EMPIRE TOWNSHIP MASTER LAND USE PLAN

November 2005 Updated January 2024 – Effective February 15, 2024

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EMPIRE TOWNSHIP MASTER LAND USE PLAN TABLE OF CONTENTS

Contents

INTRODUCTION	1
GUIDING PRINCIPLES FOR EMPIRE TOWNSHIP	2
1. Maintain the Rural Character of the Township	2
2. Plan for Growth Compatible with the Existing Rural Character of the Township	4
3. Collaborate with Residents and Other Jurisdictions	5
BASIS FOR THE EMPIRE TOWNSHIP MASTER PLAN	6
LAND USES AND ENVIRONMENT	9
Generalized Land Use Map	9
Watershed Maps	10
FUTURE LAND USES AND ENVIRONMENT	12
INFLUENCING FACTORS	12
FUTURE LAND USES	16
GROWTH TRENDS	26
THE NATURAL ENVIRONMENT	
CURRENT ENVIRONMENT AND LONG TERM OBJECTIVES	32
TRANSPORTATION	32
LONG TERM OBJECTIVES – TRANSPORTATION	
UTILITIES AND SERVICES	35
LONG TERM OBJECTIVES – UTILITIES AND SERVICES	
HOUSING POLICY & THE ECONOMY	
LONG TERM OBJECTIVES – HOUSING POLICY & THE ECONOMY	40
POLICIES & ACTIONS	40
IMPLEMENTATION GUIDELINES	42
APPENDIX ONE: FUTURE LAND USE MAP	46
APPENDIX TWO: GENERALIZED LAND USE MAP	48
APPENDIX THREE: WATERSHED MAP	50
APPENDIX FOUR: 2019 COMMUNITY SURVEY RESULTS	

EMPIRE TOWNSHIP MASTER LAND USE PLAN

INTRODUCTION

The Empire Township Planning Commission's philosophy in creating this Master Land Use Plan is to meet the current and projected needs of the Township and to retain the rural and pristine character of the area that is enjoyed today. Thus, the Master Land Use Plan has been prepared and adopted to bring about the most appropriate uses of land and future development within the Township. Due consideration has also been given to the health, safety and welfare needs of its citizens. It is the objective of this plan to be compatible with the overall plans of Leelanau County, neighboring townships and the applicable Federal, State and County statutes or directives in effect at the time this plan was adopted.

The Plan is intended to guide Township officials and citizens in making decisions about use of the land and public facilities. It defines the existing character of the area and sets forth the Township's objectives and guidelines for change on the privately owned lands and Township owned lands in Empire Township. In addition to Township's for the serving as the policy basis elected and appointed officials, this Plan serves as a foundation for the Township's zoning and other land use regulations. Adoption of this Plan does not directly control land use. Such control is left to the Zoning Ordinance (including the zoning map), to land division and subdivision regulations, and to other local ordinances. Plan implementation is made with final decisions on rezonings, special use permits, and site plan and plat approvals, as well as by the expenditure of Township funds on various capital improvements.

Input for the Planning Board's work on the original 2005 Master Plan was obtained from a visioning session on March 22, 2004 and public input sessions on October 25, 2004; November 22, 2004; and from the public hearing on October 27, 2005. Additional public input was received at Planning Commission meeting during the master plan process. The Township Board adopted this Master Plan at their November 8, 2005 meeting. Minor updates were made to the Plan in 2010.

In 2020, it was determined that the Master Plan should be reopened for amendments and additions. Updates were made to the Master Plan from 2020-2024, and a public hearing on the final product was held by the Planning Commission on September 19, 2023. The Planning Commission adopted the amended Master Plan at their January 16, 2024 regular meeting.

This Master Land Use Plan is based on the best knowledge and data available at the time. In addition to an annual review of the plan, the Planning Commission will update the plan at least every five years, to reflect changes that occur in the county as well as the Township.

GUIDING PRINCIPLES FOR EMPIRE TOWNSHIP

The intent of the Township is to provide guidance in appropriate areas to best satisfy the needs of all constituents through orderly and focused planning coupled with reasonable decision-making on current issues.

Guiding principles are statements that represent the essence of what a community values most and wishes either to encourage or not to have violated as growth and change occurs. The following are the Guiding Principles for Empire Township, which were derived from a visioning session on March 22, 2004, a 2019 community survey and from discussions among Planning Commission members through January 2024.

1. <u>Maintain the Rural Character of the Township.</u>

The Empire area is a beautiful and desirable location. People want to relocate or purchase a second home here. The Township, together with the Village and neighboring townships, occupies lands endowed with a wealth of natural resources, beauty and open spaces, including frontage on Lake Michigan, Glen Lake and South Bar Lake. It is the setting for the Sleeping Bear Dunes National Lakeshore, heavily forested lands, sand dunes and wide-open spaces. The varying topography is magnificent to look at and roads in the Township are well traveled. The views they provide are vital resources to the Township and preserving those views is a necessity.

As the Township's lakes and watersheds are a prime component of what makes it a popular place to live and to visit, water quality in the Township is critical to the future success of the Township as an appealing place to live and as an attractive destination for tourists.

Another key attraction in the Township is the vast amount of open space and agricultural lands. These land areas provide scenic beauty that all residents and tourists enjoy when traveling throughout the Township. These picturesque lands are part of the Township's rural heritage.

Listed below are polices that can be implemented to help maintain the open, rural character of the Township.

Locate future growth near existing development.

- Focus population growth in the areas adjacent to populated areas, and try to match or complement lot size and density to that of the Village on adjacent lands wherever possible.
- Locate commercial growth near the Village, where possible. Where not possible, restrict and regulate such growth to already developed areas.

Maintain open spaces and natural resources.

- Protect the water quality and beauty of lakes and streams by maintaining and establishing buffer areas along the water's edge that consist of natural vegetation and undisturbed open space, slowing the flow of surface water to minimize soil erosion and siltation of the Township's water resources.
- Minimize the loss of quality vegetation and grading on steep slopes.
- Preserve valuable natural resources by encouraging the clustering of housing with no loss of average density.
- Interconnect valuable natural resources, when possible, and create a system of connected open spaces and natural environmental corridors, providing incentives to establish open space corridors.
- Discourage development on sensitive land types such as wetlands, agricultural lands, dunes, and prime forestlands.

Maintain views along major roads.

- Preserve existing viewsheds along major highways and control signage and billboards.
- Cluster development within wooded areas, manage development along road corridors, discourage structures on ridgelines, preserve existing tree lines and canopies along roads, promote shielding techniques and minimize the number of accesses to highways.

Value and encourage agricultural uses.

- Value agriculture and develop policies and land use regulations that expand the definition of agricultural uses, help farmers continue operations and permit uses that allow the sale of agricultural products.
- Promote conservation initiatives such as the Farmland and Open Space Preservation Program (PA 116), Purchase of Development Rights (PDR), and Commercial Forest Act (PA 94 of 1925).
- Encourage the incorporation of existing agricultural structures such as barns, silos and old farmhouses in new developments to preserve the rural character of the area.

Protect Water Quality.

- Work with other jurisdictions and agencies to develop a wellhead protection plan and to protect the water quality of the lakes, rivers and streams in the Township.
- Minimize septic problems by studying sewers and alternative wastewater systems.
- Engage in continuous planning to protect water quality when new developments are proposed and consider development of sewer and sewage facilities in those instances when a demonstrated need exists, limiting capacity to what is sufficient to meet the demonstrated need.

Plan for recreational uses.

- Support tourism based on natural resources as an economic industry, while ensuring that natural resources are not over-burdened.
- Encourage different types of recreational uses that are low impact in terms of noise, and crowds and do not adversely impact natural resources.

2. <u>Plan for Growth Compatible with the Existing Rural Character of the</u> <u>Township</u>

Developments can vary widely, and some seemingly less intensive uses can result in greater land use and have a greater impact than more intensive uses. Empire Township has a limited amount of land available for development and that land must be developed wisely for the enjoyment of the present community and future generations.

Think design, not density.

- Understand the different parts of the Township and how they differ, and respect existing land use patterns. In addition, avoid a "one size fits all" mentality for regulating land uses.
- Minimize excessive widening, paving and curbing of roads, designing roads to follow the natural contour of the land or the character of a neighborhood.
- Encourage developments designed around a common element, such as a park, open space or civic building.
- Encourage clustering as a means to preserve open space and natural resources.

Create a mixture of commercial activities.

- Promote homegrown businesses, family-owned businesses, and local entrepreneurship.
- Discourage drive-in or drive-through businesses, especially in areas visited frequently by tourists.
- Encourage mixed-use development that provides compact places for people to live, work, shop and play.
- Allow light industrial uses where they will least conflict with surrounding land uses and where public utilities are readily available.

Encourage a Variety of Housing Types.

- Encourage the development of housing to satisfy the lifecycle housing needs of residents of all income levels.
- Encourage the development of affordable housing in suitable areas throughout the township.
- Encourage the expansion of housing types other than single-family residences in suitable areas.
- Allow accessory dwelling units throughout the Township where compatible with surrounding land uses.

3. <u>Collaborate with Residents and Other Jurisdictions</u>.

Fair and consistent governance to support the quality of life for all Township residents while respecting individual property decisions within established guidelines is fundamental. In addition, the Township, the Village and the Townships: Glen Arbor, Kasson, Lake, and Platte are socially, physically and economically connected. When one area is thriving, it benefits the other. Conversely, when one area loses its appeal, it is detrimental to the other. It is critical to be familiar with the plans, visions, events and developments in neighboring jurisdictions and to work together. To that end, the Township should pursue the following:

- Encourage coordination of zoning on land next to the Village and surrounding townships with the zoning regulations of the Village and surrounding townships on adjacent lands.
- Continue to understand the vision, master plan, and zoning regulations of the Village and surrounding townships.

BASIS FOR THE EMPIRE TOWNSHIP MASTER PLAN

Regional Context

Leelanau County is located in the northwestern part of the lower peninsula of Michigan. This County is known as the little finger of Michigan," because it points northward to the Manitous, the Fox and the Beaver Islands. It is believed to have been visited long ago by the Jesuits and French explorers as they searched the waterways to the West and South. Empire Township is located in the southwest corner of Leelanau County. It has approximately six (6) miles of shoreline on Lake Michigan, much of which is within the boundaries of the Sleeping Bear Dunes National Lakeshore.

Empire Township is about 265 miles from Detroit, 300 miles from Chicago, 150 miles from Grand Rapids, 170 miles from the state capitol at Lansing, and 115 miles from the Mackinac Bridge.

Empire Township has witnessed a decrease in agriculture activity and an increase in tourism since the creation of the National Lakeshore by Congress. The economy is based primarily on the tourism, recreational and residential demands on the limited business activities in the Township.

The Village of Empire is the main hub of this economic activity, some of which is generated by the National Lakeshore Park Headquarters located within the Village.

The closest urban area of any size is Traverse City with a population of 15,678 according to the 2020 U.S. Census. M-72 is the main transportation artery connecting the Township to Traverse City.

Growth is not expected to become a major problem in the Township because of the limited yearround employment opportunities. Controlled growth as proposed by this Master Plan and the Leelanau County General Plan should ensure there is no real adverse impact on the Township.

People

The organization of Empire Township officially began in 1865, although homesteaders, adventurers and settlers had been in the neighborhood since 1847. Before the settlers, Native Americans, the Chippewa, occupied the area. There are still traces of their settlements in the Dunes area and in the interior sections of the Township.

It appears that the earliest settlers came to this area through Glen Arbor, where there was a natural harbor and a refuge for sailing vessels. Others came across Lake Michigan to Glen Haven and filed claims on land at the southern end of Sleeping Bear Dunes, homesteaded their claims and settled their families here. Others came via the Erie Canal to the Great Lakes and then to the Glen Arbor area. John LaRue, John Fisher and John Dorsey came to the Glen Lake area after first traveling to the Manitou Islands. At that time there were only Native Americans on the mainland of Leelanau County. In 1854, LaRue moved to Empire, becoming the first white settler. John Dorsey purchased land in Empire Township on the southern shore of Glen Lake. Native Americans remained in the Empire area until the early 1900s, making camp on South Bar Lake in summer and moving in the winter to the Pearl Lake area in Benzie County.

Timber and Farming

Empire Township was and is a land of beautiful hills and valleys and supports farms, orchards, timberlands, and people on its unspoiled acres.

The largest community in Empire Township is the Village of Empire. The Village of Empire once bustled with activity as loggers breathed life into the local stores, saloons and hotels. Life centered around the sawmills that operated on the Lake Michigan shore near South Bar Lake. The largest mill was operated by the Empire Lumber Company from 1885 until about 1915. Thousands of acres of virgin timber fell before the loggers' axes during Empire's logging heyday. Steam engines and horse teams hauled logs from the forests to the mill, where these logs were sawed into lumber. Sailing vessels carried the finished lumber to Chicago to supply the great building boom that helped tame the Midwest. Fires claimed all three mills that were built in Empire. The last one burned in 1917 and no attempts were made to reconstruct it. The big timber had vanished and the Village returned to a period of peaceful inactivity. Orchards were planted on the cutover land and farming became the main occupation. Commercial maple syrup and maple sugar production took place in the township, and was a tourist attraction; this production has since been discontinued.

Other lumber mills included D.H. Day Mill and the John Fisher Mill. Some of the logging camps were northeast of Empire on M-72 and Fredrickson Road, the Peter Stormer Camp on Pearl Lake, North Manitou Island which shipped to Empire and Burnham Camp on top of Burdickville hill.

Transportation and Communication

A railroad was built in 1892 by the Empire Lumber Camp. It was called the Empire and Southeastern "Picturesque Line". The railroad and the Empire Lumber Company were both owned and operated by the T. Wilce Company of Chicago. There were approximately twelve miles of main line track and an additional three-mile spur line that ran to a point near Pearl Lake in Benzie County. The main line started at the mill in Empire and terminated at Empire Junction, a point on the Manistee and Northeastern Railroad. The railroad was also used to carry passengers and mail. It was in use until about 1918 and then discontinued.

The earliest roads were Native American trails. The bridge across the Narrows, the channel that connects Big and Little Glen Lakes, was first built in the 1870s. Before that time travelers either detoured ten miles around Little Glen or rowed a boat across the lake.

Messages from the "outside" reached Empire Township area often from the D.H. Day store in Glen Haven where messages came by Morse code. The Coast Guard Station also relayed messages in those days.

The first telephone system established in Empire was a special line from Traverse City to the Empire Lumber Company. It was known as the Citizen's Telephone Company.

Empire Township had two newspapers in the early 1900s, the Meteor in Burdickville and the Leelanau Leader in Empire.

Churches

St. Phillip Neri Church was built in 1894. The first Catholic service was held in 1855 at Tobin's cabin on Glen Lake. The Methodist Episcopal Church was built in about 1895. The original building is now the Masonic Temple in the Village of Empire. The Glen Lake Community Reformed Church in Burdickville was founded in 1955.

National Park/Tourism

On October 21, 1970, Congress established the 71,000-acre Sleeping Bear National Lakeshore along the northeastern shore of Lake Michigan. In the early 1970s, the National Park Service began acquiring property and now much of the area in Empire Township is part of this National Lakeshore. Because of this, tourism has become the main source of income for Empire Township. As of 2023, the National Park Service owns 54 parcels of land totaling approximately 7.800 acres in Empire Township, while the State of Michigan owns 8 parcels totaling approximately 1,800 acres.

The tourism business has been important to the Township since the demise of heavy agriculture, fruit farms, and the lumbering industry. Motels, lodges, bed and breakfast establishments, golf courses and resorts in the Township and immediate area have all been instrumental in fostering the growth of tourism in this area.

Source: 1994 Empire Township Master Land Use Plan, which referenced the following sources:

- Sleeping Bear Dunes National Lakeshore, A Complete Guide. Guy A. Wood, p. 42
- Some Other Day (Remembering Empire). Collected by the Empire Area Heritage Group
- Remembering Empire (Through Pictures). Empire Area Heritage Group
- Let's Fly Backward, Barnstorming the Grand Traverse Region. Al Barnes
- Sleeping Bear Dunes General Management Plan, October 1979

LAND USES AND ENVIRONMENT

When developing a future land use plan it is important to have an understanding of the existing land uses, the relationships between them, and the natural environment. This knowledge provides the basis for determining the appropriate future land uses. Some of the existing land uses may be acceptable to continue, while others should change. The future land use plan illustrates the desired land uses to occur during the next twenty years.

The existing land use information was gathered from various sources, including a variety of historical and current county documents, a Generalized Land Use Map, and watershed planning maps. The Generalized Land Use Map and Watershed Map are provided in this document.

Generalized Land Use Map

A Generalized Land Use map conceptually illustrates the development patterns and land uses in the Township. This map was originally developed at the April 26, 2004 Planning Commission meeting. It used a county-developed Existing Land Use Map as a guide while Planning Commission members, along with members of the audience, drew the types and locations of land uses occurring in the Township. The areas drawn on the maps were broad and based on people's perception on the current land use and features present. Some parcels had more than one land use description.

The participants identified nine classifications of land use (Natural Resources, Active Farming, Active Forestry, Recreation, Commercial/Recreation, Single Family, Mixed Residential & Commercial, Commercial, and Visual Highway Corridor) in Empire Township. The descriptions of these land uses were not specific, but were used to give a "snapshot" of the type of development or land use that existed at that time in the township.

In 2021, the Generalized Land Use map was updated using tax assessment data to determine the current use of land based on assessment classifications. Eight classifications were used in this map: Agricultural, Commercial, Industrial, Residential, Forestry, Public Land, Sleeping Bear Dunes, and Wetland. The majority of the township was found to be composed of Sleeping Bear Dunes and Residential. Agricultural and Public Land made up a substantial portion of the remainder, with the four other classifications (Commercial, Industrial, Forestry and Wetland) making up minor portions of the township.

Watershed Maps

A common theme in the Guiding Principles and in concerns expressed by residents is water quality. When planning for the future, it is important to understand the issues and how the surrounding land uses affect water quality.

Watershed management is a planning tool that can be used to understand these issues and concerns and help identify which improvements/implementations are needed to protect water quality. A watershed is the land area draining to a common body of water such as a river, lake, or wetland. The activities that occur in a watershed affect the quality of water. Empire Township is divided into four watershed-management areas: Glen Lake/Crystal River watershed, drainage to Lake Michigan, North Branch Platte River, and Platte River drainage.

There are three watershed management plans that describe land uses in the Township and their impact on the water quality. The Platte River Watershed Management Plan, last updated in 2014, was prepared by the Benzie Conservation District. The Glen Lake/Crystal River Watershed Management Plan, last updated in 2009 and with an update in progress as of 2022, was originally prepared by the Leelanau Conservancy, with the 2009 update prepared by The Watershed Center – Grand Traverse Bay for the Glen Lake Association, the Friends of the Crystal River, and the Leelanau Conservancy. The Lake Michigan Lakewide Management Plan, last updated in 2008, is developed by the United States Environmental Protection Agency (USEPA). Highlights of the watershed studies are as follows:

The Glen Lake/Crystal River Watershed:

- The overall health of the watershed is good; however, increased development pressures threaten to degrade the function of the land necessary for high water quality.
- Glen Lake has an oligotrophic classification, which means it has very low nitrogen and phosphorus levels limiting aquatic plant growth and preventing it from being overgrown with weeds (eutrophication). This is a desirable classification; however, the lake is susceptible to degradation resulting from increased nutrient concentrations. Human activities associated with fertilizers, septic effluents, and other similar type activities can increase the amount of nitrogen and phosphorus.
- Over 50% of the land in the watershed is forested. Northern hardwoods are the largest land use, providing wildlife habitat, groundwater recharge, and important water quality functions.
- The major human land use in the watershed is residential homes, which comprise nearly 5% of the watershed.
- The watershed receives 50% of its water supply from subsurface groundwater discharge, and it is critical that ground water is replenished. It is important to protect upland areas from impervious surfaces or other development that can inhibit the percolation of precipitation through the soil into ground water.

Platte River Watershed:

- The watershed is currently in good condition.
- 82% of the watershed is forested, open land and/or wetland.

- 12% is agricultural and 7% is urban use.
- Sedimentation is the primary concern and reducing it is essential to protecting the biological diversity and recreational land use of the surface water. The greatest source of sand and sediment is from construction and maintenance of the road system.
- The increase of nitrogen and phosphorus is another concern.

Lake Michigan Lakewide Management Plan:

- Describes this area as part of the Betsie-Platte Watershed
- The lake is an extremely important recreational fishery and has high water quality.
- The health of the lake is dependent on the wetlands and land uses.
- Identified impairments or concerns include fertilizers; human and animal wastes; oils, toxic chemicals, and salt; sediment; heated runoff; altered stream; pesticides; bacteria; and channel flow.

FUTURE LAND USES AND ENVIRONMENT

(What do you want Empire Township to be in 20 years?)

Think of what Empire Township was like 20 years ago and the changes that have occurred since then. Is Empire Township a better place? What changes did or could the Township have influenced? How have the changes occurring during this time affected the Township socially, economically, and environmentally?

Is the Township moving in the appropriate direction now? If not, what changes are needed? A Future Land Use Plan shows the desired future for land uses taking into account existing land uses, the natural environment, and prediction on future needs and demands. The Guiding Principles provide the philosophical basis for developing the Empire Township Future Land Use Plan.

If Empire Township's Future Land Use Plan is understood, followed, and implemented in the next twenty years, Empire Township will continue to be a special place in which it will be desirable to live, work, and play.

INFLUENCING FACTORS

The following factors influence the present landscape and will continue to influence land uses.

Land Allocation Considerations

Residential and tourism uses have increased the pressure on land resources. The amount of land in active agricultural use is relatively small and every effort is being made to sustain and encourage this use. Low-density residential housing continues to consume shoreline, scenic and forested lands in the Township. The expected residential development and tourism-oriented activities would continue to create conflicts with natural resource activities such as agriculture if not appropriately addressed. This is especially important due to the relatively large amount of land that is publicly owned and is not used for residential or agricultural purposes.

Economic Activities

It is also important to encourage uses that are capable of providing employment opportunities for nearby residents. An active, viable economic base provides jobs, taxes and services to complement the residential uses in the Township.

The primary economic activity of the Township is tourism. The unique environment of the Township and the presence of the Sleeping Bear Dunes National Lakeshore provide the ingredients for this use. The residents of the Township recognize this uniqueness and its compatibility with the rural residential character, which is important when preparing plans for the future.

Resource Base

The dominant natural features of Empire Township are the shorelines of Lake Michigan and the Glen Lakes. The geologic features, especially the Sleeping Bear Dunes, have resulted in a varied topography, creating a desirable scenic and rural nature. The natural resource base of the Township is well documented by several studies and reports, which provided much of the basis for determining the original land use areas of Empire Township. These studies and reports used for the original determinations included: Land Use Cover 2000; Agricultural Soils; Hydric Soils and Wetlands; Soil Suitable for Septic; Slopes; Soil Suitable as a Source of Gravel; and the General Soil Map Leelanau County. The three watershed studies (the Platte River Watershed Management Plan, the Glen Lake/Crystal River Watershed Management Plan, and the Lake Michigan Lakewide Management Plan) also provide valuable information regarding land uses and their impacts.

Mineral Extraction

Mineral extraction may not reach the economic viability of that in adjacent Kasson Township. If Empire Township mineral resources become economical to mine, adequate measures should be implemented to protect the rural and scenic character of the Township as well as the adjacent landowners. All applications for mineral extraction should go through the special use permit process.

Purchase of Development Rights

Background: The traditional method to reduce property taxes paid by farmers and to preserve farmland in Michigan has been through PA 116, the Farmland and Open Space Preservation Act. Farmers enrolled in this program can receive tax credit for maintaining active farmland.

Some places in Michigan have become very concerned about the loss of farmland and have decided to become more aggressive with farmland preservation. The voters in these areas have passed their own tax increases to use the extra funds generated to purchase farmers' development rights within their community. An example of this method is Peninsula Township in Grand Traverse County, which maintains an ongoing millage-funded program to purchase development rights from owners of farmland. In addition, non-profit organizations have similar programs, including The Leelanau Conservancy.

The Purchase of Development Rights (PDR) program is a voluntary one designed to preserve resources such as farmlands or other areas deemed needing protection (such as steep slopes, wetlands, or valuable open space areas). As described earlier, the development rights of a designated area are purchased and retired. The permitted uses on the parcel are then limited. These limitations can include restricting the land to be used for farming, or requiring the land to be in a condition that would allow for agricultural production, or simply prohibiting development on the parcel. These restrictions are by a deed restriction placed by the purchasing governing body. Only a landowner can sell mineral rights while retaining ownership and use of the land; PDR programs allow landowners to sell their development rights while retaining all other ownership rights. Similar to how selling mineral rights restricts the landowner's future activity (i.e., the landowner cannot extract the mineral they do not own) selling development rights

restricts the ability to develop the land because the landowner has sold that right and been fairly compensated at market rates.

Typically, a purchase price for a development right is the difference between the land's market value (development value), such as \$5,000 an acre, and its assessed current agricultural value, such as \$2,000 an acre. Using the number in this example, the landowner would be able to sell the development rights for \$3,000 an acre (the difference between the market value and agricultural value) and keep the farmland for farming. In theory the farmer would be able to then sell the farmland as agricultural property at the \$2,000 acre price, and would be able to receive \$5,000 an acre. In this example, a landowner would be able to keep the farm, farm on it, retire on it, or sell it.

This program is capable of preserving large amounts of farmland or designated open space areas (such as wetlands, scenic views, steep slopes, etc.). A disadvantage of this program is that it costs money and has the potential to result in increased requests for additional tax monies in order to pay for the program.

Plan: If a PDR program is implemented in the Township through the County, the State, or other governing body, the Township should designate land areas they would like to see purchased. Using the Guiding Principles, parcels in the Agricultural/Residential area, Steep Slope Protection Corridor, Scenic Roadway Corridor and Environmentally Sensitive lands should be considered for purchase.

Transfer of Development Rights

Background: A Transfer of Development Rights Program (TDR) is a potential method used to guide development away from threatened resources such as farmlands (or wetlands, scenic views, steep slopes), and towards areas that can accommodate growth. This program is similar to PDRs in that it can provide another revenue source for a landowner besides selling land and development rights together. It can preserve farmlands, open spaces, and sensitive lands; however, it can be difficult to administer.

Plan: To the extent a TDR program is possible under Michigan law, its use will be considered as a means of guiding development away from threatened resources and toward areas that can accommodate growth. It will be revisited as it evolves during the required five-year review of the Master Land Use Plan.

Watershed Management

A watershed is the land area draining to a common body of water such as a river, lake, or wetland. The activities that occur on adjacent land areas affect the quality of water. Watershed areas are invaluable in terms of our residents' health, rural character, tourism-based economy, visual quality, and natural resource based operations (e.g. timbering and farming). The quality of life in Empire Township is dependent on the health of our watersheds, and future land uses should not degrade them.

Watershed management utilizes planning techniques such as: protecting sensitive areas (wetlands, steep slopes, and mature forests, etc.) from development; establishing a water edge buffer; limiting the disturbance and erosion of soils during construction; treating the quantity and quality of storm water runoff; minimizing the length and size of driveways; clustering home sites; creating open space in developments; and minimizing the amount of impervious areas.

An impervious area is any surface that cannot effectively absorb or infiltrate rainfall, which may include roads, streets, parking lots, rooftops, and sidewalks. Imperviousness is a useful indicator with which to measure the impact of land development. Research commissioned by the Center for Watershed Protection shows that a watershed begins to lose its quality when the amount of impervious area exceeds 10-15%. Impervious surfaces collect and accumulate pollutants deposited from the atmosphere, leaked from vehicles, or derived from other sources. During storms, organic matter, nutrients, metals, hydrocarbons, and bacteria are washed off and enter the watershed to eventually go into Lake Michigan, Glen Lake, the Platte River, and other water bodies increasing the nitrogen and phosphorus load. In addition, septic fields, farming, and lawn manicuring, etc., adds nitrogen and phosphorus nutrients to these water bodies. If the amount of the added nutrients exceeds the amount of existing nutrients by 20%, then the water bodies will suffer from nutrient over-enrichment (eutrophication).

Traditionally, townships have used large-lot zoning to protect sensitive environment areas and preserve the rural character of an area. This type of zoning has not always been successful because longer road networks are needed, with services and infrastructure distributed over a greater amount of land area, creating a need for more roads, pavement, grading, fill, and disruption to natural resources. In addition, large lot zoning has contributed to regional sprawl. The number of dwelling units is spread over a wider geographic area, disrupting more land areas and subjecting more sub-watersheds to potential degradation.

Focusing high levels of impervious coverage (25% or higher) in single locations so that road networks, infrastructure, and public services are concentrated is an effective method to allow for high development and more intense uses, versus having them spread over the landscape. This land use plan describes the desired impervious coverage area for each land use area. Though there may be locations where impervious coverage exceeds 10-15%, the total impervious coverage within the area of a specific watershed should not exceed 10-15%.

FUTURE LAND USES

All land areas in the Township have more than one function. They provide places for people to live, work, shop, farm, timber, drive, and recreate, etc. Most lands serve more than one of these functions. People may live, farm, and recreate on one land area or may shop and live on a parcel. In addition, all of the land areas serve important ecological functions; they are places where water drains, vegetation grows, and where animals live.

This Future Land Use Plan appreciates the multifunctional nature of these land areas, and describes the future land uses by layers, versus using a single classification; and just as nature does not have defined boundaries of ending and beginning, so, also, these land use layer have flexible boundaries. Typically, land uses serve more than one purpose. Layers complement each other; some overlap, while others are adjacent. This blending of land uses more accurately demonstrates how land areas function today and how they can function in the future.

The key elements identified during the community survey and used as the basis for the Guiding Principles include managed growth, farmland protection, commercial expansion, protection of historic buildings and scenic roads, and protection of water resources. Since Empire Township is considered to be a rural community and residents desire to preserve this character, the Agricultural/Residential layer is considered to be the land use base of the Township. All lands within the Township should comply with the requirements of the Agricultural/Residential description, and if there are overlaps, then those overlap requirements apply.

Agricultural/Residential

<u>Intent</u>

This land use classification is intended to preserve the rural character of Empire Township. A rural community is a sparsely settled place that is at a distance from larger metropolitan areas. The majority of the development in a rural community occurs in designated cluster or at focal points, such as a downtown or a waterfront area. Rural areas have minimal services such as limited fire and police protection, very limited street lighting, and unimproved infrastructure (no water and sewer). These characteristics describe Empire Township and every effort should be made to maintain them.

In addition, the intent of this layer is to maintain, promote, and allow existing farming operations to continue and grow by protecting them from encroachment by other incompatible uses. The recommended future land uses should primarily be agricultural operations, rather than dense residential development. Lands currently used as active farming operations are intended to be preserved as such. These are the places where TDR, PDR, and other farmland preservation strategies programs should be implemented. The TDR program should be used as a tool to transfer residential density from these parcels to areas in the Township where growth is desired. The PDR program should be used to purchase development rights from a farm that is at risk from development.

In a 2019 survey, 63% of respondents believed that "it is important to do something now to slow the conversion of Empire Township farmland to residential or other developed uses." In addition, survey respondents selected that the two most important reasons to preserve farmland in Empire Township were "to preserve the scenic beauty and rural character of the township" and "to preserve

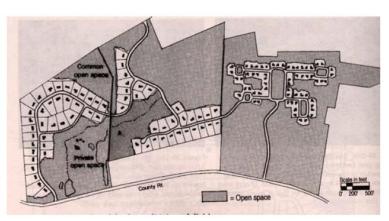
family farms and the township's farm economy". However, less than half (48%) said that they would be willing or able to personally contribute financially to the preservation of farmland.

As explained earlier, tourism is very important to Empire Township's economy. The view of the farmlands from the roadside adds to the tourism experience, which impacts the Township's economy. Agricultural related businesses such as bed and breakfasts, riding stable, and farm markets are attractions for tourists as well as being self-sustaining businesses. Land areas solely in this layer should be used for single-family residential and active farm uses. Structures should be designed so that their visual and environmental impact to the landscape is minimized. Techniques such as cluster developments (building the majority of the residences on half or less of the development parcel), deep setbacks from road rights-of-way and environmentally sensitive areas, minimal site disturbance, minimal amount of impervious coverage, narrow road width, shared access points, and effective landscaping can help preserve this rural character of Empire Township.

<u>Basis</u>

This layer includes the entire Township. Where there are locations that have overlapping layers, those uses and density supersede the recommended uses and density of this layer.

- The recommended use for lands only with in this layer is a standard single family residential.
- The overall density of this area should not exceed one unit for every five (5) acres; the minimum lot size should be determined during the development design process to allow for more flexibility and creativity.
- Developments should share access driveways off of State and County roads.



- Land-owners in this layer should be encouraged to utilize their properties for agricultural activities including crops, horticulture, fruit growing, forestry, ranching, beekeeping, poultry and egg production, animal breeding, stabling, kenneling, milk production and similar uses, and the associated storage relating to these uses and activities permitted by the Michigan Right to Farm Act.
- In order to encourage and maintain a balanced and diversified economy, agricultural related enterprises should also be permitted. These uses include farm markets, U-Pick operations, nurseries, bed and breakfasts, wineries, farm stands, corn mazes, and associated uses.
- Farming practices should incorporate watershed protection management techniques.

- Where single family developments are permitted in this layer, they should be clustered with no less than 50% of the land areas remaining as open space or for farming operations.
- Single-family residential uses should be located at a safe distance and buffered from normal farming operations in Empire Township that generate spray materials, noise, and odor.
- The recommended maximum impervious coverage for land uses should be 10 to 15%

Recreation Corridor

<u>Intent</u>

Empire Township's economy is based on recreational tourism. People visit Empire for the outdoor recreation opportunities that include hiking, sightseeing, golfing, biking, snowmobiling, skiing, and other similar activities. It is important to allow and encourage these and similar uses to ensure economic viability. These uses should not occur at the expense of Township residents, however adequate buffering and spacing between these uses and residential uses are highly recommended.

<u>Basis</u>

Empire Township is known for its recreation amenities, including but not limited to the Sleeping Bear Dunes National Lakeshore, the Pere Marquette State Forest, the Shore-to-Shore Trail, the golf courses, and other outdoor recreational uses. These uses are a mix of public and privately owned operations. Future recreational uses in the Township could include a paintball operation, archery, an equestrian center, a Frisbee golf course, if planned with environmental sensitivity. Interconnected recreation systems are desirable.

- On publicly owned lands, the permitted uses should be parks, trails, and natural preserves.
- On privately owned lands the permitted uses should include parks, trails and natural preserves. Uses that are more intense such as golf courses, miniature golf courses, equestrian center, and other outdoor recreational uses that are similar in nature in terms of noise, traffic generation, and intensity of use should be scrutinized through appropriate review processes to ensure their placement will not negatively affect surrounding neighboring lands and the watershed.
- Motor cross racing, shooting ranges and other uses similar in nature in terms of noise, traffic generation, and intensity of use are considered high impact recreation, therefore are not appropriate for this area.
- Recreational facilities and operations should be located in areas where their impacts, such as noise, traffic, etc., will have minimal effect on adjacent properties. In some instances, vegetative buffer areas of 50 feet or more may be needed.
- Residential developments should be clustered with no less than 25% of the land area remaining as open space and the development should incorporate an active recreation

component such as golfing. The overall density for residential development should not exceed one unit for every two acres.

• The recommended maximum impervious coverage is between 10-15%.

Single Family Residential

<u>Intent</u>

The intent of this layer is to provide an area for livable and desirable neighborhoods for current and future residents.

<u>Basis</u>

This layer consists of lands that have or are near well-established residential use patterns.

- The primary use should be standard single-family residential uses.
- Land uses that complement residential uses, which include public and private schools, nursery schools, accessory apartments, day care centers, churches, and state licensed residential facilities may be appropriate with special provisions and review procedures to ensure compatibility.
- Uses such as home businesses, community services, public recreational facilities should be allowed with special provisions and review procedures to ensure the development is appropriate and compatible with the residential character of the area.
- Single-family developments should be connected with trails and internal roads.
- A mixture of architectural styles to prevent homogenous-appearing housing developments should be encouraged.
- All developments should have a park, open space, or other type of communal area.
- Residential density near the Village should allow for more dense residential use, including multi-family construction, while maintaining the existing character of the Village. To meet the demands of affordable housing, multifamily dwelling units may be allowed with special provisions and review.
- The goal for impervious buildable area should not exceed 25%.

Shoreline Corridor

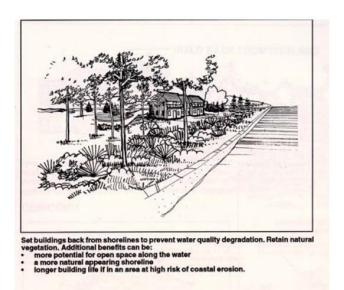
<u>Intent</u>

The intent of this layer is to maintain the water quality of South Bar Lake, Glen Lake and Lake Michigan while allowing for sensitively placed single-family uses. Although much of this area has been developed and there are relatively few vacant lots, it is anticipated that this area will face redevelopment pressures. Many of the existing homes are older and were originally intended to be summer homes and not occupied year-round. These homes are being renovated and usually expanded for year-round occupancy or they are being torn down to allow for new construction. The building design recommendations in this layer are intended for enlarged renovated homes and new construction.

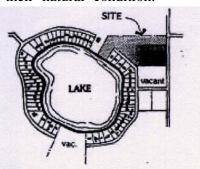
<u>Basis</u>

This layer consists of lands that are on the South Bar Lake, Glen Lake and Lake Michigan shorelines; therefore, they have a greater impact on the water quality of the lakes.

- The recommended uses for lands within this layer include open space/nature preserve and standard single-family residential.
- Residential density near the lakeshores should not exceed one dwelling unit per thirty thousand (30,000) square feet, excluding vehicular rights of way.



- There should be sufficient setback distances from the high-water mark and all built structures (including, but not limited to a dwelling unit, road, driveway, and septic system).
- Structures, including driveways, should be built or engineered so that they drain away from water bodies.
- Structures should be sensitively sited so that they minimize the obstruction of the lake from the road. This can be done regulating building width, requiring wide setbacks between structures, and minimizing fencing.
- Land areas adjacent to water bodies should remain in their natural condition. Manicuring with environmentally friendly material may be allowed.
- Impervious buildable area should not exceed 25%.
- *Keyholing*, which is also known as funnel development, is the use of a waterfront lot as common open space for waterfront access for a large number of users. Users of a keyholing lot reside on interior lots and are able to access the lake by a dedicated easement. In many instances the keyholing site has a boat launch which increases traffic on the lake, this increase in boat traffic



Example of a keyhole lot

negatively impacts the water quality (due to spillage from boats, the mooring of boats, and loss of natural vegetation and wildlife due to increased human activity).

• As explained earlier in this Master Plan, water quality is important to Empire Township in terms of economics and tourism, natural environment, and quality of life. The keyholing also impacts the existing neighboring single-family homes; they have to contend with excess noise and traffic that is not compatible with their established neighborhoods and quality of life. Therefore, the keyholing usage should only be permitted where it currently exists and not expanded. There are three to four existing keyholing locations, it is expected that this use will continue in those locations, however it is not the intent of this Master Plan or the Township to allow for additional keyholing sites.

Gateway Mixed Use:

<u>Intent</u>

This land use layer is for a primary, heavily used entrance into Empire Township; therefore, its appearance affects a person's opinion of the area. Empire Township is a rural community and wishes to retain this characteristic by maintaining the scenic views from the road, especially at the entrance into the community. When a person enters the Township, the view they see is pleasant. The view is of a forested landscaped, with some intermixed buildings. It can be argued if these existing buildings are obtrusive to the view or not, but they do exist now.

The recommended uses for the Gateway include open space, trails, parks, and single family residential. This master plan recognizes that the majority of the parcels in this location have been zoned commercial since 1962, and, therefore they do have some development potential. Limited types of commercial uses may be permitted in this location with approval of special use permit. The commercial uses should not be heavy traffic generators, and should meet specified development standards including, but not limited to: setbacks, shared access driveways, appropriate landscaping, clustered buildings, and screened outdoor storage. Expected commercial uses include a boat yard, winery, cidery, artisan shops and related commercial ventures.

In addition, any proposed commercial land use may require an impact analysis. The analysis should include any impact on transportation patterns and requirements as well as police, fire, health and other public provided services.

Outdoor storage should not be permitted, unless approved through the special use permit process. The storage area should not be visible from a road right of way or residential property. The storage area should be screened with the appropriate amount of natural vegetative landscaping to minimize the visual impact from M-72. Accessory dwellings should be permitted with the commercial structures.

Development in the Gateway should occur in concentrated clusters, and not in a strip development format. The concentrated clusters are graphically approximated on the future land use map.

Basis:

This area includes the parcels that are located along M-72 in the Gateway Mixed Use District as shown on the Township Zoning Map.

- The primary uses for this layer include open space, parks, trails, and single family residential. Limited commercial uses are permitted if approved by a special use permit.
- Buildings should be setback at a distance from the road right of way. The set back areas should be landscaped.
- Driveway entrances from M-72 shall meet all state standards for commercial driveway entrances in the state highway right-of-way.
- Strip development (more than two (2) businesses on a parcel that face M-72) should be permitted.
- Impervious coverage should not exceed 25%.

Scenic Roadside

<u>Intent</u>

The land areas along the roadways within the Township are among the most valuable open space areas. The majority of these areas are undeveloped, highly vegetated, and provide spectacular views of the landscape. The views from the roadway reinforce Empire Township's rural characteristics. What visitors and residents see here is how they perceive Empire and special attention to building placement is needed to protect these corridors. Positive public perception is critical for Empire's economic growth. The intent of this design-based layer is to preserve these roadside views by promoting sensible building designs and placement. The Scenic Roadway layer focuses on design and building placement.

<u>Basis</u>

This overlay covers more or less areas within 50 to 100 feet of the road right-of-way edge.

Recommendations:

- Use existing trees to minimize visual impact. Have tree buffers between the road and any developments. Consider adoption of a tree replacement ordinance.
- Place buildings within treed areas or on the edges of forests.
- Minimize the visual impacts of communication and windmill towers.
- Minimize driveway cuts; driveways shall meet all standards set by the Leelanau County Road Commission and the State of Michigan.

Environmentally Sensitive - Sand Dunes, Wetlands, Lakes, and Streams

<u>Intent</u>

The welfare and well-being of the citizens of Empire Township are directly linked and related to the natural environment of the area. To maintain environmentally sensitive areas such as the sand dunes, streams, and wetlands in their natural condition, it is necessary to protect these areas from degradation. The intent is to recognize and adhere to existing federal and state regulations and standards that will protect those areas.

<u>Basis</u>

Although land uses need to be sensitive to environment throughout the Township, specific locations, including, but not limited to the sand dunes, streams, wetlands, and lake areas adjacent to South Bar Lake, Glen Lake or Lake Michigan are especially important in maintaining and improving their environmental quality.

Recommended Density/Building Designs:

- Impervious cover should not exceed 5%.
- There should be appropriate building setbacks from these sensitive lands.
- There should be dedicated natural vegetative-buffered areas between these designated areas and developments.

• Critical dunes, which were the focus of the Sand Dunes Protection and Management Act (1976, PA 222 as amended, by PA 146 and PA 147 of 1989) are recognized to be the most sensitive dune features of Michigan's sand dune system. Steep slopes, highly erosive soils and high winds all combine to create special risks associated with development in critical dunes. Improper siting and construction techniques in these areas will threaten dune stability, which may result in damage to structures, surrounding properties and the dune itself. The dunes are an irreplaceable resource and development and recreational pressure will place their future in jeopardy. Empire Township incorporates by reference the standards outlined in PA 147 to ensure that future development will be compatible with the special limitations of each critical dune site.

Planned Development Area

<u>Intent</u>

This designation is to promote developments that can provide job opportunities in the Township. Recommended uses for this layer include office parks, animal care services, lodges, warehousing, and light industrial uses. When possible, residential uses should be intermixed with the commercial developments. Developments should be processed through the planned unit development to ensure that there is internal road connection, adequate vegetative buffers, and appropriate site design to mitigate any potential negative impacts to the visual character of the Township.

<u>Basis</u>

These locations are adjacent to parcels that have commercial uses.

Recommendations

- Commercial operations should have common parking, shared driveway entrance when appropriate, and internal connections.
- Parking areas should be heavily landscaped.
- Impervious cover should not exceed 25%.
- The trees on the parcel are at a sufficient height to provide a significant visual buffer around the perimeter of the site.

Commercial Development

Intent

This designation is to promote developments that can provide job opportunities in the Township. Recommended uses for this layer include office parks, animal care services, lodges, warehousing, and light industrial uses. Developments should be processed through the planned unit development to ensure that there is internal road connection, adequate vegetative buffers, and appropriate site design to mitigate any potential negative impacts to the visual character of the Township.

<u>Basis</u>

These locations have been designated as commercial development areas and are currently being utilized for commercial uses including automotive repair and storage.

Recommendations

- Commercial operations should have common parking, shared driveway entrance when appropriate, and internal connections.
- Parking areas should be heavily landscaped.
- Impervious cover should not exceed 25%.
- The trees on the parcel are at a sufficient height to provide a significant visual buffer around the perimeter of the site.

Special Land Uses

Special land uses have a greater impact on adjacent properties and on the community as a whole. Some special land uses need to be restricted as to location because they have characteristics that are not always compatible with other uses permitted in the district. Still others need to be restricted in size because they may be too large and out of character with the community. In either case, stricter site development standards are needed to minimize the potentially adverse effects of special land uses.

It is the intent of the Township to ensure a high standard of land use compatibility by imposing strict site development and locational standards on uses such as: sexually oriented businesses; telecommunications towers; wind energy conversion systems (WECS); mining operations; solid waste transfer stations; gravel pits; landfills; sewage disposal systems; structures that exceed 5,000 square feet of floor area and other similar uses. Specifically, it is the intent of the Township to:

- Limit these uses to locations that are not in close proximity to homes, churches, schools or other places where children live, play, worship, or go to school.
- Allow telecommunications antennas in the Township, but strictly limit towers as to type, size, design, and location so they will have the least visual impact on the community and not interfere with aviation.
- Limit WECS in size, design, intensity, and location so they will have the least visual impact on the community and not interfere with aviation.
- Discourage new sand and gravel operations in the Township except as required to prepare a site for development.
- Regulate outdoor storage to minimize their visual impact.

GROWTH TRENDS

Population

According to the 2020 U.S. Census, Empire Township (exclusive of the Village) had a population of 1,126, an increase from 858 in 1990 and 1,085 in 2000, but a slight decrease from the 2010 population of 1,182. The population in Empire Village grew from 355 in 1990 to 378 in 2000, before declining slightly to 375 in 2010 and then to 362 according to the 2020 U.S. Census.

Although the overall County population experienced the largest gains in the last three decades, much of that increase has occurred in the eastern portions of the County. The most significant growth areas between 1995 and 2005 occurred in Elmwood and Suttons Bay Township. Elmwood Township had a population increase of 38.9% and Suttons Bay Township had an increase of 38.7%. In the same time period, Empire Township had a population increase of 26.5% and the Village had an increase of 6.5%. This growth rate has slowed throughout the county, and both Empire Township and Empire Village saw a slight decrease in population between 2010 and 2020. The State of Michigan Department of Technology, Management and Budget projected in 2019 that there will be a 3.4% increase in population in Leelanau County between 2020 and 2030, but that the population of the County will then decline between 2035 and 2045. (*Michigan Population Projections by County Through 2045, September 2019*)

The age structure of the population will influence the nature of services needed throughout the community. Since 1960, the percentage of persons over age 65 has increased in the community while the number of school-age children has decreased. Overall, the County median age has been rising since 1980 with the influx of retirees. (*The Leelanau General Plan, Working Paper #11, Demographics, July 2003*) According to the 2021 American Community Survey, the 2021 median age county-wide is 54.7. The Village of Empire median age is 59.7 years, compared to 62.5 years for the Township. Of this comparison, 41% in the Village are over 65 while 46% in the Township are over 65. It is expected that the age median will continue to increase as more retirees permanently relocate to the area to take advantage of the beauty and serenity of the Empire area.

Economic Trends

The median income for households in Empire Township in 2021 was \$71,771 with a per capita income of \$41,205. In the Village, the median household income was \$60,781, while the per capital income was \$38,090. Countywide, the median household income was \$72,709, while per capita income was \$42,080. This leaves the township and the village somewhat below the average county incomes, both per capita and by household. (2021 American Community Survey)

Agriculture in Empire Township

Statistics for agriculture in Empire Township are not readily available, but the important fruit and farm products of the past seem to be on the decline. Each year more and more cleared land lies dormant, orchards are slowly dying off without replacement, and large- scale dairy, livestock and poultry production have become non-existent. Economics have a great deal to do with the demise of these once profitable agricultural activities. Not only is there some conflict with the use of pesticides in areas of residential build-up, but also the cost of fertilizer, increased labor costs, decrease of outside capital and intrinsic properties of the land have forced most farmers to abandon their former livelihood. Much of the agricultural income in the Township is already switching over to tourism revenue, residential construction, and expanded recreational opportunities in the area.

Land Prices

From all indications, agricultural land values in the Township will continue to rise at a moderate rate on individual properties. There will also be intense development pressure on rural lands. Typically, these lands have similar sizes and features as agricultural lands, but are not farmed.

THE NATURAL ENVIRONMENT

Climate

Leelanau County, which includes Empire Township, is surrounded on three sides by the fresh water of Lake Michigan. The climate is "Midwest continental" influenced by the heat-exchanging properties of Lake Michigan and the inland lakes. The weather observations taken at Maple City show that weather in Leelanau County is a little milder in winter and cooler in summer compared to the weather in the Traverse City area. Variations in the frost hazard depend on the elevation above the lowlands and natural air drainage in a particular area. Generally, all factors considered, the length of the growing season is about 150 days with the shorter period in the south-central part of the country. Average monthly rainfall for the area is from a low of 1.7 inches to a high of 3.0 inches between May and November for an annual average of 29 inches. As determined by the Midwestern Regional Climate Center at Purdue University, and measured in Maple City from 1959 to 2022, the record monthly snowfalls were 4.9" in October 2013, 39" in November 2014, 82.5" in December 2008, 95.8" in January 2014, and 57.0" in February 1995. The record yearly snowfall was 267" during the winter of 2013-2014, while the average annual snowfall over the period from 1991 to 2020 was 143.2".

Hydrology

Lakes and Wetlands

Empire Township has several lakes and creeks that drain from the higher ground. Big and Little Glen Lake, with shoreline also in the Glen Arbor and Kasson Townships, are primarily spring-fed in addition to drainage from higher ground. The combined acreage of the two lakes is over 7,000 acres. The lake water level is controlled by a dam on the Crystal River and is maintained at 596.75 feet above sea level by a consent decree of the Leelanau Circuit Court in 1954. Other lakes in the area include North and South Bar Lake and Taylor Lake. Hatlem Creek flows into the southern shore of Big Glen Lake. Wetlands are predominantly on the northern and western shore of both Glen Lakes.

Groundwater Availability

Empire Township has experienced little trouble in locating suitable sites for wells and obtaining potable clear water. Drilled wells have varied from twenty-five to four hundred feet, depending upon the location. Although some residents have found a need for water softeners, most wells go untreated.

Flooding

Flooding has not been a major problem in Empire Township, except when Lake Michigan reached all-time highs in 1986 and 2020, which caused significant shore and bluff erosion, caused some wet basements and reduced the efficiency of some septic systems near the shoreline. No flooding of any consequence has taken place in other areas of the Township.

Pollution

There has been no reported substantial pollution of ground or surface water in Empire Township. Residents and business property owners are continually reminded of the pollution potential caused by in-ground fuel storage tanks. Generally, low-pressure sewage systems, lagoon systems or holding tanks do not present a problem if properly maintained to Health Department specifications.

Geology

Surface Geology

The surface of Empire Township is covered by ground-up rock material. This material ranges from clay or loams to sand and gravel and contains boulders, stones and limestone slabs. All of this earth mass was moved by ice from the north during several glaciation periods. The ice transported material ranges from 50 to 600 feet or more in thickness and is underlain by shale and limestone bedrock. Erosion by wind and water has modified the surface configuration, mainly by moving soil material from higher to lower elevations, sculpturing the hills and cutting drainage ways. Glaciation and subsequent erosion cycles formed a number of different landscapes in Empire Township. The most distinct is the hilly morainic landscape and drumlins in the southeastern part of the Township. Strong winds built up the dunes on Lake Michigan, which formed much of what is now known as the Alligator Sleeping Bear Dune, reaching an elevation of 1,044 feet and is the most pronounced of the open dune land.

The permeable unconsolidated glacial deposits permit percolation of absorbed water to great depth. This water moves laterally through the ground until it appears again as springs or as underwater discharge into streams and lakes, notably the Glen Lakes. Rapid runoff of water is slight and occurs mostly during periods of rapid snowmelt, particularly if the surface soil is frozen. Runoff from the ever-decreasing cultivated sloping fields is rapid if they are not protected by appropriate measures to conserve soil and water.

Soil Associations

Soil association is a landscape that has a distinctive proportional pattern of soils. Empire Township is gifted by this variation, especially as the community turns from agricultural to a tourism and residential atmosphere. The association is useful to people who want an idea of the soils in the Township as they compare with other areas or want to know the location of tracts that are suitable for a certain kind of land use. Soil information is also useful for a guide in managing a watershed, a wooded tract, a wildlife area or in planning recreational facilities and community developments. The soil information is extremely important in selecting exact road locations, construction sites or specialty structures because soils in one area ordinarily differ in slope, depth, stoniness, drainage and other characteristics that affect soil management.

Soil Associations Found In Empire Township

Five soil associations are found throughout Empire Township and are categorized as follows:

Deer Park – Dune Association

Deer Park – Dune: well drained, strongly sloping to very steep, sandy soils on dunes. The Deer Park Duneland Association is found along the Lake Michigan shoreline extending approximately a mile inland by Little Glen Lake and about one half-mile inland just north of Empire Village and also at the Empire-Benzie line. None of this association is suited for farms. The available water capacity, fertility and organic matter content of these soils are low. Nearly all of this association is in woodland or is used for recreation.

East Lake – Eastport Association

East Lake – Eastport: well drained and moderately well-drained, nearly level to gently sloping, sandy soils and very poorly-drained, nearly level, mucky soils; on lake terraces and beach ridges. The East Lake – Eastport Association is found around the Village of Empire extending approximately four miles north varying from a quarter to a mile wide. A second location surrounds both Little and Big Glen Lakes, being one mile wide on the southeast shore, its widest point. Although orchards are well suited for this association, homes and lakefront properties have taken precedence. Fertility is low in all these soils as well as the water capacity is low in the well drained soils. Plantations of pine, spruce and natural woodland prevail, except where the terraces and buildings have usurped the land area. A main concern is controlling erosion.

Kalkaska Series Association

Kalkaska - East Lake: well drained, moderately steep to very steep, sand soil on moraines.

Kalkaska – Mancelona: well drained, nearly level to strongly sloping, sandy soils on outwash plains.

Leelanau – Mancelona: well drained, strongly sloping to very steep, sandy soils on moraines.

The Kalkaska Series dominates the rest of Empire Township, extending east from the west side of Little Glen Lake to the Empire-Kasson Township line south to Benzie Township and north along the Deer Park – Dune and East Lake – Eastport Associations. Natural vegetation is composed of elm, beech, red maple, and a few hemlocks and white pines. Abandoned farmland is common on these soils.

Kalkaska sand slopes range from 0 to 45 percent slopes. Surface runoff is from slow to fast, depending upon the ground cover, all of which affects erosion hazards. Surface runoff in the higher slopes areas is slow in wooded areas and medium in open areas, but the erosion hazard is severe. The soil in the Kalkaska Series is not suited for common field crops, forage crops, or pasture. On the 0 to 6 percent slopes, orchards are moderately well suited in frost-protected areas, but intensive soil management is required. Generally, the soils falling in the Kalkaska 6 to 45 percent slopes series are moderately suitable for use for wildlife habitat and woods.

Soil Properties

Some soil properties are important because they affect construction and maintenance of roads, airports, pipelines, building foundations, water storage facilities, and sewage disposal systems. The soils map is useful for planning, and with detailed field investigation, potential problems could be uncovered. Where insufficient detail is available on the map, an on-site technical investigation is a must. Other source documents should also be researched for any characteristics of a site that could affect a proposed land use.

Soil Suitability Guides

The suitability of soils guides for specific uses are valuable tools for property owners, managers, and community planning officials. Specific reports applicable to Empire Township are available from the Soil Conservation District. The information has been classified according to potential productivity levels based on vegetation or soils. The information does not provide volumes, densities or value, but is a guide if proper management programs are undertaken. The information was also created to protect the rather limited areas from being despoiled by pressures for other land uses even though agricultural uses are on a decline in the Township. Community planners need to recognize the value of these relatively scarce sites and set their priorities on their use by giving protection as necessary to ensure productive and environmentally sensitive sites are preserved.

SOURCE: 1994 Empire Township Master Land Use Plan, which referenced the Soil Survey of Leelanau County, Michigan 1973.

CURRENT ENVIRONMENT AND LONG TERM OBJECTIVES

TRANSPORTATION

Highways

Empire Township, encompassing 23,040 acres, is located in the southwest corner of Leelanau County. It is approximately six (6) miles long and seven (7) miles wide at the widest point. Since transportation is a major concern, Empire Township is served by M- 72 and M-22, which connects the Township to the north, south and east. Other secondary highways traverse the Township, connecting various scenic areas, parks, community centers and residential areas throughout the Township. These roadways include County Roads 616, 675, 677 and state highway M-109. Bicycle paths are being provided on many miles of roadways within the Township as major highway improvements are undertaken.

Road Design

Not all roads should be thought as the same, as they serve different uses. Design standards for roads serving the downtown village area differ from roads serving residential areas, which should differ from roads serving more rural areas. Generally, roads should be designed to meet their locale and usage needs, and not their potential full capacity needs. Road designers should give priority to environment, historic preservation, and neighborhood protection concerns, instead of opting for standard road designs that give priority to vehicle capacity.

Roads should be designed to reflect the "context sensitive design" objectives whenever possible. Context sensitive design is a movement towards flexible road design instead of conforming to the "one size fits all" philosophy the current exists when roads are designed.

Road Standards

Leelanau County Road Commission has a published set of standards for public and private roads. Private roads have greater flexibility with respect to width and paving requirements.

Road Improvements

The Township encourages the addition or inclusion of bicycle paths when major roadwork takes place. Increased bicycle traffic on the Township roadways has increased the potential for accidents where bicycle paths have not been added. Protruding sidewalks, pavement surface changes and other devices that heavily mark pedestrian street crossings would help address this problem.

Access Management

Access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing capacity, and preserve investment in roads by managing the location, design, and type of access to property. Access management focuses on the number, location, and design of driveways as they relate to the following elements within the road right-of-way: travel lanes, medians, by-pass lanes, dedicated turn lanes, and signal operations. Access management should be applied to all roads in the Township. The following points should be addressed in the zoning ordinance and during development reviews and rezonings:

- Limit the number of driveways to each lot.
- Restrict the number of lots fronting on highways and on busy roads.
- Regulate the location, spacing, and design of driveways.
- Encourage shared access to parcels and consolidate driveways where possible.
- Locate driveways away from other driveways.
- Restrict turning movements into and out of driveways.
- Encourage passing lanes over road widening.
- Restrict turns onto the roadway.
- Encourage front or rear access drives (frontage roads).
- Connect streets, roads, and access easements.
- Promote internal connections and alternative accesses.

Airport

The Empire Township airport, renamed the William B. Bolton Airport is located 5 miles east of the Village of Empire on Benzonia Trail and provides an air facility for small private aircraft. The airport has two runways, with the north-south runway being hard surface and the east-west runway being grass. The field has parking, toilets and a courtesy vehicle available, and it is adjacent to the Township campground. Major usage occurs during the summer months; there is no snow removal for winter flights.

Public Transportation

Public transportation is provided by the Bay Area Transit Authority. It serves all of Leelanau County and Traverse City. Residential and other location pick-up and discharge along designated routes are available by prior arrangement.

LONG TERM OBJECTIVES – TRANSPORTATION

- Monitor and review the private road ordinance to maintain public health and safety and require emergency vehicle access.
- Support the development of bike lanes and trails to improve recreation opportunities and the ability for safe travel in non-motorized vehicles.
- Review the process for the approval of residential and commercial driveways to maintain public health and safety and require emergency vehicle access.
- Encourage the development of public and group transportation.

UTILITIES AND SERVICES

Empire Township, including the Village of Empire, has a limited complement of services and facilities available to residents, visitors and small business activities needed in their everyday existence and activities. Included are such things as a post office, library, banks, shopping, fire and emergency medical services and outdoor recreational opportunities.

Marina

There are no public marinas in the Township for access to the inland lakes or Lake Michigan. A public Department of Natural Resources launch site is available on Little Glen and a launch site operated by Glen Arbor Township in Glen Arbor is available for access to Lake Michigan. Boat launch sites are at Lake Michigan and South Bar Lake in the Village of Empire. Empire Township supports efforts to relocate the Glen Arbor Lake Michigan boat launch site to Glen Haven area in the National Lakeshore area.

Emergency Services

Police protection is provided by the Leelanau County Sheriff's Department and Michigan State Police. Glen Lake Fire and Rescue provides fire protection and ambulance services.

Health Services

Empire Township is served by the Empire Community Health Center, a Munson affiliate, in the Village of Empire – services provided include primary care, lab services, physical therapy, and a pharmacy. There is also a family dentist in the Village. Health Services also include a comprehensive array of practitioners, both general and specialized, in the region, and in Traverse City, Munson Medical Center serves as the primary hospital for the region.

Utilities

Electrical And Gas Service

Consumers Power Company and Cherryland Electric Company provide electric service to Empire Township and DTE provides natural gas in some areas.

Communications, TV and Internet Service

CenturyLink provides franchised telephone service within the Township. Cable TV service is provided by Charter Communications in those areas where cable service is available. Expansion of cable service is continuing as economic conditions warrant. Various cellular telephone, internet and satellite services are available.

Beginning in early 2020, substantial changes have been seen in how business and education are conducted, with many schools and employers encouraging or requiring increased amounts of work from home. This has resulted in an increased need for high-speed internet services; a need which has not been met in many areas of the township. Increased high-speed internet could result in new economic development, enhanced livability, new public safety capabilities, improved remote education and healthcare offerings, and more efficient communication in all

areas of life.

Solid Waste Disposal And Recycling

Commercial contractors provide solid waste disposal on demand. Individual solid waste disposal is available for a fee at the solid waste landfill located on M-72 in Kasson Township. Under the sponsorship of the Leelanau County program, continued emphasis is being placed on recycling of paper, cardboard, glass, aluminum, tin cans and plastic containers. Trailers are provided in the Village for disposal of residents' recyclable material.

Water Supply & Sewage Disposal

The Village of Empire has its own water system. All other Township locations are served by individual on-site wells. The primary sewage disposal method is Empire Township is the on-site sewage system. Where such systems are not suitable due to soil composition, holding tanks must be used. The Benzie-Leelanau District Health Department is responsible for well and septic inspections and maintenance of records related to these systems. Leelanau County requires point-of-sale inspections for well and septic systems.

Schools

Glen Lake Community School is a K-12 school located in Kasson Township. Students who reside in the Village and Empire Township are bused to the school.

Parks And Recreation

Several parks and recreational facilities are located within the Township and Village of Empire. The Township maintains a campground with adequate support facilities located in the Empire Airport area.

Located on the east shore of Big Glen Lake on South Dunns Farm Road (County Road 675) is Old Settlers Picnic Ground. It celebrated its one hundredth anniversary in 1992. The picnic ground and swimming area, maintained by Leelanau County, has barbecue cooking stoves, tables, playground equipment and toilet facilities. Reservations can be made for special activities at the historic chapel.

Active and passive parks, natural areas, wetlands and other forms of open space are essential and unique features of the region and provide multiple public benefits for all the residents of the area. Public and private parks and other forms of open space are important factors for quality of life and must be provided as the Township grows.

A wide variety of lands can meet the park and open space needs of the Township, from shoreline areas to environmentally sensitive lands. Open space and rural areas also provide scenic and recreational values, although the primary reason for keeping these lands relatively undeveloped is for their productive resource value or to provide rural living opportunities.

Identifying lands for preservation as open space will be an ongoing process that requires public involvement in determining which areas to preserve and which methods to use. Methods of preserving each parcel designated as open space will be based on site characteristics and the

reasons the parcel is to be preserved. Regulations to prevent environmental hazards will keep some lands as open space; others can be preserved through incentives, trades, development dedications, easements and purchase. Using a variety of protective measures will increase Township's ability to maintain a significant amount of parks and natural areas.

Cemeteries

Five cemeteries are located within the Township. Maple Grove on M-109 and Bland on County Line Road are township-owned. St. Philip Neri Church in the Village of Empire and Tobin on County Road 677 are both church-run. There is also a privately-owned cemetery in Burdickville.

Library

Glen Lake Community Library is located in the Village of Empire and supported by the Townships of Empire, Glen Arbor and Kasson. A library board consisting of two representatives from each township oversees its operation. The library was renovated in 1997 and expanded in 2019/2020. The library offers an extensive collection of books, magazines, DVDs, audio books and music CDs; provides access to high-speed internet service, public computers, printing, technology tutoring and test proctoring; and includes program and study rooms available to groups and individuals, The library also offers program and special events for children and adults, and includes displays of local artwork.

Other Facilities And Services

The Township and Village of Empire have municipal offices in the Village of Empire. Both are open to the public at regularly scheduled hours. A Township Hall in the Village is also available by reservation for public and private activities.

LONG TERM OBJECTIVES – UTILITIES AND SERVICES

- Review and explore the needs for additional municipal services and municipal buildings in appropriate locations in the township.
- Recommend that broadband internet be determined to be an essential service for the purposes of the Township and Zoning Ordinance.
- Encourage expansion of fast, low-cost, high-reliability broadband internet coverage to improve the services provided to all areas of the township.
- Encourage initiatives that will increase the number of service providers and types of services that are available to township residents.
- Seek to ensure that residents and businesses have access to infrastructure that will foster local innovation, economic development, and reasonable growth.
- Explore opportunities for cooperation with non-profits and other governmental units for joint projects that will result in improved services for township residents.

HOUSING POLICY & THE ECONOMY

The general goal of Empire Township's housing policy is to promote a range of housing types and prices while maintaining the quality of the environment and the rural character of the community. While full-time residency continues to increase slowly in the Township and although the population density is still low, methods should be continued to manage the linear settlement patterns along roadways to retain the openness and views characteristic of the Township. The Commission is also concerned with the cost of housing in general in the Township (and elsewhere on the peninsula).

In a 2019 Planning Commission survey to which more than 400 persons (including persons living in the Village of Empire, as well as other areas of the township) responded, certain questions were focused on housing issues. The first question asked, "Is there adequate affordable housing in Empire Township?" The question generated 405 responses with 197 stating they believed there was not adequate affordable housing, 170 were neutral and only 57 said they believed there was adequate affordable housing in the township. In response to another question in the 2019 community survey, 230 of 422 respondents said they would support the clustering of several homes close together to help protect open space. Another 84 were neutral on the issue while 108 respondents opposed such clustering.

A 2015 study of affordable housing in the northwest Michigan area (*A Framework for Housing Choices in Northwest Michigan – Networks Northwest, 2015*) found that low-income households make up an important part of the region's workforce—including many of those working in the region's tourism or service-based industries—and many of these households confront significant challenges in finding affordable housing. The study used a definition for affordable housing of "housing that costs 30% or less of a household's income", and found that even average or moderate-income households in many communities struggle to find homes that they can afford. The study went on to say that when homebuyers cannot afford to purchase homes in or near employment centers, many "drive 'til they qualify" - that is, relocate to more rural areas with cheaper homes. But because these locations are far from employment centers, these cheaper homes often come with longer commutes, higher transportation costs, and higher heating or utility costs.

The 2015 study also found that oftentimes, affordable housing initiatives are limited by more than just policies or funding. Stereotypes of affordable housing often give rise to public opposition of new housing initiatives, preventing new homes from being built or even new policies from being adopted by a local community. Input received from local government stakeholders indicated that public opposition plays a large role in the ability of local governments to plan and zone for affordable housing.

The 2019 Northwest Michigan Target Market Analysis found a substantial demand for housing, both owner-occupied and year-round rentals, in Leelanau County. The study found support for 668 additional housing units to be added to the market between 2020 and 2025. Of these, 367 were recommended to be rental units; 63% of these units were needed by households with annual incomes below \$26,000. In addition, 301 units were needed for homeowners, of which 48% were projected to be needed in the \$175,000-\$250,000 category. While Empire Township cannot be expected to account for these numbers in their entirety,

the Planning Commission should be aware of zoning and planning changes that would make encourage and incentivize additional affordable housing units in the township.

There are numerous community-led and policy-based strategies being used locally, regionally, and nationwide to address affordable housing needs. While there is no single solution or silver bullet to the issue of affordable housing, a cohesive community-led approach that includes a variety of strategies can help to meet increasing need.

There are several zoning techniques which can help address the affordable housing shortage. Zoning ordinances can make room for additional housing, by allowing more homes to be developed in a given area, allowing smaller homes, or by reducing minimum lot sizes. Sometimes land bank authorities are used primarily to address tax foreclosed properties, but they can also offer opportunities for housing development, such as making tax foreclosed properties available at a low cost to nonprofits for the purposes of housing development, and may also partner in property purchases to lower the costs of development. These and other techniques yet to be discovered can help address the lack of affordable housing and the township zoning ordinance should embrace those techniques which are applicable in the township, especially in the rural areas and the township Planning Commission is encouraged to embrace these concepts.

In accordance with the community survey results and the conclusions of the Commission, affordable housing should be encouraged. In addition, housing units should be clustered, when possible, to retain open, forested, and agricultural areas (the rural character of the Township). The densest residential areas surround the Village. Other less dense housing is allowed in the other areas, with specific conditions for those sections.

Community Design

The design of buildings and signs in an area creates a sense of place. There are different design "places" in the township: Burdickville & area surrounding the Village; farms & large lots; recreation-oriented places, and open space areas. Designs should reflect these different locations by being compatible with the historic architectural character in terms of building height, construction materials, roofline slope, porches and windows, and pedestrian and vehicular access locations. Specific design guidelines may be needed to retain the character of these "places."

Home-Based Business

The Township encourages employment opportunities by allowing Home-Based Businesses as secondary uses in single-family residences. These businesses are based often, but not necessarily, on the recent advances in communications and electronics that have reduced the need for businesses to be located adjacent to production or population centers.

These businesses are largely in communications, professional consulting, insurance, design, engineering, e-retail, home services, and frequently only depend on electronic communications for their normal business operations. Other businesses are operated by residents who supplement the needs of local residents by providing services that are common in neighborhood settings, such as a daycare or beauty salon.

A principal characteristic of a home-based business is one that can be operated with minimal impact on the nature and character of the residential community. These uses should be regulated by the Township in varying degrees and have the following restrictions:

- The permitted number of parking spaces for employees should be in character with the residential neighborhood;
- businesses that depend on employees constantly driving to and from the site (i.e. field workers) should not be permitted;
- noise should not exceed what typically is generated by residential use,
- the operations should occur within the primary structure (daycares are permitted to use the rear yard area if fenced);
- uses that require industrial or manufacturing uses such as repairing boats, automobiles, should not be permitted.
- limit the space devoted to the business so as not to detract from the residential character.

LONG TERM OBJECTIVES – HOUSING POLICY & THE ECONOMY

- A. To continue to promote a variety of housing for all economic levels of Empire Township residents.
- B. To control the manner and placement of new housing development in order to preserve the rural character of the Township.
- C. To mandate and enforce adequate buffers and proper regulations of nonresidential uses to ensure the quiet enjoyment of their homes by the residents of the Township.
- D. To manage growth, especially in prime natural resource areas, to prevent over burdening public services and to prevent destruction of the native terrain and pollution of the Township's resources.
- E. To manage and protect natural resources and terrain, including steep slopes, ridgelines, and viewsheds.
- F. To encourage night sky-friendly development and policies.

POLICIES & ACTIONS

- 1. Land use permits may be required of all operations that change the land or landscape. A site plan shall be required to obtain this permit. Grading, septic installation and house construction or modification may require permits from the township and/or one or more other agencies.
- 2. Criteria used to evaluate any new rezoning requests or new subdivisions shall include anticipated traffic impacts, increased demands on public facilities, and effects upon the native terrain.
- 3. Higher density development shall be placed near the Village or other suitable locations, near services and facilities.
- 4. In order to maintain rural character and to preserve undeveloped native terrain, low residential densities should be encouraged outside the Village and the higher-density

areas. Open space and conservation planning should be the standard method of development in these areas.

- 5. Planned developments, clustered housing with large buffers, and undeveloped spaces, coordinated with the natural resources plan and careful site analysis for natural features, shall be the residential development methods of choice.
- 6. Special housing needs of the elderly, and other groups identified as underserved, may be identified and efforts made to meet those needs. Individuals shall be encouraged to utilize MSHDA or other programs for home ownership and home improvements.
- 7. The needs of the workforce for affordable housing should be considered while making zoning and planning decisions and changes. Zoning changes should be considered that allow for smaller homes, more concentrated development, incentives for diverse housing options, and multi-family housing.

IMPLEMENTATION GUIDELINES

Empire Township will implement the Master Land Use Plan through:

- 1. Township Policies
- 2. Zoning Ordinances
- 3. Involvement by Private Groups or Individuals
- 4. Capital Improvement Programs
- 5. Monitoring Program

Township Policy Decisions

Development policies are those policies that will be recommended by the Empire Township Planning Commission and adopted by the Empire Township Board in order to carry out the purpose of the plan. These two boards will work together as they will need to make many decisions that can directly impact Empire Township's citizens and environment. These decisions include future land and zoning ordinances, group or individual requests for action, and to annually review the Master Land Use Plan to ensure compliance.

Agriculture

Agriculture, although on the decline in the Township, should be encouraged in those land use areas that support a profitable operation. These profitable agriculture areas will continue to be protected from development or encroachment from residential or recreational expansion into open spaces or sensitive areas.

Residential

The entire concept of this Master Land Use Plan is to concentrate residential development in or near the Village of Empire or other designated areas, thereby retaining as much open space as possible and to take advantage of concentrated utilities and other residential support systems. Development and growth outside the designated areas will only take place when it is assured that these areas can no longer meet residential demand.

Commercial

Retail commercial profitability in the Township is very limited because of the close proximity of the more commercial benefits of the Traverse City area. Appropriate signs should encourage use of the commercial services available in the Village of Empire and the Township commercial area.

Rural

The Rural Area incorporates, whenever possible, Environmentally Sensitive areas and the bulk of the open non-agricultural land in the Township. These areas are considered the major resource, the "unique and very precious nature" of Empire Township. Consistent with the stated community goals, more intensive use will only be allowed when there is a clear determination of the need of the community that cannot be met without the conversion of rural areas to more intensive use.

Environmentally Sensitive Areas

These areas will be identified and regulations and standards developed to protect those areas that are sensitive to development due to soil types, drainage, topographical, vegetation, wildlife habitats or other factors that are subject to being seriously endangered, damaged or destroyed if allowed to be developed inconsistent with sound conservation and preservation practices. These regulations and standards should in no way preclude property owners using their property to meet their needs provided they comply with the federal, state and local statutes or regulations applicable to that particular land use district.

Zoning Ordinance

Revisions

The Empire Township Zoning Ordinance will be revised to conform to the land use areas and guidelines of the Master Land Use Plan. The Leelanau County General Plan will be considered when appropriate.

Special Use Permits

A process for reviewing certain land uses and issuing of special use permits will be used for those land use activities that are allowable only if certain conditions or restrictions are met to ensure that the land use or activity authorized shall be compatible with adjacent uses of land, the natural environment, and the capacities of public services and facilities affected by the land use. In addition, these standards shall ensure that the land use or activity is consistent with the public health, safety and welfare of the Township and the standards enumerated are intended to promote the intent and purpose of the ordinance.

Land Use Permits

All land use permit requests shall note other construction or other land uses contemplated within the next two-year period, such as accessory buildings or other land uses different from the primary use.

Site Plan Review

The zoning ordinance will designate what land uses and structures will be subject to the review of a site plan by the Empire Township Planning Commission. The site plan review will ensure that the provisions regarding erosion control, sewage disposal, removal of vegetation, building construction and location blend with the character and esthetics of the district and are in conformance with the intent and goals of this Master Land Use Plan, county, state and federal regulatory requirements. During the review process, the Planning Commission may request such additional data and analysis in the form of an environmental assessment or impact statement to ensure that the proposed development meets the goals and intent of the Master Land Use Plan.

Non-Conforming Provisions

To correct land uses in effect prior to adoption of a Township Land Use Ordinance and still give the property owner continued use of the property to meet reasonable needs, two classes of nonconforming use should be implemented during the subsequent ordinance update: Class A and Class B. The intent is a Class A non-conforming use would be applied to any continuing use compatible with the current use. A Class B non- conforming use would be one incompatible with the current use or cannot meet the intent of the zoning ordinance and Master Land Use Plan.

Lot Splitting and Width-To-Depth Provisions

Newly created lots must conform to Township, County and State regulations. This ensures the newly created lots remain as buildable lots, do not impact erosion control measures, and do not compromise public safety by impeding ingress and egress. Adequate regulations at Township and county levels must be implemented for mandatory review of pending lot splitting prior to recording the newly created lots with the County Register of Deeds.

Standards

The standards for development that are adopted as part of the Master Land Use Plan should be included in the Zoning Ordinance. A site plan review process to review site plans for conformance to the standards has to be part of the Special Use Permit process and can also be used for specific allowed uses to ensure compliance with the standards of the Zoning Ordinance and other Township, county, state and federal requirements. Site plan review shall be applicable to any land use identified as environmentally sensitive and all other land use districts where site plans are required.

Rezoning

Rezoning should be considered only after reviewing the appropriate sections of the Master Land Use Plan to determine if the proposed rezoning is consistent with the intent of this Plan and the Leelanau County General Plan.

Zoning Board of Appeals

The Zoning Board of Appeals should adopt rules or procedures to consider appeals, variances and requests for interpretation.

Involvement by Private Groups or Individuals

There are planning goals that cannot be accomplished by Zoning Ordinance alone such as preserving open space, scenic areas, etc., but decisions by landowners can accomplish this by private contracts, scenic easements, and so forth. Private groups or individuals can also impact or be part of the decision process by attending regularly scheduled meetings of the Township Board and the Planning Commission. These meetings are always open to the general public and participation is encouraged.

Capital Improvements Program and Budget

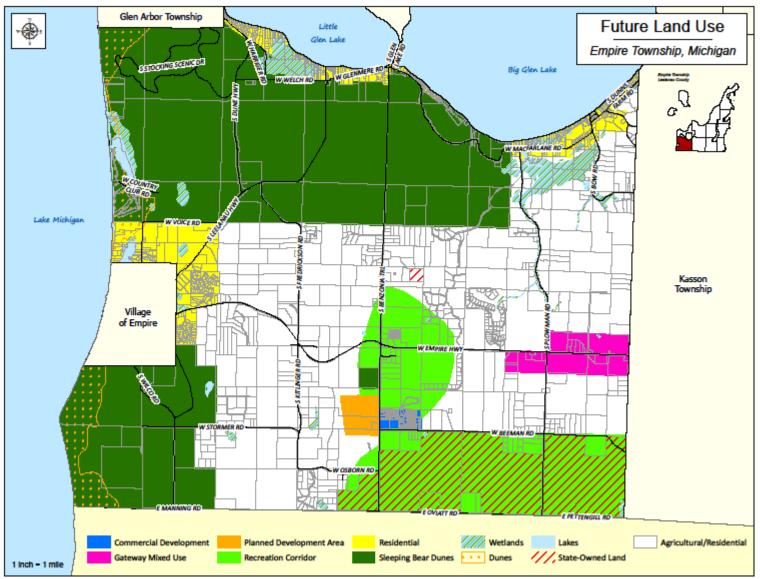
A Capital Improvement Budget, necessary to implement this plan, should be part of the annual Township budget adopted by the Township Board. Every capital improvement recommended should meet the test of a real need and one the Township can afford. Especially important is the capital improvement consistent with the Leelanau County General Plan as well as this Master Land Use Plan. Each capital improvement budget should contain:

- a. A description of the different capital improvement projects arranged according to priority.
- b. A statement of the basic reasons for each project and its priority.
- c. A statement of the amount each project will cost and how it will be financed.

Township Planning Commission

The Planning Commission shall review the Master Land Use Plan for compliance at least every five years. Upon review, the Master Plan can be maintained as written, or a decision can be made to begin an amendment or re-writing process. The Township Board members, Zoning Administrator, Zoning Board of Appeals members and the public are encouraged to attend these review meetings

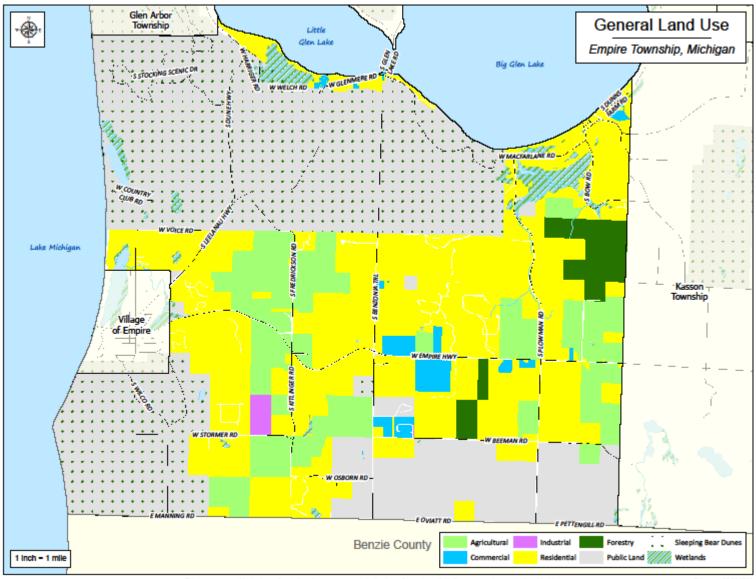
APPENDIX ONE: FUTURE LAND USE MAP



This map is prepared by Leelanau County for reference purposes only. Leelanau County is not liable for any errors that may be found in this map.

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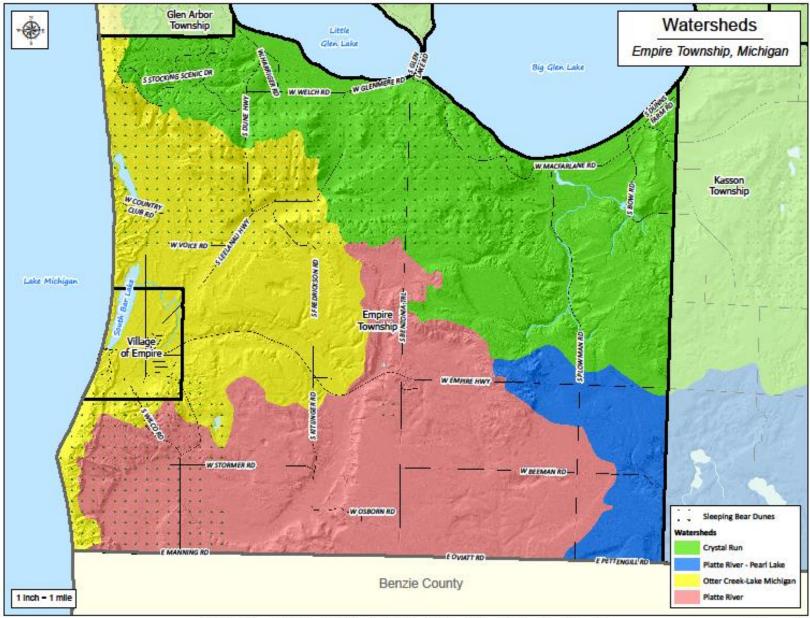
APPENDIX TWO: GENERALIZED LAND USE MAP



This map is prepared by Leelanau County for reference purposes only. Leelanau County is not liable for any errors that may be found in this map.

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APPENDIX THREE: WATERSHED MAP



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APPENDIX FOUR: 2019 COMMUNITY SURVEY RESULTS

Empire Community Survey Results – As of 10/17/2019 **Total Responses: 449** Question A.1 – The issue of controlling growth and development can be controversial. Please check the statement that most closely matches your views about growth. (After the question, it states: Please identify the three statements that are most important to you, noting 1, 2, or 3 on the line in front of the statement) I would like to see structured growth encouraged: First Choice - 111 Second Choice – 92 Third Choice - 52 Where: **M-72** – 143 M - 22 - 120**Other** – This allowed respondents to indicate other locations where they would like to see structured growth. 47 respondents chose to enter a response. Choices with multiple responses included Village (30), Front Street/Downtown (9), and Everywhere/Entire Township (3). I would prefer to let growth take its own course in the township. First Choice - 51 Second Choice – 31 Third Choice - 63 I would prefer planned and limited growth in the township. First Choice – 242 Second Choice – 75 Third Choice - 21 I would like to see a goal of no growth in the township. First Choice - 39 Second Choice – 40 Third Choice - 31 Question B.1 – Should short term rentals be allowed in the township? Agree - 243 Neutral - 107 Disagree - 81 This question included a follow-up question of "If so, where?" which allowed respondents to indicate a location where they would like to see short term rentals. 157 surveys included a response. By far the most popular response was Anywhere/Everywhere/No restriction, with 86 responses. Other responses mentioned specific areas (resort areas, village/downtown, rural areas, commercial districts, etc.), or expounded on whether short term rentals should be permitted but managed or required to have approval. Question B.2 – Is there adequate affordable housing available in Empire Township? Agree - 58 Neutral - 170 Disagree - 197

Question B.3 – Should the township explore other housing options?

Yes-72

No – 73

Another 139 surveys included responses that went beyond a basic "yes" or "no". 42 included answers that were "yes" and included additional information or caveats. 19 included answers that were "no" and included additional information or caveats. The remainder specified certain types of housing they would like or dislike (mentions included senior housing, affordable housing, condos, workforce housing, and others), or methods by which the township could undertake projects of these sorts or pass projects off to local for-profit or non-profit entities.

Question C.1 – In rural (non-waterfront) areas of Empire Township, do you support the

clustering of several homes close together on small lots, in order to protect the majority of the site as open space? Agree - 230 Neutral - 84 Disagree - 108 Question C.2 – The Township should work to provide environmental protection for setbacks along developed shoreline. Agree - 352 Neutral - 34 Disagree - 35 Question C.3 – Which of the following best describes what "Open Space" means to you. Rank in order 1-6, with 1 being the best. Forests Selection 1 - 150 Selection 2 - 105 Selection 3 - 54 Selection 4 - 58 Selection 5 - 25 Selection 6 - 18 Wetlands Selection 1 - 62 Selection 2 - 92 Selection 3 - 81 Selection 4 - 66 Selection 5 - 57 Selection 6 - 41 **Scenic Views** Selection 1 - 143 Selection 2 - 36 Selection 3 - 71 Selection 4 - 52 Selection 5 - 74 Selection 6 - 29 Parks, sports fields Selection 1 - 43 Selection 2 - 16 Selection 3 - 34 Selection 4 - 27 Selection 5 - 64 Selection 6 - 213 **Pastures/meadows** Selection 1 - 82 Selection 2 - 91 Selection 3 - 91 Selection 4 - 91 Selection 5 - 33 Selection 6 - 19 Farmland Selection 1 - 57 Selection 2 - 51 Selection 3 - 51

Selection 4 - 74

Selection 5 - 112

Selection 6 - 54

Question C.4 – It is important to do something now to slow the conversion of Empire Township farmland to residential or other developed uses.

Agree - 271

Neutral - 100

Disagree-58

Question C.5 – Which are the two most important reasons to preserve farmland in Empire Township?

- a. To preserve the scenic beauty and rural character of the township Selected 251
- b. To make it easier to transfer farms to family members or other farmers Selected 90
- c. To preserve family farms and the township's farm economy Selected 203
- d. To maintain the ability to grow food in the future Selected 106
- e. To protect the natural environment and wildlife habitat Selected 174
- f. Other Selected 14
- g. Having a farmland preservation program is not important Selected 18

Question C.6 – To preserve farmland, would you be willing or able to personally contribute financially?

Yes - 190

No - 207

Question D.1 – Employment opportunities in Empire Township are too dependent on seasonal/tourism business.

Agree – 296

Neutral/Uncertain - 93

Disagree – 37

Question D.2 – Is the current mix and quantity of businesses in Empire Township adequate? Yes – 104

No - 308

Question D.3 - If not, what types of businesses are needed in Empire Township?

This question allowed respondents to enter their own answers. There are 12 pages of text answers to this question, with most respondents choosing to enter an answer. A large proportion of these entered "Grocery store(s)". Other answers included restaurants, coffee shop, bakery, gym, brewery/winery, recreation, hardware store, retail, laundromat, small manufacturing, tech, and car wash/repair. One answer that was given several times was "pharmacy", despite the pharmacy located in the village. **Question D.4 – How much new business would you like to see in Empire Township and where?** This question allowed respondents to enter their own answers. There are 10 pages of text answers to this question, with many respondents choosing to enter an answer. Answers ranged from specific types of businesses (grocery store, restaurants, etc), to locations of new business (along certain streets or highways, in the Village, etc.), to quantities (either hard numbers of new businesses or jobs, or percentages of increase over existing quantities), to types of growth (planned growth, very limited, etc.) to "none" or "0" from several respondents.

Question D.5 – Are there adequate employment opportunities in the area for Empire Township residents?

Full-Time Yes – 47 No – 290 **Part-Time** Yes – 170 No – 119

Question D.6 – Do you work in:

Empire Township – 47 Northern Michigan – 38 Outside Northern Michigan – 87 Retired – 217

Not Working -21

Question E.1 – Architectural controls for new development

Agree -263

Neutral/Uncertain – 82

Disagree – 59

This question also included a sub-question of "**What control?**". There are 6 pages of text replies to this question, most of which focused on specific types of controls (height, size, design, setbacks, parcel size, etc.)

Question E.2 – Stricter sign regulation

Agree - 192

Neutral/Uncertain - 146

Disagree – 57

This question also included a sub-question of "**What regulations?**". There are 4 pages of text replies to this question, most of which focus on regulating size and height and dis-allowing billboards and neon-lit signs.

Question E.3 – Preservation of scenic rural roads

Agree – 338

Neutral/Uncertain - 52

Disagree – 25

This question also included a sub-question of "**What roads?**". There are 5 pages of text replies to this question. Most of the responses name specific roads. M-22 and M-72 are the most frequently mentioned. Other roads mentioned multiple times include Wilco, Burnham, Echo Valley, Voice, Stormer, M-109, CR-616, Norconk, Fredrickson, and Benzonia Trail. A number of respondents also listed "All" or "All seasonal".

Question E.4 – Preservation of historic buildings

Agree-283

Neutral/Uncertain - 95

Disagree-27

This question also included a sub-question of "**Which buildings**?". There are 6 pages of text replies to this question. Most of the responses named specific buildings. The most popular answer was the old schoolhouse in Empire Village. Other buildings mentioned multiple times included old farms/farmhouses, the old hardware store/livery in Empire Village, and the museum building in Empire

Village. A number of respondents also listed "All" or "Any".

Question E.5 – Adopting a Point of Sale septic ordinance to assure water quality for lake and stream properties

Agree – 320 Neutral/Uncertain – 61 Disagree – 36 **Question E.6 – How do you feel about special events for nonprofits?** Agree – 285 Neutral/Uncertain – 97 Disagree – 23 **Question E.7 – How do you feel about special events for profit?** Agree – 143 Neutral/Uncertain – 185 Disagree – 84 Question E.8 – Lighting standards are needed to protect the night sky Agree – 331 Neutral/Uncertain – 59 Disagree – 39 Question E.9 – Internet speed is adequate in the township Agree – 106 Neutral/Uncertain – 168 Disagree – 150 Question F.1 – How long have you lived in Empire Township, either part-time or full-time? N/A – 22 0-4 Years – 63 5-10 Years – 55 11-20 Years – 106 21-30 Years – 81 Longer than 30 years - 108

Question F.2 – During which months do you typically reside in Empire Township?

All - 212Jan - 11Feb - 8Mar - 7Apr - 55May - 123 Jun – 170 Jul - 184 Aug - 183 Sep - 136 Oct - 101Nov - 37Dec - 21Question F.3 – How long have you owned property in Empire Township? Don't Own - 30-4 Years - 56 5-10 Years - 59 11-20 Years - 128 21-30 Years - 81 Longer than 30 years - 116 Question F.4 – Are you a registered voter in Empire Township? Yes - 209No - 212Question F.5 – Do you own more than one home or lease an Empire Township home to others? Yes - 68No - 366This question included a follow-up question: If so, what is the typical rental period: Do not lease/rent - 82 Weekly or by the day -40Monthly - 5Annually - 8 Question F.6 – If you rent your Empire Township house, which months is it typically rented? All - 14

Jan - 2Feb - 3Mar - 2Apr - 5May - 21 Jun – 36 Jul - 45Aug - 45 Sep - 24Oct - 17 Nov - 5Dec - 4Question F.7 – Indicate which best describes where your Empire Township property is located. (May choose multiple answers). Shoreline - 65 Rural Setting – 154 Farm - 20Empire Village - 140 Glen Lake - 104 Question F.8 – Please indicate which of the following best describes your affiliations. Farmer – 29 Real Estate/Developer - 11 Tradesperson/laborer – 14 Family w/ school age children - 25 Business Owner – 78 Elected Official – 6 Employee - 42 None of the Above -22Owner of over 20 acres -61Retiree -257Professional - 155

Note that there are also 16 pages of text responses to "General Comments" as well as additional comments that were given to questions that did not indicate to give text answers. All of the text answers have been transcribed and are available for review.