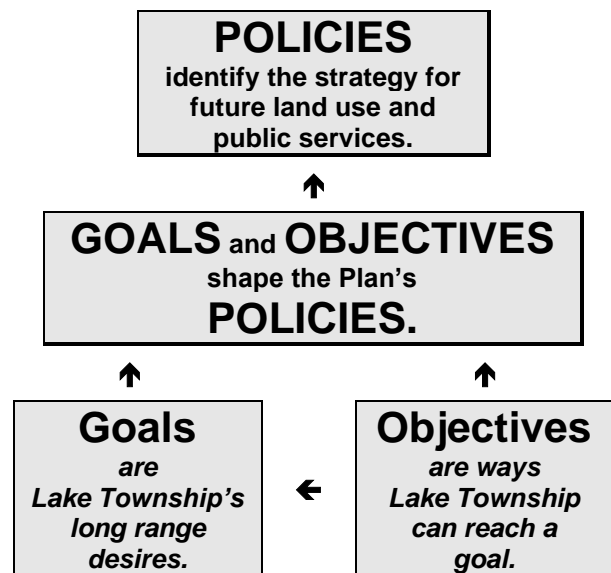
The planning issues and goals/objectives are divided into the following major categories:

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

### The Importance of Goals and Objectives

- **Lake 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 and decisions.
- **Evaluate Development Proposals:** The goals and objectives serve as references upon which future rezoning and land development decisions can be evaluated.

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



Goals, Objectives, and Policies

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 some objectives in a shorter time frame than others.

**GROWTH MANAGEMENT and PUBLIC SERVICES**

Lake Township is a desirable place to live for many, with abundant natural resources and open spaces, an overall rural character, lake shoreline lifestyles and recreation, the presence of M-25 and the access it affords, and nearby small urban communities with associated urban services. It is reasonable to expect that as the regional and state's economic rebound continues, Township growth will follow though perhaps at a comparably slow rate.

Individual properties and land uses exist within a network of adjoining and nearby properties and land uses. This weave of uses helps to establish the character of the Township. The accommodation of growth and development should assure compatibility between properties, land uses and new development. Effective growth management extends well beyond parcel-to-parcel relationships to Township-wide issues. Growth and development has the potential to impact all residents' quality of life.

Successful growth management includes:

- unnecessary loss and degradation of natural resources
- public services consistent with the Township's character and growth policies
- growth, and economic development, that preserves the desired character of the community and its environmental integrity
- orderly development including compatibility between adjacent land uses
- wise expenditures of public funds
- minimizing traffic hazards and nuisances

The Township's character and quality of life will be impacted by the way the Township chooses to manage growth and development.

Tax revenues dictate, in part, the extent and quality of public services. Public services in the community are comparatively limited, including the lack of public sewer or water. The comparatively limited public services have not been identified as a problem but are a way of life. Although development will slightly increase the Township's tax base, the same

development will place additional demands on public services.

***Contrary to traditional planning wisdom and thought, research has shown that development does not necessarily "pay its way," particularly as it applies to traditional single family residential development. Maintaining the current quality of public services, let alone the pursuit of improvements, can be very difficult in the face of unmanaged growth and development.***

Development patterns that minimize public costs should be sought where practical. In this regard, it is advantageous to locate higher density and intensity development near or adjacent to areas served by higher levels of services or anticipated to be served by such services in the future.

***GROWTH MANAGEMENT GOAL:*** *Guide future development in a manner that encourages compatibility between land uses, land use patterns compatible with public facilities and services and the cost-effective use of tax dollars, and the preservation of natural resources, property values, and its rural and shoreline character.*

**Objectives**

- 1) Document and monitor the Township's natural and cultural features that impact growth management efforts, such as public services, existing land use patterns, road infrastructure, and sensitive environmental resources.
- 2) Develop a rational land use strategy that provides an appropriately balanced scope of uses, including agricultural, residential, and non-residential uses, and which considers the constraints and opportunities presented by the Township's natural features and public services.
- 3) Guide development into areas where public facilities and services have adequate capacity to accommodate the growth and increased development intensities, and where the provision or expansion of public facilities is cost-effective.
- 4) Separate incompatible land uses by distance, natural features, or man-made landscape buffers that adequately screen or mitigate impacts.
- 5) Where legally permissible, local regulations should require that new developments pay for the additional direct and indirect public services costs associated with that development. These costs should not be imposed on existing residents except where public interests or benefits may be at stake.



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- 7) Communicate and coordinate with nearby municipalities to provide mutually beneficial and cost-effective public services improvements.
- 8) 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.
- 9) Discourage public services improvements that will have the effect of encouraging development in areas not designated for such growth.
- 10) Encourage the preservation of natural resources including farmland resources, wetlands, woodlands and the Lake Huron shoreline.
- 11) Provide regular opportunities for substantive public input on growth and development issues, continually monitor local attitudes about public facilities and services, and pursue options to address identified service and facility needs.
- 12) Explore options and pursue measures to address the increasing demand for Township administrative and meeting room space, including consideration of alternative sites and modifications to the current Township hall site.
- 13) Update zoning and other tools to implement the Plan's policies, goals, and objectives, and evaluate rezoning petitions, site plans, and other development decisions according to the Plan's policies, goals and objectives.

### COMMUNITY CHARACTER / M-25

The M-25 corridor is the single most defining feature of Lake Township. The corridor is characterized by more than six miles of Lake Huron shoreline, the vast majority of all residences in the community, multiple recreation facilities including Sleeper State Park, and M-25 is the most heavily traveled thoroughfare and which crosses the entire Township. The corridor is of a predominantly suburban and urban character and continues to offer glimpses of the shoreline as one travels the corridor. For many, the M-25 corridor "is" Lake Township.

The preservation of the valued aspects of the corridor including views of the lake and shoreline areas, development in scale with the size of the respective lot and surrounding conditions, and minimizing conflicts between neighboring properties, requires active management of corridor uses and the application of beneficial site development principles.

In contrast, the Township's second most defining feature is the prevailing rural character of the community outside of the M-25 corridor. "Rural" is a subjective quality but is often associated with an overall perception of limited development, open

spaces comprised of farmland, woodlands, wetlands, meadows and/or similar landscapes, and a way of life often linked to the outdoors and past pioneer settlers.

Rural character preservation does not require the prohibition of growth and development. Managed growth and development encourages the continuation of the Township's overall rural character, including reliance on appropriate site design standards regarding lot area, lot width, building and parking setbacks, screening, exterior lighting, signage and other site development features.

Both the M-25 corridor and the Township's more rural areas fundamentally define the overall fabric of the Township and its character, diversity and historical evolution. Community character preservation can protect property values, minimize negative impacts between adjacent land uses, and enhance the overall quality of life.

***COMMUNITY CHARACTER GOAL:*** *Protect and enhance the visual character of the M-25 corridor and the dominant rural character throughout the balance of the Township, in a manner that fosters a sense of community identity and a desirable place to visit, recreate and live.*

### Objectives

- 1) Recognize the role of the M-25 corridor as the Township's defining feature and the importance of managed corridor land use and development including preservation of shoreline views and appropriate relationships between lots sizes and dwelling sizes.
- 2) Encourage development designed in scale with the immediate surroundings and the dominant shoreline and rural character, through reasonable standards addressing density, building size and height, setbacks, and other development features.
- 3) Encourage the preservation of the Township's natural resources including their visual character, environmental integrity, and recreational value, and development that actively strives to preserve natural open spaces (woodlands, wetlands, and fields) as part of a development project.
- 4) Introduce appropriately designed and landscaped signage at key Township entrances, to highlight the Township's identity and place within the region.
- 5) Encourage the maintenance of historically significant structures and the placement of markers at designated historic sites/buildings, to highlight the Township's historic resources.
- 6) Work with local communities to emphasize 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.

- 7) Consider community character preservation as one of the factors in determining the appropriate character of development.
- 8) Encourage a structurally sound housing stock and the rehabilitation or removal of dilapidated and/or blighted structures and yard areas.

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 in Lake Township without acknowledging the tremendous impact its natural resources play in defining the community’s character. These resources include its Lake Huron shoreline; farmland; underground and surface water features; forested lands of both an upland and lowland character; wetlands; and the resources comprising Sleeper State Park and the Rush Lake State Game Area.

These resources are important in shaping the character of Lake 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 fundamental role in recreation in the community including hunting, fishing, hiking, and boating.

Preservation of natural resources can be very difficult because the process of encroachment and degradation can occur incrementally and very slowly. Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation. Proactive site development practices are critical as well.

***The Township’s natural resources are important in shaping the community’s rural character, providing recreation opportunities, and providing vital environmental roles.***

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

### **NATURAL RESOURCES and ENVIRONMENT**

**GOAL:** *Preserve the integrity of the Township’s natural resources including its Lake Huron shoreline, land resources, underground and surface water resources, wetlands, woodlands, and farmland, and the varied and interconnected environmental systems that foster native flora and fauna.*

#### **Objectives**

- 1) Document and periodically update natural resources inventory for use in land planning studies and land use and development decisions.
- 2) Encourage land development that actively strives to preserve natural resources as part of the development plan 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.
- 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 such as woodlands, wetlands, and flood prone areas.
- 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 including resource systems that cross multiple parcels.
- 8) Encourage the use of conservation easements to preserve woodlands, wetlands and other important open spaces including in association with land development projects.
- 9) Encourage the use of native vegetation in association with new development projects, redevelopment efforts, stream corridor preservation, and reforestation.
- 10) Educate the public about measures that help to protect the environmental integrity and recreation value of water resources including management of yard waste and fertilizer use, minimizing impervious surfaces, maintenance of shoreline vegetation, avoidance of erosion, and properly operating septic systems.
- 11) Educate the public about waste management and the Township’s fundamental reliance upon groundwater resources for potable water supplies and the potential detrimental effects of irresponsible land use and development practices including improperly functioning septic systems.

## FARMLAND

Approximately 58% of the Township is devoted to agricultural use. Farming continues to play a dominant role in the community. Farmland resources provide important food and fiber to both local and regional populations, are an important source of income, and contribute to the economic stability of the local economy. Farmland has been found to typically generate more municipal revenues than the costs associated with the municipal services it requires.

Persons yearning for a rural lifestyle flock to farm communities and incrementally consume farmland for home sites – the very farmland that contributes to the rural lifestyle they seek. Of course, these home sites would not be available if it were not for the farmer opting to make available the residential lots. Other factors that can encourage the decline and/or abandonment of farmland include changing economic conditions, encroachment by other uses that interfere with day-to-day farm operations, the personal circumstances of the landowner, and the fewer young persons interested in continuing in their parents' footsteps.

To substantially limit the farmer's ability to provide home sites can undermine the farm operation during difficult economic times, or otherwise burden the farmer when the continuation of the farm operation is no longer practical, economical, or otherwise desirable.

Effective farmland preservation is dependent upon the management of both the number and size of new non-farm lots. Ten-acre divisions, by example, accelerate the loss of farmland and are an inefficient use of the Township's land resources. On the other hand, one-acre zoning across the Township, by example, encourages residential encroachment and sets the stage for a Township build-out population approaching 15,000 persons or more.

State law illustrates the importance and need for farmland preservation. Most notably is Public Act 116 of 1974, the Farmland and Open Space Preservation Act (now part of the Michigan Natural Resources and Environmental Protection Act). The Act enables a landowner to enroll property in a tax relief program provided the property is maintained in an agricultural/open space status. Approximately 5,890 acres of farmland was enrolled in the program in 2022.

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***The challenge before the Township is to encourage farmland preservation while, at the same time, accommodate the conversion of farmland to alternative uses in a manner supportive of growth management interests.***

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

### Objectives

- 1) Document those areas of the Township that present favorable conditions for farming, including existing farm areas and compatible soils and parcel sizes.
- 2) Advise prospective builders and homeowners in planned agricultural areas that they should expect the normal smells, odors, noises, dust, and use of chemicals as a part of daily farm life in the area.
- 3) Establish limits on the amount of non-farm residential development permitted in designated agricultural areas, in a manner that strives to balance farmland preservation interests with private property interests.
- 4) To the extent that residential development occurs in farm areas, encourage such development to be placed on less productive farmland.
- 5) To the extent that residential development occurs in agricultural areas, encourage developments that incorporate the continuance of the farming operation through the clustering of the residential lots on only a portion of the farm parcel.
- 6) Support and maintain P.A. 116 farmland preservation agreements and other preservation programs.
- 7) Discourage the extension of enhanced public services into designated agricultural areas.
- 8) Encourage the continuation of farm operations through complementary zoning provisions.
- 9) Provide opportunities for "value-added" income sources as part of local farm operations such as agri-tourism, farm markets, and corn mazes, where such activities and specific proposals will not cause unreasonable impacts on surrounding properties and the community as a whole.

**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, farming, demand for public services, and overall community character.

Lake Township is characterized by housing of varied densities including an abundance of lots of less than 20,000 sq. ft. (approximately ½ acre) in size and far larger lots in the more rural areas outside of the M-25 corridor, where lot sizes range from two acres to 40 acres and more. While housing densities are quite varied, apartment, townhouse and other forms of multiple family development are quite limited.

Lake Township is interested in providing reasonable options for additional and varied housing choices including senior housing opportunities. The lack of public sewer and water service significantly restricts opportunities for new higher density housing in compliance with current public health standards. However, private community sewer systems may be a reasonable alternative in some instances.

***Providing suburban and urban residential development opportunities can be important as part of the Township’s efforts to address the varied housing needs of all people, including all age groups, and limit the extent of residential encroachment into natural resource areas including farmland.***

The minimal projected growth in the near future suggests that only limited portions of the Township be set aside for more suburban and urban development patterns at this time. However, it should be recognized that even low density growth can dramatically accelerate the rate at which farmland and other natural resource areas are converted to residential use or otherwise disturbed. For example, the accommodation of 100 new dwellings could occupy as little as 100 acres or less, or the same 100 dwellings could occupy 1,000 acres of farmland and other natural resources (approximately 8% of the Township) based on an average lot size of 10 acres.

As previously noted, it must also be recognized that small acreage zoning across the Township without any density limitations, such as one acre zoning, provides for a future Lake Township population approaching 15,000 residents and dramatic impacts on farming, community character, taxes, and public services demands.

***HOUSING GOAL:*** *Provide a healthy residential environment in which persons and families can grow and flourish, accommodating residential growth in a manner that recognizes the opportunities and constraints of the Township’s public services, infrastructure, and natural features; preserves the overall rural character of the Township and its natural resources; maintains visual access to the Lake Huron shoreline from the M-25 corridor, and accommodates an appropriate balance of densities and lifestyles.*

**Objectives:**

- 1) Encourage the continued dominance of single family housing as the principal housing option, with varied density options.
- 2) Provide opportunities for alternative housing options to meet the varied preferences of current and prospective residents including apartments, townhouses, and assisted living facilities.
- 3) Consider the extent and character of environmental features when determining the appropriate density of development.
- 4) Limit higher density residential development to areas best suited to accommodate such development, with priority directed to locations with access to improved thoroughfares.
- 5) Discourage strip residential development along the frontage of existing county roads in the more rural areas of the township.
- 6) Encourage innovative development that incorporates the permanent preservation of natural resource systems and open spaces, including “clustering” (see page 5-7).
- 7) Encourage a housing stock that ensures affordable housing to all, including starter homes and special housing opportunities for senior citizens, 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 encroachment and conflicts between landowners due to accessory buildings of excessive size or inappropriate location.
- 9) Encourage landscape buffer areas between residential lots and non-residential uses.
- 10) Encourage the rehabilitation of blighted and/or dilapidated homes and properties, or their removal.

## COMMERCIAL SERVICES, INDUSTRY and ECONOMIC DEVELOPMENT

Commercial and industrial development in Lake Township is comparatively limited. The principal commercial sites of a traditional retail, office or service nature are two convenience stores, a mini-storage facility, and an auto repair service. There are also more inconspicuous commercial enterprises such as agricultural roadside stands and uses that operate as home occupations. There are no active industrial operations in the Township except for a sheet metal fabricator.

The limited extent of commercial and industrial uses is not surprising. The Township lacks public sewer and water, has a limited and seasonal population base, and is in a comparatively remote location near the “tip of the thumb.” Still, the presence of M-25 offers improved opportunities for access and visibility – important factors for most traditional commercial activity such as retail sales, offices and consumer services. Highway access can be a strong asset for industry as well.

There are no universal standards regarding the appropriate amount of commerce for a community. Each community has its own set of conditions including infrastructure, land use patterns, regional setting, population growth, and the desires of the local public. Current conditions do not support significant expansion of commercial or industrial activity. The proximity of consumer opportunities in Caseville, Port Austin, and other nearby small urban centers, and the more regional Bay/Saginaw/Midland area, must also be acknowledged.

In addition, the Township’s current approximately one acre of conventional commercially used land (office, retail and service) serving its seasonal population of less than 700 persons is in keeping with the commonly recommended five to ten acres of commercial land for a community of 3,000 to 4,000 persons.

It must be recognized, however, that commercial and industrial development can improve the community’s overall economic stability and provide additional local employment opportunities. Economic development efforts can strive to capitalize on special or unique assets of the Township including the recreation opportunities presented by Lake Huron and the state recreation facilities in the immediate area, the community’s rich rural character outside of the M-25 corridor that may support and complement more specialized commercial endeavors that cater to the local population and visitors.

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***Limited commercial and industrial development that complements the Township’s character should be encouraged, including appropriate landscaping and screening; limitations on signage, building heights and sizes, and lighting; and the avoidance of excessive curb cuts and conflicting turning patterns that undermine public safety.***

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Commercial uses can vary significantly in character, as can industrial uses. The existing and desired long-term character of Lake Township does not support large commercial enterprises or heavy manufacturing facilities that require services not currently available. Limited development of a more local character, which does not contribute to excessive traffic levels and public services demands, can be more appropriately accommodated into the fabric of the community.

**COMMERCIAL SERVICES, INDUSTRY AND ECONOMIC DEVELOPMENT GOAL:** *Provide limited opportunities for commercial and industrial growth, and which is of a scale, intensity, and character supportive of the rural, residential and recreation-based nature of the community.*

### Objectives

- 1) Identify limited locations with defined boundaries and of comparatively small area where limited commerce and industry are most appropriate, based on sound planning principles including neighboring land use conditions, enhanced access and road infrastructure, and adequate facilities and services to support the resulting demands.
- 2) Encourage limited commercial and industrial development that is in character and scale with the Township’s overall character and surrounding land uses, considering such features as building size and height, architectural design, setbacks, signage, lighting, and landscaping/screening.
- 3) Encourage small business areas that exhibit an attractive and inviting character and in doing so, discourage traditional strip or larger commercial development patterns.
- 4) Encourage smaller commercial uses that cater to local needs and the highway traveler, including tourists, or are otherwise of a character that do not generate excessive traffic or create excessive demands for public services.
- 5) Limit industrial uses to those predominantly characterized by assembly activities, information and communication technologies, and similar “light” operations that do not require enhanced public services, do not entail the processing of raw materials, and do not present negative impacts.

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- 6) Encourage limited industrial uses within industrial park settings, characterized by interior road systems, ample open spaces, landscaping, and buffering.
- 7) Encourage economic development through the marketing of the special assets of the Lake Township area, including its rural and shoreline character and opportunities for recreation tourism, agri-tourism, and other tourism opportunities.
- 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 and ensure adequate landscape barriers where residential properties interface with commercial/industrial uses.
- 10) Maintain reasonable controls on commercial and industrial uses such as noise, odors, glare, vibration, and similar operational features.
- 11) Provide managed opportunities for small home-based occupations that will support the desired character, appearance, and quality of life for surrounding residential properties.

### 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 maintenance. Conversely, it must be recognized that road improvements may attract new development which, in turn, will place additional demands on the road network. 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 impact the functioning of the Township's roads. Residences "stripped" along the existing county road frontages can have significant negative impacts including increases in congestion, safety hazards and travel times, and it encourages the incremental loss of the Township's rich panoramic views as experienced from the road view sheds.

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, and persons of all ages and physical conditions.

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***The value of circulation systems between communities that facilitate non-motorized travel has 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 resulting environmental impacts, improve the health of local residents, and improve the quality of leisure time. 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.***

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

#### Objectives

- 1) Discourage high-traffic generating land uses and development patterns along the Township's secondary roads.
- 2) 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.
- 3) Work with the Michigan Department of Transportation (MDOT) and the Huron County Road Department to improve opportunities for safe non-motorized travel.
- 4) Work with MDOT and the Huron County Road Department to discourage road improvements that will increase growth and development pressures in areas of the Township not specified for such growth.
- 5) Identify priority road segments for systematic maintenance and improvement, based on the planned future land use pattern and existing and projected traffic patterns.
- 6) Encourage the inclusion of pedestrian/bicycle paths in association with new residential subdivisions and non-residential development to

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facilitate safe and convenient non-motorized movement for all potential users.

- 7) Encourage the linking of residential and commercial centers through non-motorized trails or similar linkages.

### REGIONAL COORDINATION

Lake Township exists within a regional network of communities, none of which are islands unto themselves. Lake Township principally abuts the townships of Caseville, Chandler and Hume, and is a mile from the City of Caseville. Lake 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 use, public services and preservation efforts should take into consideration conditions in these abutting and nearby communities. Land use planning efforts should seek to establish a land use pattern compatible with surrounding conditions provided the goals of Lake Township are not undermined.

**REGIONAL COORDINATION GOAL:** *Guide future development and public services in a manner that recognizes the position of Lake 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 where appropriate.
- 2) 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 interests, planning issues including vehicular and non-motorized modes of travel and recreation, and mutually beneficial strategies to address short and long-term needs.

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## Chapter Three FUTURE LAND USE STRATEGY

### Introduction

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

Implementation of the policies of this Chapter and Plan rests with regulatory and non-regulatory tools – most importantly, the Lake Township Zoning Ordinance. The Zoning Ordinance generally regulates the type, location, bulk, and intensity of land development. ***The Future Land Use Strategy establishes policy for future land use – it does not change the manner in which property is zoned under the Zoning Ordinance.*** However, the Future Land Use Strategy does serve as a basis for evaluating future rezoning requests, site plan submittals, and other land use decisions.

The Township may also utilize supporting regulatory and non-regulatory tools, in addition to zoning regulations, to further the implementation of the policies of this Plan. Chapter Five discusses implementation strategies in more detail.

***The foundation on which the Future Land Use Strategy is rooted is the goals and objectives in Chapter Two including:***

- ***encourage the preservation of farmland, natural resources, and rural character***
- ***guide future development in a manner that ensures land use patterns compatible with public facilities and services***
- ***encourage compact growth and development areas***
- ***encourage the cost-effective use of tax dollars***

The Future Land Use Strategy is based on an analysis of the Township's natural and cultural features such as local views, existing land use, road network, existing and nearby public infrastructure, and environmental features including wetlands. Also considered were conditions in neighboring municipalities. The opportunities and constraints presented by these conditions were evaluated in the context of the goals and objectives in Chapter Two to arrive at a planned land use strategy.

### 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 planning areas are as follows:

- Resource Conservation Area
- Agricultural / Rural Residential Area
- Suburban Residential Area
- Commercial and Industrial Areas
  - Oak Beach Commercial Area
  - State Park Commercial / Industrial Area

It is not the intent of this Plan to identify the specific land uses that should be permitted in each of these planning areas. This Plan presents broad-based policies regarding the dominant land use(s) to be in each. Specific permitted land uses will be determined by the zoning provisions of the Township based on considerations of compatibility.

There may be certain existing properties 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 the existing use of such properties. Zoning regulations will clarify this matter.

**Boundaries:** The approximate boundaries of the planning areas are illustrated on the Future Land Use Map at the end of this chapter. The boundaries are described as approximate. 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. The described and illustrated boundaries of the planning areas are purposeful. These areas are not intended to incrementally evolve into extended strip corridors or other expanded development zones contrary to this theme. Significant departures are strongly discouraged except in unique circumstances and only when the public health, safety and welfare will not be undermined.

***It is important to recognize that neither the Future Land Use Map nor the explanatory policies of this chapter are intended to stand on its own. Both the policy discussions and map are inseparable and must be viewed together.***

**Context-Sensitive Site Development:** Irrespective of the particular planning area, all nonresidential development should be of such character and design so as to encourage compatibility with adjacent and nearby land uses and the desired predominant rural character of the Township. Such compatibility should be based on, in part, overall site layout; building height, size, bulk and architectural character; setbacks; landscaping and screening; and signage. Special care must be exercised during all phases of the review and approval of specific development proposals to ensure that proposed uses, buildings and other site modifications, and their interface with surrounding properties, enhances their compatibility.

***The establishment of private “community sewer systems” serving new neighborhoods is not a valid basis for development densities contrary to the policies presented in this chapter.***

Site development should incorporate the inclusion of non-motorized travel and measures to enhance the safety and comfort of non-motorized travel along road corridors and elsewhere.

## Resource Conservation Area

The Resource Conservation Area includes those portions of the Township comprised of the Sleeper State Park, the Rush Lake State Game Area, the several public park facilities along M-25, and river and stream corridors. These resources include substantial wetland and woodland environments. These resources provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for public recreation and contribute to the township’s overall rural character and desirability as a place of residence. The Resource Conservation Area is intended to encourage the preservation of important natural resource areas.

In light of the critical role of these natural resource areas, uses within the Resource Conservation Area should be predominantly limited to open-space and natural resource-based conservation endeavors including opportunities for passive recreation. Residential development is discouraged to minimize encroachment into and the disturbance of these important resource areas.

### ***Key policies of the Resource Conservation Area are:***

1. The primary use of land should be resource conservation and other open space areas including campgrounds, game refuges and hunting facilities, and public access sites to Lake Huron.
2. Where only a portion of a parcel is located in the Resource Conservation Area, development on the site should be guided to those portions outside of the Resource Conservation Area
3. The alteration of wetlands and shoreline environments to accommodate site modifications and construction in the Resource Conservation area should occur only where no other practical alternatives are available and only after the issuance of all necessary local, county and state approvals including as may be required by the Michigan Department of Environment, Great Lakes and Energy.

## Agricultural / Rural Residential Area

Farming plays an important role in the history and character of Lake Township, contributes important food and fiber to local and regional populations, encourages economic stability, and is an important source of income.

The Agricultural/Rural Residential Area covers the largest portion of the township and nearly all areas not otherwise part of the Resource Conservation Area or the Suburban Residential Area (which generally follows the M-25 corridor and is described on the next page). The Area is principally comprised of commercial farming operations on parcels typically of 40 acres or more, along with scattered residential properties typically ranging from about two to 10 acres in area, and open space areas including meadows, woodlands, and certain wetlands not otherwise part of the Resource Conservation Area. The intent of the Agricultural/Rural Residential Area is to provide opportunities for farming and encourage the preservation of farmland resources while also providing opportunities for rural residential home sites. Agriculture and single-family residences are intended to be the primary use of the land in this Area.

Lands in the Agricultural/Rural Residential Area are generally characterized by conditions that enhance their suitability for commercial agricultural endeavors including:

- the presence of active farm operations including farm parcels adjacent to other farm parcels
- acreage contained within parcels commonly approaching 40 acres or more
- limited presence of residential neighborhoods
- the majority of the acreage in the P.A. 116 Farmland and Open Space Protection Program

It is intended that development densities in the Agricultural/Rural Residential Area be low. Limited densities are supported by a number of factors including, in part:

- the Township's commitment to protecting its farming industry and minimizing land use conflicts between farm operations and neighboring land uses
- the Township's commitment to managing growth, providing cost effective public services, and limiting suburban and urban development densities to specific and compact portions of the community
- the Township's commitment to protecting its natural resources and rural character
- the presence of a market for low-density rural lifestyles

### **Key policies of the Agricultural/Rural Residential Area are:**

1. The primary use of land should be agriculture, resource conservation and other open space areas, and comparatively low density home sites.
2. Secondary uses should generally be limited to those that are uniquely compatible with the environmental and/or rural character of the Area such as kennels, stables, golf courses, and bed and breakfasts.
3. Minimum lot sizes should generally be restricted to about 1.5 acres provided adequate measures are available for potable water and sewage disposal. Greater minimum lot sizes may be appropriate for uses of a more unique or special character where there is an increased need for greater acreage to adequately accommodate the use's needs, afford greater building setbacks, and/or generally minimize impacts on nearby properties.
4. Exceptions to the lot size and density limitations in (3) above may be appropriate in the case of "open space preservation communities," where smaller than normal home sites are permitted provided substantial portions of the development tract is set aside in a permanent open space status. This option is further described in Chapter Five.

***Prospective new residents in the Agricultural/Rural Residential Area should recognize that the noises, smells, and agricultural operations associated with responsible farm operations are a significant component of the Area and will continue on a long-term basis. Lake Township does not consider such activities and operations as nuisances. The Township supports the long-term continuation and protection of responsible farm operations and the local farming industry. Developers and real estate agents should disclose this information to their clients.***

The Agricultural/Rural Residential Area encourages the continuation of all current and the introduction of new farming activities including the raising of crops and livestock and the erection of farm buildings, provided that they meet Department of Agriculture and Rural Development's "generally accepted agricultural management practices" (GAAMPs) 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.

## Suburban Residential Area

The Suburban Residential Area provides for residential development of a more suburban and urban character than planned elsewhere in the Township. The planned Suburban Residential Area extends along the majority of the M-25 corridor to a depth north and south of approximately one-quarter to one-half mile, depending upon existing land use and environmental conditions. The Suburban Residential Area also extends along the east side of Oak Beach Road, south from M-25 for a distance of approximately 1 ¼ miles, excluding areas planned for commercial use as described under “Commercial and Industrial Areas.”

The Suburban Residential Area is characterized by multiple conditions that support its appropriateness as a higher-density residential growth area including

- improved access via M-25 and Oak Beach Road
- existing suburban/urban development in the area
- soils that are more supportive of suburban/urban densities
- enhanced proximity and timeliness of fire protection services

### **Key policies of the Suburban Residential Area are:**

- 1) The primary use of land should be single and two-family residences, including opportunities for small-lot subdivisions where adequate provisions are made for potable water and sewage disposal.
- 2) Secondary uses should be principally limited to alternative living arrangements such as townhouses, apartments, retirement centers, and similar housing options, along with uses that directly support and enhance desirable residential areas such as schools, religious institutions, and recreation facilities.
- 3) All living arrangements should ensure healthy environments including sufficient open space and safe motorized and non-motorized circulation.
- 4) Maximum development densities should typically not exceed two dwellings per approximately one acre, provided adequate measures are in place for sewage disposal and potable water.
- 5) Development densities of three or more dwellings per acre may be reasonable but only after special review proceedings to determine if the proposed development densities are appropriate on the proposed property. Minimum guidelines that should be considered are:
  - adequate infrastructure and public services including sewage disposal and potable water
  - on-site environmental conditions

- anticipated impacts on existing neighborhoods and opportunities for minimizing negative impacts through appropriate design measures

- 6) Development projects with densities of approximately six dwellings or more per acre should be of limited size, or be subject to phasing, to ensure that the desired character of the community is preserved and public services and infrastructure are in place to address the resulting increased demands.

## Commercial and Industrial Areas

The Future Land Use Strategy establishes two principal planned “Commercial and Industrial Areas.”

The Oak Beach Commercial Area is comprised of two segments of Oak Beach Road to the north and south of the Sand Road settlement area. The north portion covers approximately 20 acres and extends west approximately one-quarter mile. The south portion covers approximately five acres and extends west approximately 600’. Uses planned for this Area are to principally be commercial endeavors.

The State Park Commercial / Industrial Area extends along the east side of State Park Road from M-25 south for approximately 750’, and for a depth of approximately 500’. Uses planned for this Area are to principally be commercial endeavors and light industry.

These areas are considered preferred locations for limited commercial and/or industrial growth and are characterized by one or more conditions that support such uses:

- excellent access and visibility afforded by M-25, Oak Beach Road, and State Park Road
- existing and/or past commercial or industrial activity in the area
- increased proximity and timeliness to fire protection services
- a more limited presence of residences near the State Park Commercial Area

In addition to the above planned commercial and industrial growth areas, the Plan supports the continued commercial use of the single lot along the south side of M-25, approximately 200’ west of Oak Beach Road, and the various lodging facilities along the M-25 corridor serving the tourist industry.

**Key policies of the Commercial / Industrial Areas are:**

1. The primary commercial use of land should be locally oriented services catering to the needs of the local and tourist population, and the highway traveler, including convenience and other retail sales, restaurants, offices, and other service providers.
2. Secondary commercial uses should be principally limited to those that provide additional benefits but which may not cater to the local and tourist population, and highway traveler, or may otherwise rely on a more regional market and generate heightened traffic levels and/or require larger building footprints or floor area.
3. Dwellings above commercial storefronts are recommended as a means to provide varied housing opportunities, security, and nearby consumers.
4. Primary industrial uses of land should be comparatively light industrial activities that generate minimal impacts on neighboring uses and limited demands on the township's public services. Uses may include, by example, small-scale product testing, information technology and technology research, calibration services, and the assembly of electrical components and other pre-manufactured items.
5. Secondary industrial uses should be principally limited to those that may result in more visible external impacts but which incorporate adequate measures to substantially limit nuisance conditions and have comparatively limited public services demands. Raw manufacturing is not a recommended industrial activity.

***There may be existing residences in the designated commercial/industrial areas. The Plan supports the continued presence of these residences while, at the same time, supports the incremental conversion of such properties to commercial/industrial use should there be interest by the respective landowner. See (6) below.***

6. To the extent that residential properties may be within the Commercial and Industrial Areas and remain in residential use, special provisions are to be employed where nonresidential uses are introduced, to ensure that appropriate site layout, including buffer yards and screening, minimizes negative impacts on existing home sites. Prospective residents to the area should recognize that nearby properties may transition into commercial and/or industrial uses, subject to Township review and approval.

7. 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; parking location and configuration; signage and lighting; and landscaping and screening.

**Preservation of Natural Resources**

Lake Township includes abundant areas of woodlands, wetlands, and water courses. In light of the importance of these resources, the Plan supports their protection including the establishment of the Resource Conservation Area as previously described.

Preservation should take precedence over the unnecessary disturbance and/or destruction of these resources. These resources are vital parts of the township's environment, provide important environmental benefits including habitats for wildlife, flood control, groundwater recharge and discharge, and surface water purification. In addition, they provide special opportunities for recreation and contribute to the township's overall character and desirability as a place of residence and business.

Not all important natural resource areas may fall within the Resource Conservation Area described earlier in this Chapter or as otherwise delineated on the Future Land Use Map. 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.

**Keyholing**

Keyholing, or funnel development, is the use of a waterfront lot as common open space for waterfront access for dwelling units located away from the waterfront. This results in potentially greater surface water use than would normally occur if the lot were used for its intended use, such as a single-family residence. As surface water use increases, so does the potential for shoreline erosion from speedboats, loss in property values, oil and gas spillage from powerboats, increased noise, conflicts between users (sailboats, fisherman, swimmers, etc.), and potentially increased water resource maintenance costs. Such

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threats become that much greater when keyholing occurs with the digging of canals to increase water frontage access to back lot residences.

These forms of development should be effectively regulated (and even discouraged) in the interest of preserving the environmental quality of the Township's lakes, protecting the public health, safety, and welfare, preventing conflict among users and preserving local property values and the character of local surface waters and associated shoreline areas.

***Keyhole regulations should address, at a minimum, minimum lot area and width of common use lots, minimum water frontage per dwelling having access to a common use lot, water quality protection, common use lot parking facilities and setbacks, litter control, and related use and development features.***

### Phased Zoning

This Plan recommends that the rezoning of land to a more intensive zoning district be done in a phased or incremental manner. For example, while the Plan may identify locations that are appropriate to accommodate suburban residential development, the Plan does not recommend “across the board” or immediate rezonings of such land. The Plan recommends that rezonings to more intensive districts occur incrementally over time to ensure:

- adequate public services
- managed growth and development
- proper review of rezoning requests as they pertain to specific sites
- rezonings are in response to a demonstrated need
- no unnecessary hardships upon a landowner as a result of property assessments and/or the unintended creation of nonconforming uses and structures

### Solar and Wind Energy

The existing land uses, topography and aesthetics of Lake Township would not be conducive to nor consistent with extensive solar farms or large wind energy generating systems. In general, such solar farms and wind energy generating towers should be discouraged, especially within the prime agricultural areas of the Township and along the lakeshore. To the extent that a solar farm or wind energy generating tower or towers is or are approved under the Zoning

Ordinance for Lake Township, the land coverage should in no event exceed one percent of the total land area of the Township as determined by the Zoning Administrator. In general, there are many areas outside of Lake Township within other parts of the “thumb” of Michigan further inland and away from Lake Huron that are more conducive to the installation and operation of solar farms or wind energy generating towers.

### Overriding Considerations

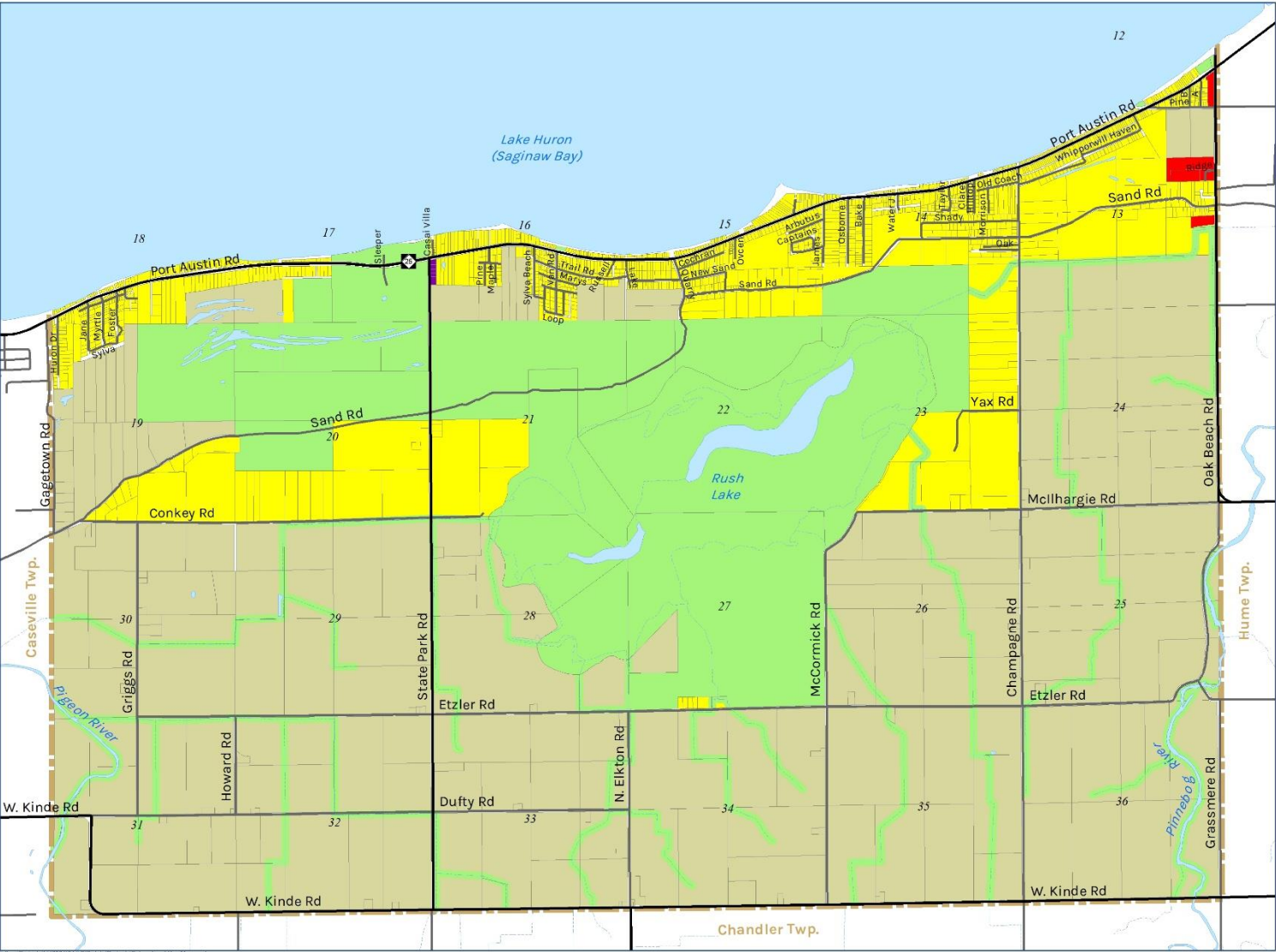
Certain goals, recommendations and strategies of this Master Plan should be carefully reviewed (and complied with where possible or practical) when the Lake Township Board of Trustees, Zoning Board of Appeals or Planning Commission is considering a rezoning, site plan, planned unit development, special land use, variance or other zoning request. Those “super considerations” should override almost everything else in this Master Plan and are as follows:

- Farms and agricultural land should generally be protected and preserved.
- The lakeshore vistas and beauty should be preserved and protected.
- The Township is generally not well suited for new large-scale residential developments.
- There is no current need or demand within the Township for additional manufactured housing communities/mobile home parks.
- Large-scale, heavy or intensive industrial uses should generally not occur within the Township.
- Impacts on the environment, watersheds, woodlands and wetlands should always be considered.
- Lake areas should always be protected.
- Even if a proposed use is seemingly consistent with the Master Plan Future Land Use Map, the timing of development must be considered and the use may not yet be appropriate if the infrastructure, utilities, public services or other supporting services are not in place.
- Any proposed use, buildings, structures or activities must be consistent with the lakeshore, rural and agricultural character of Lake Township.
- Each proposed use, buildings, structures or activities must be reasonable.



# LAKE TOWNSHIP MASTER PLAN

August 21, 2023



## Lake Township

HURON COUNTY, MICHIGAN

## Master Plan August 21, 2023

### Future Land Use

- Future Land Use Classifications:
- Resource Conservation Area
  - Agricultural/Rural Residential Area
  - Suburban Residential Area
  - Oak Beach Commercial Areas
  - State Park Commercial/Industrial Area

- Base Layers:
- Parcel Lines
  - Major Roads
  - Other Roads
  - Water Bodies
  - Streams, Creeks and Drains
  - Township Limits
  - Section Numbers (Town 18N, Range 11E, Huron County, MI)

Parcel Source: Huron County Equalization Department, 2018

Base Layers Source: Michigan Geographic Framework



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Bay City, MI 48706  
www.WadeTrim.com

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## Chapter Four COORDINATED PUBLIC SERVICES

### Introduction

Chapter Three describes the planned pattern of land use throughout the township. Chapter Four discusses the public services strategy in coordination 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 in the community.

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***An important principle of the Future Land Use Strategy is that no new development should occur in the township unless public services are adequate to meet the needs of that new development.***

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On the other hand, public service improvements and the increased development that may result from such improvements should not jeopardize the township's preservation interests and commitment to managed growth and development. Thus, it is important that future public service improvements be coordinated with the planned pattern of future land use as described in Chapter Three.

### Circulation and "Complete Streets"

As growth and development occurs, demands on the road network will increase. The additional development anticipated in this Plan will result in higher traffic levels. This increased traffic may lessen the level of service along some of the township's road segments. Conversely, it must be recognized that road improvements may well attract new development which, in turn, will place additional demands on the road network.

The township's road infrastructure currently fulfills its function reasonably well for vehicular traffic. This is due, in large part, to the existing low development density throughout most of the township and the presence of M-25 along with important paved thoroughfares such as State Park Road and Oak Beach Road.

However, opportunities for safe pedestrian and non-motorized travel are comparatively limited. Safe pedestrian and non-motorized travel have 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 a healthier population, provide alternative means of recreation, and lessen congestion, air pollution, and the consumption of fossil fuels. The importance of safe and comprehensive pedestrian and non-motorized travel led to the Michigan Legislature to amend the Planning Enabling Act in 2010 to require a "complete streets" element in a master plan. The automobile as the sole design factor for roads is no longer the "norm."

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***"Complete streets" generally refers to the design of roads that takes 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 and users of 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.***

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As a rural community, implementation of a "complete streets" program is different than that of an urban center such as in the case of Caseville. While an urban community may pursue sidewalks, bike lanes, paved shoulders, bus lanes, convenient public transportation stops, median islands, frequent and well-marked crosswalks, and other measures, rural communities such as Lake Township typically have fewer options and frequently focus on paved shoulders. However, even in rural communities, the need and feasibility of implementing a wider scope of "complete streets" measures increases in the community's planned residential and non-residential development areas, such as along the M-25 corridor.

The Huron County Road Commission has jurisdiction over local public roads except for M-25 that is under the jurisdiction of the Michigan Department of Transportation. Still, the township has the opportunity to provide input regarding road maintenance, design and improvements.

**Circulation/Complete Streets Policies:**

1. Greatest priority for road improvements will be assigned to those road segments whose current conditions present imminent danger to the public health, safety, and welfare, such as in the case of road impasses and flooding.
2. Functional classification of roads will dictate the priority of improvements when all other conditions are generally equal. The functional importance of the roads in the township, from highest to lowest, is: a) M-25 and county primary roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential Areas and Commercial/Industrial Areas; b) county local roads, particularly those segments servicing the Future Land Use Strategy's Suburban Residential Areas and Commercial/Industrial Areas, but excluding roads in a platted subdivisions and similar neighborhood developments; and 3) minor roads, such as local subdivision roads and similar neighborhood roads.
3. No new roads or road extensions should be undertaken except upon a clear finding of need to ensure public safety and welfare or to provide access to new development projects, such as the provision of access to lots in new subdivisions.
4. All roads will be designed and constructed to ensure safety for all users and long-term structural integrity.
5. All proposed future road construction will be evaluated for local and regional impacts on traffic flow, congestion, public safety, and land use. New road construction will be coordinated with other local and regional road improvements to address traffic movement in a unified, regional, and comprehensive manner.
6. The township will explore the development of a non-motorized circulation plan to encourage the provision of trails and linkages between neighborhoods, commercial centers, and other activity centers including in association with new residential developments. (See also "Recreation" section in this Chapter.)

7. The township will work with the Road Commission and Michigan Department of Transportation to incorporate "complete streets" measures in road construction, maintenance, and improvements.
8. The township will evaluate proposed developments within the context of "complete streets" to ensure all users are afforded opportunities for safe and efficient travel within and between development sites including neighborhoods and commercial and industrial areas.

**Sewage Disposal and Potable Water**

There is no public water or sewer service in Lake Township. Residents rely on private wells and septic systems for potable water and sewage disposal.

As development densities increase, so does the need for public sewer and water. Industrial, commercial, and higher density residential land uses generally have greater sewage disposal and potable water needs than can often be met by traditional on-site facilities. Failure to provide adequate sewer and water facilities to these land uses can lead to health and environmental problems while the premature provision of these services can lead to accelerated and unmanaged growth and development.

***Many of the township soils present severe limitations to on-site sewage disposal. Improperly operating septic systems can contaminate potable groundwater resources, lakes, and streams and this poses a public health threat. This condition highlights the critical relationship between land use, development intensities, and adequate measures for sewage disposal and potable water.***

**Sewage Disposal and Potable Water Policies:**

1. All on-site sewage disposal and potable water facilities will be constructed and maintained in accordance with the requirements and standards of the Huron County Public Health Department, Michigan Department of Health and Human Services, and other applicable public agencies.
2. The township will support the introduction and extension of public sewer and water in the planned Suburban Residential Areas, where initiated and funded by private sector interests and in coordination with the policies of the Suburban Residential Area.

3. Public sewer and water services will not be introduced into planned conservation and agricultural areas except in response to a significant public health threat and where no other practical means of addressing the threat is available.
4. Any introduction or expansion of public sewer and/or water service, and associated infrastructure, will occur in a phased and incremental manner to ensure effective growth management.
5. The introduction or expansion of public sewer and/or water should be based upon sound engineering principles and infrastructure design that will facilitate incremental increases in demand on the system while, at the same time, will not create excessive capacity that will encourage expansion into planned conservation, agricultural and rural residential areas.

**Storm Water Management Policies:**

- 1) Increased runoff that may occur as a result of development will be appropriately managed to ensure that the quality of the water runoff discharged does not undermine the integrity of the township’s surface and ground water resources.
- 2) Proposed land uses will not be permitted if the level of service currently provided by existing storm water management infrastructure and/or existing drainage patterns will be decreased unless necessary improvements to such infrastructure or natural drainage courses are first made.
- 3) New and existing land uses shall comply with all local, county, state, and federal regulations regarding storm water management and soil erosion, including the regulations of the Huron County Drain Commissioner, except where local officials determine less stringent standards in site-specific instances are appropriate, the standards will not undermine the public health, safety and welfare, and the application of the standards are within the jurisdiction of the township.
- 4) Storm water management will emphasize “green infrastructure” – planned networks of functioning landscapes and other open spaces that minimize alterations to the natural landscape and drainage systems and lessen the reliance on storm sewer and similar “grey” infrastructure.
- 5) All development will be reviewed within the context of its impact on drainage corridors and surface and groundwater resources, including wetlands, to ensure discharge practices do not undermine the environmental integrity of these resources.
- 6) The township will maintain communication with the Drain Commissioner and Road Commission regarding drains and roadside ditches in disrepair.

**Storm Water Management**

As buildings, parking lots and other impermeable surfaces associated with new development cover more 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 storms is replaced by impervious surfaces. Unless specific preventive measures are taken, this condition encourages flooding and property damage, as well as the pollution of local water resources due to soil erosion, sedimentation, and other runoff impurities. The township’s water resources including Rush Lake and the Pigeon and Pinnebog Rivers, and their associated wetlands, are vulnerable to degradation.

Storm water management is not a development issue only. While development can pose increased flood potential, improper maintenance of county drains and roadside ditches, and filling of wetlands, can increase flood conditions in agricultural and rural areas as well.

***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.***

**Emergency Services**

Lake Township receives fire protection services from the Caseville Area Fire Protection Association, with the fire station being located in Caseville – about four road miles from the central region of the township. Police protection services are provided by the Huron County Sheriff’s Department, and the State Police during times of need and most particularly along the M-25 corridor. Ambulance service is provided to township residents by the Village of Elkton, located approximately 13 road miles south of M-25.

As community growth and land development increases, so does the demand for emergency services. It is important that the township ensure that adequate fire and police protection services are available to existing and future residents and property.

Common industry standards regarding fire protection suggest a maximum service radius from a fire station in low density residential areas of approximately 3 miles, and an approximately 3/4 to 2 mile service radius in commercial, industrial, and high-density residential areas. The vast majority of the township is not within these recommended ranges, with the western third receiving the best level of service.

There are no widely accepted standards for police protection levels and is frequently measured as a function of public satisfaction.

**Police and Fire Protection 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 critical. On-site fire protection infrastructure will generally be considered necessary for residential developments that concentrate building sites on lots of approximately one-half acre or smaller.
2. The township will continually monitor police and fire protection needs and services to minimize and/or prevent emergency services deficiencies and explore improving service levels. Considerations for expansion of services will include both the expansion of joint services with neighboring municipalities and the establishment of independent operations.

**Recreation**

Lake Township does not operate any recreation sites. Within the township, residents have available to them the Albert E. Sleeper State Park and the Rush Lake State Game Area, two county-operated Lake Huron access/beach sites (Philp Park and Oak Beach Park), a Michigan Department of Transportation roadside park (Thompson Park), and a private golf course. Outside of the township are the recreational facilities and services of the regional public school facilities and programs, the parks and recreation programs of nearby municipalities including Caseville, and the several other parks/campground facilities operated by Huron County Parks.

***The well-being of the township's residents is affected by the availability of recreation opportunities, and the type and ease of accessibility to nearby opportunities are important.***

Demands for recreation opportunities increase with population growth. Available land for recreational

purposes decreases as housing and other land uses consume more of what was open space and potential outdoor recreation land. Recreation lands must be appropriately located within the community if ease of access is to be enhanced.

**Recreation 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 state-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.
3. Where there is a demonstrated demand for recreation improvements, 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.
5. The township will make the short and long-term maintenance of recreation facilities a priority including adequate funding to support such efforts.
6. The township will ensure that all recreation facilities are accessible by all persons, including encouraging recreation sites in planned residential growth areas and facilitating access within each park site for all persons, irrespective of physical limitations of prospective users.

**Information and Technology Access**

Our society has been dramatically molded by advanced technology including wireless communications, the internet and computer programs and applications. Availability of reliable cellular phone service and high-speed internet access (broadband) is now commonly linked to quality-of-life measures. Local, regional, and global economies rely heavily on these tools including persons and entrepreneurs who work from their home. Emergency services are greatly enhanced when access to such technology is readily available including the generation of and analysis of data to improve efficiency and levels of service.

Personal communications and leisure time are significantly linked to cellular phones and internet surfing. Personal and business research and consumer

purchasing through the internet is a regular practice in many households. Today, access to information and technology services is a priority among entrepreneurs, businesses and jobseekers.

Rural areas frequently experience a reduced level of access to reliable cellular service and high-speed internet. Lake Township is no different in this regard.

**Technology and Information Access Policies:**

1. The township will communicate with local broadband providers to explore impediments to enhanced services and options to improve services.
2. The township will communicate with local municipalities to explore joint efforts to attract broadband providers and improve services on a regional level and in a coordinated manner.
3. The township will periodically evaluate zoning provisions to minimize impediments to cellular service while, as the same time, ensuring potential negative impacts of cellular towers for area residents are minimized.

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## Chapter Five IMPLEMENTATION

### Introduction

This Master Plan establishes a strategy for growth, development, and preservation in Lake 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.

***This Plan is a policy document. As a policy document, the 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:**

- encouraging knowledge, understanding, and support of the Plan by residents and the business community, and the continued communication with and involvement of the citizenry
- providing a program of capital improvements and adequate, economical public services to accommodate desirable development.
- pursuing an action plan to address the objectives presented in Chapter Two
- regulating the use and manner of development through up-to-date reasonable zoning controls and other regulatory and non-regulatory tools
- maintaining a current master plan

The purpose of this Chapter is to identify important implementation tools available to the township.

### 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.

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 available at the township hall and on the township web site.
2. Post the Future Land Use Map in the township hall where it is clearly visible.
3. Post a regularly updated listing of current events pertaining to planning and zoning matters at the township hall and on the township web site.
4. Through public notices, newsletters, township hall postings, web site postings, and other means, apprise residents of:
  - the planning efforts of the township
  - meetings that will address development and public service improvement proposals as the projects move through review
  - proposed developments and land use decisions under consideration, and where individuals may acquire additional information
5. 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.

6. Encourage “neighborhood watch” programs in each neighborhood to promote safety, cooperation, and communication.
7. Maintain regular and continued communication with neighboring communities and encourage coordination of planning efforts.

As the township grows and increased demands for public services and infrastructure improvements surface, the benefit of a comprehensive capital improvement program will grow.

### 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 (time span may vary) including costs, anticipated funding sources, location, and relative priority. It is a schedule for implementing improvements that acknowledges current and anticipated demands, and recognizes present and potential financial resources available. 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 importance of CIPs is highlighted by the fact that Sec. 65 of the Planning Enabling Act strongly endorses capital improving planning for all communities, and mandates that a township prepare an annual six-year CIP if the township owns or operates a water supply or sewage disposal system.***

The CIP outlines the projects that will replace or improve existing facilities, or that will be necessary to serve current and projected land use 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. Most communities are faced with the necessity of determining the relative priority of specific projects and establishing a program schedule for their initiation and completion.

This Master Plan does not recommend specific increases in public services or infrastructure excluding an expanded township hall, and includes no recommendations for the introduction of public sewer or water or the acquisition of additional park sites. Still, regularly prioritizing even “minor” community improvements is an important element of planning.

### Objectives Action Plan

The objectives presented in Chapter Two serve as strategies to reach the goals of this Master Plan, also presented in Chapter Two, and to put in place the policies of Chapter Three (Future Land Use Strategy) and Chapter Four (Coordinated Public Services). Some of the objectives require comparatively short periods of focus for successful implementation (one or several years) while others may require a longer implementation period and continued maintenance as a regular annual effort each and every year.

***The Chapter Two objectives are of limited value unless they are routinely and regularly reviewed and an annual action plan is developed to identify those objectives to pursue in the coming year and each subsequent year, and the recommended township entity that is best suited to take the lead in furthering the selected objective(s).***

Undertaking the implementation of an excessive number of objectives during a single year is likely not realistic and may lead to little being accomplished. Identifying a realistic set of annual objectives to direct efforts toward may ultimately lead to a more successful long-term implementation program.

The Planning Commission and Township Board should meet annually:

- to prioritize objectives to be pursued in the coming several years and those that should take priority in the immediate year ahead
- to identify the entity to take charge in the respective objective’s implementation
- to identify the steps to be taken for the objective’s implementation
- to identify from where funding is to be provided (if funding is necessary)
- to report on the status of implementation efforts during the previous year

Prioritization of the objectives should be based on such factors as public safety, economic stability and growth, comparative need, comparative impact community wide, and the number of residents and/or businesses that benefit.



**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 Michigan Zoning Enabling 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.”*

Lake Township’s prior 2007 Zoning Ordinance was recently replaced by a wholly new Zoning Ordinance in 2020.

Any time a new Master Plan is adopted or an existing Master Plan is amended, a municipality’s zoning ordinance should be carefully reviewed to identify ordinance amendments that may be beneficial to implement the policies of the Plan and facilitate efficient day-to-day zoning administration. The extent of desirable amendments may suggest the need for the development of a wholly new zoning ordinance.

Adoption of zoning regulations by the Township Board provides the legal basis for enforcement of zoning provisions. The ultimate effectiveness of the ordinance is dependent 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 to ensure that these essential day-to-day functions are met and appropriate development is facilitated.

**Lake Township Zone Plan**

The following pages present a Zone Plan. The Zone Plan establishes a foundation for the township’s zoning regulations. The Zone Plan is comprised of three elements. The Michigan Planning Enabling Act requires that a Master Plan include a Zone Plan.

**Zone Plan – Part One**

Part One of the Zone Plan presents **guidelines for the presentation of zoning districts** in the Lake Township Zoning Ordinance, to implement the Future Land Use Strategy presented in Chapter Three including the Future Land Use Map.

**Zone Plan – Part Two**

Part Two of the Zone Plan presents **guidelines for basic site development standards** for the zoning districts to implement the Future Land Use Strategy presented in Chapter Three including the Future Land Use Map.

**Zone Plan – Part Three**

Part Three of the Zone Plan identifies **important ordinance elements** that the Lake 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 Zoning Ordinance should be reviewed periodically within the context of these elements.

**LAKE TOWNSHIP MASTER PLAN**

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**Zone Plan – Part One**

**Table of Recommended Zoning Districts and Relation to Future Land Use Map**

The following table presents conceptual guidelines for the presentation of zoning districts in the Lake Township Zoning Ordinance, to implement the Master Plan’s Future Land Use Strategy (including Future Land Use map). “Secondary District 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. The Zoning Ordinance may incorporate other districts to address specialized matters such as uses and development in floodplains and along surface waters, “planned unit development” provisions as authorized by the Zoning Enabling Act, and corridor access management provisions.

<b>Zoning District (example names)</b>	<b>Primary Relationship to Chapter Three Including Future Land Use Map</b>	<b>Primary Intended District Uses</b>	<b>Examples of Potential Secondary District Uses</b>
<b><u>C</u> Conservation</b>	Resource Conservation Area	Wildlife management areas, conservation areas, and passive recreation areas	(Not Applicable)
<b><u>AG</u> Agricultural-Residential</b>	Agricultural/Rural Residential Area	Agriculture and single-family residences	Golf courses, campgrounds, shooting ranges, veterinarian clinics, kennels, bed and breakfasts, and agritourism
<b><u>RR:</u> Rural Residential</b>	Agricultural/Rural Residential Area	Agriculture and single-family residences	Golf courses, campgrounds, kennels, bed and breakfasts, and day care centers
<b><u>R-1</u> Low Density Residential</b> <b><u>R-2</u> Medium Density Residential</b>	Suburban Residential Area	Single-family dwellings (R-1 and R-2) and two-family dwellings (R-2):	Religious institutions, schools, libraries, child care facilities, parks and other recreation facilities, and utility substations
<b><u>R-MHC</u> Manufactured Housing Community</b>	Suburban Residential Area	Manufactured housing communities	Religious institutions, schools, libraries, child care facilities, utility substations and mobile home sales
<b><u>R-MF</u> Multiple Family Residential</b>	Suburban Residential Area	Multiple family developments	Religious institutions, schools, libraries, child care facilities, utility substations, assisted living facilities and boarding houses
<b><u>RB</u> Residential Business</b>	Suburban Residential Area	Cottage resorts	(Not Applicable)
<b><u>B-1</u> Local Commercial</b>	Commercial and Industrial Areas	Comparatively small retail, office and personal service uses, catering to local population, tourists and highway traveler	Service stations, vehicle sales, building supply sales, hotels, hospitals, day care centers, and drive-through facilities
<b><u>I-1</u> Light Industrial</b>	Commercial and Industrial Areas	“Light” industrial uses such as assembly of pre-made parts, tool and die, sheet metal fabrication, printing, and laboratories	Lumber mills, junk and salvage yards, vehicle repair, recycling centers, and manufacturing from raw materials

**LAKE TOWNSHIP MASTER PLAN**

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**Zone Plan – Part Two  
Table of Zoning District Site Development Standards**

The following table establishes conceptual guidelines for basic site development standards of the zoning districts intended to implement the Future Land Use Strategy in Chapter Three (including the Future Land Use Map). The table’s standards establish a realistic concept for each district. All guidelines below are approximate and serve as a framework for more detailed Zoning Ordinance standards. Conditions may suggest divergences from the guidelines to address special issues such as height exceptions for communication towers, increased setbacks where commercial/industrial uses are adjacent to residential uses, and increased lot width standards as part of access management measures. Flexibility by way of a “planned unit development” district per the Zoning Enabling Act may also be determined beneficial.

Zoning District	Minimum Lot Area	Minimum Lot Width and Frontage	Maximum Building Height	Maximum Building Coverage (BC) Maximum Lot Coverage (LC)	Minimum Yard Setback		
					Front	Side	Rear
<b>C</b> Conservation	12,000 sq. ft.	100 ft.	20 ft.	BC: 5% LC: 5%	20 ft.	20 ft. each	20 ft.
<b>AG</b> Agricultural	1.5 acres	150 ft.	35 ft.	BC: 25% LC: 30%	50 ft.	25 ft. each	25 ft.
<b>RR</b> Rural Residential	1.5 acres	150 ft.	35 ft.	BC: 25% LC: 30%	25 ft.	10 ft. each	25 ft.
<b>R-1</b> Single-Family Residential	12,000 SF	100 ft.	35 ft.	BC: 35% LC: 50%	25 ft.	6 ft. for one yard, combined 16' total.	35 ft.
<b>R-2</b> Single-Family Residential	12,000 SF except 24,000 sq. ft. for a two-family dwelling.	100 ft., except 150 ft. for a two-family dwelling.	35 ft.	BC: 35% LC: 50%	25 ft.	6 ft. for one yard, combined 16' total.	10 ft.
<b>R-MHC</b> Manufactured Housing Community	Compliance with Manufactured Housing Commission Rules and Regulations						
<b>R-MF</b> Multiple Family	12,000 SF	100 ft.	35 ft.	BC: 35% LC: 65%	40 ft.	15 ft. each	25 ft.
<b>RB</b> Residential Business	12,000 SF	100 ft.	35 ft.	BC: 35% LC: 50%	25 ft.	10 ft. each	20 ft.
<b>B-1</b> Local Commercial	20,000 SF	100 ft.	35 ft.	BC: 35% LC: 70%	40 ft.	25 ft. each	25 ft.
<b>I-1</b> Light Industrial	1.0 acres	150 ft. <sup>2</sup>	35 ft.	BC: 50% LC: 70%	40 ft.	25 ft. each	25 ft.

**Zone Plan, Part Three – Important Components of the Lake Township Zoning Ordinance.** The following identifies important general elements that the Lake 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 periodically 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 process and approval standards for zoning permits, amendments, matters that come before the Zoning Board of Appeals, and enforcement efforts.

***The zoning permit application procedures should include clear requirements for the submittal of necessary plans illustrating proposed modifications to a site, to enable officials to determine compliance with all standards of the Ordinance.***

The provisions should ensure development plans include comprehensive information such as the delineation of existing natural features, the extent of alterations to such features, and the salient features of the development including buildings, parking, screening, lighting, grading and storm water management.

The Zoning Ordinance should include a comprehensive set of approval standards addressing such matters as access management and vehicular/pedestrian circulation, emergency vehicle access, natural resource protection, utilities, storm water management and compatibility with surrounding conditions.

2) District Provisions/Special Land Uses

The ordinance should include a clear and comprehensive presentation of zoning districts including the purpose, authorized uses, and development standards for each. 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 but, because of their particular character, may have

an increased potential for injurious effects upon the primary uses in the district, or are otherwise unique in character and it may not be appropriate in certain situations or on certain parcels. An example may be a kennel in a residential district.

***Special land uses require special consideration in relation to the welfare of adjacent properties and to the township as a whole, and may not be appropriate in all locations.***

3) Site Development Standards

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

- a. Proper access to ensure public safety and welfare including access management along thoroughfares, emergency vehicle access, and non-motorized circulation.
- b. Off-street parking and loading to ensure adequate facilities are provided on a development site and design features encourage safe and efficient circulation for all.
- c. Landscaping and screening provisions that ensure new development (commercial, industrial, institutional, etc.) is compatible with surrounding conditions and supportive of the desired character of the community.
- d. Sign regulations to ensure local signage does not contribute to traffic safety hazards, visual clutter, confusion for vehicle drivers, visual blight, and decreased property values.
- e. Environmental safeguard provisions to ensure new development minimizes disturbances to the township’s natural resources including keyholing 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 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. 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

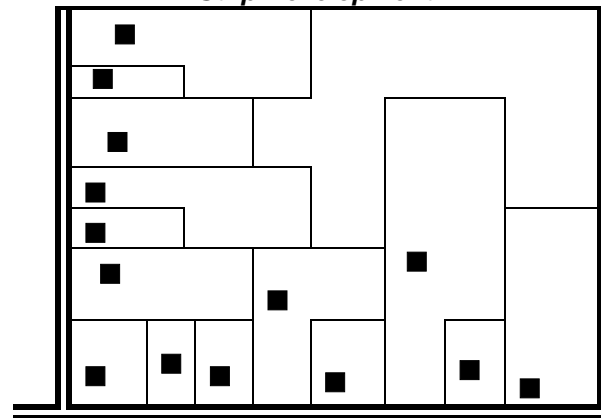
As a tool to facilitate the conservation of important natural resources and ecosystems, this Plan supports what are commonly referred to as “cluster developments” and “open space developments” in association with platted subdivisions, condominium subdivisions, and similar neighborhood developments. This 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.

**“Clustering” provides for the grouping of smaller lots than what is normally permitted, on only a portion of the development tract, so that the balance of the tract can be retained as open space and for the preservation of important environmental resources. Clustering provisions must recognize the specific requirements of Sec. 506 of the Michigan Zoning Enabling Act.**

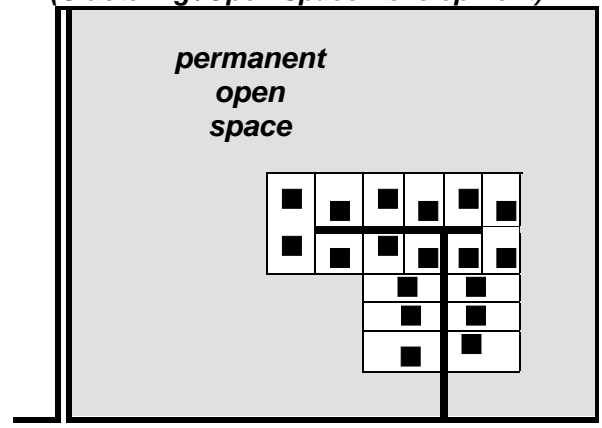
As much as 50% or more of a site, and preferably the most environmentally significant, may be preserved in its existing natural state, with individual house lots occupying the remaining acreage. These “open space” areas can be reserved by the use of conservation easements, deed restrictions, or similar 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.

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 a clustering/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  
(Clustering / Open Space Development)**



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. 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 than normally permitted by the district in which a development 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 consumer opportunities. PUDs are sometimes used as a means to facilitate residential cluster development discussed in (6) above but are 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.

8) Special Issues

A very beneficial part of a zoning ordinance, commonly referred to as “supplemental provisions”, can be used to address a host of special issues that have relevance to the particular community. The particular scope of issues addressed should be tailored to the particular community. However, common issues addressed include, but are not limited to, 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)
- swimming pools
- outdoor display, sales, and storage
- outdoor recreational vehicle storage
- temporary non-residential buildings/uses
- building height exceptions
- setback exceptions

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 Lake Township adopted its first zoning regulations, was repealed in 2006 and replaced by the Zoning Enabling Act (Public Act 110). The township’s zoning regulations should be coordinated with the Zoning Enabling Act and periodically updated to address any subsequent changes to the law.

**Subdivision and Land Divisions Ordinances**

When a landowner/developer proposes to subdivide land, the person 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. 288 of 1967, 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 a “land division ordinance.” While a subdivision ordinance addresses unified residential developments of multiple units (plats), much of the development in Lake Township outside of the M-25 corridor area is in association with incremental land divisions for the purpose of establishing individual home sites. A land division ordinance assures that these incremental divisions meet certain minimum zoning ordinance standards such as lot area and width. The Land Division Act referenced above also provides municipalities with the authority to adopt a land division ordinance. Land division ordinances can ensure consistency in review and approval practices.

### **Other Special Purpose Ordinances**

While zoning and land split 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 rules and regulations can complement zoning and land split regulations and further the implementation of the Master Plan. Such ordinances may address matters pertaining to noise, public nuisances, outdoor assemblies, blight, junk, weeds, and other activities. Township officials should evaluate the scope of the township’s current special purpose ordinances and determine what new ordinances, and/or amendments to current ordinances, may be beneficial to further implement the Master Plan.

### **Maintaining a Current Master Plan**

Successful planning requires maintaining 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 following page outlines important considerations for the periodic evaluation of the Master Plan.

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***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 and document the Commission’s findings.***

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Amendments to the Master Plan, or the preparation of a wholly new Plan, should follow the minimum procedures delineated in the Planning Enabling Act in addition to the measures the township believes will enhance the planning process.

**Questions to be asked during a review  
of this Master 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, which 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 appear 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 to maintain coordination between the two documents?
- Is the character of local growth and development (residential, commercial, 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 Zoning Map, recognizing that the Zoning Map is current law and the Future Land Use Map portrays the future vision?
- Are there conditions and/or trends in nearby communities, particularly along the township's borders, which suggest modifications to the Plan's policies addressing future land use and public services?
- Does the Master Plan comply with current law?



# Appendix A

## CULTURAL FEATURES

### Geography and Regional Context

Lake Township is located along the northwest periphery of Huron County in the “Tip of the Thumb” area of Michigan, along the Lake Huron shoreline. The township occupies a total area of approximately 13,250 acres (20.7 square miles), of which approximately 960 acres (1.5 square miles) are comprised of inland waters. The township is six miles in width with an irregular west and north boundary that follows the Lake Huron shoreline. As a result of the presence of Lake Huron, Lake Township does not reflect the six miles by six miles square congressional township boundary characteristic of the majority of townships in Michigan’s Lower Peninsula (based on the U.S. Public Land Survey System). Lake Township is one mile east of the City of Caseville (population of 651 in 2020), and about 20 miles northwest of Bad Axe (population of 3,042 in 2020), the county seat. There are no cities or villages immediately adjacent to Lake Township.

The four principal surrounding municipalities are Caseville Township to the west, Hume Township to the east, and Chandler Township to the south. M-25 travels along the Saginaw Bay and Lake Huron shoreline including along the northern edge of Lake Township for its entire length. The nearest urban centers of 30,000 persons or more are Bay City (32,661 persons in 2020) and Saginaw (44,202 persons in 2020), both approximately 55 to 65 road miles to the southwest. The City of Flint, approximately 85 road miles to the south, is the nearest urban center with a population of 75,000 or more (81,252 persons in 2020).

The regional landscape within fifty miles of Lake Township is dominated by agriculture, woodlands, wetlands and other open spaces; and scattered residential development with more concentrated settlement areas along the Saginaw Bay and Lake Huron shorelines and within the numerous small villages and cities that dot the landscape such as Caseville, Bad Axe, Port Austin, and Bay Port.

### Access and Circulation

#### Regional Access

Principal regional access to Lake Township is via M-25, which travels around the entire “Thumb” of Michigan. The nearest interstate is I-75, which travels north-south through Michigan and within approximately 55 road miles of the township at the I-75/M-25 interchange. The nearest public regional airport is the Huron County Memorial Airport, approximately 20 miles southeast in Bad Axe.

#### Local Road Network

Lake Township’s local road network exhibits in instances the general one-mile square grid system that is so dominant in most Michigan townships. This grid system is not nearly as dominant in Lake Township due to the presence of the Lake Huron shoreline where residential development is denser and served by a far more developed road system, and the presence of extensive wetlands, the Rush Lake State Game Area, and the Sleeper State Park. All roads in the township are under the jurisdiction of the Huron County Road Commission (HCRC) except for M-25 and some private roads owned and maintained by the property owners they serve. Approximately half of the public road miles in the Township are of a

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gravel surface. Approximately two-thirds of the road miles outside of the M-25 developed corridor are of a gravel surface.

**Public Act 51 Road Classifications:** In compliance with the requirements of Public Act 51 of 1951, the HCRC classifies all roads under its jurisdiction as either “*primary*” or “*local*.” Primary roads are considered the most critical in providing regional circulation throughout the county. The classification of roads by the HCRC has important financial implications with regard to maintenance and improvements. Under Michigan law, townships have no responsibility for funding road improvements and maintenance. The HCRC is responsible for local road maintenance.

On the other hand, while the HCRC must maintain and improve primary roads at its own expense, state law limits the participation of road commissions and departments to no more than 50% of the cost for improvements to local roads. Requests by local townships for local road maintenance levels beyond those considered adequate or feasible by the HCRC frequently require local funding. In reality, there are few counties in Michigan where local townships are not actively involved in funding road improvements.

Roads in Lake Township that the HCRC classifies as “*primary*” under Act 51 are limited to:

- Kinde Rd.
- State Park Rd.
- Oak Beach Rd.

All other roads in the township under the jurisdiction of the HCRC are classified as “*local*.”

**National Functional Classifications (NFC):** Also of importance is the national functional classification of roads as established by the Federal Highway Administration (FHA). The FHA classifies road segments according to their function – the extent to which the road is intended to facilitate traffic movement over long distances versus over shorter distances and for access to abutting property. The relative hierarchy of the classification and its applicability to Lake Township follows:

*Interstates, Freeways and Principal Arterials* are thoroughfares intended to move large volumes of traffic over long distances, including facilitating circulation on a regional level and between cities and states. *No road segments in Lake Township fall under these classifications.*

*Minor Arterials/Major Collectors* serve to accommodate through traffic while also providing access to abutting properties and minor intersecting streets.

Minor arterials in the township are limited to: *M-25*

Major collectors in the township are limited to: *State Park Rd., Oak Beach Rd., and W. Kinde Rd.*

*Minor Collectors* serve to collect traffic from local streets and to provide a means of access to local destinations and minor arterial/major collector roads. *No road segments in Lake Township fall under this classification.*

*Local Streets* serve primarily to provide access to adjacent properties and minor collectors. *The public roads in Lake Township not otherwise identified above are classified as local streets – being the vast majority of road miles in the township.*

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

## Land Cover, Land Use and Development

The dominant land cover in Lake Township is of an “*open space*” character including farmland, woodlands, wetlands, meadows and similar environments. The most dominant active land use is farming. Together, agricultural operations and other open spaces account for approximately 62% of the land area of Lake Township. The more urbanized areas of the township, including those developed for commercial, industrial, and suburban residential uses, are along the M-25 corridor including a nearly continuous pattern of residences and residential neighborhoods. The principal exception to the residential character of the M-25 corridor is the presence of the Sleeper State Park in the township’s northwest quarter and straddles M-25.

Table A-1 provides a breakdown of general land use/land cover in Lake Township. Table A-1 is followed by a review of some of the more significant characteristics of land use and development in the township.

**Table A-1  
Approximate General Land Use/Land Cover Allocation, 2019**

Land Use-Land Cover	Approximate Acreage (ac.)	Approximate Portion (%) of Township
<b>Agriculture</b>	7,630 ac.	57.6%
<b>Open Space, comprised of water courses/bodies, woodlands, wetlands, and meadows, including outdoor conservation-based recreation areas such as Sleeper State Park and Rush Lake Wildlife Area.</b>	4,558 ac.	34.4%
<b>Residential</b>	600 ac.	4.5%
<b>Transportation, comprised of road/highway rights-of-way.</b>	420 ac.	3.2%
<b>Industrial, comprised of manufacturing and similar processes.</b>	1 ac.	---
<b>Commercial, comprised of retail, office and service-oriented uses.</b>	1 ac.	---
<b>Other, comprised of golf courses, cemeteries, substations, and municipal buildings.</b>	45 ac.	0.3%

Table is based on aerial imagery, township records and “windshield” survey.  
“—” denotes less than 0.1%

## Agriculture

Farming operations occupy approximately 58% (approximately 7,630 acres) of the township. Farming occupies nearly all areas of the township not otherwise part of the M-25 residential corridor, Rush Lake State Game Area, Sleeper State Park, and wetland/woodland areas. As such, the southern half of the township is devoted nearly entirely to farming operations. Nearly all farmland is dedicated to crop production, most particularly the growing of wheat, corn, soybeans and sugar beets.

In an effort to better protect Michigan's farming interests, the state passed Public Act 116 of 1974 – the Farmland and Open Space Preservation Act. The Act has since been amended and ultimately repealed, and made part of Public Act 451 of 1994, the Natural Resources and Environmental Protection Act. The program continues to be commonly referred to as the “PA 116 Program.” The program permits farmers to enroll their properties to gain property tax relief provided the farmland is maintained in an agricultural and/or other open space status. Minimum and maximum program enrollment periods are 10 and 90 years respectively, with renewal enrollment periods of a minimum of seven years. Except in certain instances, termination from the program requires the landowner to repay the tax credits received for the enrolled property during the previous seven years.

There were approximately 5,890 acres in Lake Township enrolled in the Farmland and Open Space Preservation Program in 2022, comprising approximately 45% of the township's area. Except for about 11 enrolled parcels totaling about 600 acres, all enrolled parcels are located in the southern half of the township (Section 25 – 36) and account for approximately 69% of the acreage in the township's southern half. There were approximately 89 enrolled parcels township-wide in 2022, ranging in size from 5 acres to 208 acres and with an average parcel size of approximately 65 acres. Approximately 30 landowners are involved in the program. About 30% of the enrollments extend to year 2040, and about 60% of the enrollments extend to year 2060 or beyond.

## Residential Development and Land Division

The 2020 Census recorded 1,502 dwelling units in Lake Township, a 6.3% increase over the 1,413 dwelling units recorded in 2010. Based on an average dedication of 0.4 acres for each residential lot for each home and maintained lawn area, the dwelling itself, and related site modifications such as driveways, decks and similar accessory features, residential development comprises approximately 4.5% (600 acres) of the township's total acreage.

According to the 2020 Census Bureau's American Community Survey, approximately 98.2% of the township's dwellings were single-family detached dwellings. Mobile homes accounted for 3.9% of all single-family dwellings.

According to the 2020 American Community Survey, 4.4% of the dwelling units were constructed prior to 1940, 63.5% were constructed between 1940 and 1979, and 32.1% were constructed since 1980. The township's housing stock is comparatively young. The 4.4% of the township's housing stock constructed prior to 1940 is far less than that of the county (18.8%) and state (14.6%). The township's 2020 median value of the owner-occupied housing stock was \$135,200, significantly higher than the county (\$109,000) and significantly lower than the state (\$162,200). See Table A-2.

**TABLE A-2**  
**Selected Housing Characteristics Comparison**

Source: U.S. Census Bureau, 2020 American Community Survey

DWELLINGS	LAKE TOWNSHIP	HURON COUNTY	STATE OF MICHIGAN
<b>Year Built (%)</b>			
<b>Since 1980</b>	32.1%	31.9%	36.0%
<b>1940 to 1979</b>	63.5%	49.3%	49.4%
<b>Before 1940</b>	4.4%	18.8%	14.6%
<b>Median Value, Owner Occupied</b>	\$135,200	\$109,000	\$162,200
<b>Median Monthly Owner Cost, With Mortgage*</b>	\$987	\$973	\$1,312
<b>Median Monthly Owner Cost, Without Mortgage*</b>	\$338	\$420	\$495

\*Owner costs include mortgages, loans, and similar property debt, utilities, and fuel.

Residential development in Lake Township exhibits two principal development patterns. The first and original form is the farm homestead and other large land tracts. With the organization of Lake Township in 1867 and into the 1940s, nearly all of the township’s acreage was contained within parcels of 30 to 120 acres or more. The parcels were commonly occupied by farming families and those in the timber industry.

By the 1950s, new dimensions in the township’s land division pattern had begun to emerge. Most particularly, residences on small lots began to appear along M-25 and the Lake Huron shoreline including unified neighborhood subdivisions with their own internal street systems. Neighborhood subdivisions represent multiple land divisions established as a unified development project pursuant to the requirements of the Land Division Act (formerly Subdivision Control Act) or the alternative provisions of the Condominium Act.

Lake Township has not seen the level of “strip residential development” in its agricultural areas as has occurred throughout so much of the state. This strip form of development is commonly characterized by parcels of two to ten acres stripped along section-line roads. The limited evidence of this development pattern in Lake Township is a reflection of the local farming industry’s commitment to maintaining farm operations rather than the conversion of acreage to residences. Strip residential development has been the source of increasing concern in the transportation and land use planning arena due to its negative impacts upon traffic safety, congestion, farmland preservation, and rural character preservation.

### **Commercial Development**

The principal “*brick and mortar*” commercial sites in Lake Township are:

- convenience store at the M-25/State Park Road intersection
- convenience store on M-25 east of Oak Beach Road
- auto repair service on Oak Beach Road south of Sand Road
- mini-storage facility on State Park Road approximately 300’ south of M-25

There are also a number of other commercial enterprises scattered throughout the township in association with agricultural operations and occupations conducted from residences, and a golf course along Griggs Road.

## Industry

Industry in Lake Township is limited to a sheet metal fabricator located on the east side of State Park Road, just north of the above referenced mini-storage facility.

## Outdoor Recreation and Conservation

Aside from the Caseville Golf Course (Griggs Road) referenced above, there are two principal outdoor recreation and/or conservation facilities in the township.

- The Albert E. Sleeper State Park covers approximately 723 acres in the northwest quarter of the township. The facility straddles M-25, with its approximately 275 campsites located on the south side with access to the Lake Huron and beach facilities on the north side.
- The Rush Lake State Game Area covers approximately 2,166 acres in the north-central region of the township, directly east of Sleeper State Park. Approximately half of the facility is comprised of wetlands, with the open water portion of Rush Lake being approximately 100 acres in area.

With the presence of the Albert E. Sleeper State Park and the Rush Lake State Game Area, the public, through the State of Michigan, owns approximately 22% of Lake Township's area.

## Community Facilities & Services

### Government Administration

A five-member Township Board governs Lake Township. Township offices are located on the north side of W. Kinde Road just east of N. Elkton Road. The township hall includes office space, a restroom, and a meeting room. The hall covers approximately 1,500 sq. ft. on an approximately 1/2-acre parcel. The Lake Township Board currently funds nearly all services and the maintenance of all township facilities through local tax revenues.

### Cemeteries

Lake Township operates no cemeteries at this time.

### Education

Lake Township is served by three public school districts:

- Elkton-Pigeon-Bay Port Laker Schools serves more than three-quarters of the entire township area including all of the central two-thirds of the community.
- North Huron Schools serves about one-fourth of the east quarter of the township.
- Caseville Public Schools serves about one-fifth of the west quarter of the township.

There are no public school facilities located in Lake Township. The nearest public school facilities are in Caseville.

### Public Sewer and Water

There is no public sewer or water service in Lake Township. The City of Caseville is the nearest municipality that provides such services.

## **Emergency Services**

Lake Township receives fire protection services from CAFPA – the Caseville Area Fire Protection Association. The fire station is on Main St. in Caseville. Fire emergency services are paid by way of a township-levied tax.

Police protection services are provided by the Huron County Sheriff's Department, and the State Police during times of need and most particularly along the M-25 corridor. Basic service levels are funded through county and state tax revenues. The township contracts for enhanced levels of service from the Sheriff's Department on an as-needed basis, which is funded through the township's general fund.

Ambulance service is provided to township residents by the Village of Elkton, located approximately 13 road miles south. Lake Township pays an annual fee for ambulance service.

## **Recreation**

Lake Township does not operate any recreation facilities but residents do have access to two significant outdoor recreation-based facilities – the Albert E. Sleeper State Park and the Rush Lake State Game Area. Township residents also have available to them the recreational facilities and services of other public entities including the school facilities and programs of the various school districts that serve the township, the parks and recreation programs of nearby municipalities including Caseville and the six parks/campground facilities operated by Huron County Parks.

In addition to the above publicly owned recreation facilities, area residents have access to the Caseville Golf Course on Griggs Road, in the township.

**LAKE TOWNSHIP MASTER PLAN**

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## Appendix B

# ENVIRONMENTAL FEATURES

### Geology & Topography

During the Paleozoic era of geological history, Huron 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. Lake Township sits upon two principal bedrock formations, generally defined by a diagonal line extending from its northwest corner to the southeast corner. The Marshall Foundation is the primary bedrock to the southwest of this diagonal line, and the Michigan Formation is the primary bedrock to the northeast. The Michigan Formation bedrock is comprised principally of shale, along with interbedded sandstone, limestone, dolomite and anhydrite. The Marshall Formation is comprised principally of 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, the depth of the drift layer in Lake Township does not typically exceed 40' in depth.

The topography of Lake Township can be described as level to nearly level, exhibiting grades of 6% or less with isolated areas where the topographic relief is more evident. Those areas exhibiting greater topographic relief are principally along segments of the Lake Huron shoreline and within 500' of the shoreline, where grades frequently approach 10% to 15%.

The township ranges from approximately 580' to 625' above sea level, with the majority of the township being 600' to 620' above sea level. Generally, the township's surface elevation falls as one moves south to north toward Lake Huron, and all water courses in the township drain to the north into Lake Huron. . The approximate mean Lake Huron elevation is 581 feet above sea level.

The character of an area's geology and topography has bearing on development and land use planning. As surface 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. Slopes exceeding 7% present special challenges in this regard. It is generally recommended that development be restricted in intensity where grades exceed approximately 12%, and be strongly discouraged where grades exceed 18%.

## Drainage and Water Courses

Drainage in Lake Township is facilitated by several systems. Perhaps most significantly is the very permeable nature of its sandy and gravelly soils that dominate in its northern half, allowing rainwater to seep into the ground below. Much of the surface runoff that does occur finds its way to one of two major wetlands. Rush Lake, near the center of the township, is comprised of about 100 acres of open water and approximately 1,350 acres of wetlands. A second wetland extends more than two miles long to the north and northeast of Rush Lake and includes approximately 1,400 acres of wetlands. Rush Lake is the only lake in the township in excess of ten acres, excluding Lake Huron.

Also facilitating drainage are the township's two primary drainage courses – the Pigeon River and Pinnebog River. The Pigeon River cuts through the southwest tip of the township before exiting one-half mile north of W. Kinde Road and flowing to Caseville where it empties into Lake Huron. The Pinnebog River travels along the township's east edge before it exits a quarter mile south of McIlhargie Road and flows northeast before emptying into Lake Huron at Port Crescent State Park.

Lands abutting or in close proximity to drainage courses 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. Serious flooding has not been an occurrence in Lake Township. This is due in large part to the comparatively limited development (impervious surfaces) throughout most of the township, the presence of Lake Huron adjacent to those areas most heavily developed, and the network of drainage courses and wetlands that carry and store runoff. The Federal Emergency Management Agency (FEMA) completed a floodplain study for the Lake Township and surrounding areas in 2008. The study identifies those areas of the township that are subject to a flood event that has a 1% chance of happening in any single year, commonly referred to as the 100-year flood.

Township areas that would be subject to such flood conditions are principally limited to the following:

- Saginaw Bay/Lake Huron Shoreline, up to an elevation of 584' above sea level, which commonly extends inward from the shoreline approximately 25' to 75'.
- The Rush Lake area including associated wetlands extending south of Etzler Road, and along the Musselman Drain corridor to the northeast and south along the Champagne Road corridor for approximately one mile.
- The Pigeon River corridor and extending approximately one-half mile to the north and east in the area where the river exits the township at the southwest tip of Section 30.
- Certain other road segments, typically extending no more than 500' from their centerlines.

Although Lake Township may be relatively free of any regular threat of flooding, improperly managed land development practices can impact flood conditions locally and in neighboring communities and locations further downstream.

## Groundwater

As runoff flows across land surfaces and travels through drainage courses, a portion of the runoff seeps into the ground through gravitational forces and collects in great quantities in the underlying soils (drift) and deeper bedrock. *Groundwater* is a term that is generally used to describe this subsurface water below the water table in soils and bedrock. The reservoirs of groundwater are referred to as *aquifers* and serve as the sources of drinking water for nearly all residents of Lake Township. Aquifers are geological formations that are capable of yielding a significant amount of water to a well or spring. The water drawn from the Marshall Formation bedrock aquifer, the sandstone bedrock underlying most of the southwest half of the township, is considered to be of very good quality. The Michigan Formation

shale bedrock underlying the majority of the northeast half of the township is considered a lesser source of potable water. Shale, the principal component of the Michigan Formation, typically provides a higher quality of water but the shale significantly restricts the rate at which the water can be drawn due to its comparatively limited permeability. Aside from the potential for high-iron content, common throughout Michigan, the quality of Lake Township's groundwater is generally considered to be satisfactory. There have been recorded instances in the township, and Huron County as a whole, where nitrate and arsenic levels in the ground water exceed those determined to be safe by the U.S. Environmental Protection Agency.

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 (petroleum products, fertilizers, improperly disposed household liquids, etc.). 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 nearby and/or more distant non-confined aquifers and improperly constructed and/or abandoned wells.

A random survey of well records for Lake Township suggests that the majority of wells in the township extend to the bedrock below, typically between 90' to 150' in depth. Local well logs suggest there is virtually no confining layer of clay across the township's northern half, thereby increasing the potential for groundwater contamination. The common sandy and graveling soil conditions in this part of the township encourage comparatively fast seepage of contaminants to the aquifers below. Well logs suggest there is a confining layer of clay across much of the township's southern half though its fragmented pattern lessens its effectiveness in protecting groundwater sources.

Contamination of ground water resources can originate from a number of sources including 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.

## Vegetation

The predominant vegetative cover of Lake Township can be divided into three principal types. The largest is that of the agricultural fields that cover about 58% of the Township's area (about 7,630 acres) and nearly the entire southern two-thirds. Woodland and wetland vegetation accounts for approximately 26% of the township's area. The balance of the vegetative cover is characterized principally by lawn areas associated with residences and road rights-of-way.

**Upland Woodlands.** Upland woodlands are comparatively limited in Lake Township and are principally found along the upland areas that run generally parallel to the Lake Huron shoreline within a mile of the shoreline. These upland areas are intermixed among lowland woodlands comprising wetland environments (described below in more detail). Tree species in the upland forests include red oak, white oak, sugar maple, red maple, black cherry, beech, basswood, and ash. Upland woodlands provide multiple benefits including the slowing of surface run-off flow to allow for greater water infiltration, reducing air pollutants through absorption, minimizing soil erosion and sedimentation of water courses, providing special habitats for wildlife and shaping the community's visual character.

**Wetlands.** Wetlands can generally be described as land where water is found, either on the surface or near the surface and for all or portions of a year, so as to result in the lack of oxygen in the soil and a distinct set of plant species. Wetland soils are typically dark and high in organic content. Wetlands are commonly referred to as swamps, marshes and bogs, with swamps being of a more wooded character. There are approximately 3,090 acres of wetlands in Lake Township and they are nearly entirely

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comprised of two expansive areas in association with the Rush Lake State Game Area and Sleeper State Park.

The Rush Lake wetland areas are comprised principally of shrub and emergent herbaceous non-woody plant material. Emergent wetlands tend to be more open in character and are commonly referred to as marshes, where shallow waters are present throughout the year or for extended periods of the year, and are commonly characterized by cattails, cranberry, fens and sedges. The Sleeper State Park wetland areas are comprised principally of lowland forest and shrub environments such as red and silver maples, cottonwood, cedar, green ash, basswood, willow, and dogwoods.

Wetlands also provide vital roles in flood control, runoff filtering and purification, groundwater recharge, wildlife habitats, recreational opportunities, and supporting the rural character of the township. The length of the township's interconnected wetlands, and their interface with adjoining upland woodlands, enhance their value for flora, fauna and recreation.

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 exist.

## Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), has prepared a soil survey for Huron County. According to the survey, nearly all acreage in Lake Township is characterized by loam, sand or muck soils. Loam soils are most dominant in the southern two-thirds of the township, in the more agricultural areas of the community. Soils classified as "loam" typically have near equal proportions of sand, silt and clay. The majority of the balance of the soils, and the dominant soils in the northern third of the township, are classified as sand. Soils classified as sand have a sand composition of 85% or greater. Muck soils are commonly described as being a soil consisting of fairly well decomposed organic material that is relatively high in mineral content, fine in texture and dark in color. Muck soils are commonly associated with wetland environments.

Approximately 79% of the soils in the township are also classified as "hydric" soils. Hydric soils are generally described as soils formed under conditions of saturation, flooding or ponding for periods long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile. Hydric soils have a particularly high moisture content, are typically poorly drained, and are commonly associated with wetlands as well as other less evident soil environments. Approximately 79% of the township area is classified as hydric soils.

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The character of soils can have a profound impact upon the suitability of future land uses such as in the case of construction projects, on-site sewage disposal, and agricultural productivity. The NRCS has identified specific individual soil units throughout the county based upon the characteristics of the upper soil layers (approximately five feet in depth) that provides a reliable basis for township planning purposes. For example, hydric soils commonly present significant obstacles to construction or otherwise can substantially increase construction costs due to the special measures that must be taken to combat the high moisture content and resulting challenges for stable building foundations.

**Septic Systems:** According to the NRCS, all or nearly all land in Lake Township is classified as “very limited” in regard to its natural compatibility with septic systems. The NRCS describes a soil as being “very limited” when the soil has one or more features that are unfavorable for a septic drain field. A primary concern is the soil’s ability to absorb and break down the leachate from the septic drain fields before it reaches underground water supplies. The soil limitations generally cannot be overcome without major soil reclamation, special system designs, and/or comparatively expensive installation procedures. Poor performance and high maintenance can be expected. In the case of Lake Township, these features pertain to such things as poor soil filtering characteristics, ponding of water, a high water table, and slow or rapid percolation rates.

The Huron County Public Health Department is responsible for issuing permits for on-site sewage disposal. A permit will not be issued unless all county requirements have been met. Under typical conditions including the absence of wetlands, sites approaching one to two acres are generally adequate to meet the Health Department’s requirements for effective septic systems, including a back-up area should the initial drain field fail. Sites of one acre or less must meet more stringent standards and may not be able to do so due to soil conditions. Development at this density may require a sewer system.

It should be noted that while a site may be classified by the NRCS as presenting limitations 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 from the upper layer soils and thus, varying limitations. Detailed on-site investigation is critical to determine opportunities and constraints the soils may present.

**Prime Farmland:** The NRCS classifies approximately 60% of the township’s land area as “*prime farmland*” if adequately drained, and the southern two-thirds of the township is comprised nearly entirely of *prime farmland* (if adequately drained). The NRCS generally defines *prime farmland* as land that is, under proper management, particularly well-suited for food, feed, forage, fiber, and oilseed crops and is capable of producing sustained high yields. Nearly all acreage currently under crop production is classified as “prime farmland” (if adequately drained).

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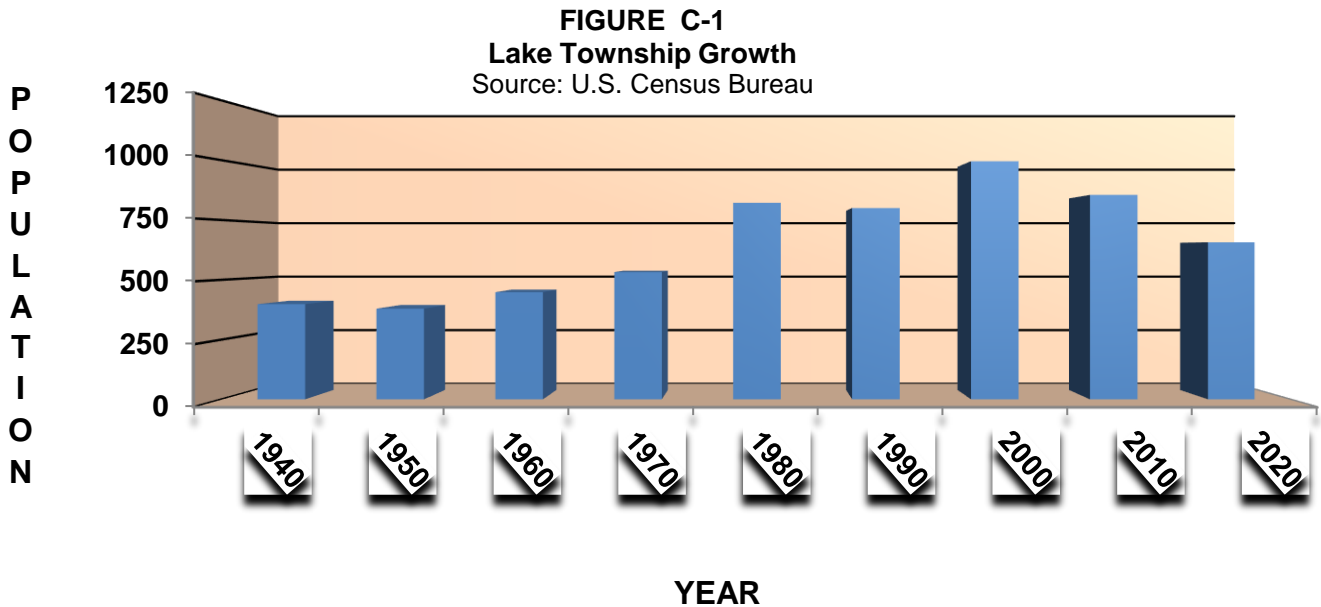
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## Appendix C DEMOGRAPHIC FEATURES

*Appendix C presents demographic data about Lake Township. The decennial census (10-year census) is taken on April 1, a time of the year when the township's population and dwelling occupancy are comparatively low. Seasonal residents who do not reside in the township in April may provide incorrect Census information regarding residency status. Thus, the 2020 Census may not reflect true conditions in Lake Township to the extent in non-seasonal communities.*

### Population Growth Trends

The 2020 Census recorded a Lake Township population of 657 persons, a decrease of 23.2% from its 2010 population of 855 persons and a 34.0% decrease from its 2000 population of 996 persons. The township's population steadily grew between 1950 and 2000 when it reached its highest population of 996 persons.



The township's 34.0% population decline between 2000 and 2020 was more than twice that of Huron County as a whole (-13.9%) during the same period, while the state's population grew 1.4% during the same 20-year period. These population declines are a reflection of the economic and housing market decline across the nation between 2007 and 2009 and which was particularly evident in Michigan. Lake Township's population peaked at 996 in 2000 before witnessing its recent population decline. Huron County's population peaked in 1980 at 36,459 persons and two of the three following decades witnessed population declines and a resulting 2020 population of 31,407.



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The township's 2020 population of 657 persons was 65% greater than its 1940 population of 398 persons. During this same period, Huron County's population decreased 3.6%, from 32,584 to 31,407 persons.

The varying growth rates of the township and county since 1940 have resulted in an increase in the proportion of Lake Township residents comprising the total county population. The township's population comprised 1.2% of the county population in 1940 and 2.1% of its population in 2020 – an increase of about 75%.

**TABLE C-1**  
**Population Trends & Growth Rates Comparison**  
(previous ten-year growth rate indicated by "%")

YEAR	LAKE TOWNSHIP	HURON COUNTY	STATE of MICHIGAN
1940	398	32,584	5,256,106
1950	379 -4.8%	33,149 1.7%	6,371,766 21.2%
1960	448 18.2%	34,006 2.0%	7,823,194 18.6%
1970	532 18.8%	34,083 0.2%	8,881,826 11.9%
1980	822 54.5%	36,459 7.0%	9,262,078 4.1%
1990	800 -2.7%	34,951 -4.1%	9,295,297 0.4%
2000	996 24.5%	36,079 3.2%	9,938,444 6.9%
2010	855 -17.5%	33,118 -8.2%	9,883,640 -0.5%
2020	657 -23.2%	31,407 -5.2%	10,077,331 2.0%

Source: U.S. Census Bureau

The township's overall rising population has increased population density. Its population density was 19 persons per square mile in 1940 and 31 persons per square mile in 2020, somewhat lower than that of the county as a whole (38 persons per square mile). By comparison, the Village of Caseville is one of the most densely populated communities in the county and had a 2020 population density of 593 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, along with the impacts of the Covid-19 pandemic and resulting changes in employment conditions and workplace patterns, projecting population growth is uniquely challenging. This is further exacerbated by the township's seasonal population shifts and impacts on the reliability of local census data.

The Michigan Bureau of Labor Market has prepared projections for county populations through 2040 and the projections reflect a continual decline in Huron County's population between 2020 and 2040. If Lake Township's current 2.1% share of Huron County's total population continues, the township's population can be expected to be about 596 in 2030 and 538 in 2040.



## SOCIAL and ECONOMIC CHARACTERISTICS

**RACE:** The 2020 Census showed Lake Township to have a comparatively homogeneous racial composition, with 96.3% of the township population being white, nearly equal to that of the county as a whole (94.9%) and noticeably higher than the state (73.9%). The township's homogeneity is typical of rural Michigan communities as compared to larger urban areas. (See Table C-2).

**TABLE C-2**  
**Race Profile Comparison, 2020 (By Percent)**

Source: 2020 U.S. Census

RACE	LAKE TOWNSHIP	HURON COUNTY	STATE of MICHIGAN
<b>White Only</b>	96.3	94.9	73.9
<b>Black/African American Only</b>	0.0	0.3	13.7
<b>American Indian, Alaska Native Only</b>	0.6	0.3	0.6
<b>Asian Only</b>	0.2	0.5	3.3
<b>Native Hawaiian/Other Pacific Islander Only</b>	0.0	0.0	0.0
<b>Some Other Single Race Only</b>	0.4	0.9	2.2
<b>Two or More Races</b>	2.3	3.1	6.3

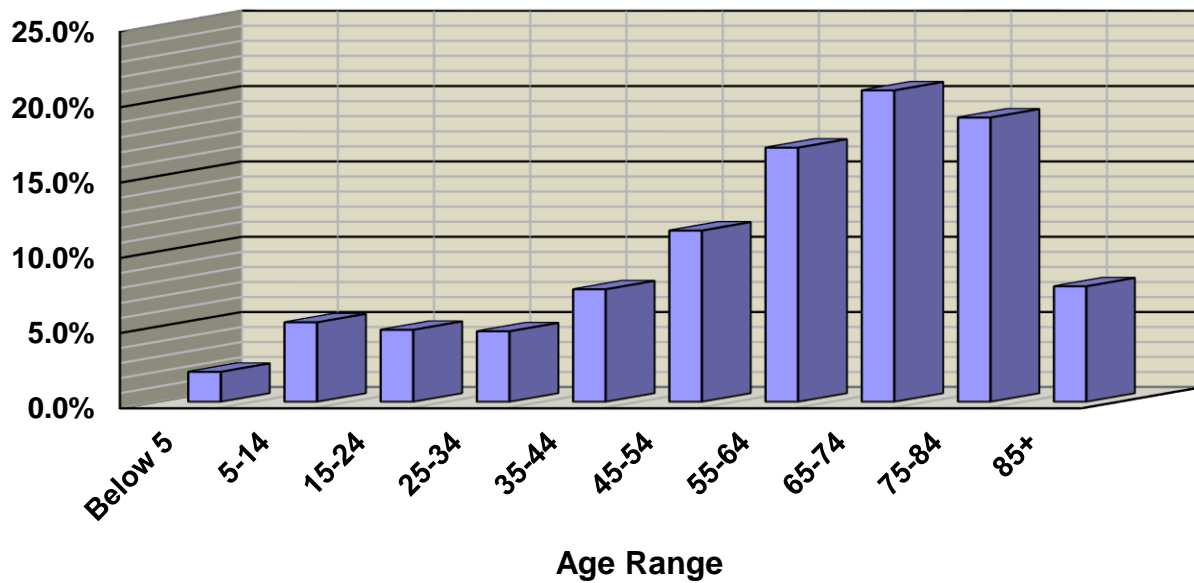
**AGE:** Lake Township's overall age composition in 2020, and for decades, has been quite different than that of the county and state. The township's age profile is heavily skewed toward the older age groups. This is due most particularly to the abundance of retired persons in the community and this group of residents continually growing as more and more baby-boomers exit the labor market. The comparative lack of nearby employment opportunities discourages many young persons and families settling in the township and the county as a whole. The 8.7% of the township's population less than 18 years of age in 2020 was less than half that of the county and state. Conversely, the 47.3% of the township's population of 65 years of age or greater in 2020 was almost twice that of the county and almost three times that of the state. See Figure C-2 and Table C-3.

**TABLE C-3**  
**Age Profile Comparison (By Percent, except where noted)**

Source: U.S. Census Bureau, 2020 American Community Survey

AGE	LAKE TOWNSHIP	HURON COUNTY	STATE of MICHIGAN
<b>Under 5 yrs.</b>	2.0	4.9	5.7
<b>5 – 14 yrs.</b>	5.3	10.9	12.
<b>15 - 24 yrs.</b>	4.8	10.3	13.5
<b>25 - 34 yrs.</b>	4.7	9.5	12.9
<b>35 – 44 yrs.</b>	7.5	9.4	11.7
<b>45 - 54 yrs.</b>	11.4	12.7	13.0
<b>55 - 64 yrs.</b>	16.9	17.0	14.0
<b>65 - 74</b>	20.7	14.2	10.1
<b>75 - 84</b>	18.9	7.8	4.8
<b>85 yrs. or more</b>	7.7	3.4	2.2
<b>Under 18 yrs.</b>	8.7	19.2	21.7
<b>65 yrs. and over</b>	47.3	25.3	17.2
<b>Median Age</b>	62.2 yrs.	49.3 yrs.	39.8 yrs.

**FIGURE C-2**  
**Lake Township Age Profile**  
Source: U.S. Census Bureau, 2020 American Community Survey



The township's population in 2020 can be divided into near equal thirds according to the following age groups, which further illustrates the dominant presence of more senior age groups:

- Less than 53 years of age
- 53 – 71 years of age
- 72 years of age and greater

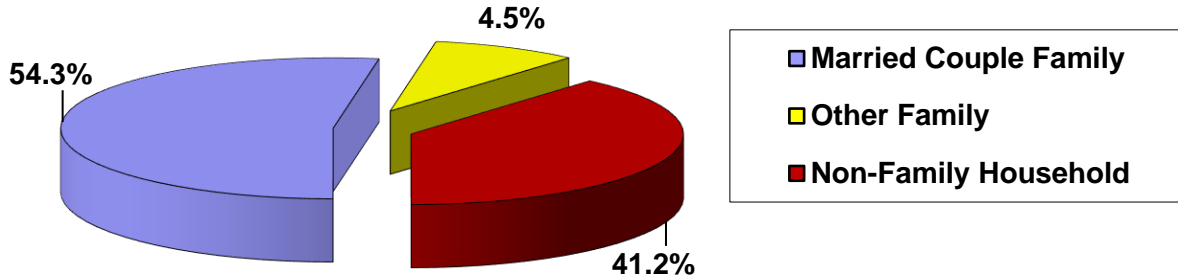
Not surprisingly, the township's 2020 median age of 62.2 years is comparatively high – approximately 26% higher than that of the county (49.3 years) and 56% higher than that of the state (39.8 years). Like the balance of the state and nation, Lake Township's residents are continuing to mature. The township's 2020 median age of 62.2 years reflects a 3.2% increase over its 2010 median age of 60.3 years and a 26.4% increase over its 1980 median age of 49.2 years.

**HOUSEHOLDS:** The 2020 American Community Survey (U.S. Census Bureau) recorded 335 households, 58.8% of which were family households. Of the 58.8% of family households, 92.3% were comprised of a married-couple family. Of the 7.7% of the family households not comprised of a married couple, about one of every four households were headed by a female. The township's proportion of married-couple households was somewhat above the county's (50.1%) and significantly above the state's (46.9%). The 335 households recorded in 2020 was 23.5% less than that recorded in 2010 (438), likely a result of the seasonal occupancy/part-time residency of many township land owners and their absence during the administration of the census.

The township's average household size of 1.8 persons in 2020 was 14% lower than its average size of 2.1 in 2000. Its average household size in 2020 was somewhat lower than that of the county's (2.3) and state's (2.5). The township's average 2.2 persons per family in 2020 was significantly lower than the county's (2.8) and state's (3.1). These are further indications of the comparatively older population in Lake Township. See Figure C-3 and Table C-4.

**FIGURE C-3**  
**Lake Township Household Type**

Source: U.S. Census Bureau, 2020 American Community Survey



**TABLE C-4**  
**Household Type and Size Comparison**  
(by percent, except where otherwise noted)

Source: U.S. Census Bureau, 2020 American Community Survey

	LAKE TOWNSHIP	HURON COUNTY	STATE OF MICHIGAN
<b>HOUSEHOLD TYPE</b>			
Married-couple family	54.3	50.1	46.9
Other family:	4.5	11.1	16.6
Male householder	3.6	3.6	4.8
Female householder	0.9	7.5	11.8
Non-family household	41.2	38.8	36.5
<b>PERSONS Per HOUSEHOLD</b>	1.8 persons	2.2 persons	2.5 persons
<b>PERSONS Per FAMILY</b>	2.2 persons	2.8 persons	3.1 persons

Of the 41.2% of township households comprising a non-family household, about two-thirds were comprised of the householder living alone.

**EMPLOYMENT and INCOME:** Of the estimated 536 township residents of age 16 years and over in 2020, 38.6% were in the civilian labor force. The three principal employment industries for employed township workers were: 1) manufacturing; 2) agriculture, forestry, fishing, hunting, and mining; and 3) education, health, and social services. These three industries alone accounted for about two-thirds of township workers' employment. Perhaps one of the most significant differences between employment aspects of township workers as compared to the county and state is the 18.4% of township workers in the agriculture, forestry, fishing hunting and mining industry – more than twice that of the county and state. See Table C-5.

23.2% of the township's work force worked within their place of residence in 2020, a percentage far greater than that of the county (5.4%) and state (6.0%). For those township residents who commuted to work, the average travel time was 25.2 minutes – significantly higher than that of the county (20.5 minutes) and nearly equal to that of the state (24.6 minutes). This is a reflection of the comparatively limited employment opportunities in the immediate Lake Township area and workers commuting to more regional urban areas such as the Bay City, Midland and Saginaw areas.

**TABLE C-5**  
**Employment by Industry Comparison**  
**(employed persons 16 years and older, by percent)**  
Source: U.S. Census Bureau, 2020 American Community Survey,

INDUSTRY	LAKE TOWNSHIP	HURON COUNTY	STATE of MICHIGAN
Manufacturing	23.7	21.3	18.6
Agriculture, forestry, fishing, hunting, mining	18.4	8.8	1.1
Education, health, and social services	13.5	20.7	23.4
Professional, scientific, management, administrative, waste management, other services not listed (excluding public administration)	12.1	9.5	14.3
Retail trade	11.0	11.9	10.7
Transportation, warehousing, and utilities	10.1	4.0	4.4
Wholesale trade	4.3	2.6	2.4
Finance, insurance, and real estate	2.9	3.4	5.6
Public administration	2.4	2.9	3.5
Art, entertainment, recreation, accommodations, and food services	1.4	7.2	9.2
Construction	0.0	6.3	5.5
Information	0.0	1.5	1.3

The overall prosperity of Lake Township’s residents generally exceeds that of the county and state as a whole.

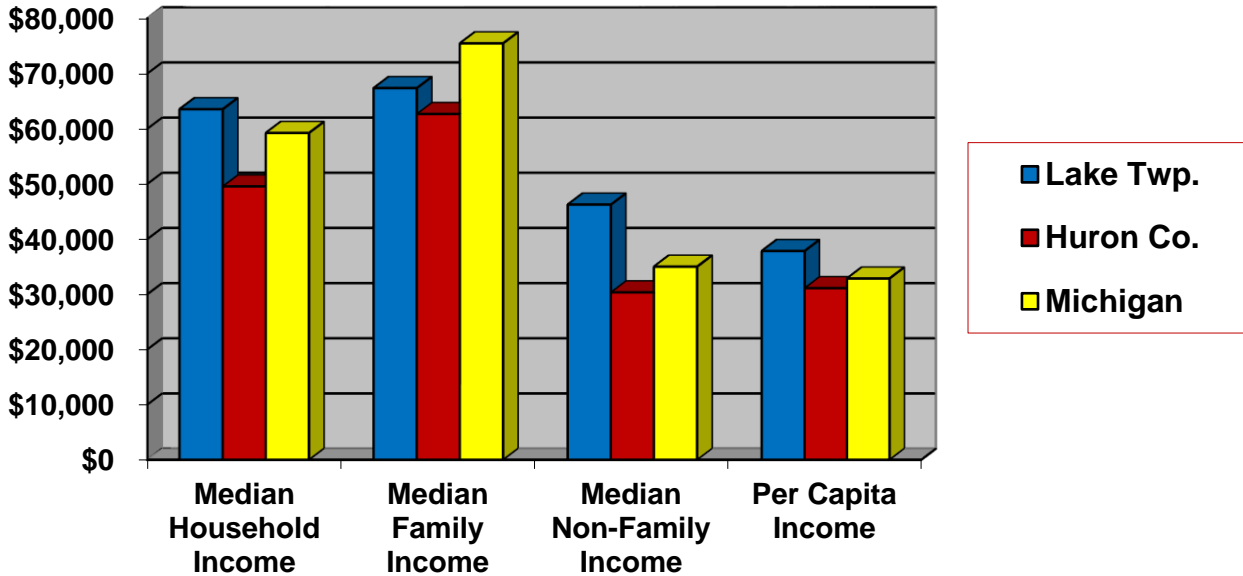
- The township’s median household income of \$63,536 was noticeably greater than both the county (\$49,541) and the state (\$59,234).
- The township’s median family income of \$67,371 was noticeably greater than that of the county (\$62,671) and noticeably less than the state (\$75,470).
- The township’s median non-family income of \$46,250 was substantially greater than both the county (\$30,343) and the state (\$35,002).
- The township’s per capita income of \$37,837 was substantially greater than both the county (\$31,105) and the state (\$32,854).

Perhaps the greatest contrast between the township, county and state is that of poverty conditions. The portion of township persons below poverty level in 2020 (3.1%) was one-quarter or less than the county and state. See Figure C-4 and Table C-6.

**TABLE C-6**  
**Income Characteristics Comparison**  
Source: U.S. Census Bureau, 2020 American Community Survey

INCOME CHARACTERISTIC	LAKE TOWNSHIP	HURON COUNTY	STATE OF MICHIGAN
Median household income	\$63,536	\$49,541	\$59,234
Median family household income	\$67,371	\$62,671	\$75,470
Median non-family household income	\$46,250	\$30,343	\$35,002
Per capita income	\$37,837	\$31,105	\$32,854
Persons below poverty level	3.1%	12.5%	13.7%

**FIGURE C-4**  
**Income Characteristics Comparison, 2020**  
Source: U.S. Census Bureau, 2020 American Community Survey



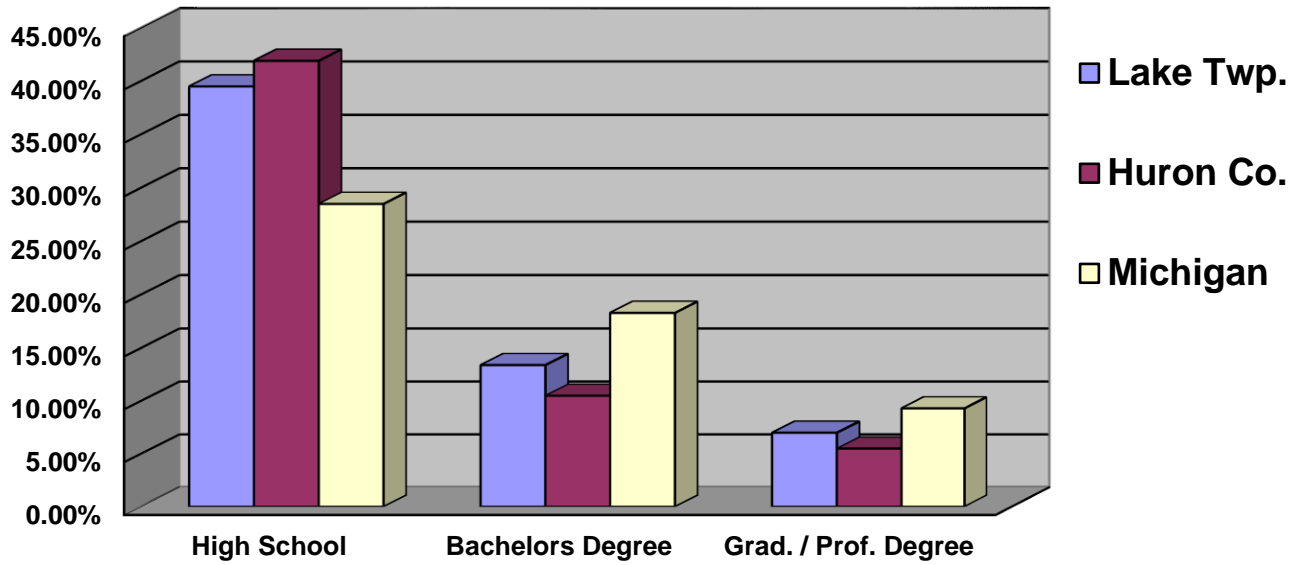
**EDUCATION:** Formal education levels for Lake Township residents in 2020 were generally between those of the county and state as a whole. The township’s 39.8% of residents 25 years of age or older that had not pursued formal education beyond the attainment of a high school diploma (or equivalent) was somewhat similar to that of the county (41.9%) and noticeably higher than that of the state (28.5%). The township’s 20.4% of residents 25 years of age or older that had attained a bachelor’s degree or higher level of education was somewhat higher than that of the county (16.0%) and noticeably lower than that of state (30.0%).

See Table C-7 and Figure C-5

**TABLE C-7**  
**Highest Level of Education Attainment Comparison**  
**(for persons 25 years of age and higher, by percent)**  
Source: U.S. Census Bureau, 2020 American Community Survey

HIGHEST EDUCATION ATTAINMENT	LAKE TOWNSHIP	HURON COUNTY	STATE of MICHIGAN
Less Than 9th Grade	0.0	3.0	2.7
9th to 12th, no diploma	4.1	6.7	6.0
High School Diploma	39.8	41.9	28.5
Some college, no degree	23.5	21.1	23.2
Associates Degree	12.2	11.3	9.6
Bachelor’s Degree	13.4	10.5	18.3
Graduate/Professional Degree	7.0	5.5	11.7
High school graduate or higher	95.9	90.3	91.3
Bachelor’s degree or higher	20.4	16.0	30.0

**FIGURE C-5**  
**Highest Level of Education Attainment Comparison**  
**(for persons 25 years of age and higher)**  
Source: U.S. Census Bureau, 2020 American Community Survey



## Appendix D **INVENTORY MAPS**

Land Division Pattern

Roads: PA 51 Classification

Land Use by Tax Classification

Water Resources and Wetlands

**LAKE TOWNSHIP MASTER PLAN**

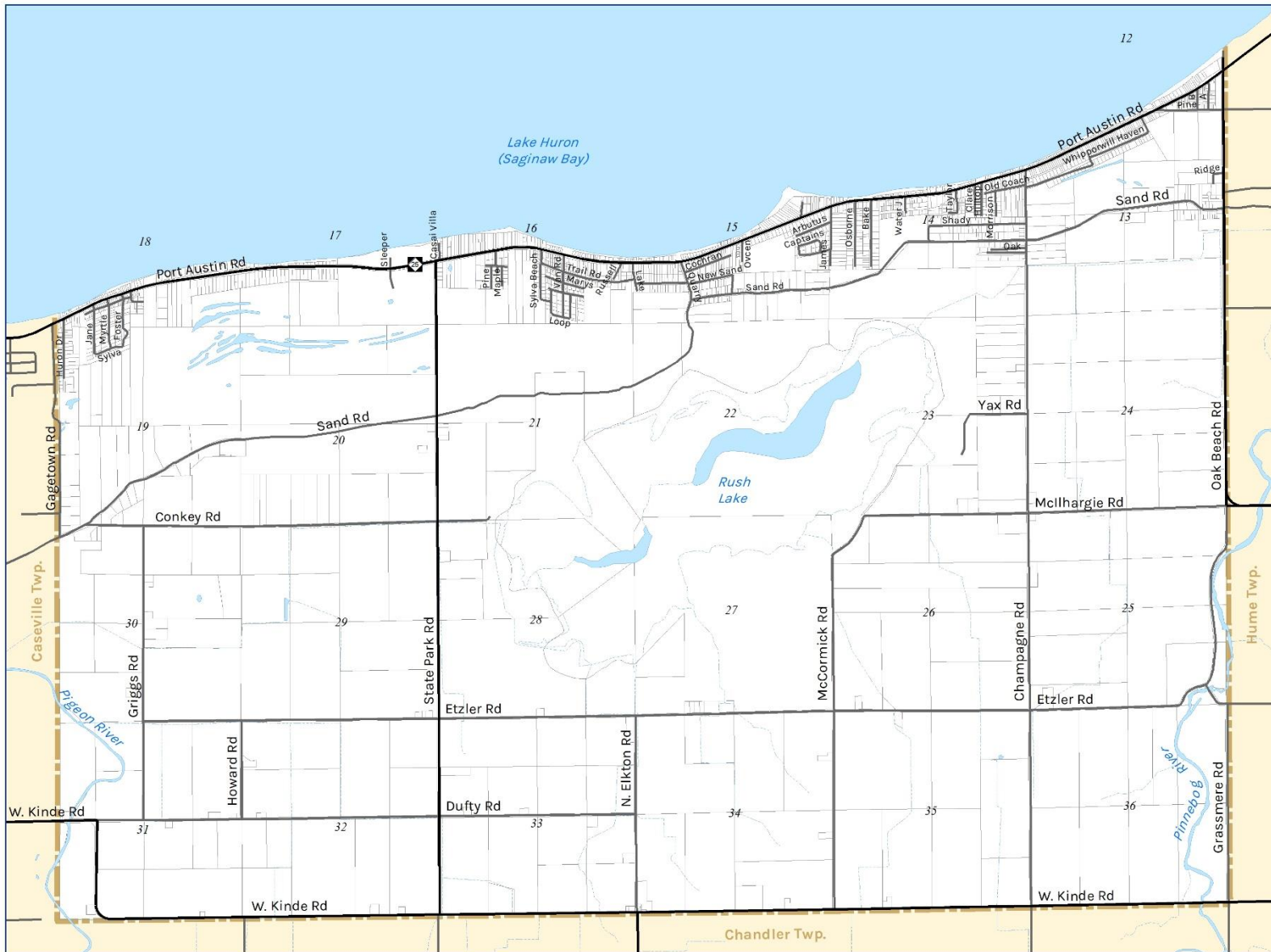
August 21, 2023

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# LAKE TOWNSHIP MASTER PLAN

August 21, 2023



**Lake Township**  
 HURON COUNTY,  
 MICHIGAN

**Master Plan**  
 August 21, 2023

## Land Division Pattern

- Parcel Lines
- Major Roads
- Other Roads
- Water Bodies
- Streams, Creeks and Drains
- Township Limits
- Section Numbers  
(Open 184, Range 16, Huron County, MI)

Parcel Source: Huron County Equalization Department, 2019  
 Base Layers Source: Michigan Geographic Framework

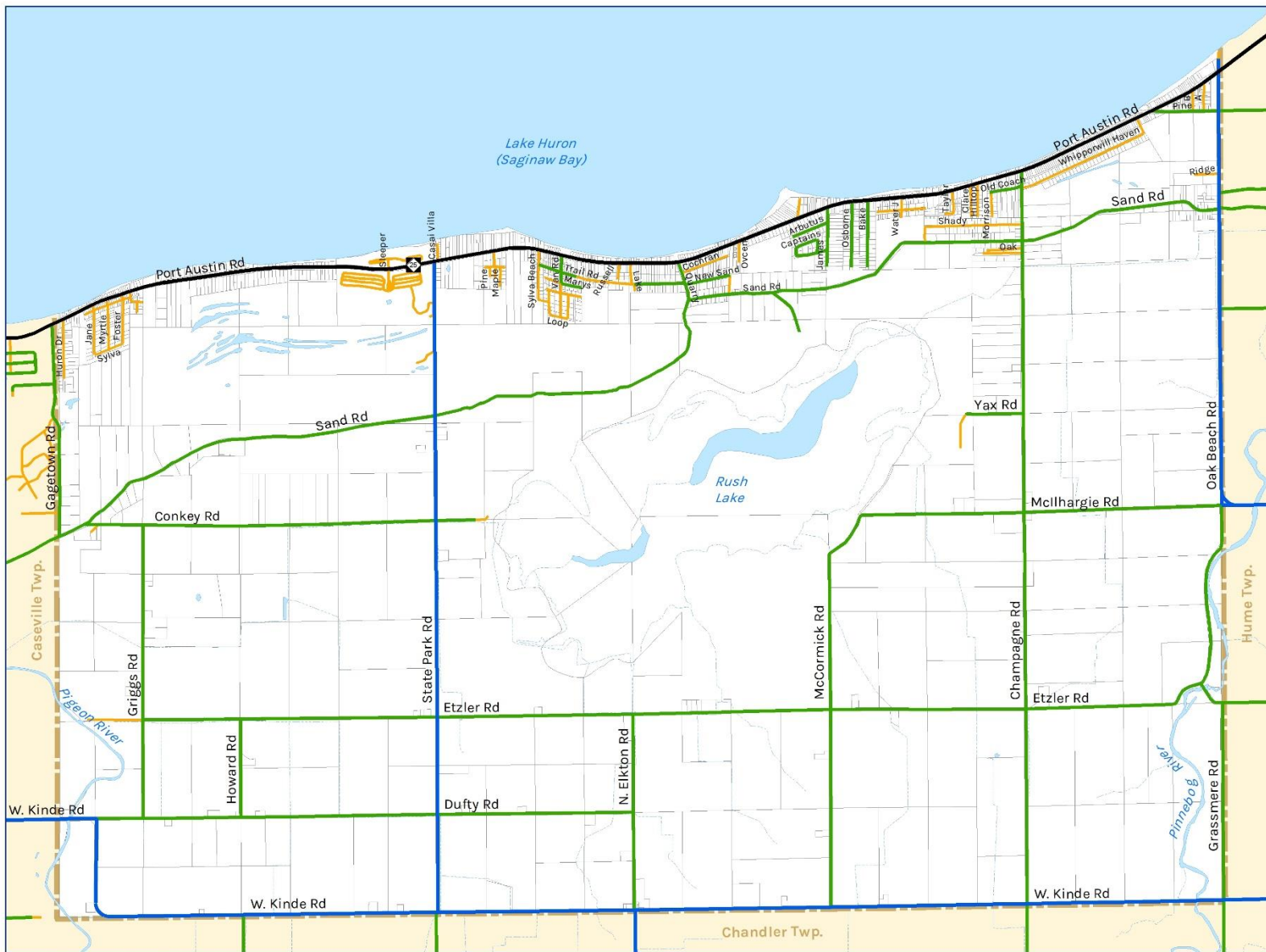


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# LAKE TOWNSHIP MASTER PLAN

August 21, 2023



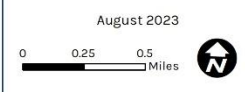
## Lake Township

HURON COUNTY,  
MICHIGAN

### Master Plan August 21, 2023

#### Roads: Public Act 51 Classification

- Road Classifications:**
- State Trunklines
  - County Primary Roads
  - County Local Roads
  - Unclassified Roads
- Base Data:**
- Water Bodies
  - Streams, Creeks and Drains
  - Parcel Lines
  - Township Limits
  - Section Numbers  
(16w-18N, Range 16, Huron County, MI)
- Parcel Source: Huron County Equalization Department, 2019  
Roads/Base Layers Source: Michigan Geographic Framework

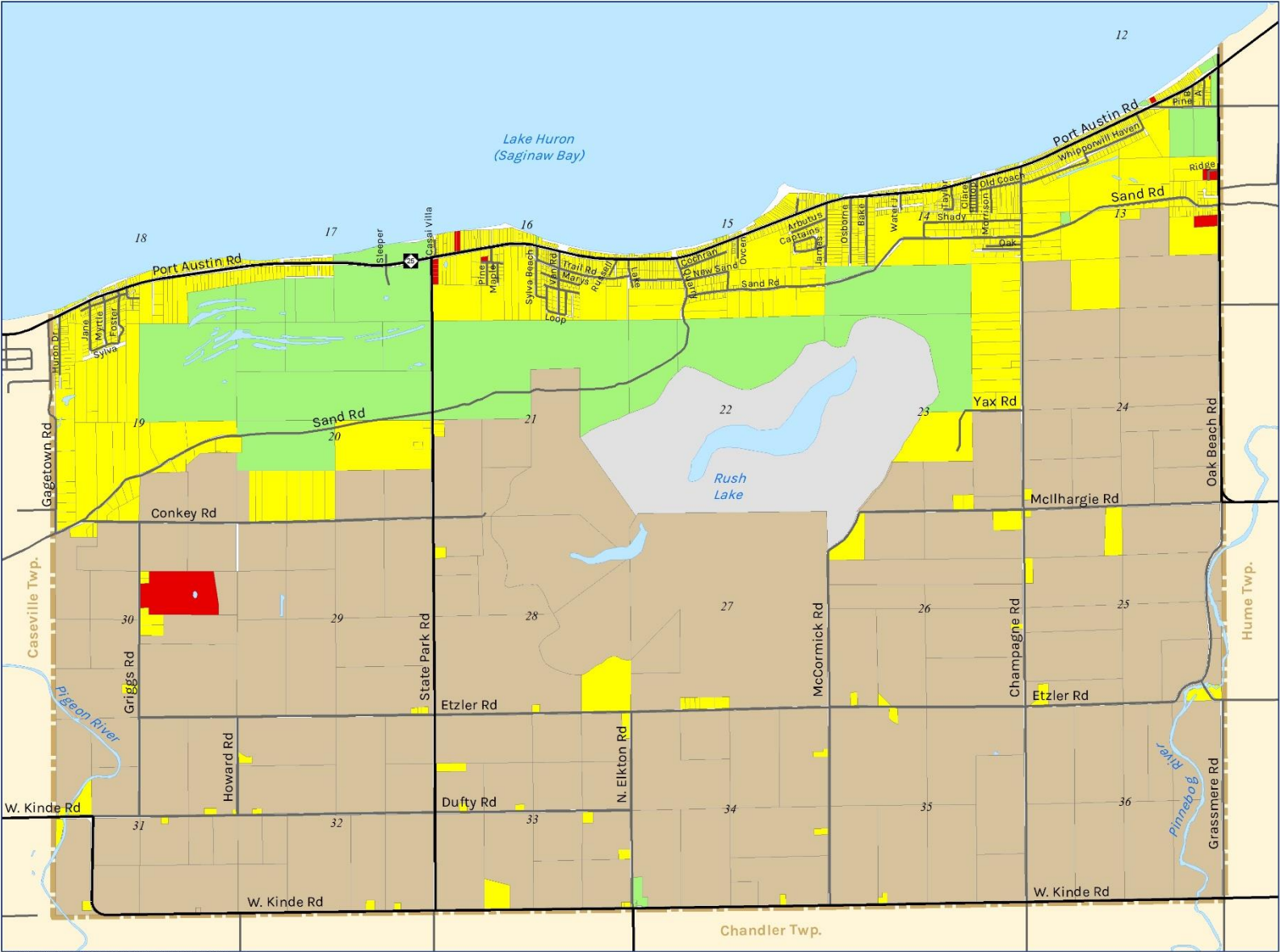


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# LAKE TOWNSHIP MASTER PLAN

August 21, 2023



## Lake Township

HURON COUNTY,  
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### Master Plan August 21, 2023

### Land Use by Tax Classification

- Tax Classification:**
- Agricultural
  - Residential
  - Commercial
  - Exempt
  - Personal Parcel/Other

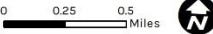
- Base Data:**
- Major Roads
  - Other Roads
  - Water Bodies
  - Streams, Creeks and Drains
  - Parcel Lines
  - Township Limits
  - Section Numbers
  - 28 (Town 18N, Range 11E, Huron County, MI)

Tax Class Source: Huron County Equalization Department, updated by Huron Township, 2021

Parcel Source: Huron County Equalization Department, 2019

Base Layers Source: Michigan Geographic Framework

August 2023



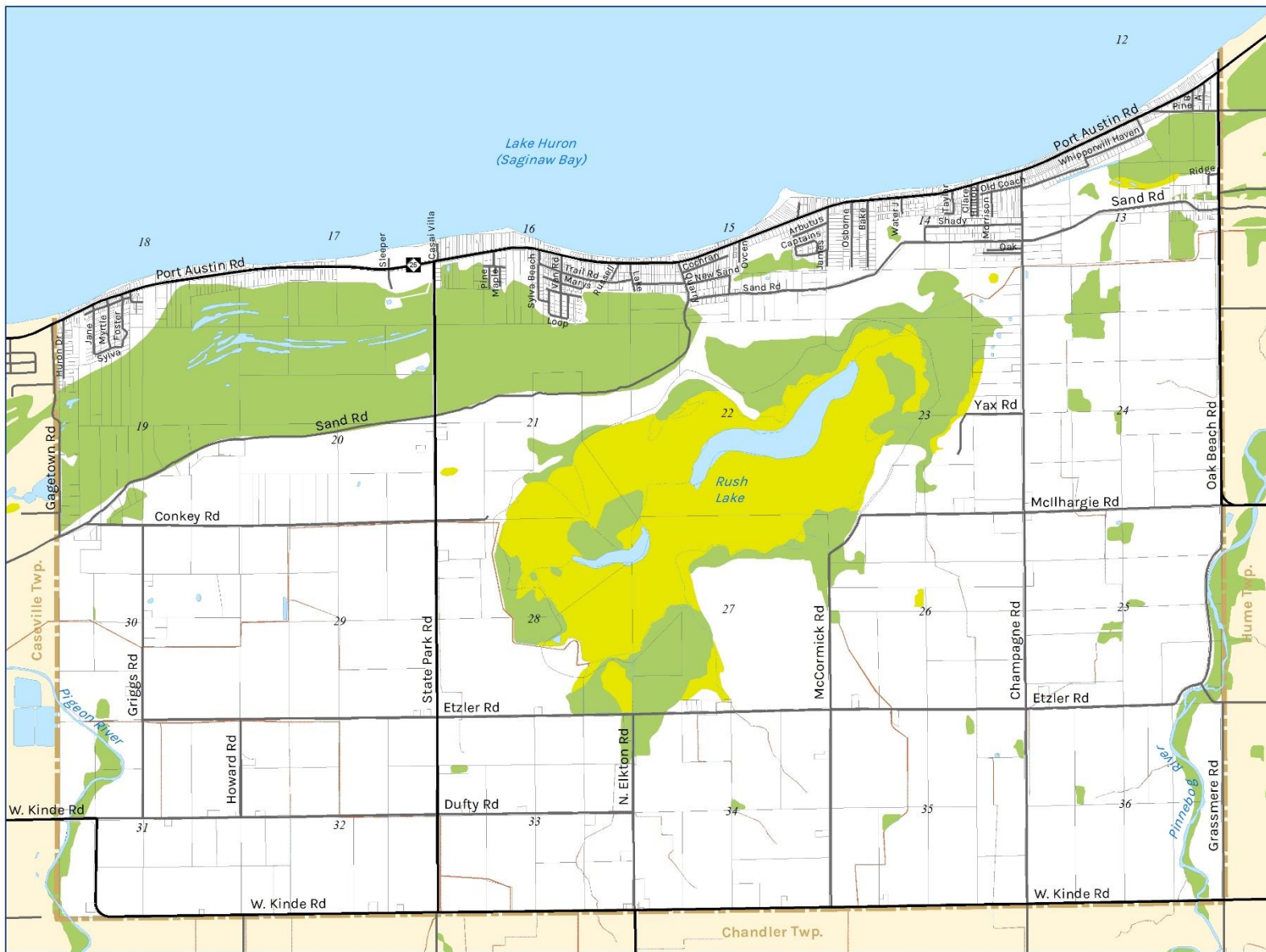
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# LAKE TOWNSHIP MASTER PLAN

August 21, 2023



## Lake Township

HURON COUNTY, MICHIGAN

Master Plan  
August 21, 2023

### Water Resources and Wetlands

Wetlands:

-  Emergent Wetland
-  Forested/Shrub Wetland
-  Riverine Wetland

Base Data:

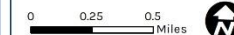
-  Major Roads
-  Other Roads
-  Lakes/Ponds
-  Streams, Creeks and Drains
-  Parcel Lines
-  Township Limits
-  Section Numbers

Wetland Source: National Wetlands Inventory, v2, US Fish and Wildlife Service

Parcel Source: Huron County Equalization Department, 2019

Base Layers Source: Michigan Geographic Framework

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