

Glen Arbor Township Master Plan

June 2017 Draft



Glen Arbor Township FUTURE LAND USE PLAN

Prepared Under the Direction of the

**Glen Arbor Township
Planning and Zoning Commission**

**Adopted by the Glen Arbor Township Board
on XX xx, 2017**

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PLANNING and ZONING COMMISSION**

Master Plan Update

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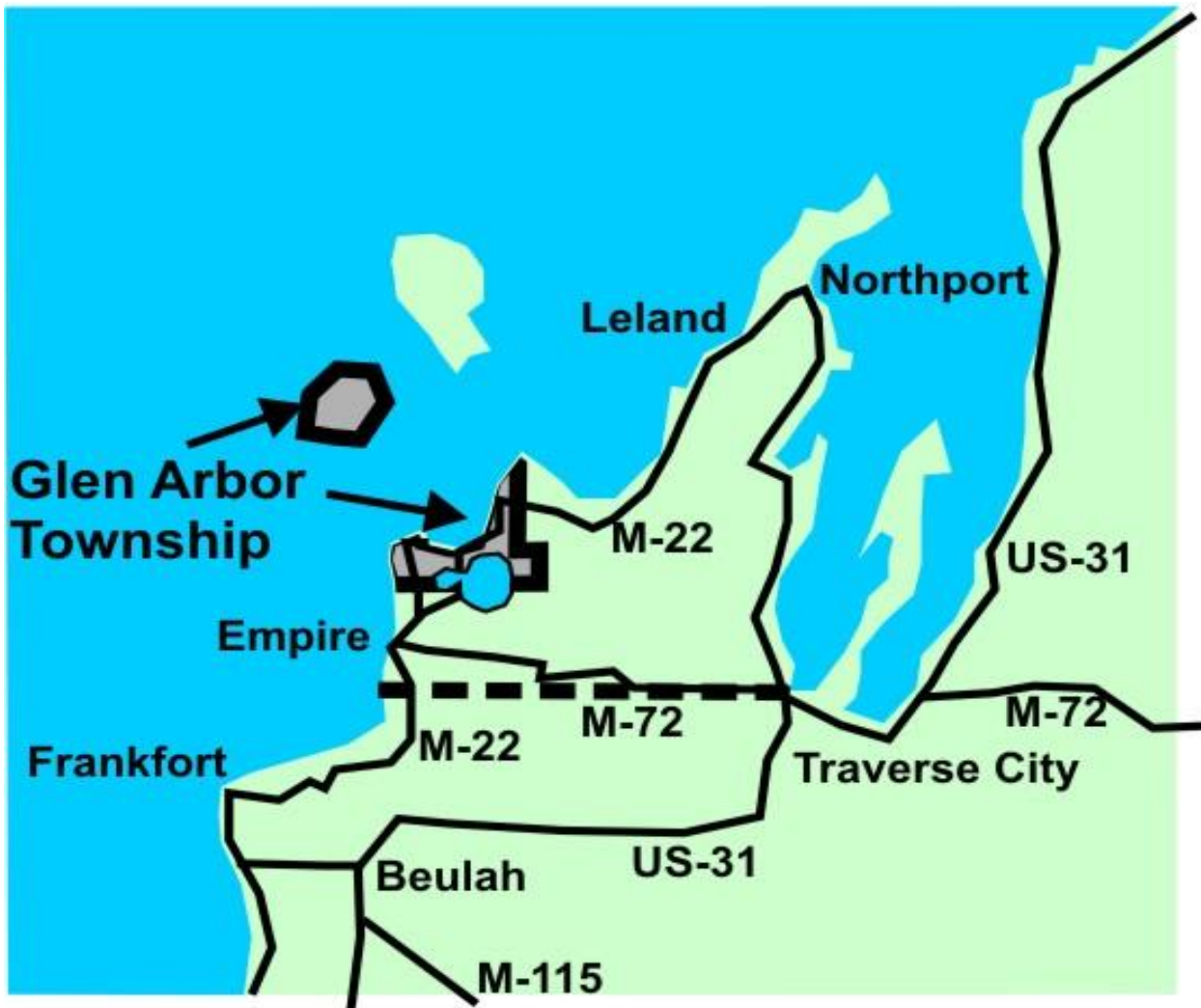
CHAPTER 1 INTRODUCTION

This Chapter presents introductory information on the location of Glen Arbor Township, its highly valued physical character, and the relationship of the Glen Arbor Township Future Land Use Plan (the Plan) to zoning. It also includes information on the process used to create this Plan. This Plan was adopted initially on February 15, 2005, updated in March 2013, and updated again in XXXX.

Overview

Glen Arbor Township is one of eleven townships in Leelanau County located in the northwestern corner of the Lower Peninsula of Michigan. Glen Arbor is accessed primarily by M-72 from Traverse City and M-22 from Frankfort. It is not on the road to any other major community. See Map 1-1. There is no long distance bus or rail service, no trucklines, nor any deep-water ports. The closest commercial airport is in Traverse City, about 40 minutes away. No one comes to Glen Arbor Township by accident. Yet it is a prime destination for more than a million visitors a year, the permanent home of about 800 persons, and the seasonal home of another 2000 or so. Nearly half of the acreage of the Sleeping Bear Dunes National Lakeshore, a national park, is located within the Township. The small settlement of Glen Arbor, an unincorporated village within the Township, is nestled between the National Park, Lake Michigan, and Big Glen Lake. The local economy is driven largely by summer tourist trade.

**Map 1-1
Regional Location Map**



The Township is a tourist attraction largely because of its spectacular beauty and recreational opportunities. There are abundant opportunities for swimming, boating, sailing, waterskiing, tubing, canoeing, kayaking, fishing, hiking, and bicycling. Fall adds color tours and hunting as deer are abundant, and winter brings new opportunities for cross-country and downhill skiing, snowshoeing, and ice fishing. But what brings visitors back year after year is the opportunity to enjoy nearly unparalleled scenes of incredible beauty.

Photo 1-1
Sleeping Bear Sand Dune



Photo by Terry Gretzema

The unique combination of geology, forests, sand dunes, rivers, lakes, streams, islands, and Lake Michigan defines the natural character of Glen Arbor Township. But it is the homes, businesses, rural quaintness of the Village, and tree-lined public roads on the one hand, and the National Park land and facilities on the other, that give the area its unique appeal and character. Both share the common goal of protecting the natural quality of the environment and the visual splendor of the area for the benefit of both present and future generations. The challenge for the future is how to accommodate change in a manner that preserves the special character of the area. While the quality of life in the Township and of visitor experiences in the Township are both very high at the present, there is a strong tendency to want everything to stay the same and for no change to occur. It is unrealistic, however, to expect there will be no change. New homes and businesses will be built. This Plan identifies current trends and needs and presents preferred options for meeting those needs. It is one tool the Township will use to guide and manage future changes in a manner that preserves all that is highly valued by those who live and visit here.

The National Park Service manages the lands under its control via a General Management Plan adopted in October 1979. The Park Service recently updated its plan. Glen Arbor Township is looking forward to the opportunity to work with the National Park Service, which includes giving special attention to meeting the needs of those who live in the shadow of the Park.

Plan and Relationship to Zoning

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 Glen Arbor Township.

The Plan was initially prepared under the provisions of the Township Planning Act 168 of 1959, and subsequently revised in accordance with the Michigan Planning Enabling Act (MPEA), Public Act 33 of 2008, as amended. The Plan is a long-range guide for use of land in the Township and is composed of text and supporting maps. The most significant map is the Future Land Use Map in Chapter 5, which shows the relationship of land use districts in the Township for the next 20 years.

In addition to serving as the policy basis for the Township's elected and appointed officials, this Plan serves as a foundation for the Township's zoning and other land use regulations. As required by MPEA, it contains a Zoning Plan element in Chapter 6 that sets forth the principal district and use regulations of the Zoning Ordinance and how the zoning districts correspond to the future land use designations in the Plan.

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.

By law, this Plan will be reviewed by the Township Planning Commission every 5 years and, if necessary, updated as required. If circumstances warranting a change to the Plan come up before the 5-year review, then this Plan would be changed. Changes may be necessary because the Plan is based upon present goals, knowledge, and technology, all of which change with time.

Public Input

This Plan was prepared and updated as a result of a public process that included reviewing existing conditions, obtaining public input on a vision of what the community should be like in the future, analyzing the key issues identified by the public, and consulting with adjoining units of local government and other governmental agencies. The Planning Commission and Township Board reached consensus on specific elements in the Plan prior to its final adoption.

Overview of Chapters

This Plan has seven chapters. Chapters 2 through 4 contain background information and identify planning implications and issues related to the topic of each chapter. More specifically, Chapter 2 summarizes recent demographic and economic characteristics. Chapter 3 presents data and maps describing current conditions related to the land and buildings in the Township. Chapter 4 summarizes the basic characteristics of the infrastructure and public services available in the Township. The last three chapters provide a planning framework for future decisions on land use, zoning, and infrastructure investments. Chapter 5 presents the Future Land Use Map and text describing the existing character of various parts of the Township and proposed land use in each area. Chapter 6 describes the essential parts of the strategy behind the districts in the Zoning Ordinance and sets forth a series of proposed Ordinance changes to be consistent with this Plan. Chapter 7 provides a vision statement, objectives, and implementation strategies for guiding future land use and infrastructure change in the Township. A brief bibliography is included in Appendix A, and a summary of public participation in Appendix B completes this Plan.

CHAPTER 2 PEOPLE AND ECONOMY

This Chapter presents information on the people and economy of Glen Arbor Township.¹

Population

Total Population

The population of Glen Arbor Township has remained relatively stable since 2000, growing approximately 9% according to U.S. Census data. By contrast, the population increased by 22% and 144 people between 1990 and 2000.

Table 2-1 Glen Arbor Population, 1990-2010

	1990	2000	2010	% Change 2000-2010
Glen Arbor Township	644	788	859	9%
Leelanau County	16,527	21,119	21,708	3%

Source: U.S. Bureau of Census

More recent census data estimate that the population of Glen Arbor Township in 2014 was less than in 2010.² The significance of this drop in population from 2010 to 2014 is unknown. Factors that could have contributed to the reduction in population include the ongoing effects of the 2008 economic crisis and the high real estate values in the Township. What does appear clear, however, is that Glen Arbor Township population is not likely to exceed 900 residents over the next 5 years.

Age of Population

Like most American communities, the median age of Glen Arbor Township is increasing due to an increased senior population as the baby boomers reach retirement age, families have fewer children, fewer full-time jobs are available, and other factors. Unlike most American communities, however, the median age of residents of the Township has grown from 53.1 in 2000 to 60.9 in 2010, which is notably higher than that of Leelanau County (50.3 years) in general and even more so than the State of Michigan (39 years).

¹ U.S. Census data from the 2013 Master Plan were used and, where available, updated. As with the 2013 Master Plan, however, this updated Chapter on population relies heavily on census data from 2010. With respect to the economic information, little data are available below the county level.

² The Leelanau Enterprise, December 31, 2015, Sec. 1 p. 16 (citing the U.S. Census Bureau and noting the figures cited were within a 90% confidence level).

Further highlighting this trend is that in 2000, 29.3% of the population was above the age of 65, which increased to 40.5% by 2010. The implications of this trend relative to land use planning is addressed at the end of this Chapter.

Table 2-2 Median Age in Glen Arbor Township, 1990-2010

	1990	2000	2010
Glen Arbor Township	49.7	53.1	60.9
Leelanau County	36.5	42.6	50.3
Michigan	32.6	35.5	39

Source: U.S. Census Bureau

Housing

Housing Units

In 2010, there were about 400 occupied housing units, which was a slight increase from 2000, and nearly all of the housing units were owner-occupied. Over half (54%) of all households in 2010 were two person households (244), while 30% were single person households (126). There were 36 renter-occupied units in 2010 when the census was taken, with 75 rental units vacant and available for rent.

Table 2-3 Housing Units in Glen Arbor Township, 1990-2010

	1990	2000	2010	% Change 2000-2010
Glen Arbor Township	303	377	408	8%
Leelanau County	6,274	8,436	9,255	10%

Source: U.S. Census Bureau

Seasonal Housing

Glen Arbor has a very large seasonal population relative to its year-round population. In 2010, there were 1,102 seasonally occupied housing units, which means there are about three times more seasonal homes than year-round homes in the Township.

Table 2-4 Seasonal Housing in Glen Arbor Township, 1990-2010

	1990	2000	2010	% Change 2000-2010
Glen Arbor Township	1,058	1,068	1,102	3%
Leelanau County	4,172	4,111	4,681	14%

Source: U.S. Census Bureau

The number of seasonal homes appears to have grown by a smaller amount between 1990 and 2010 compared to year-round homes. It is likely that some seasonal homes have been converted for year-round use or razed and replaced with a home for year-round use. Leelanau County also experienced a growth in seasonal homes during the period 1990-2010, with census figures showing a county-wide increase of 12%. What is unknown presently is whether more seasonal homes in the Township will be occupied on a year-round basis as the baby boomer generation continues to retire and move here.

Household Size

The size of households in Glen Arbor Township is decreasing, similar to Leelanau County, the State of Michigan, and the United States. The average household size in Glen Arbor Township declined 7% from 1990 to 2010, from 2.13 to 1.98 persons. In Leelanau County, population per household declined by 12%, but from a larger average size of 2.62 to 2.31 persons, while the Michigan average household size declined 7% to 2.45 persons. The general trend toward smaller family size is due to many factors, including a growing retirement and “empty-nester” population, families having fewer children, and young people waiting longer to get married. Glen Arbor Township’s smaller family size reflects an increasingly older population, many of whom are empty nesters, retired, and/or single person households.

Table 2-5 Average Household Size in Glen Arbor Township, 1990-2010

	1990	2000	2010	% Change 2000-2010
Glen Arbor Township	2.13	2.09	1.98	-5%
Leelanau County	2.62	2.48	2.31	-7%
Michigan	2.66	2.56	2.45	-5%

Source: U.S. Census Bureau

Education

Year-round Glen Arbor Township residents are a well-educated group, with 48% earning college degrees and very few over 25 years of age without a high school diploma. See Table 2-6.

Table 2-6 Educational Attainment of Glen Arbor Township Residents, 2010

Percent of population 25 years or older

8 th grade or less	9 th to 12 th grade no diploma	High School (incl. equiv.)	1 or more years college no degree	Associate Degree	Bachelor's Degree	Master's Degree
0.5%	4%	14.2%	26.9%	6.5%	28.8%	19.3%

Source: U.S. Census Bureau

Economic Characteristics

Year-round Glen Arbor Township households had a median income of \$64,583 in 2010, which is substantially higher than the County (\$47,062) and the State of Michigan (\$44,667). Only five families in Glen Arbor Township were receiving food stamps in 2010. Reflecting the age of the population, 226 persons received Social Security income in Glen Arbor Township in 2010, but no one received supplemental Social Security income.

Assessed Value

Glen Arbor Township's assessed value is primarily based on residential development. In 2011, at a state equalized value (SEV) of \$574,011,351 residential land accounted for 94.7% of SEV of real property. Commercial SEV was \$30,575,500 or only 5.3%. Over the past 21 years, agricultural SEV and timber cut-over SEV disappeared entirely. There is very slight industrial assessed value in Glen Arbor Township. See Table 2-7. What is most significant is the fact that 95% of the tax base of the Township is residential; thus Township services are supported almost entirely by taxes on seasonal and year-round residences. If for some reason the value of residential property in the Township were to fall significantly, there would be a dramatic reduction in the amount of tax revenues available to support Township services and school millages.

Table 2-7 Glen Arbor Township SEV, 1990-2011

Category	1990	1995	2003	2011	Percent of Total Real Property 2011
Agriculture	\$95,000	\$300,000	\$337,500	0	0%
Commercial	\$5,699,700	\$7,704,500	\$19,566,454	\$30,575,500	5.3%
Industrial	\$0	\$0	\$0	\$66,500	0.0%
Residential	\$75,810,650	\$145,367,010	\$403,979,350	\$543,369,351	94.7%
Timber Cut-over	\$314,200	\$0	\$0	0	0%
Total	\$81,919,550	\$153,371,510	\$423,883,304	\$574,011,351	100%

Source: Michigan Department of Treasury, State Tax Commission, and Glen Arbor Township.

Planning Implications and Issues

The preceding data and analysis can be summarized in the following conclusions that affect the long-term future of Glen Arbor Township:

- Glen Arbor Township can expect its population to remain relatively stable over the life of the Plan, although it may slow somewhat as the few remaining vacant properties in the Township are developed. The previous Master Plan analyzed this issue with a build-out analysis that looked at how much developable land remained in the Township. This was conducted in order to determine if the Township had a sufficient amount of undeveloped land available to accommodate enough future residents to support a wider range of year-round businesses to serve the local (*i.e.*, non-seasonal) population. The analysis concluded that many year-round businesses were probably not feasible unless supplemented by a more balanced tourist season, or unless many more of the Township's seasonal homes are converted to permanent dwellings to accommodate more permanent residents.

Simply stated, unless residential development density increases significantly, it is unlikely that many businesses intended to serve local residents will be able to locate in Glen Arbor Township. Furthermore, if increased density were desired by the Township, it is likely that public sewer (and perhaps water) would be needed.

- Glen Arbor Township's year-round population is primarily composed of residents that are near or past retirement age. This results in a community that generally consists of smaller households, fewer children, and thus less demand for full-time employment opportunities. Many of Glen Arbor Township's permanent residents do not depend on the local economy to make a living.

It is likely that the number of seniors in Glen Arbor Township will continue to increase as the baby-boomer generation reaches retirement age, which may lead to some demand for local businesses or recreation facilities intended to serve an older population. With an aging population, new development and redevelopment should be carefully reviewed to ensure that buildings and properties are easily accessible by seniors, users of assistance devices, and disabled persons.

- With approximately 95% of the Township's tax base coming from residential uses, the Township is heavily dependent on residential development, particularly on seasonal homes and the tourism industry. Because of the limited amount of land available, new residential

developments will be minimal. This leaves the Township susceptible to economic forces that may affect property values and the tourism industry. In cooperation with similar communities in the region, the Township should encourage and support broad, four-season marketing and promotional efforts to attract low-impact, non-residential development to help diversify its population and tax base and to attract tourists during non-summer months.

CHAPTER 3 THE NATURAL AND BUILT ENVIRONMENT

This Chapter presents information on the characteristics of the natural environment and development in Glen Arbor Township.

Land

Overview

Glen Arbor Township consists of approximately 18,000 acres. Of this, South Manitou Island is 5,286 acres and is located about 6 miles from the closest mainland point and generally is accessed by ferry from Leland. The Sleeping Bear Dunes National Lakeshore accounts for 79 percent of the Township's area and includes South Manitou Island. The privately owned land area of the Township is approximately 7,600 acres.

The characteristics that are most representative of the Township include the waterfronts of Glen Lake, Little Glen Lake, and Lake Michigan; the Sleeping Bear Dunes; the Crystal River; hillsides; and the extensive tree vegetation and cover. The August 2, 2015 storm, however, caused considerable loss in vegetation. Thousands of mature trees were destroyed.

The natural features have influenced the major land use patterns in the Township. Residential development is most evident around the Glen Lakes, Fisher Lakes, Lake Michigan, and on ridgelines, while Glen Arbor Village, The Homestead Resort, and the Leelanau School are the only concentrations of development. As would be expected, waterfront and lake view properties act as a magnet for residential development.

Property Classifications

All property in Glen Arbor Township is classified as residential, agricultural, business, or exempt. As shown in Table 3-1, more than 80% of the land area of the Township is tax-exempt because it is owned by the federal government (Sleeping Bear Dunes National Lakeshore). Residential properties comprise nearly 18% of the land area in the Township, and commercial and agricultural properties account for less than 1% of the land area in the Township. Map 3-1 illustrates the land classifications in the Township.

Table 3-1 Land Classification by Property Class in Acres

Tax Class Category	2000 Acres	Total %	2012 Acres	Total %	2014 Acres	Total %
Residential	3,518	20.1%	3,738	20.1%	3,076	17.5%
Business	128	0.7%	123	0.7%	115	0.6%
Agricultural	2	0.01%	0	0%	2	0.01%
Tax Exempt	13,836	79.1%	14,123	79.2%	14,354	81.8%
Total	17,483	100%	17,984	100%	17,547	100%

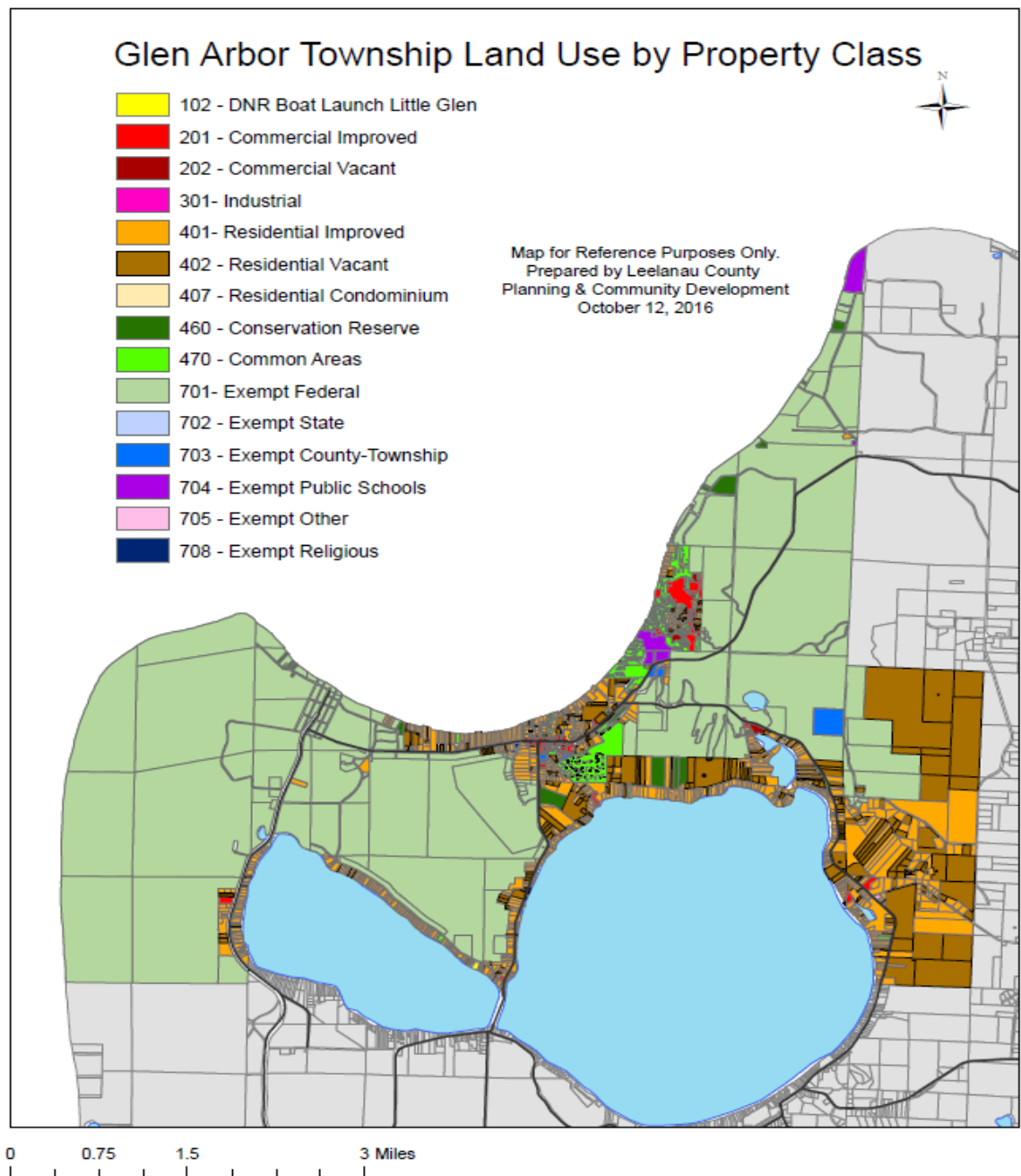
Note: South Manitou Island accounts for 5,286 of the total tax exempt acres.

Total acres in Table 3-1 are less than the actual area of Glen Arbor Township because inland lakes and road rights-of-way are not included and account for several thousand acres. The exact amount is not known as there are no boundaries for those areas on the parcel map.

Sources: 2003 & 2012 – Township assessment rolls and parcel map.

2014 – Leelanau County GIS parcel map.

Map 3-1 Land Use Classifications in 2016



Topography

Glen Arbor Township has remarkable topography. The predominate land features are sand dunes and dune ridges. The sand dunes along Lake Michigan and within the Sleeping Bear Dunes National Lakeshore tower hundreds of feet above the beach and inland plains. In some locations, the face of the dunes are steep. Inland dune ridges rise over 400 feet above the level of Lake Michigan and Glen Lake. See Map 3-2. Relatively flat areas exist between dune ridges and between Glen Lake and Lake Michigan. These flatter areas are where roads and settlements occur.

Dunes and dune ridges are especially sensitive to disturbance. Development for roads, buildings, or recreational activities need to be limited or constructed very carefully in order to prevent erosion that can pollute streams with sediment. The disturbance of dune ridges can also affect the scenic quality of the Township, which is the backbone of commerce in the community. The most significant hills in private ownership are on the east side of the Township. Vistas toward the west and the lakes from this area are excellent.

Map 3-2 Topography in Glen Arbor Township



Natural Features

Overview

The natural features of Glen Arbor figure prominently in the lure of the Township as a tourist destination and as a place to live. They are given considerable weight in this Master Plan. Much of the scenery and vistas in the Township are unparalleled. Views of Lake Michigan, the Manitou Islands, the Sleeping Bear Dunes, and Glen Lake are but a few. Vistas from many points are such that one can view all of these features.

The preservation of natural features, including trees, scenic views, and water quality, is one of the leading areas of interest among residents and is a focal point of this Master Plan.

This section begins with a description of key features of the natural environment, focusing on the Sleeping Bear National Lakeshore, Glen Lake, and the Crystal River. It then turns to those aspects of the natural environment that pose planning and development challenges: soils with limitations for septs, wetlands, impervious surfaces, and coastal hazards.

The Sleeping Bear Dunes National Lakeshore

The Sleeping Bear Dunes National Lakeshore (the Park) is the dominant land entity in Glen Arbor Township. See Map 3-1. Its presence assures preservation of much of the Township's natural beauty. The Park attracts more than a million visitors each year, resulting in pressure for additional tourist-related services in the Township and neighboring communities.

Development of the Park is guided by the General Management Plan, which was approved in 1979 by the Midwest Regional Director of the National Park Service. Drafts of subsequent management plan updates have been adopted. Physically, the Park is divided in two by the Glen Arbor village area and privately owned lands south to Glen Lake. These areas also separate the Dunes and Alligator Hill from the Crystal River, Miller Hill highlands, and the meadow and farmlands to the north. Since the business and residential center of the Township lies between these areas, conflicts are created as traffic, both motorized and non-motorized, passes through the Village.

A majority of the National Lakeshore's visitor facilities are located to the west of Glen Arbor Village. The Pierce Stocking Scenic Drive and the Dune Climb draw a majority of the visitors and will continue to do so for the foreseeable future.

When combined with the Coast Guard Maritime Museum, the Glen Haven historic village, the Little Glen Picnic Area, D.H. Day Campground, the Heritage Bike Path, various hiking trail systems, and convenient access to Lake Michigan beaches, Glen Arbor Township is a very attractive destination for visitors.

The northeastern portion of the Township encompasses the settlement district known as the Port Oneida area, which is unique from the western areas of the Park. Port Oneida is typified by a rural landscape that hosts several old farmsteads. See Map 3-4. The Park's goal for management in this portion of the Township is to maintain the pastoral setting and interpret early settlement of the area. To the east, an area encompassing approximately 600 acres is known as the Miller Hill Resource Preservation Area.

Photo 3-1
Sleeping Bear Dunes

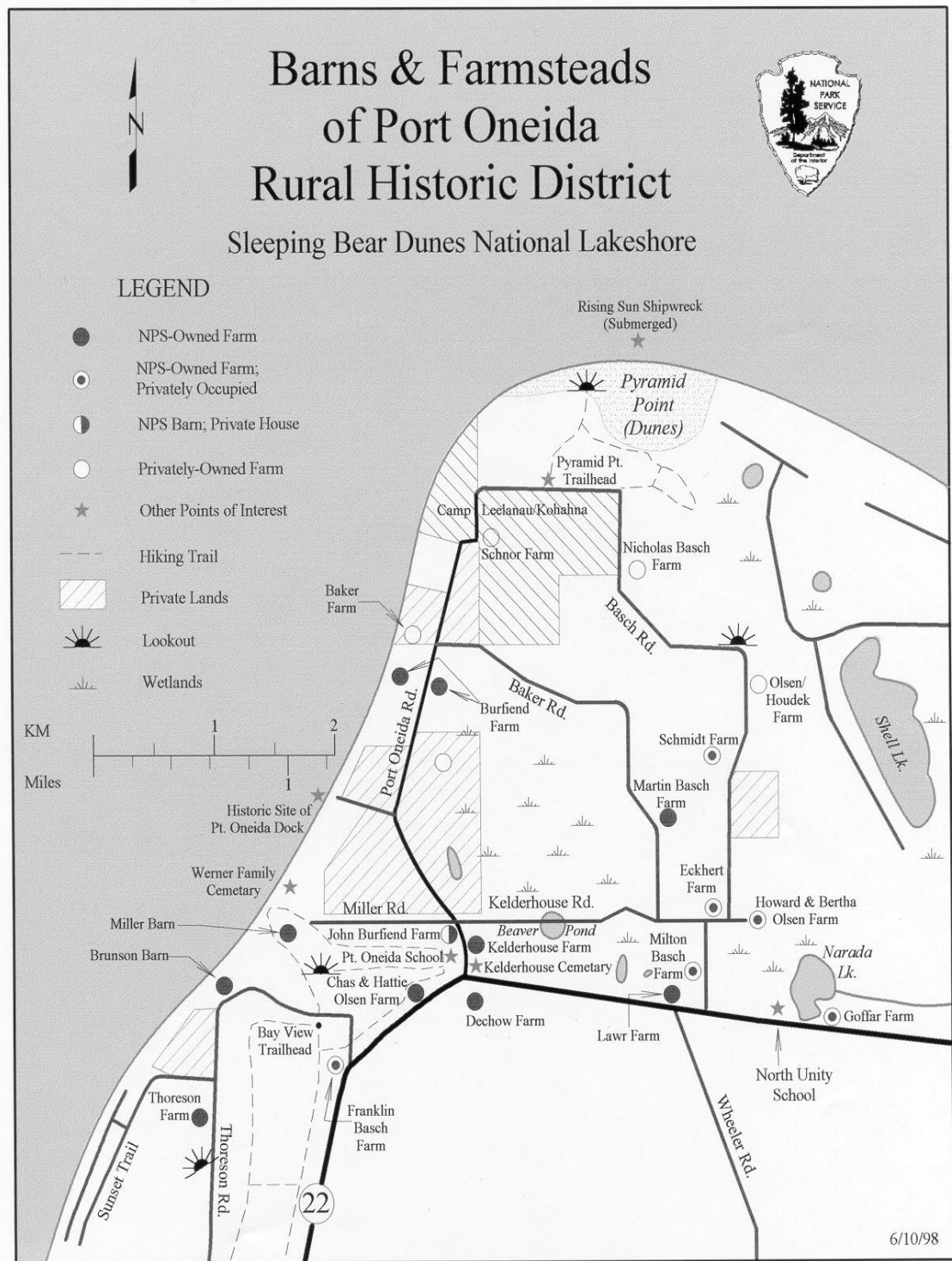


Photo by Mark Wyckoff

Map 3-3 Sleeping Bear Dunes National Lakeshore



**Map 3-4
Port Oneida Rural Historic District**



Source: National Park Service.

Glen Lake

Glen Lake is a large inland lake with an area of 1,450 acres. Aside from Lake Michigan, it is the predominant hydrologic feature in the Township. Glen Lake is unofficially divided into Little Glen and Big Glen Lakes, connected via a small channel known as The Narrows under M-22. Big Glen Lake is deeper than Little Glen, but both lakes host a variety of fish and are mostly surrounded by single-family residential development.

Water in Glen Lake is clear and clean; however, non-native invasive species remain a concern for the health of a lake ecosystem. The introduction of such species can alter the balance of plants and animals in the lake, causing a decline in desirable species and sometimes negatively affecting recreational activity in the lake.

Studies have been undertaken with regard to the health of Glen Lake. Clearly, the health of Glen Lake is a priority for Glen Arbor Township.³

Photo 3-2 Big Glen Lake from Inspiration Point



Photo by Mark Wycoff

³ The Glen Lake Association and the Leelanau Conservancy developed a watershed management plan for the Glen Lake/Crystal River watershed in 2002 and updated the plan in 2009. The plan was reviewed and accepted by local governments and the Michigan Department of Environmental Quality. This latter step qualifies the area for Clean Michigan Initiative (CMI) funding to implement portions of the plan. The Glen Lake/Crystal River Watershed extends into four communities: Glen Arbor Township, Cleveland Township, Empire Township, and Kasson Township. The plan includes information on pollutants and fisheries management, provides milestones to guide the plan implementation process, and sets forth standards to evaluate the plan's effectiveness.

Crystal River

The Crystal River is a pristine stream that winds from the north end of Fisher Lake (attached to Big Glen Lake) through wetlands, a dune and swale area, and woods to discharge into Lake Michigan within The Homestead Resort. It is a popular canoeing and kayaking stream. It is visible within Glen Arbor Village and along portions of M-22 and County Road 675.

The dune and swale complex along the Crystal River is an important and sensitive ecosystem and one of the highest quality of such complexes in Michigan. The National Park Service has noted the importance of this habitat along the Crystal River for wildlife. The dune/swale complex is located wholly within Glen Arbor Township.

Photo 3-3
Crystal River



Photo by Terry Gretzema

Soils with Limitations for Septics

Large areas of the Township have soils that pose problems for septic systems and residential development. This is due to a combination of factors, including highly permeable soils that permit septic waste to infiltrate to the groundwater without adequate soil filtration and high groundwater from steep slope runoff.

Some areas of the Township depicted as having slight limitations for septic systems have actually developed severe limitations due to the concentration of septic systems on small lots and because ground water is close to the surface. This is especially true in part of the Village of Glen Arbor.

Wetlands

The Wetlands Map (Map 3-5) shows wetland areas that serve to provide wildlife habitat, stormwater storage, water quality improvement, natural scenery, and other benefits. Generally, these areas exhibit severe limitations for the use of individual waste disposal systems. Many of the wetlands are located along the Crystal River, although there are isolated wetlands elsewhere in the Township. See Photo 3-4.

Hydric soils are also identified on Map 3-5. These are soils that have formed in the presence of water for sustained periods. They can be used to help locate wetlands, especially those that have been disturbed or altered by fill or excavation. Hydric soils are unsuitable for development and are an indicator of high groundwater levels.

Map 3-5 Wetlands

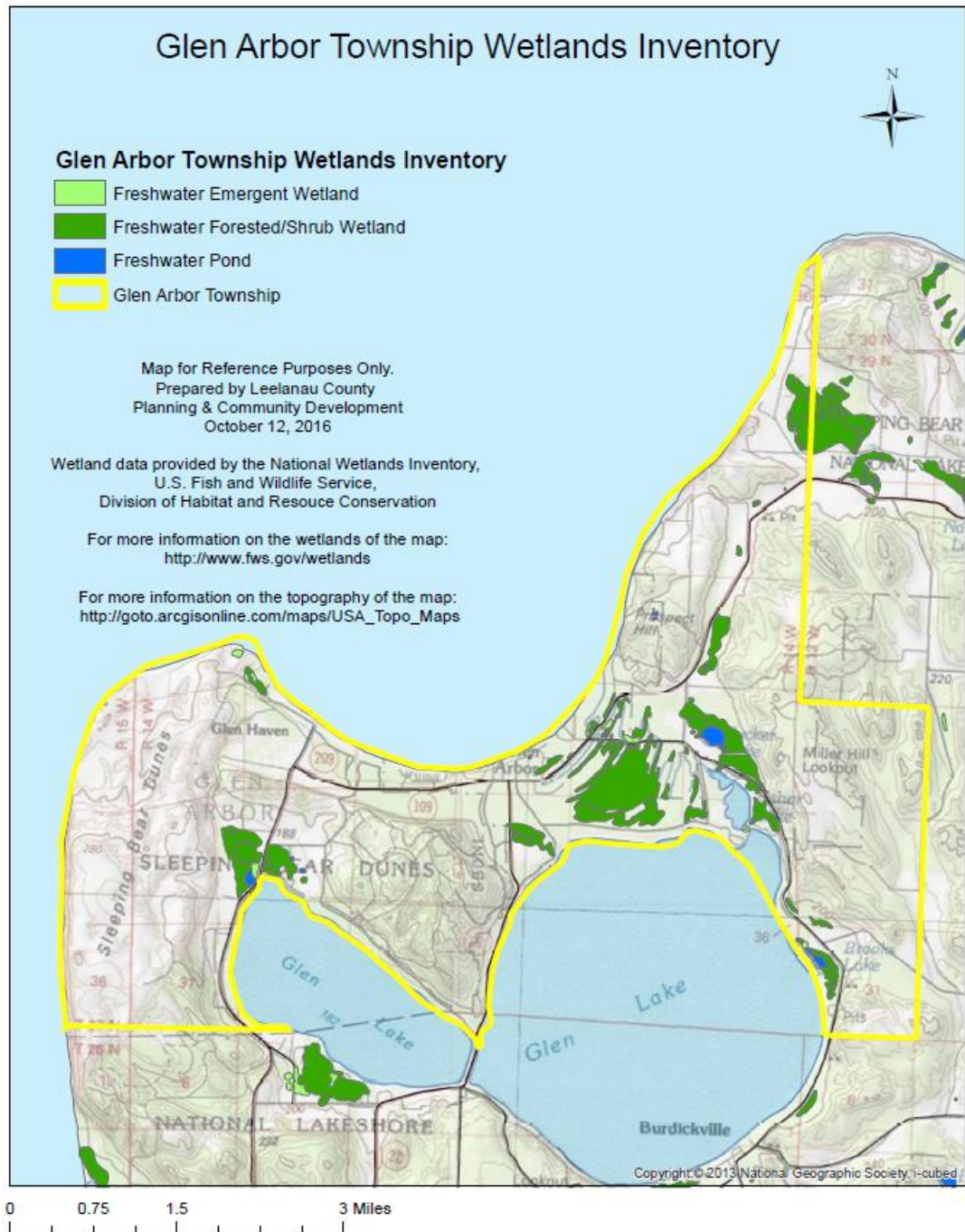


Photo 3-4
Wetlands Along the Crystal River



Photo by Mark Wyckoff

Nearly all of the Township land is wooded. This is a characteristic that residents want to maintain and doing so will require efforts to preserve mature trees and the planting of new trees as the primary landscape treatment in areas cleared for development or damaged from the August 2, 2015 storm.

Also of significance, from a planning standpoint, are those open areas that are not covered by woodland vegetation because they could be developed for relatively intensive uses without seriously affecting wooded characteristics. Development in open areas, however, would be highly visible and could detract from the character of the community if not developed in a sensitive manner or screened by thick vegetation. An advantage of the open areas in private ownership is that they could be used for onsite sewage disposal without the necessity of clearing trees.

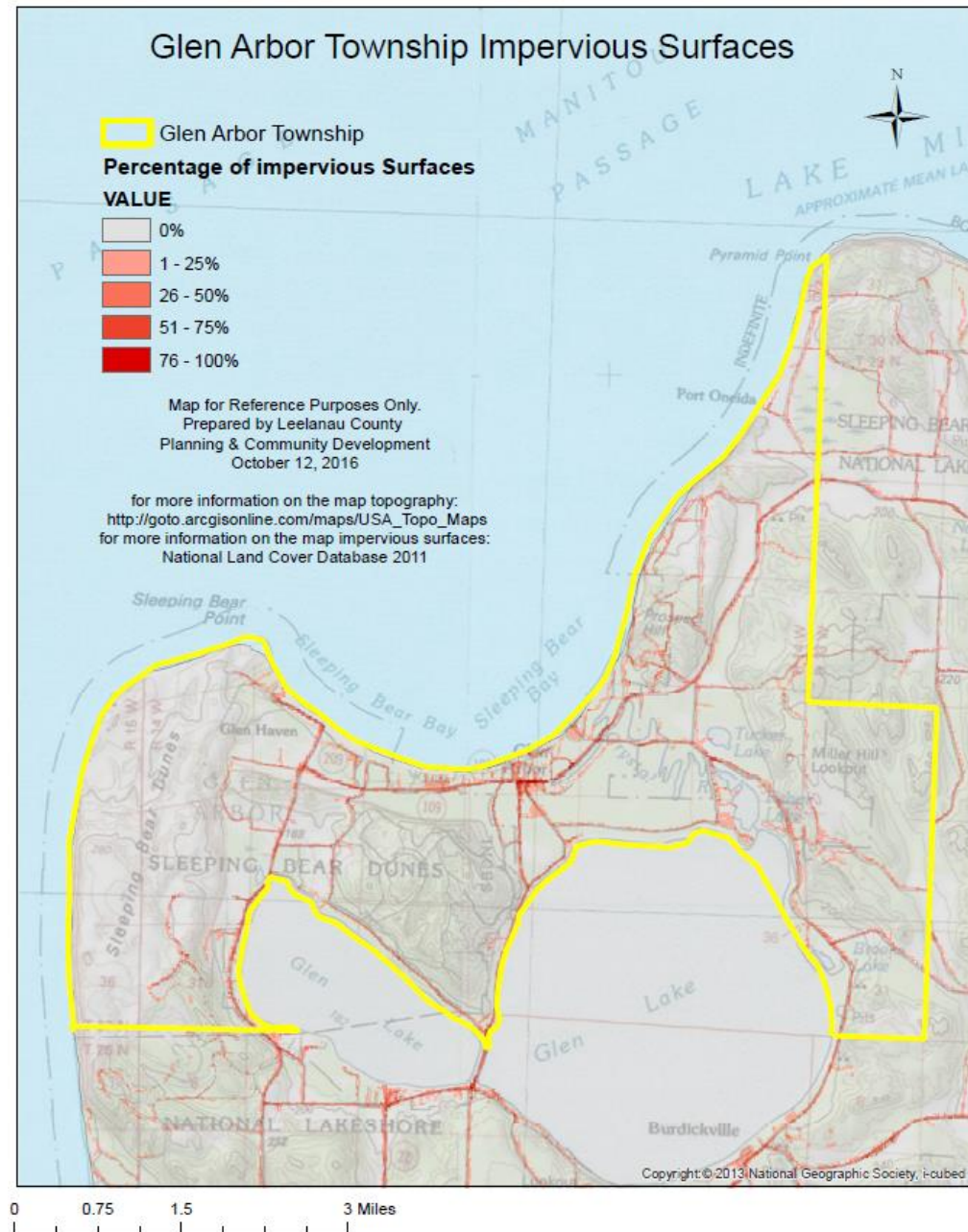
Impervious Surfaces

One of the emerging areas of scientific interest in the control of nonpoint-source pollution (NPS) is the detection and analysis of impervious surfaces within watersheds. NPS runoff from urban surfaces is now a leading threat to water quality, and the percentage of impervious surface within a particular watershed has been recognized as a key indicator of the effects of nonpoint runoff and of

future water and ecosystem quality (Arnold and Gibbons, 1996; USEPA, 1994). The imperviousness issue has even been suggested as a unifying theme for the overall study of watershed protection (Schueler, 1994) and as part of an urban ecosystems analytical model (Ridd, 1995).

Impervious surfaces can be generally defined as any material of natural or anthropogenic source that prevents the infiltration of water into soil, thereby changing the flow dynamics, sedimentation load, and pollution profile of storm water runoff.

Map 3-6 Impervious Surfaces



Coastal Hazards

Flooding

According to the Federal Emergency Management Agency (FEMA), the entire Lake Michigan shoreline in Glen Arbor Township is in a flood zone. It extends from about 50 feet to 125 feet inland from the shoreline. Most of this is beach. There are no other flood-prone areas identified in the Township.

Shoreline flooding occurs most often when Lake Michigan water levels are high. This is a natural, periodic occurrence. In areas where there are bluffs, there may be little or no usable beach. Flooding is most likely to occur during high Lake Michigan levels when there are severe storms or seiches (sudden rises of up to several feet in water level due to wind or changes in atmospheric pressure). In order to protect both privately owned structures and public health and safety, restrictions apply to structures and septic systems placed within the flood zone. FEMA maps are periodically updated and can be viewed online at <http://msc.fema.gov/portal/search?AddressQuery=Glen-Arbor-MI>

High Risk Erosion Areas (HREA)

Eroding areas of the Lake Michigan shoreline are addressed in Part 323, Shorelands Protection and Management, of the Natural Resources and Environmental Protection Act, PA 451, as amended. The Michigan Department of Environmental Quality has prepared maps that identify Lake Michigan shoreline areas that are susceptible to erosion. These maps are based on a variety of factors, primarily past erosion history. The only area in the Township that has a HREA zone identified on the shoreline is an approximately one-half mile segment of shoreline with single family homes between The Homestead Beach Club and the Sleeping Bear Dunes National Lakeshore property along Sunset Shores Drive. Within this area, minimum setbacks for 30 years of protection are 55 feet and for 60 years 95 feet. Local governments can assume permitting authority (instead of the MDEQ) for development in HREA zones, if the local ordinance is approved by the MDEQ.

Critical Sand Dunes

Michigan is home to the largest assemblage of fresh water dunes in the world. They support diverse habitats, including forests, interdunal ponds, and open dunes. The Sand Dune Protection and Management Act (Part 353, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended) was passed to help protect these resources. As a result of the Act, Critical Sand Dunes were mapped in order to identify areas requiring protective regulation and permits for development. Glen Arbor Township would have the opportunity to assume local permitting authority for Critical Dunes through amendments to the Zoning Ordinance, except that the only area with Critical

Dunes in Glen Arbor Township is within Sleeping Bear Dunes National Lakeshore. The National Lakeshore is already active in protecting the dunes.

Development in Glen Arbor Township

Lakefront Development

Most of the Township's frontage on Glen Lake has already been developed and consists of both year-round and seasonal homes. Three marinas serve the lake: one at the south end of Lake Street, one at the head of the Crystal River (not a full service marina), and one at The Narrows. There are several lodges, cottage resorts, and a public access point west of M-22 on Day Forest Road. Lakefront lots are characterized by 100 foot widths with varying depths to adjoining access roads that parallel the shorelines. Lots are very shallow between M-22 and Glen Lake. In some areas, the cottages are clustered and do not all have direct lake frontage, a characteristic of some of the older areas. Such conditions are most prevalent near The Narrows, at the western edge of the lake, and to some extent near Fisher Lake.

The character of development on Glen Lake has changed in recent years. Smaller homes and cottages have been converted to very large homes, many that can house multiple families at once. This has limited the views of the water from the road and adjacent lots, and it has intensified the activity level on the lakeshore.

The Homestead Resort

The Homestead is a resort/residential community located in Glen Arbor Township on approximately 500 acres of heavily timbered land with about a mile of beach frontage on Lake Michigan. It includes condominiums, site condominiums, lodging units, restaurants, conference centers, and recreational complexes. The facility is the largest single employer and taxpayer in the Township.

The Leelanau School

The Leelanau School is a private college preparatory high school, which has operated in the Township since 1929. It is located on 42 acres adjacent to and southwest of The Homestead, and together they form an important activity center north and east of the Village area. The school campus also contains a greenhouse and the Lanphier Observatory.

Historic Sites

Many sites have been identified in Glen Arbor Township as having historic significance. The sites have been identified from the Inventory of Michigan's 1975 Historic Preservation Plan and various written material regarding the history of Glen Arbor Township and state and federal online historical references. The Township should continue to encourage the preservation of historic buildings and sites.

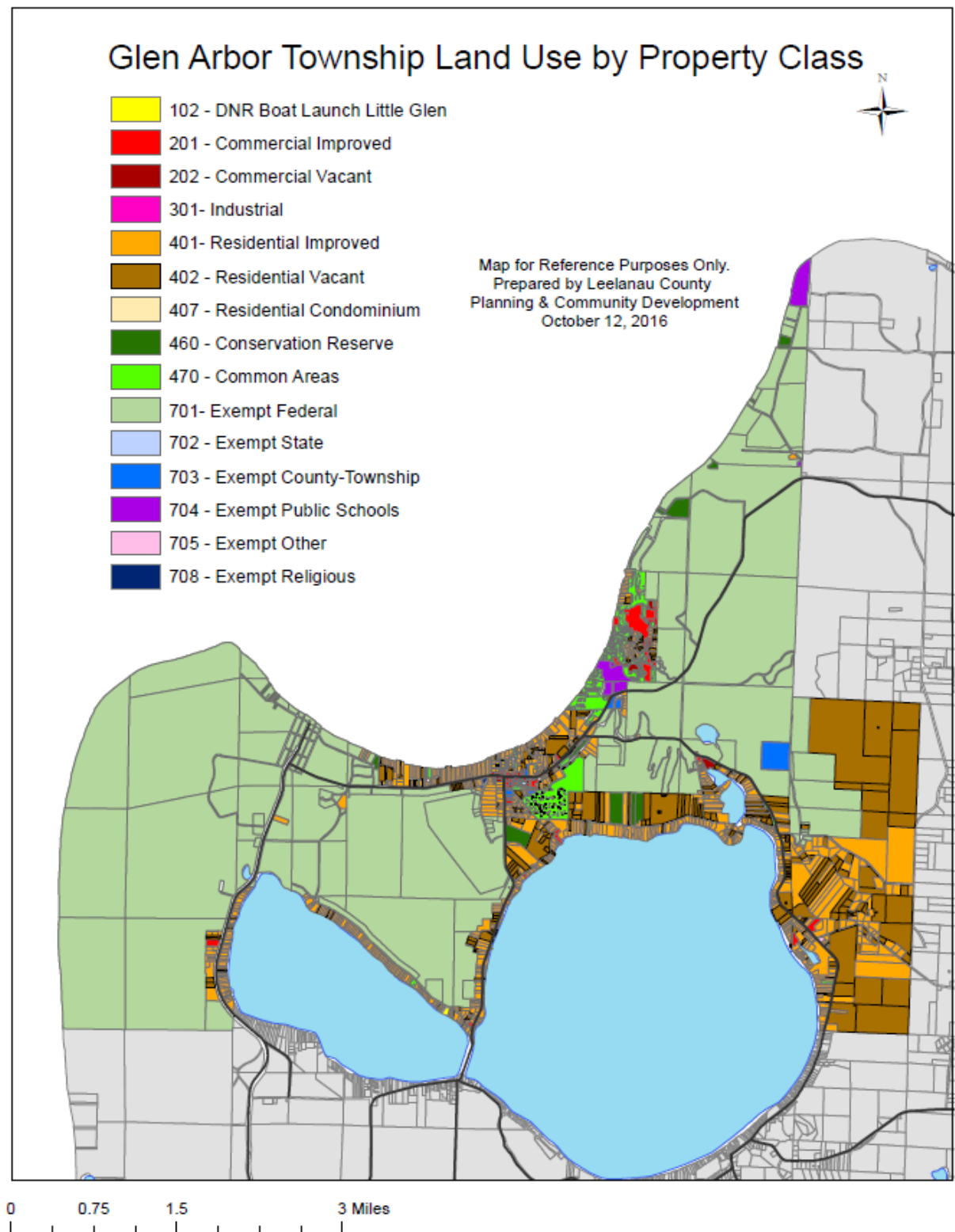
Glen Arbor Village

The Village is the business and governmental center of the Township and includes two churches and numerous small businesses. The Village is not incorporated, so it is a part of Glen Arbor Township. There is a small park that includes the Township tennis courts, basketball court, and children's playground. The Township provides public restrooms in a garden setting as a service to visitors in the business district.

There is variety in the type and visual character of the buildings in the Village. There are residences, businesses, and a few governmental facilities. The Township Hall, post office, and fire and rescue department are also located in the Village, as are several historic buildings. Architectural styles in the Village include many older, rustic buildings as well as newer buildings having more traditional American designs. Previous planning efforts have indicated that the public prefers new buildings to have a "northwoods" or traditional American character. Although it is the center of activity in the Township, the Village remains heavily wooded, and the preservation of this characteristic is important to maintaining the charm and northern Michigan character of the community.

Glen Arbor Township's large seasonal population has a significant effect on the Village. In the summer months, the Village is often congested as the population increases significantly. In the spring and fall, there is less activity, but tourism during these shoulder seasons is becoming increasingly stabilized. Winter tourism is also increasing, especially during the holidays and long holiday weekends.

Map 3-7
Existing Land Use Village of Glen Arbor, 2016



Planning Implications and Issues

There are several planning issues pertaining to the natural environment and development that will affect the long-term future of Glen Arbor Township:

- Glen Arbor Township is unique in that most of the land in the Township is unbuildable and therefore remains in a natural state. The Sleeping Bear Dunes National Lakeshore and Glen Lake occupy the vast majority of land in the Township and, given the Township's hilly terrain, form some of the most breathtaking views in the region. Care must be taken to carefully govern what development does occur in the Township. Planning and zoning policies should encourage, in a reasonable manner, maintenance of the wooded areas, the ground water, water quality in lakes and rivers, the wetlands, and the dune areas, both as ecosystems and as important scenery.
- Glen Arbor Township will forever have the majority of its natural landscape preserved in the National Lakeshore. If residents want to retain nature in the privately owned areas, to protect water quality of the lakes and rivers, and to sustain wildlife populations as part of the nature experience, then they will have to be diligent in caring for the pure water and plant and animal ecosystems in the Township. The Township should continue to foster and maintain positive ongoing relationships with the Glen Lake Association, the Leelanau Watershed Council, various conservancy groups, and others who are dedicated to monitoring the quality of Glen Arbor Township's natural resources.
- Like most water features, Glen Lake and Lake Michigan have attracted development over the years, and Glen Lake is mostly surrounded by residential development. However, great care must be taken to ensure that development does not begin to degrade the natural features that attracted it in the first place. The Township must remain vigilant in protecting the water quality in the lakes. Reducing fertilizer use and working to combat invasive species are methods that can maintain the pristine water quality of the community.
- Most commercial development in the Township is in the Village of Glen Arbor, and past studies and plans have revealed that many residents prefer the rustic charm and small-town character of the Village area. As with other development in the Township, it is important that great care be taken in preserving the atmosphere of the Village to ensure it remains a popular destination for both residents and visitors.
- Seasonal parking is a concern in the business district of Glen Arbor Township during the peak tourist season. While it may be appropriate for the Township to construct additional parking lots, it should not be at the expense of quality development. It is possible that small expansions or reconfiguration of off-street parking lots can add additional spaces,

and there may be additional parking available on local streets. These are options that should be explored before acquiring new properties for parking. With so little land available for new commercial or residential development, utilizing high quality real estate near downtown Glen Arbor is not an efficient or economically responsible use of land and should be considered only once all other options have been exhausted.

CHAPTER 4 PUBLIC PLACES AND SERVICES

This Chapter discusses the community facilities, schools, utilities, and transportation system of Glen Arbor Township. It looks at present conditions and future needs.

Township Hall

The Township Hall is located at 6394 West Western Avenue (M-22) midway between Lake and Oak on the north side of the street. See Photo 4-1 and Map 4-1. The building also contains an historic gymnasium, a stage, and a kitchen. The facility is used for a variety of activities.

The Township Board is composed of five trustees and meets regularly on the third Tuesday of each month. The Township Board is the elected, governing body of Glen Arbor Township that adopts ordinances and manages the operations of the Township. The Township Planning Commission has seven members and meets monthly. The Planning Commission is an appointed group responsible for advising the Township Board on planning and zoning issues and administering land use regulations for the Township.

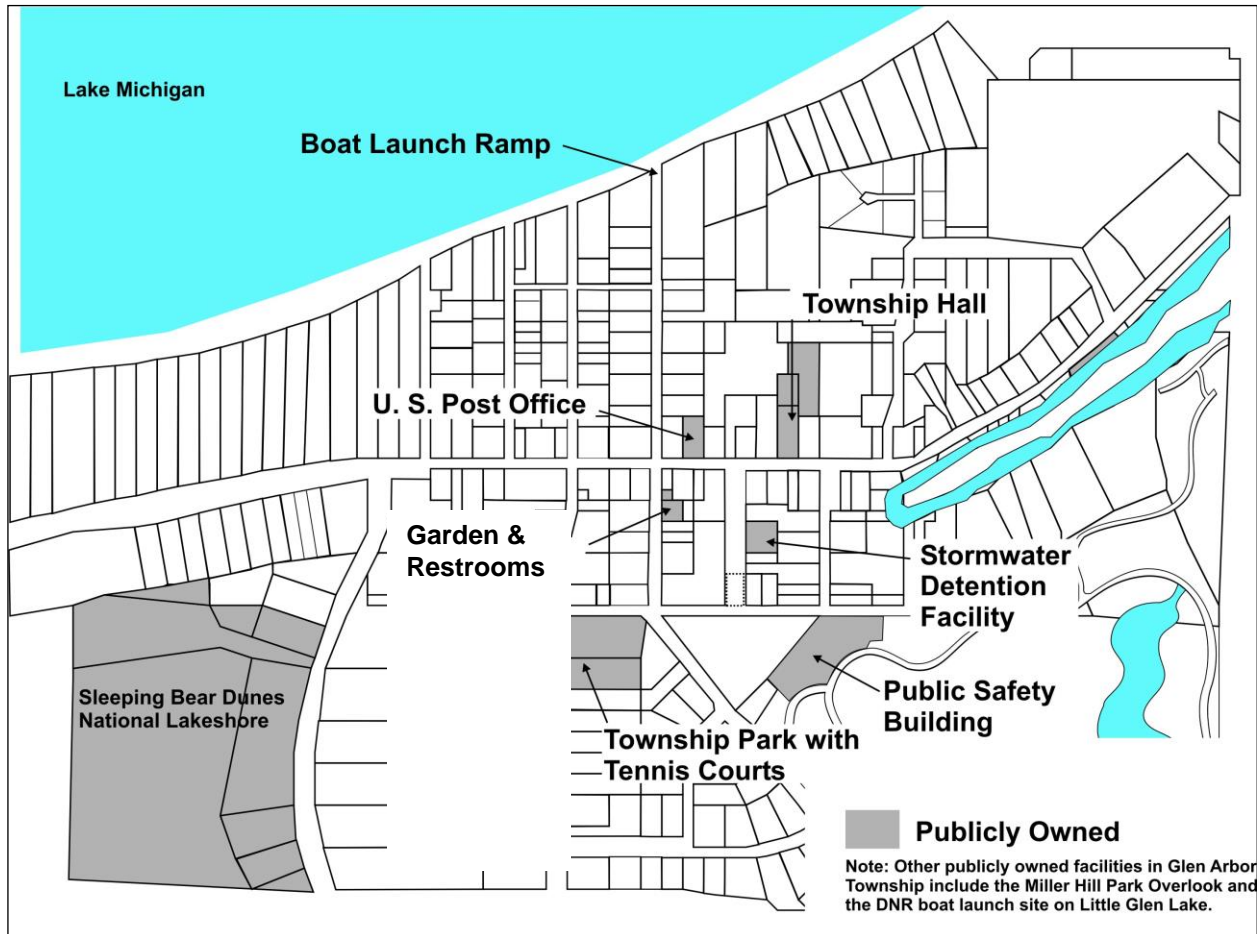
**Photo 4-1
Glen Arbor Township Hall**



Photo by Terry Gretzema

Located behind the Township Hall is public parking that is used seasonally for tourists, as well as for any other events. Weekly, during the summer, this parking lot is turned into a farmers market.

Map 4-1 Township Buildings and Recreation Facilities in Glen Arbor*



Graphic by John Warbach, Planning & Zoning Center, Inc.

Public Utilities

There are no public water or sewer utilities in Glen Arbor Township. Natural gas and electricity are provided by private companies. More specifically, natural gas is provided by Detroit Edison, and Consumers Energy provides electricity to residents, businesses, and institutions in the Glen Arbor community. Century Telephone and Ameritech provide local landline phone service, as well as

* The U.S. Post Office building, which is depicted on Map 4-1, is privately owned and leased to the U.S. Postal Service.

Internet. Internet and cable are provided by Spectrum Communications, Inc. Fiber optic service is available.

When the Township explored the placement of a public sewer system, numerous challenges were revealed. One challenge was the high capital and maintenance costs of operating such a system, which would be levied on property owners. With the Township's small population, the operation of a public wastewater system could result in high fees for the end users. Furthermore, additional challenges were discovered relative to the placement of a wastewater treatment plant due to (1) the limited amount of suitable undeveloped land in the Township and (2) the ecological sensitivity of such lands.

Fire, EMS, and Rescue Services

The Glen Arbor Fire and Rescue Department, which operates as The Glen Lake Fire and Rescue Department (the Department), is a 24-hour a day, seven days a week service, staffed by a full-time chief and full-time core members, supplemented by a small contingent of part-time personnel. The Department operates from two stations: the Public Safety Building in Glen Arbor and the fire station in Empire. The Department provides many emergency services, including high-angle rescue at the Dunes and various services on Glen Lake and Lake Michigan, as well as surrounding properties, often in coordination with the U.S. Coast Guard. The Department has a fire boat for water rescue.

The Department participates with, and provides assistance to, other county fire departments under a mutual aid agreement. Public education programs and CPR classes are made available to the public throughout the year.

Glen Arbor Township does not have a hospital. Munson Health Care, based in Traverse City, is the major healthcare provider for Leelanau County. The Paul Oliver Memorial Hospital, which is now part of Munson Health Care, is located in Frankfort, Michigan. A family doctor, a dentist, and a pharmacy are located in Empire.

Photo 4-2
Glen Arbor Public Safety Building



Photo by Terry Gretzema

Public Safety

The Leelanau County Sheriff's Office provides 24-hour law enforcement to 11 townships and three villages, including Glen Arbor Township. Park Rangers work closely with the Leelanau County Sheriff's Department and provide emergency assistance to county officers when requested. The Marine Safety Unit of the Sheriff's Office patrols the waterways within Glen Arbor Township and Leelanau County. This unit also responds to distress and emergency calls.

The Township is located within the Michigan State Police's Seventh District. The community is served by the Michigan State Police post located in Traverse City.

Parks and Recreation

Glen Arbor Township's location amidst the Sleeping Bear Dunes National Lakeshore provides numerous recreational opportunities to seasonal and year-round residents and tourists. Activities such as camping, fishing, hiking, biking, skiing, and golfing are all readily accessible within the community. During the summer months, hundreds of thousands of seasonal residents and tourists flock to the area to take advantage of its intrinsic natural beauty and recreational opportunities. The Township last adopted a Community Recreation Plan in spring 2014. Additionally, the Township has begun exploring ways to enhance the Glen Arbor Township Park facilities.

Recreational facilities include:

- Glen Arbor Township Hall Gymnasium: Contains event and center stage, indoor basketball court, and restroom facilities.
- Glen Arbor Township Park: Contains a basketball court, four tennis courts, and a children's play area with a variety of playground equipment. The Township is seeking to enhance and improve this park.
- Glen Arbor Boat Ramp: Boat launch located on Lake Michigan.
- Beach Facilities: Beaches are located on both Lake Michigan and Glen Lake and provide limited parking. The National Lakeshore includes beach facilities with adequate parking.
- Crystal River Canoe Access: A narrow strip of land from the road to the water, accessed off Fisher Road near County Road 675 at the Crystal River dam. Two privately owned canoe outfitters rent canoes, kayaks, and bicycles.
- Little Glen Lake Access at The Narrows: Small beach with large amounts of poison ivy. This is a narrow strip of land from the road to the water.
- Miller Hill Lookout Park: A small, undeveloped park at the slope of Miller Hill and the power lines.
- Sleeping Bear Dunes National Lakeshore: 26 square miles of National Park containing a campground, numerous historic buildings, a maritime museum, a dune climb and scenic drive, cross-country and snowshoe trails, canoeing and fishing opportunities, and a visitor's center.

Golf Courses

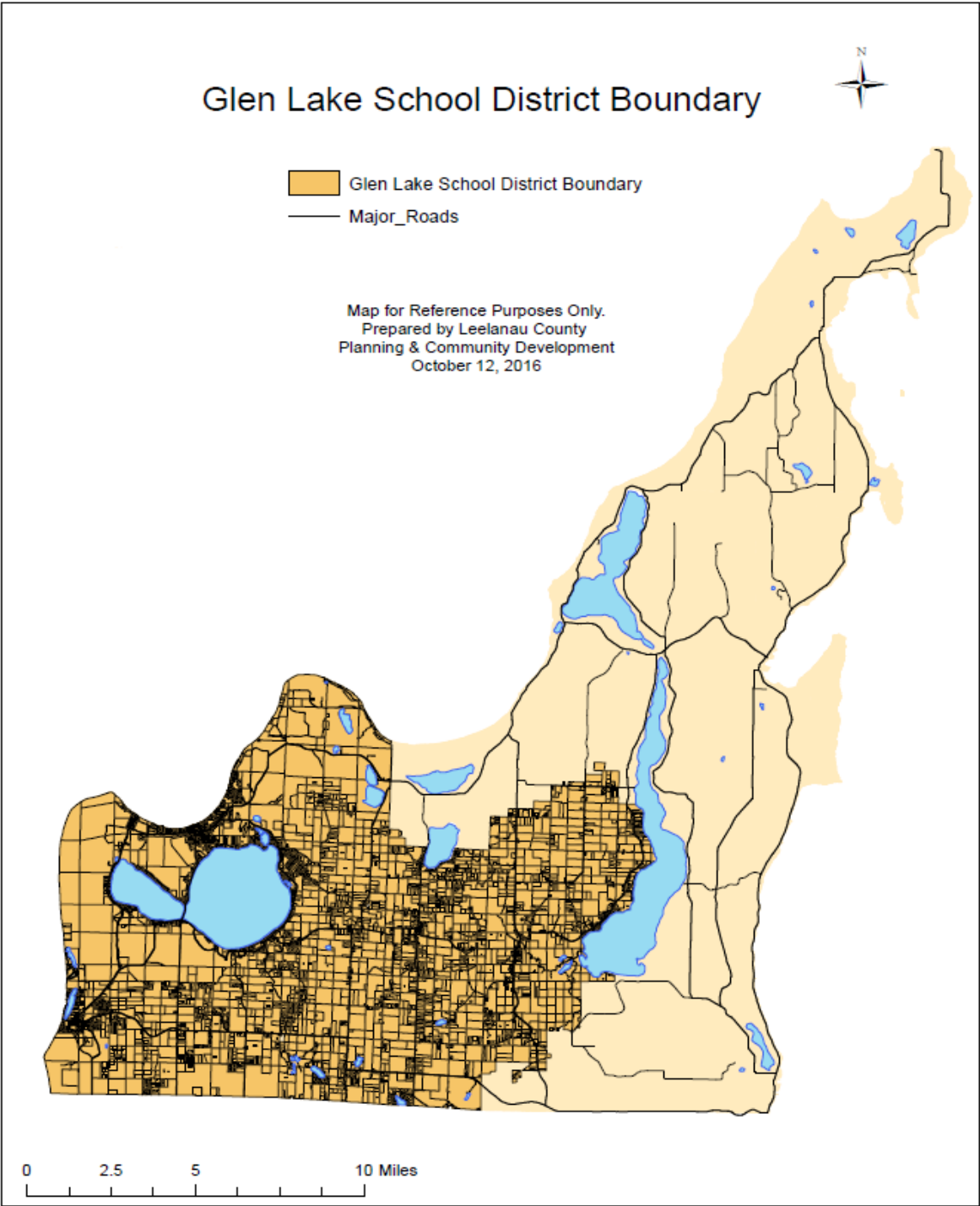
Golfers in the Glen Arbor Township community have access to several golf courses within Leelanau County. Within Glen Arbor, golfers need to look no further than The Homestead Resort, which features a private 9-hole course that is unique in that the golf facility shares the same area as the ski layout during the changing seasons. The Homestead is a par 3 course with a hilly design and an abundance of trees. The variable elevation provides beautiful views of Lake Michigan, Manitou Passage, and North and South Manitou Islands. There are several other courses within a short drive of Glen Arbor Township that are available to the public.

School System

Glen Arbor Township is served by the Glen Lake Community School District, part of the larger Traverse Bay Area Intermediate School District. Glen Lake Community Schools encompass 200 square miles and serves eight townships. Glen Lake Schools have a district-wide enrollment of approximately 930

students. See Map 4-2. Presently, Glen Lake Elementary School educates students in grades kindergarten through fifth grade. Glen Lake High School, which also houses the middle school, has grades six through twelve. All Glen Lake schools and accredited by AdvanED.

Map 4-2 Glen Lake Community School District



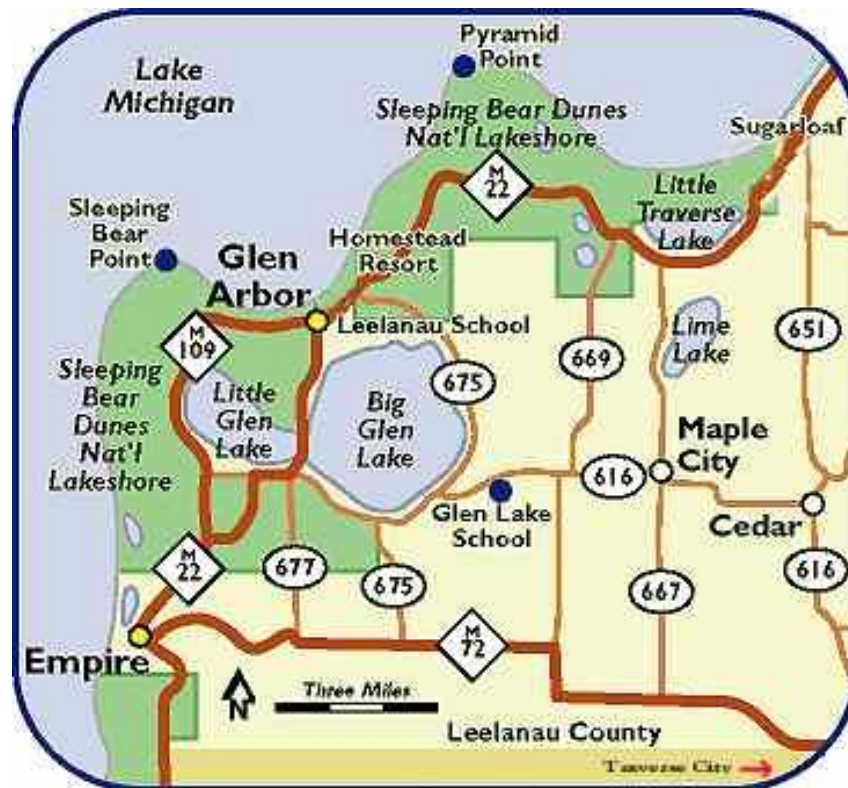
Library

The Glen Lake Community Library has served Glen Arbor, Empire, and Kasson Townships since 1977. In 1983, the library moved into the former Empire Fire Hall, which was completely renovated. The library offers an extensive collection, and it provides public computers with high-speed internet access, as well as information materials and services to all community residents and visitors on an equal, publicly funded basis. A board of trustees, composed of residents from all three townships, governs operational and financial matters.

Highways

Glen Arbor Township is served by two state trunklines, M-22 and M-109. M-22 is designated as the major access route into the Township. It passes along the west side of Big Glen Lake and across The Narrows. The winding road along Glen Lake is tree-lined, although many trees were lost in the storm of August 2015, especially along the section of M-22 entering Glen Arbor. The Narrows is a congregating place for visitors who like the view, for fisherman off the bridge, and for customers at the marina. This attraction sometimes creates hazardous traffic situations. Map 4-3 depicts the system of roads in Western Leelanau County.

Map 4-3 Roads in Western Leelanau County



M-22 serves as both a major transportation artery for the County and as a corridor for viewing some of the country's most scenic vistas. As such, MDOT has designated M-22 and M-109 as a Scenic Heritage Route. The Heritage Route program was initiated through legislation in 1993 and emphasizes cooperation among local residents, their government officials, landowners, and interested groups to preserve unique scenic, historic, or recreational highways. The Scenic Historic Route designation ensures that the rural character of Leelanau County is preserved and that the inherent qualities of the peninsula continue to be showcased.

In 2002, MDOT helped secure funding from the U.S. Department of Transportation to designate M-22 in Leelanau County as a National Scenic Byway. National Scenic Byway funds enable states to embark on eligible projects along highways designated as National Scenic Byways and state-designated byways.

M-22 is an arterial road, while M-109, Glen Haven Road (former M-209), and County Road 675 are connector roads. All other public roads are local streets. There are also many private roads that provide access to property. M-22 and M-109 are maintained by MDOT, while all other public roads in the Township are maintained by the Leelanau County Road Commission.

Traffic Counts

By most traffic engineering standards, traffic, even during the peak summer months, is limited. That does not mean, however, that residents are not sensitive to it nor concerned about it. The biggest concerns are on M-22 from The Narrows to Glen Arbor where many homes are very close to the road and there is often little road shoulder. Similar concerns exist along M-109 on the west end of Little Glen Lake where most homes are set farther back but speeds are higher. As with many of the challenges in Glen Arbor Township, traffic congestion is generally viewed as a problem mostly in the summer, when seasonal residents and tourists flock to the community.

Non-motorized Trails

The Sleeping Bear Heritage Trail (SBHT) is a hard-surfaced multi-use trail paralleling M-22 and M-109. Once fully completed, it will stretch for 27 miles from Empire, through the Sleeping Bear Dunes, Glen Arbor, and end at Good Harbor Bay, between Glen Arbor and Leland. The SBHT provides walkers, runners, wheelchair users, bicyclists, cross-country skiers, and rollerbladers a safe, enjoyable, and carefree way to access and explore the Lakeshore and neighboring communities. See Map 4-4.

There are no other non-motorized trails in the Township, although the most recent Recreation Plan (2014) recommends the development of a “system of

non-motorized paths which will link the Township to adjacent communities as well as linking the Township's residential areas with parks, commercial centers and waterways."

Map 4-4 Sleeping Bear Heritage Trail



Planning Implications and Issues

- The Township has abundant recreational opportunities nearby that attract hundreds of thousands of residents and visitors to the community each year. Maintaining and enhancing recreational opportunities should remain a priority, including improving the Glen Arbor Township Park facilities.
- Water and sewer utilities are not present within the Township, and it is unlikely that such utilities will become available in the short term. This has the effect of limiting the intensity of development that can be located in the Township. Onsite parking requirements in the business district further limit options of business owners. Additional parking areas could be pursued using road right of ways throughout the Village.
- The road network in the Township is unlikely to see significant changes due to the limitations in development and the limited amount of land available.

The development of the Sleeping Bear Heritage Trail is a positive step in the development of a non-motorized trail network serving Glen Arbor and surrounding townships. The SBHT, however, has exacerbated congestion in the Village during the summer months. Finding alternate routes through the Village should be a priority.

CHAPTER 5 FUTURE LAND USE PLAN

The future land use plan is a compilation of descriptions and recommendations for future development and conservation in Glen Arbor Township. Along with the zoning plan in Chapter 7, it serves as an overall framework for the management and regulation of future development and as the basis for evaluating rezoning requests.

Community Character

Glen Arbor Township is a community with unparalleled northwoods character, although that character is quite varied in different parts of the Township. A primary purpose of the Glen Arbor Township Future Land Use Plan is to provide guidelines for the treatment of the areas of the Township that have varied characteristics. The orientation of the Plan is toward maintaining these characteristics rather than to accommodate significant potential development, as is the case with most local land use plans. Glen Arbor Township is the site of unique characteristics, which must be valued, or disturbed as little as possible, in order to sustain the basic attributes that make the Township a highly desirable place to visit and in which to live. This Plan provides the basis for maintaining the outstanding natural features of the Township, while accommodating future development. That means that when development does take place, it should be done with great concern for the natural and cultural features of the Township, both public and private, that make the Township unique. Success will mean that both the existing generation and future generations will be able to enjoy the natural landscape and other amenities of the Township.

Community Character by Subarea

One of the most fascinating and enjoyable aspects of Glen Arbor Township is the beauty that its varied topography and waterfront lands offer. When the sun shines, few other places in the world offer as much splendor. Many of the spectacular scenic views available in the Township are captured in photographs used throughout this Plan. Following is a brief description of the Township by subarea. First the existing character is described, then observations are made about how that character should be maintained as change occurs in each subarea.

M-22/M-109/675 Corridors

The overwhelming bulk of what residents and visitors to Glen Arbor Township see of the Township is from the major public roads. Only a small number of people have seen the Township from the air, or by boat in Lake Michigan or Glen Lake.

M-22 at the south end of the Township winds from a marina and small resorts at the Narrows Bridge into the Village. It is an elevated residential corridor with a mixture of cottages and year-around homes under a tree canopy, which was altered by the August 2, 2015 storm, with frequent views of Big Glen Lake. Alligator Hill frames this corridor, as well as the homes along Day Forest Road on the north side of Little Glen Lake. The primary changes in this subarea are likely to be continued replacement of cottages and smaller homes with larger, year-around homes. There is a strong desire to maintain existing vegetation, especially the tree covered highway as this development occurs.

Where M-22 meets M-109 is the heart of the Village of Glen Arbor. The Village is a small tourist-oriented, northwoods town. (A separate description of the Village is included in this Chapter.)

On the east side of the Village, M-22 winds past the entry to the Leelanau School and The Homestead Resort, before passing under a canopy of trees that serves as a passage into the historic agricultural area known as Port Oneida. This area is largely in National Park ownership, and efforts to maintain its rural agricultural character and heritage are well underway. It is desired that these efforts be maintained and expanded, if feasible, to ensure its character and heritage are preserved for the benefit of future generations.

M-109 on the west end of Little Glen Lake winds north past the Sleeping Bear Dune Climb area, perhaps the best known natural feature in the Township. It also goes past the historic D.H. Day Farm almost into Glen Haven and then turns east along nearly flat terrain into the Village. The few privately owned parcels along this corridor are concentrated on both sides of M-109 along the west end of Little Glen Lake and as one gets closer to the Village, along Lake Michigan. Again, the primary changes in this area are likely to be continued replacement of cottages and smaller homes with larger, year-around homes. The few undeveloped lots are likely to be developed over the next 20 years. There is a small motel, which is the only nonresidential property in this area.

Eastbound County Road 675 from M-22 provides stunning views of the clear shallow waters of the Crystal River. The sandy bottom and varied vegetation along the river are easily viewed from the road and the many river crossings that exist between M-22 and Fisher Road. Only a few private structures remain along this segment. At Fisher Road intersection, there is a private marina located at the headwaters of the Crystal River and Fisher Lake, which is linked to Big Glen Lake. From Fisher Road to the south end of the Township on 675 is

a mixture of tree-covered roadway, waterfront residences with occasional views of Glen Lake and short strips of second-tier residences. There is also a motel and restaurant on the east side of the road. Again, the primary changes in this area are likely to be continued replacement of cottages and smaller homes with larger, year-round homes. The few undeveloped lots are likely to be developed over the next 20 years.

Much of the undeveloped land for residential lots in the Township is second tier, *i.e.*, the land is not on the waterfront side of the road; rather it is on the other side of the road. For example, there are a number of lots along M-109 west of the Village and along Northwood Drive where the land has been split and is only awaiting a buyer before new single-family homes are constructed. These areas are tree lined, although altered by the August 2, 2015 storm, especially along Northwood Drive. It will be important to ensure retention of the bulk of the trees as land is cleared for building sites, or the character of the area will suffer greatly.

Photo 5-1
Looking East across Big Glen Lake from The Narrows



Photo by Mark Wyckoff

**Photo 5-2
D.H. Day Farm**



Photo by Terry Gretzema

National Lakeshore

The Sleeping Bear Dunes National Lakeshore with bluffs rising 450 feet above Lake Michigan surrounds most of the private land in the Township. Among the most notable features within the Township include the Dune Climb, Stocking Drive with many scenic overlooks, the historic unincorporated Village of Glen Haven, many trails such as Alligator Hill and Pyramid Point, and South Manitou Island. These lands will be forever protected as part of the National Park system. The only significant changes to the geography of the Park expected over the next 20 years are the acquisition, as the opportunity presents itself and funds are available, of most of the few remaining private parcels already surrounded by National Park land. Additional desired changes include adoption of a new Park Management Plan that preserves all the existing access in the mainland parts of the Park, the construction of new non-motorized trails, and an expansion of the preservation efforts at Port Oneida.

Photo 5-3
Looking Down the Sheer Face of a Sand Dune



Photo by Mark Wyckoff

Lake Michigan Shoreline

The Lake Michigan shoreline throughout all the National Park property has reverted from single-family homes to a natural state. Except for the boat launch in Glen Arbor, the LeBear development, the Leelanau School, The Homestead Resort, and other smaller resorts, nearly all the rest of the shoreline is single-family homes on large lots. Very little land remains that is not already split at the minimum zoning requirements. This is high value property that continues to change from cottages to permanent year-round homes. The trend to build homes on all remaining shoreline lots is expected to be complete over the next decade.

There is considerable public opposition to building mass and type along the Lake Michigan shoreline that is different from single-family homes on large lots. Viewed from Lake Michigan, single-family homes largely blend into the trees along the shoreline, whereas, larger structures, like the LeBear condominiums, stand out in ways that are considered undesirable by Township residents. New single-family homes should be constructed to blend into the shoreline, and more intensive and larger mass uses like multifamily structures should not be

permitted along the shoreline.

There are very few docks along the Lake Michigan shoreline, and frequent high waves make it difficult to build seasonal docks on the Lake. This helps maintain a natural appearing shoreline.

Photo 5-4 Natural Vegetation Screens Buildings along the Lake Michigan Shoreline



Photo by Terry Gretzema

Glen Lakes Shoreline

Similarly to the Lake Michigan shoreline, almost all the shoreline along the Glen Lakes is already divided into lots that meet the 100-foot frontage requirement and have a residence on them. This is also very high value property. While the depth of the lots varies dramatically, from very shallow along the west shore of Glen Lake to very deep along much of the north shore of both Big and Little Glen Lakes, much of the shoreline has a natural appearance. That is because most of the lots have large trees and few lots have large lawn surfaces. The trend of switching from cottages to year-round structures is far advanced and expected to continue. There is a public concern, however, that lots should not get overbuilt with too much building mass.

Many shoreline lots have accessory structures that accommodate vehicles, boats, guests, and family visitors, although some lots have separate structures for visitors. In some cases, these separate structures are boathouses on the waterfront. Most residential lots have a single dock. Much of the shoreline is shallow to a great distance so docks are often long, with multiple boats moored on each dock.

The Township has keyhole zoning provisions, so continual review of these ordinances should be conducted to keep a future back lot development from funneling a large number of lake users onto the lake through a single lakefront lot. The Township should review other similar provisions and consider strengthening keyhole regulations.

At one time, there were many small resorts around Glen Lake. Now, only a few remain. Small resort property is now usually more valuable for single-family homes, either as part of a condominium arrangement (as per the original resort arrangement) or as separate lots. The conversion of the remaining resorts around Glen Lake to single-family homes is likely to continue over the next 20 years.

Photo 5-5
A Small Resort on Glen Lake



Photo by Mark Wyckoff

Crystal River Shoreline

Much of the Crystal River shoreline is within the National Park and will be

forever protected. Another large segment, the Oxbow by M-22 and 675, was recently protected through acquisition by the Township and is managed by the Leelanau Conservancy. The remainder of the private property on the Crystal River has widely spaced cottages and year-round homes,

mostly near the Village of Glen Arbor. The river flows past buildings in the Leelanau School and The Homestead. Homes and other buildings along the river that are a part of The Homestead and or the Woodstone residential development are connected to privately owned and operated wastewater disposal systems. Otherwise, there are few places privately owned along the river where existing lots are large enough, or dry enough, to permit the construction of new homes. Because of the environmental sensitivity of the clear shallow waters of the Crystal River, new homes need to be carefully sited and constructed to prevent degradation of the water quality.

Photo 5-6
Crystal River



Photo by Mark Wyckoff

The Homestead Resort

The Homestead is a well-known resort owned and operated by the Bayberry Group, Inc. It is the largest single private development in the Township and is designed as a planned development. The Homestead is accessed across National Park Service land on M-22, north of Glen Arbor, and sits next to the Leelanau School. A total of 730 dwelling units are planned. The Homestead is zoned as a resort and is expected to be built out over the next 20 years.

**Photo 5-7
The Inn at The Homestead**



Photo by Terry Gretzema

Woodstone

The Woodstone development is relatively new residential site condominium project east of Lake Street, north of Northwood Drive, and southeast of the center of the Village of Glen Arbor. It will have 93 units on about 100 acres. Woodstone is expected to build out within the next 20 years.

Miller Hill

The only other large privately owned, undeveloped area in the Township is on Miller Hill on the east side of the Township overlooking Sleeping Bear Bay and the Glen Lakes. In recent years, the land has increasingly been divided and readied for sale. Slopes are steep and, as a result, roads are limited and not well suited for year-round use. There are serious questions about the ability to get fire trucks into many of the existing private driveways on the Hill. Miller Hill is also largely clay and erodes easily, posing significant problems for septic waste disposal and storm water runoff. Consequently, future density should remain low.

Village of Glen Arbor

The unincorporated Village of Glen Arbor is not a separate political entity, but it is an integral part of the Township. The Village has no formal boundaries, yet the residential portion is significantly larger than when the 1984 Plan was prepared. It is the area with the densest population and the bulk of the commercial and institutional uses in the Township. Lot sizes vary widely from very small in the oldest platted parts of the Village to large along Lake Michigan and between Lake Street and M-22 south of State Street. Commercial businesses are a mix of tourist and those serving the year-round population, with most providing some services or products to visitors. Businesses include everything from retail clothing to toys and restaurants. During the summer, the Village is very busy and parking is limited. However, part of the Village's charm is the high level of activity associated with busy shops and crowded streets. There are measures the Township can take to increase parking in the Village as the need and opportunity present themselves.

This concentration of retail and services within the Village is very important to the Village's long-term viability as it promotes efficient shopping and less vehicle use by keeping businesses within walking distance of convenient parking. It also enhances sales by giving shoppers more opportunities, which promotes the economic wellbeing of the businesses and, in turn, the commercial part of the Village itself. The policies of this Plan, the Future Land Use Map, and the Zoning Map are all designed to strengthen the function of Glen Arbor as a retail center for tourists and residents. As noted in the 1984 Plan, and reinforced again in this Plan:

Preventing scattered business locations in other parts of the Township helps preserve the natural features in these areas. It is the intent of this Plan that scattered business uses will not be encouraged. Examples of areas which will be subject to increased pressure for business use are on M-22 south of the village and east along the Crystal River. The trend is already in evidence. Expansion in both areas may begin to dissipate the village area's strength.

This Plan anticipates that new commercial expansion will likely occur along the M-22 corridor.

Photo 5-8
A Local Shop that Combines Home and Business

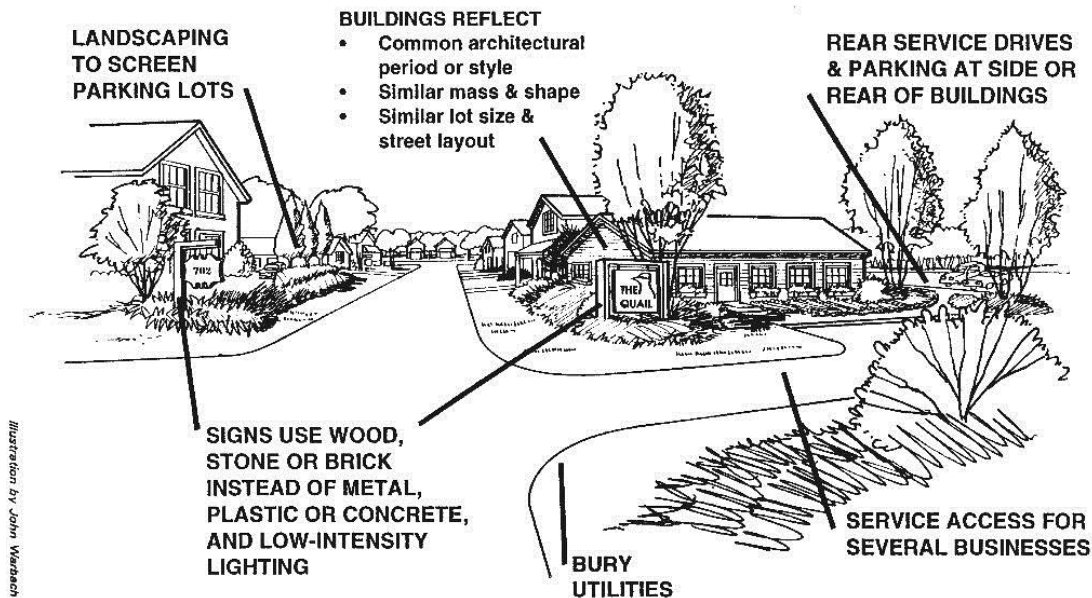


Photo by Terry Gretzema

There is a mix of homes and businesses in the central part of the Village, with a slow conversion of most homes to businesses. This is in part a response to market demand, and in part because the Township Zoning Ordinance has most of the property in the Village core in a business classification. In order to preserve adequate land that is well suited for business use, it is important that the Township keep the existing lands zoned business, whether they are presently used that way or not. The Zoning Ordinance permits dwelling units in the Business District only as part of a multifamily dwelling or on the second or third floors above businesses. This has the benefit of providing more housing opportunities for both year-round and seasonal residents.

A key dimension of maintaining the Village's character is to encourage that as new buildings are constructed, they have certain common elements as illustrated in Figure 5-1.

**Figure 5-1
Protection of Visual Character**



Source: Leelanau County General Plan

Natural Carrying Capacity

Public sewers are likely an unfeasible option in Glen Arbor Township without private landowners incurring a very high cost with little benefit. This is largely because existing septic systems are working fine except in some parts of the Village. There are also serious issues associated with where waste treatment facilities could be constructed and where treated waste could be disposed of because of the limited amount of private land and the pristine water quality of the Glen Lakes, Lake Michigan, and the Crystal River. With the limited amount of undeveloped, privately owned land, and the absence of public sewers, it is unlikely that development much more intensive than that which already exists in the Township will be proposed. This situation makes it both easier and more certain to make future decisions that will retain the existing character of the Township that is so cherished by residents and visitors alike.

To a very great degree, the boundaries of the Township, the lands owned by the National Park Service, the natural limitations of soils for septic wastes, and the high water quality of the lakes and river create a natural carrying capacity for development in the Township. That capacity is nearly reached and is likely to be achieved within the next 20 years. The existing land use pattern has been set, and most of the opportunities for development are infill or replacement of existing structures. This means that future land use decisions must largely focus on ensuring conformance with local setback and design considerations,

which will ensure retention of existing character and protection of the natural environment. Any proposed change to this land use pattern, or to the density or intensity of development beyond that which is presently planned and zoned, should be closely scrutinized and will likely be met with little public support, unless a very strong set of public benefits were to be achieved. If the proposed change were inconsistent with this Plan, then this Plan would need to be amended, along with the Zoning Ordinance, before such a change were approved and implemented.

Relationship to Plans and Zoning in Adjoining Jurisdictions

Three local units of government border Glen Arbor Township: Cleveland Township to the east, Kasson Township to the southeast, and Empire Township to the south. Only a very small portion of Kasson Township borders Glen Arbor Township, along the southeast shore of Big Glen Lake. The existing Master Plans and Zoning Ordinances of Cleveland Township and Empire Township and the Zoning Ordinance of Kasson Township were reviewed to determine compatibility with existing and future land use as proposed in this Plan.

Glen Arbor Township has very high land values, and it has no land well suited for a mobile home park or for industrial use. Consequently, it is important that the Township cooperate with its neighbors to ensure any area-wide needs for these uses are adequately met. Other observations from a review of the existing plans and zoning ordinances of these adjacent jurisdictions follow.

All three bordering communities have policies consistent with the preservation of the wooded, low-density character that currently exists in those townships and in much of Glen Arbor Township. Large portions of two of these townships are also publicly owned by the National Park Service.

Off the lake, and near to Glen Arbor Township, all three communities have plans or zoning regulations (or both) that seek to maintain a density of from 1 dwelling unit per 5 acres to 1 dwelling unit per 10 acres. Along the Glen Lake shoreline in Empire Township, density is closer to 1 unit per one-half acre. In general, permitted uses include single-family dwellings.

In Cleveland Township, the adjacent area is zoned for agriculture, while the future land use map shows it as low density residential. This difference occurs because the future land use map indicates what the area is to be zoned when it is no longer zoned agriculture. It will still have a density of 1 dwelling unit per 10 acres, but it will also permit planned unit developments (PUDs) that have a minimum impact on slopes and roads.

Photo 5-9
Entry Across The Narrows Bridge from the South in Empire Township



Photo by Mark Wyckoff

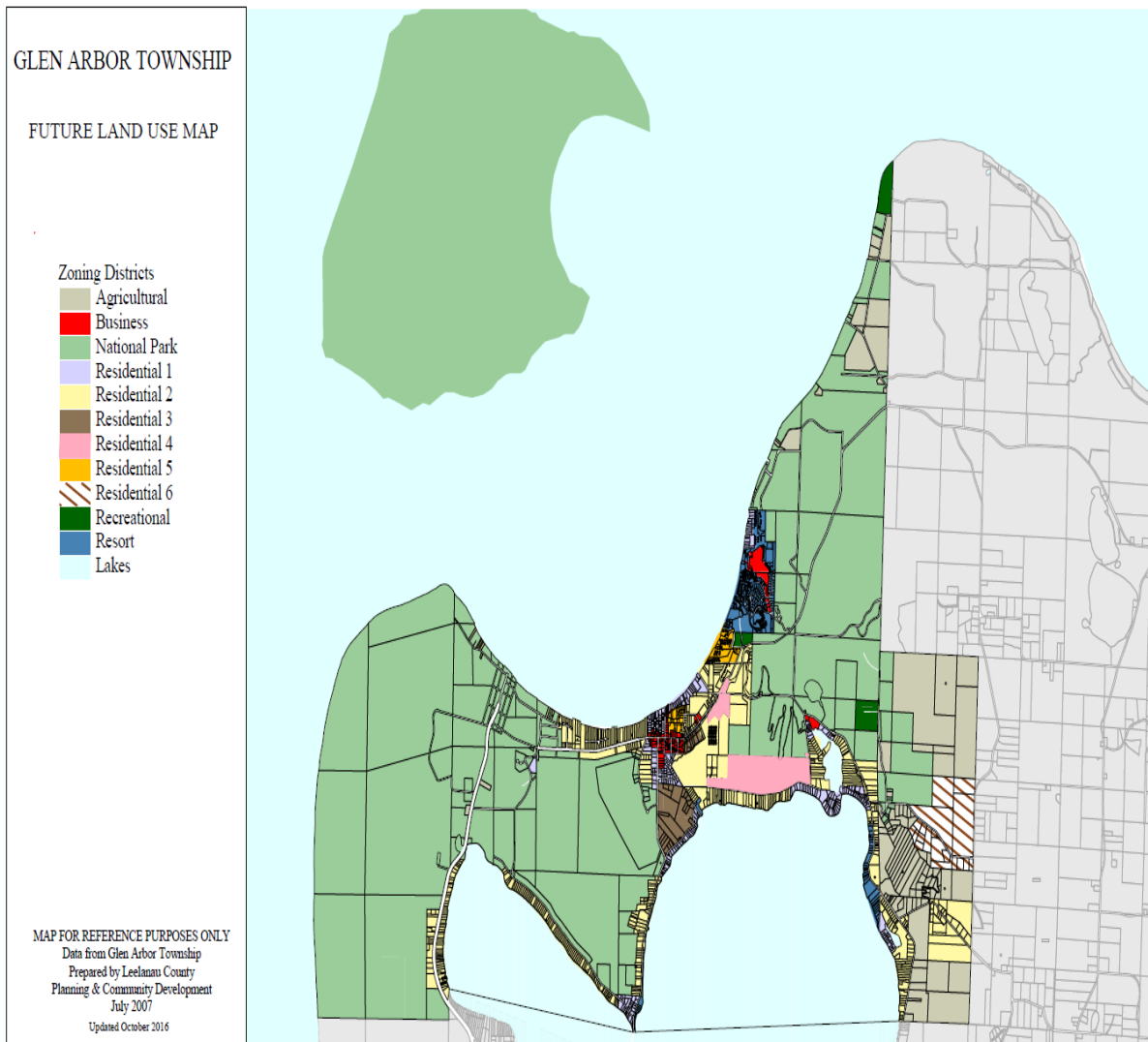
There was great concern over protecting water quality in the Glen Lakes and trying to achieve more uniformity with regard to lakefront development. Both Empire Township and Kasson Township have relatively developed shorelines along Glen Lake, which are similar in development pattern to those portions of Glen Lake shoreline in Glen Arbor Township and are similarly zoned. The Empire Village Plan identifies a potential need for a public sanitary sewer system to serve the low to moderate density shoreline areas, due to a lack of suitability of some shoreline segments for on-site septic systems.

Future Land Use Map

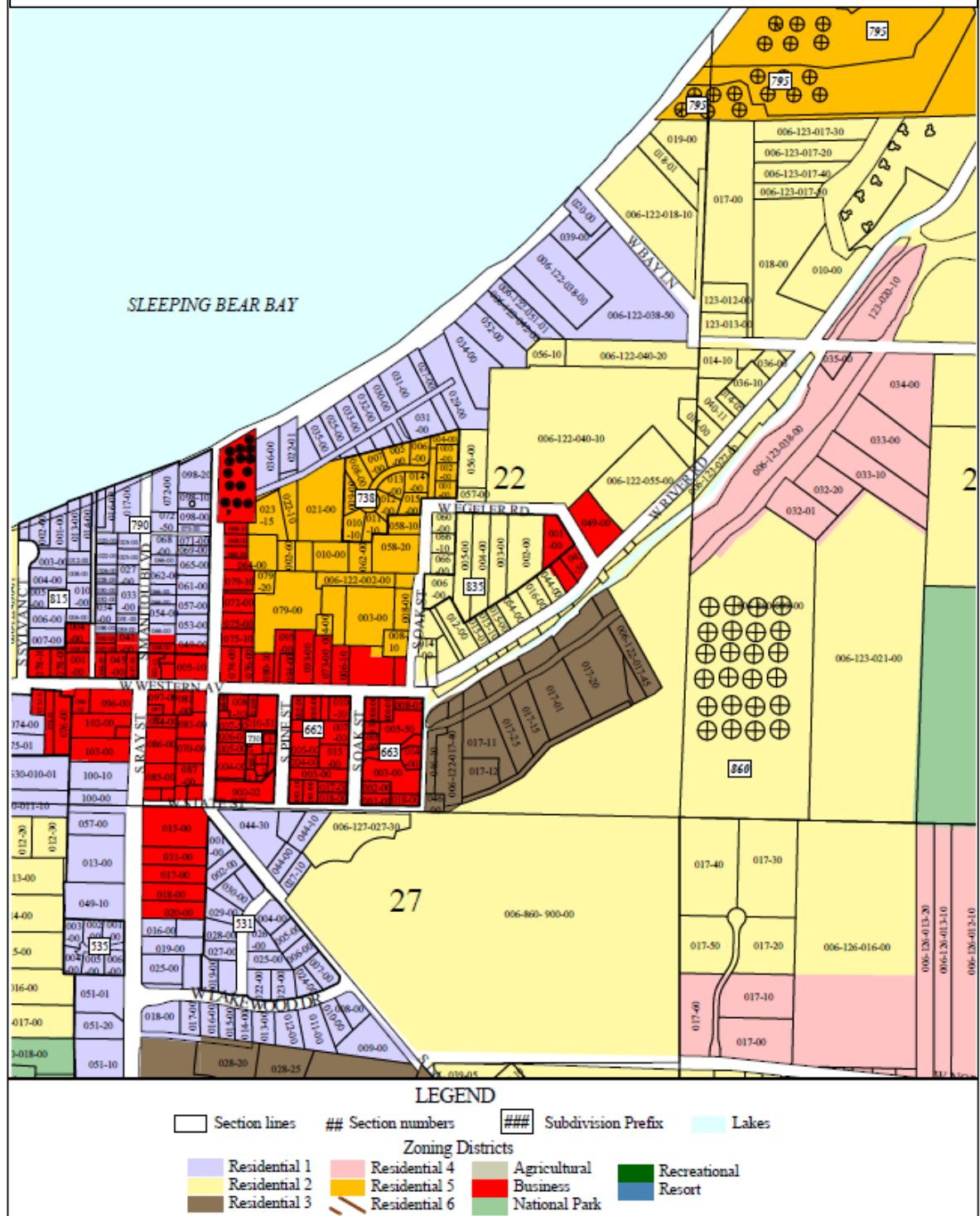
The Future Land Use Map, composed of Maps 5-1 and 5-2, sets forth the proposed general arrangement of future land use for Glen Arbor Township. The dominant use area depicted is, of course, the Sleeping Bear Dunes National Lakeshore. Some infill is anticipated over the next 20 years. The comparatively few acres in the Township outside the National Lakeshore are divided on the Map into categories that reflect the policies that the Township intends to continue to implement through the Zoning Ordinance and other controls.

Map 5-1 depicts the whole Township, while Map 5-2 shows just the Village of Glen Arbor and surrounding area. There is very little proposed change to land use on the Future Land Use Map compared to the present. That is because there is little privately owned land, and the Township will likely reach build out within the next 20 years. As a result, the land use pattern is well established, and once filled out as planned and zoned, will adequately serve the needs of both year-round residents and visitors. Density is not depicted on the Future Land Use Maps. General density ranges are discussed below. Permitted density is established by the Zoning Districts and depicted on the Zoning Map, which is a part of the Township Zoning Ordinance and not illustrated in this Plan.

Map 5-1 Future Land Use Map



Map 5-2 Village of Glen Arbor
GLEN ARBOR TOWNSHIP
Village of Glen Arbor Future Land Use Map



The following categories of land uses are depicted on the Future Land Use Map:

Residential (yellow and a small amount of agricultural land in white)

1. Very low density because of significant natural limitations on the land.
2. Waterfront residential is predominately low density, but it includes some areas of higher residential density based on historic platting, and it includes some back lot areas where waterfront access rights are common.
3. Low density adjacent to areas in the very low-density area, or adjacent to (and often across the road from) developed waterfront areas.
4. Medium/high density in the Village of Glen Arbor.

Resort (orange)

5. Resort residential and resort business as part of planned developments.

Business (red)

6. Village business.

Public and Institutional (four colors, depending on entity owning land)

7. Public and quasi-public.

Very Low Density Residential

Characteristics

Areas shown as very low density residential are characterized by natural features that are either worthy of protection or incapable of supporting relatively intense use. (The words "intense" and "intensity" are used in this text as relative terms in comparing the various use areas. The Township is not characterized by what would normally be called intense development, and it is not intended that it will be.) The former would be typified by the steep hillside and wildlife wetlands and the latter by areas that have severe limitations for individual sanitary waste disposal (septic tank) systems. In other words, the natural features of the very low-density residential areas need to be safeguarded from the impact of development. The very low-density residential areas include:

- Land currently in agricultural use up on Miller Hill and the Port Oneida area.
- Areas of steep hillsides. These are located primarily in the eastern part of the Township. Although there are other hillside areas, such as the west side of Big Glen Lake, they are already developed.

- Areas well suited to wetlands wildlife habitat. The cranberry marsh south of the Village and some lands near the Crystal River fall into this category. Although similar conditions exist near Fisher Lake and Brooks Lake, the predominant characteristic of those areas is of waterfront development.
- Areas with “severe limitation” for individual waste systems. Lands near the Crystal River are included. Similar conditions exist on parts of the Fisher Lakes and Brooks Lake.

Objectives

It is the intent of this Plan that the very low-density residential areas will be the least developed of all areas of the Township so that the natural features are maintained as much as possible. When land is used, it would be at very low density with options available that would allow development in small portions of a parcel while sustaining the major portions. Minimum land parcel sizes are three acres (130,680 square feet) or more in area. Most of the very low-density residential areas are on the east side of the Township and fall within the current Agricultural District, which is a minimum parcel size of three acres. They are also the farthest from and hardest to reach for fire and emergency services.

Uses Intended

This zoning district permits agricultural use, forest management, and single-family dwellings. Passive recreation uses and trails can be compatible with the objective of maintaining the natural land features so long as those natural land features are not altered significantly.

Low Density Residential

Characteristics

The low-density residential areas can be divided into two main categories:

- Areas that consist of fairly level, undeveloped open terrain that generally border areas of more intensive development (such as waterfront residential areas).
- Areas that are sparsely developed and in close proximity to more intensively used land, such as near the Village of Glen Arbor.

Three of the areas planned in this manner are already occupied by dwellings. They include the M-109 frontage west of the Village, the area north of M-22 and generally between The Homestead and the Village, and the east side of Fisher Road near Northwood. The major emerging areas at this density are on the

north side of Northwood Drive from Lake to Fisher Road, and part of the area bounded by Lake, Sunset, M-22, and south of the lots on Lakewood (not including the cranberry marsh). Another common characteristic of these areas is that they do not fall easily within the other categories: they do not front on lakes and usually do not contain soil problems or steep hillsides.

Objectives

Low-density residential use areas have densities ranging from roughly one to three acres (45,000 to 131,000 square feet per dwelling). This land is largely in the R-III Zoning District. Policy for the low-density residential areas is to maintain significant open spaces by allowing densities that make it possible. Density can be higher than in the very low-density residential areas because existing natural features do not require as much special attention.

Uses Intended

Zoning districts applicable to the low-density residential areas should permit a full range of uses normally associated with single-family, detached residential areas. Clustering is permitted to allow flexibility so that open spaces can be maintained. Limitations should be placed on uses other than residential so that natural features are maintained.

Waterfront Areas

Characteristics

The waterfront properties in Glen Arbor have characteristics that require special consideration in Plan implementation. Most of the waterfront is almost exclusively characterized by both seasonal and year-round single-family housing. Most parcels are already developed. Waterfront parcels not in single-family use are in small or large resorts, or used for marinas.

The waterfront areas include shoreline on Lake Michigan, the Crystal River, Fisher Lake, and the Glen Lakes. They also include some non-waterfront land such as the land between the west side of M-109 and the Sleeping Bear Dunes and between M-22 and Alligator Hill. Although not directly abutting the water, the orientation of homes in these areas is toward the water. Some properties include waterfront access parcels that are separated by roads.

Objectives

Policies for the use of waterfront property recognize that these areas are primarily developed and land use controls are tailored to fit the situation. All single-family property on the waterfront could be in a single zoning classification. Currently, several different zoning classifications apply. Existing

lot sizes range from 15,000 sq. ft. to 30,000 sq. ft., depending on how the land in the area has been platted or split. R-II District establishes requirements for waterfront residential lots. New splits must have at least 100 feet of frontage on the waterfront and at least 30,000 sq. ft. New structures must not exceed 30% of the lot.

Uses Intended

The predominant use of the waterfront areas is for seasonal or year-round dwellings. New nonresidential uses on lots not already used for that purpose are not permitted. Bigfoot regulations are necessary to prevent overbuilding of structures on a parcel. Excessive mass of structures on waterfront lots is out of character with the shoreline area and increases storm water runoff with negative effects on water quality.

Since the waterfront areas of the Township are mostly developed, and the demand for water access is expected to increase, it is anticipated that there may be increased pressure for the use of keyhole or funnel development. This is typically where one or two waterfront lots are acquired and used to funnel back lot users onto a lake, often with a very large dock and many boats. Zoning regulations prohibit this type of development or any other overuse of waterfront resources in Glen Arbor Township. Funnel development is restricted because it can cause overcrowding of public waters, create hazards to life and property by increasing the risk of boating and other similar accidents, affect adversely the recreational experiences of both riparian owners and the public, affect adversely property values of shoreline property located near funnel developments, and may damage residential communities.

Medium Density Residential

Characteristics

These are residential areas with the greatest density in the Township that are not on the waterfront or part of The Homestead or other resort. All medium density areas are within the Village of Glen Arbor. They are close to, and surround, the businesses in Glen Arbor. When and if public utilities are needed, such as centralized sewer and water systems, they will be needed in the Village area.

Objectives

The objectives of the Plan in the medium-density residential area are to provide for the Township's most intense residential development outside of The Homestead resort. Currently, there is a wide range of lot sizes in the Village, running generally from 6,000-30,000 sq. ft. However, lots under 15,000 sq. ft.

often face serious septic and well separation problems. The R-I District has a 15,000 sq. ft. dwelling minimum and should continue to guide future land division and use in this area. Shorefront residential property within the Village should be rezoned to be consistent with other waterfront residential areas.

Uses Intended

Zoning districts for the medium-density residential area primarily permit one single-family dwelling. Churches, schools, and recreation uses are also permitted.

Village Business

Characteristics

The Village business area is, of course, characterized by the present businesses. Most of the original platted part of the Village is presently zoned Business, and those parts of the original Village south of Western Avenue not yet used for business use are planned for future business use.

Objectives

It is the intent of this Plan to concentrate retail stores and services in the Village business area in order to strengthen it as a commercial center and not to allow it to expand outside the edge of existing business use as presently zoned in the Village, except for a few peripheral lots on M-109 at the west edge of the Village and a few lots used for residential and commercial uses on the west side of M-22, north of State Street.

Uses Intended

The Village business area is typified by a broad variety of uses that serve the retail needs of the summer and winter visitor and of the year-around resident. Examples of uses include:

- Grocery, pharmacy, post office, hardware, clothing, gifts, novelties, and other retail sales;
- Financial, real estate, and other service establishments;
- Motels and Bed & Breakfasts;
- Restaurants and taverns;
- Medical, dental, optical, and related health and fitness services;

- Electrical, plumbing, and building trades; and
- Office buildings.

Multiple-family dwellings are also permitted in the Village business area, either as freestanding apartment buildings, townhouses, apartments over businesses, or other forms of shared-wall dwellings. However, all parking for residents must be on site, and all Health Department requirements for well and septic must also be met.

Resorts

Characteristics

Two types of resorts are provided for:

1. The Homestead, a large planned development with a compatible and well-designed mix of a wide variety of residential living options for short- and long-time occupants, as well as a variety of food service, retail, and commercial recreation options (including a par three golf course and ski hill).
2. Small resorts with cottages or other residential units and the owner/operator living on site, possibly with other limited commercial services such as a marina, boat sales, rentals, food service or sales, laundry, and/or other personal services.

Objectives

There are only a few family oriented resorts remaining with 3-6 cabins rented on a weekly basis. Three marinas are also located along the waterfront (one at The Narrows, one at the end of Lake Street, and one at the north end of Fisher Lake where Fisher Road and 675 intersect). Existing small resorts and marinas in the Township have a proud and long heritage that is desired to be maintained and, thus, such uses are permitted uses in the Resort district. Many existing residents first visited the Glen Lake area by staying at traditional resorts. However, the closure of most small resorts along the shores of the Glen Lakes and Lake Michigan over the last decade, and their replacement with year-around homes, indicates a market and community preference for single-family homes on individual lots. Consequently, no new resorts or marinas are desired to be established on these bodies of water, although existing resorts or marinas could be redeveloped consistent with the Resort requirements. Future dwelling units should be limited to 15,000 sq. ft. per dwelling on that land suitable for building upon, all parking must be on-site, and all Health Department requirements must be met.

Redevelopment of resorts over 2-3 acres into anything other than a single-family homesite should be done as a planned unit development (PUD). A PUD is a development planned to meet specific objectives with regard to a mix of land uses in a manner that involves creative preservation of most of the natural features and/or open space on a site. Planned developments are usually large enough to support a variety of uses that are all related. They can include not only housing and recreation uses but also businesses such as restaurants and shops designed to serve users of the planned development and sometimes other patrons, as does the retail area at The Homestead. A planned development must be undertaken in accordance with an approved site plan (which carefully looks at number, type and arrangement of land uses, parking, signage, ingress, egress, and related aspects of the project on the site), so that businesses and other nonresidential uses can be permitted and buffered from residential areas both within and outside the development.

Uses Intended

New resorts, or expansions of large existing resorts like The Homestead, are expected to involve a wide range of land uses and will be handled as planned unit developments under appropriate zoning provisions. While a smaller range of uses is involved in the older style, small resorts, the land area involved is also much smaller and nuisance impacts from higher intensity use levels on adjoining single-family lots are greater. Thus, either PUD or special use permit standards should guide future expansions of existing small resorts, although the traditional range of cottages and related recreation uses in small resorts should be permitted.

Public and Quasi-Public Uses

Public or quasi-public uses include government buildings, parks, institutional uses, churches, private schools like the Leelanau School, and private clubs such as the Glen Lake Yacht Club. The Plan recognizes such existing uses. The Future Land Use Map also depicts the location of most uses, including all Township-owned, State-owned, and federally owned parcels (including anticipated acquisition of some privately owned lands within the National Park boundaries). The designation of public and quasi-public areas and uses on the Future Land Use Map is not intended to represent or suggest a specific zoning district as these uses are intended to be allowed in any zone.

CHAPTER 6 ZONING PLAN

As noted in Chapter 5, the future land use plan is a compilation of descriptions and recommendations for future development and conservation in Glen Arbor Township, and it serves as an overall framework for the management and regulation of future development and also serves as the basis for evaluating rezoning requests.

This section of the Glen Arbor Township Master Plan builds upon the goals and objectives and presents a zoning plan, which relates the future land use categories to the current zoning districts of the Township, as required by the Michigan Planning Enabling Act.

Planning is guiding land uses from a policy standpoint, while zoning is the act of regulating the use of land by ordinance (law). The future land use map and the supporting narrative is intended to serve as a guide for the Township as it contemplates zoning and development applications and should be evaluated with the Zoning Plan during the decision-making process. It is important to note that the Future Land Use Map is not a zoning map, but it will help to guide rezoning decisions along with the zoning plan.

This Chapter opens with a general description of a zoning plan. It is followed by a brief explanation of the relationship between this Future Land Use Plan and the Township Zoning Ordinance. The districts in the Zoning Ordinance are briefly described, followed by a list of proposed changes to the Zoning Ordinance that are desirable to make in order for the Zoning Ordinance to more closely conform with this Plan.

Explanation of a Zoning Plan

A “zoning plan” is another term for a “zone plan,” which is used in the Michigan Planning and Zoning Enabling Act. The Michigan Planning Enabling Act (MPEA), as amended, requires that the plan prepared under that act, as this Plan is, serves as the basis for the zoning plan. The Michigan Zoning Enabling Act (MZEA), as amended, requires a zoning plan be prepared as the basis for the zoning ordinance. It must be founded on an inventory of conditions pertinent to zoning in the Township and the purposes for which zoning may be adopted, as described in the MZEA. The zoning plan identifies the zoning districts and their purposes, as well as the basic standards proposed to control the height, area, bulk, location, and use of buildings and premises in the Township. These matters are regulated by the specific terms in the Zoning Ordinance.

Relationship to the Future Land Use Plan

The Glen Arbor Township Future Land Use Plan is intended to guide Township officials and citizens in making decisions about use of the land. A primary purpose of the Future Land Use Plan is to provide guidelines for the treatment of the areas of the Township that have varied characteristics. It is the result of a process that included a survey of existing conditions; public input on a vision of what the community should be like in 20 years; and an analysis of alternatives by the Planning Commission, synthesized with public awareness and input. This Chapter presents the Zoning Plan and, along with the other relevant parts of this Future Land Use Plan, is intended to guide the implementation of and future changes to the Township Zoning Ordinance.

Districts and Dimensional Standards

Following are six land use categories within which the eleven zoning districts in the Glen Arbor Township Zoning Ordinance are organized. The general purposes of each of these categories are also indicated. The purposes of each district are listed in the specific district provisions of the Zoning Ordinance. The Section references indicate where detailed ordinance language for each district is located within the Zoning Ordinance. The Zoning Map, which is part of the Zoning Ordinance and is posted on the Township web site (www.glenarbortownship.com), depicts which lands are in which districts. It is the only map depicting the official boundaries of zoning districts.

Agricultural District

The purpose of the Agricultural District is to provide for and encourage agricultural uses of land, related uses, and limited residential uses in a rural environment. The minimum lot area for each single-family dwelling with its accessory buildings is 3 acres, which is 131,000 square feet, and the minimum road frontage is 200 feet. There is little farmland left in the Township, and most is in the east side along the border with Cleveland Township. Once agricultural operations cease on those parcels that are not acquired by the National Park Service, the name of the agricultural district should be changed to reflect the very low-density residential character of the district, and nonresidential uses should be removed as permitted uses.

Residential Districts

The following zoning districts are considered “residential districts”:

- Single-Family Residential District (R-I)
- Single-Family Residential District (R-II)
- Single-Family Residential District (R-III)
- Single-Family Residential District (R-IV)
- Multiple-Family Residential District (R-V)
- Single-Family Residential District (R-VI)

The principal purpose of these districts is to provide for a range of residential dwelling types at various densities within individual zones tailored for specific uses. Minimum lot sizes range from 15,000 square feet in the R-I and R-V Districts to 131,000 square feet in the R-VI District. The bulk of land zoned into R-I and R-II Districts is located along the shorelines of Glen Lake and Lake Michigan. The R-III, R-IV, and R-VI Districts provide for low-density housing and are predominantly found in the interior of the Township, between the Village of Glen Arbor and Glen Lake, and in the eastern portion of the Township on Miller Hill. The R-V Multiple-Family District is centered on the north side of the Village and south of the Leelanau School.

While the district scheme has generally served the Township well and fairly closely matches the size of existing lots, the differences between several of these districts is very small and serious study should be initiated to determine if the six districts can be successfully collapsed into not more than four districts. This is especially pertinent because there are three more districts allowing significant residential use—the Recreational Open Space, Resort, and Agricultural Districts. All waterfront land not in the Resort or Business classification would be zoned R-II, while all Village residential lots would be R-I, and all remaining land that is not zoned agricultural or resort would be R-III.

Multiple-family uses are currently allowed in the Business District and would continue to be allowed. This should be structured to allow lots smaller than 15,000 sq. ft. in return for more common open space. There are large parcels on the east side of the Village (north and east of Egeler Road) that are well suited for multiple-family uses. Incentives (such as a small density bonus) should be offered to cluster multiple-family uses and preserve an open space buffer from single-family residential uses.

These related issues should be carefully examined together prior to consolidating districts or rezoning. In the end, all this land should retain a residential classification, but it may be pertinent to change some of those classifications to better match lot sizes in the area and to provide a wider range of housing options in the Township. It may be that six districts cannot be collapsed into three, but a strong effort should be made to try, as a simpler

system will be easier for all to remember and properly apply. Multi-family uses should continue to be permitted in the Business District.

Resort and Business Districts

The following zoning districts are considered “commercial districts”:

Resort District

Business District

The principal purpose of the Resort District is to accommodate demand for land suited for hotels, motels, lodges, rental cottages, rooming houses, and other land uses that are principally intended for vacationing, relaxation, and conference activities for visitors to the community. Minimum lot sizes range from 10,000 square feet to 20,000 square feet. The main resort area in Glen Arbor Township is The Homestead, a planned development located in the northeast portion of the Township. There are also a few scattered small resorts with cabins on Little Glen, at The Narrows, at the end of Lake Street, and along Dunns Farm Road. All future changes on these properties should be guided by new PUD requirements.

The next time The Homestead Resort proposes a change in use or expansion of use, the request should be reviewed under the new PUD provisions, and a PUD approval should be granted that incorporates all existing uses on The Homestead. Thereafter, changes would be processed as PUD amendments. This will better protect the huge investment in The Homestead and ensure a means of reviewing future changes so they are consistent with the Township Zoning Ordinance, as all uses must be.

Some of the areas zoned Resort should be reexamined in light of changing conditions. Most of the property zoned Resort near The Narrows is owned and used for single-family uses, not resort uses, and this is unlikely to change. These properties should be rezoned as R-II (although the marina should remain in the Resort District). Some property on the west side of M-22 and north of Day Forest Road is used as resort, although not zoned that way, but should be.

Similarly, a number of other properties used as resorts are not zoned that way and consideration should be given to rezoning them. For example:

- The R-V area that is part of The Homestead could be rezoned into Resort or Business and included under the same PUD for all of The Homestead.
- The marina on Fisher Road and Dunns Farm Road could be rezoned from Business to Resort.
- Existing resorts along the eastern shore of Big Glen Lake (by Brooks Lake) and the motel/restaurant nearby on the east side of Dunns Farm

Road could be rezoned out of Residential District and into the Resort or Business Districts.

- The existing marina, boat sales, condos, and cabins at the south end of Lake Street are currently zoned R-II residential and would be more appropriately zoned into the Resort or Business Districts.
- Consideration could also be given to rezoning the LeBear Development at the north end of Lake Street out of Business and into Resort.

These changes will better reflect existing use, prevent nonconforming use problems when owners wish to upgrade the property, and prevent too wide a range of uses from being established that could occur if these properties were zoned Business. These changes would also serve to better notify anyone looking at the Zoning Map about the actual use in these areas. The properties above that are presently zoned Residential would not be rezoned, if the long term desired use were for single-family dwellings on individual lots at the size and density currently allowed under the Zoning Ordinance. It is not the intent of these changes to provide a basis for examining the amount of land presently used for these commercial uses, nor are they intended to be used as the basis for rezoning other lands nearby into a Business or Resort classification.

The basic purpose of the Business District is to provide opportunities for regulated businesses and commercial activities serving both local and tourist markets. Minimum lot sizes range from one-quarter acre to one acre in size. Most of the land currently zoned for business is centered within the Village. The other existing sites are marinas. These sites outside the Village should be rezoned into a Resort classification, as too great a range of uses is possible in the Business District. Some properties in the Village that are zoned for business are being used for residential purposes and as the business district grows, apartments and multiple-family residences could be located on second or third floors. Multi-family uses should continue to be allowed in the Business District.

Recreational Districts

The following zoning districts are considered “recreational districts”:

Recreational District

The purpose of this district is to provide for the orderly and attractive grouping of recreational lands, including golf courses, ski slopes, private clubs, and commercial resorts. However, none of the lands included in the district have these characteristics; the only lands in the Recreation District on the Zoning Map are quasi-public, owned by the Leelanau School or Camp Leelanau and Kohahna adjacent to Pyramid Point. It may, therefore, be desirable to eliminate

this zone and allow these uses as special uses, or planned unit developments by extending the appropriate adjacent zone.

Governmental District

This district exempts land owned by governmental entities from the Zoning Ordinance. Currently, the DNR boat launch on Little Glen Lake is zoned R-II, but it should be zoned Governmental, and the Public Safety Building property should also be zoned Government.

On the Zoning Map, a separate color depicts all the land in the National Park at the time the Map was made. As lands are acquired by the National Park, it is important that the Zoning Map be periodically updated to reflect all land owned by the Park Service. This will be most convenient to accomplish whenever another rezoning change is made—or every two years, whichever comes first. The legend on the Zoning Map should say Governmental instead of National Park Service, to match the name of the district in the text of the ordinance.

Proposed Changes to the Zoning Ordinance

Because this Plan incorporates new policies, land uses, public improvements, and other measures related to further improving the quality of life in the Township, there are changes to the Zoning Ordinance that should be made to make it fully consistent with this Future Land Use Plan. These changes should be pursued as the need or opportunity presents itself, but before the Township initiates action to implement one of the recommendations or new policies in this Plan. That means the Planning Commission should identify the major policies it first wishes to implement and begin work on the corresponding zoning changes at the same time. If a proposed development comes along that presents an opportunity to address another change in this list, it should be seized and changed at that time. In some cases, public discussion of proposed zoning amendments on any of the elements will result in the need to refine some of the language in this Plan. When that occurs, this Plan should be amended before the zoning amendments are adopted—although both actions could be taken at the same meeting.

CHAPTER 7 OBJECTIVES AND IMPEMENTATION STRATEGIES

As a result of the Township's efforts to form a community consensus opinion about growth and development, the following objectives have been developed. These objectives are founded on the input received from the public, the Planning Commission, the Township Board, and the business community. They reflect a common vision, which can be stated as follows: *Develop and maintain a distinctive identity as a small, self-sufficient, and highly desirable waterfront community with a broad base of economic activities within a uniquely beautiful area.*

There are five objectives, and each objective is supported by more specific implantation strategies. The objectives are intended to describe a desirable end state—the condition of the Township in the future. As such, the objectives are aspirational, recognizing that obtaining the desired result is often beyond the authority of the Township. Nevertheless, these objectives serve as a useful guide for policy decisions by the Planning Commission and the Township Board.

Objective 1

Water in Glen Lake, the Crystal River, Lake Michigan, and all other water bodies should be clean, and the surrounding areas should provide vital habitats for wildlife while serving as a sustainable resource for low-intensity human recreation and use.

Implementation Strategies

1. Expand and strengthen storm-water management standards to reduce the quantity and velocity of runoff, and improve water quality over and above the State-enforced soil erosion control.
2. Encourage new developments to utilize ecologically friendly building and development standards.
3. Maintain a cooperative relationship with the Glen Lake Association and work towards common goals.
4. Continue to explore options for wastewater treatment in the Township.

Objective 2

Downtown Glen Arbor should be a safe and vibrant community, consisting of businesses that meet the needs of local residents year-round, while also providing necessary goods and services to seasonal residents and tourists.

Implementation Strategies

1. Attract viable small businesses, including retail establishments and personal and professional services, to downtown Glen Arbor.
2. Maintain collaborations with the Chamber of Commerce.
3. Review and revise the Zoning Ordinance, as appropriate, to ensure land-use controls, setbacks, and similar standards are encouraging appropriate development to downtown Glen Arbor.

Objective 3

The Township should work closely with the National Parks Service to ensure that management of the Sleeping Bear Dunes National Lakeshore is managed in a manner that is compatible with community values.

Objective 4

Roads in Glen Arbor Township should be smooth, well maintained, and designed to accommodate vehicular traffic at reasonable speeds, as well as bicyclists and pedestrians, where appropriate.

Implementation Strategies

1. Working with MDOT, TART, the US Parks Service and other agencies, develop a comprehensive plan for non-motorized transportation in Glen Arbor Township.
2. Evaluate and monitor way-finding signage in downtown Glen Arbor to ensure that pedestrians, bicyclists, and motorists are using and sharing the roadway in an equitable manner.

3. Work with the Leelanau County Road Commission, MDOT, and residents to identify key road segments in disrepair and develop a plan for their repair or reconstruction.
4. Explore a better connection route between the Village and the Sleeping Bear Heritage Trail.

Objective 5

Parking in downtown Glen Arbor should be effectively monitored during peak months to avoid overcrowding and to ensure the safety of residents and visitors.

Implementation Strategies

1. Improve signage in downtown Glen Arbor to direct residents and visitors to available public parking lots.
2. Review all streets and street rights-of-way to ensure that all areas where on-street parking is viable are being used as efficiently as possible.

APPENDIX A

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APPENDIX B

PUBLIC PARTICIPATION

Public involvement is crucial, although non-binding, to any planning process as it helps to build support for the plan and allows residents and stakeholders to voice their thoughts and perspectives relative to the future of their community. The Glen Arbor Township Planning Commission offered several opportunities for public engagement in the development of the plan to ensure broad participation and input. These meetings were designed to gather thoughts on current issues facing the community and to solicit ideas regarding ways in which they could be addressed.



The following public input opportunities were offered to Glen Arbor Township residents:

- Visioning Meeting:** July 22, 2014 at the Township Hall Gym
- Open House:** August 20, 2014 at the Township Hall Gym
- Community Opinion Survey:** Sent via US mail in August 2014, and responses were collected through approximately October 3, 2014
- Stakeholder Interviews:** Conducted in summer and fall 2014

This Appendix describes each of the public engagement opportunities listed above and summarizes the results. The policies of the Master Plan and the vision the plan expresses are based on the input received from the public.

Visioning Meeting

Glen Arbor Township held a visioning meeting on July 22, 2014. To advertise the event, notices were sent to local media outlets and flyers were placed through the community. The Township also placed a large portable sign outside the Township Hall Gym about two weeks before the meeting. This meeting was intended to give community residents an opportunity to voice their opinions about the key issues and challenges facing the Township. About 85 people attended the workshop.

Introduction

The meeting began with a presentation by the consultants at Williams & Works that summarized the work completed to date and provided an overview of the planning process.

Land Use Images

A series of images were shown representing land use conditions common in communities like Glen Arbor Township. For each slide, a general discussion was held regarding each image and the planning and zoning challenges they illustrate. The primary purpose of this activity was to help the participants begin to think about the multiple dimensions of planning and land use as a precursor for visioning exercise. This exercise also helped to “break the ice” among participants and generate discussion.

Several issues were raised in the context of these images including bike trails, traffic and parking, water quality, the Sleeping Bear Dunes National Lakeshore and the challenges associated with public utilities (water and sewer).

Visioning Exercise

The central component of the meeting was to gain ideas from residents and to learn about some of the issues facing the Township today. During this session, participants were asked to answer the following question:

“What issues need to be addressed to ensure that Glen Arbor Township is a place I want to be in 2040?”

Participants rotated in small groups three times among 11 table topics, and ranked issues pertaining the table topic in terms of their urgency using categories of “sizzling”, “hot” and “simmering”. After 15-20 minutes, participants were asked to switch to a new table of their choice with a different topic and repeat the process. This was completed three times to ensure participants were able to discuss topics of particular interest to them.

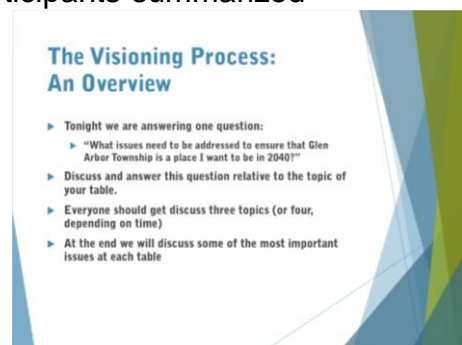
At the conclusion of the third round of discussions, participants summarized the ideas presented.

Parking

- Increase parking locations
- Limit on street parking on North Oak with signage
- More parking or fewer cars
- Non-motorized vehicles creates more demand for parking
- Mostly a summer problem
- Trail head + bike rental creates parking problems

Scenic Views and Viewsheds

- Protecting views from lake, roads by limiting cutting of trees on hilltops & hillsides & placement of houses in relation to trees so that their view is maintained by house is not primary view from the lake.
- Preserve existing views



- Replanting trees/replacement trees
- Collaborating w/ other townships

Employment

- Affordable housing is key for low pay employees & full time employment
- Work with neighboring communities to develop low affordable housing with low transportation costs.
- Year round employment for adults needs to be addressed – work from home/technology tradesmen/women
- Seasonal help for local businesses.
- Affordable housing – local homeowner rent rooms to Glen Lake students and/or Michigan college students.
- Subsidized transportation – can businesses offer BATA passes at a discount to kids coming from Cedar/Maple City etc.

Transportation

- Safety – parking, publishing bus & parking rules, etc.
- Manage congestion – cyclists, walker, drivers
- Make Lake Street one way South
- Improve crossing walkways (signage/stripping)
- Better shoulders for bikes
- Deal with pinch points (Lake & M22)
- Safety concerns
- Lake Street very dangerous – suggest one way (South direction)
- Reduce speed limits on State Highways & in congested areas
- Tour bus parking outside central business area

Lakefront Development

- Structures pop up that do not fit in with our character and the public has no warning or say. ex: Le Bear, latest mansion on Big Glen
- Zoning laws & enforcement need to keep this from happening everywhere
- Need greater set backs on Lake Michigan & on inland lakes
- Opposition to large scale development
- Maintain current zoning levels
- Residential vs. commercial
- Boat launch on Big Glen Lake
- Want to see harbor refuge in Glen Haven
- Use natural lake shore as public beaches not Township road ends

Public Places and Recreation

- Additional public restrooms @ park
- Wheel chair accessibility to Garden
- No more new recreational industries

- Pedestrian safety
- Heritage trail connection?

Downtown Glen Arbor

- Safety concerns with ever increasing bicycles/cars/people in the GA and establishing limits and lack of defined ending & beginning of bicycle trail.
- Clear sidewalks in winter! (business owners responsibility)
- Keep look of GA!
- Safer town for pedestrian & bicycle traffic
- Sidewalks (Art -> south)
- Trees – permaculture, edibles, regenerative ethos
- Preserve family character of mixed look - & how to preserve small independent artisan type business
- Traffic congestion
- Snow management

Housing

- Maintain setbacks & height restrictions (because will force other issues to be solved in a planned way)
- Affordable housing for service workers, for seniors
- Overusing existing housing (12-20 people in a 4-5 br house)
- Housing for seasonal workers
- Develop small affordable housing PUD
- Develop retirement “Community”

Lakes

- Education on impact of materials we put into septic systems
- Get septic system test at sale into law
- Continue/increase education about invasives
- Add Crystal River to this issue
- Need harbor-Lake MI
- Invasive species control water quality
- Limiting kayak hours on Crystal River: wild life

The Environment

- Water quality
- Scent pollutions – coffee roaster smell
- Local environmental committee
- Better recycling in GA
- Better recycling info for visitors & bottle deposit
- Trash on beach – balloons, firework trash
- Biz that use disposables instead of china & silverware
- Deforestation cutting down trees & displacing animals habitats & bees & bugs
- Water quality: fertilizer run-off, invasives, water depth, drinking
- Water quality (drinking water) - Regular testing (Glen Lake Assoc got grant for testing last year)
- Environment – congestion
 - Bicyclist situation need to be addressed
 - Does bike path go through Glen Arbor, does it cross M-22 – very dangerous
 - Leads to overall congested environment

Non-motorized Transportation

- Make Lake Street pedestrian only
- Once you get to end of trail where do you go?
- Parking lots off 22
- Parking a major issue
- Small scale visiting center
- How to continue Heritage Trail thru G.A.
- Safety = good bicycle, pedestrian + auto control – mixture
- Dangerous traffic in village due to too many bicycles going from trail to trail
- No parking for bicycle users
- Trash – bathrooms
- Taking private property and people losing property values due to trails – taking privacy away
- NO MORE PATHS WITHOUT SOME FORETHOUGHT!

Open House

On August 22, 2014 an open house was held at the Glen Arbor Township Hall Gym. The purpose of the open house was to solicit additional feedback on the Master Plan process and build on some of the issues that were identified in the Visioning Meeting. As with the visioning meeting, the open house was widely advertised via local media outlets, flyers were placed through the community and again the Township placed a large portable sign outside the Township Hall Gym about two weeks before the meeting.

The benefit of the open house format is that it allowed residents and stakeholders the opportunity to talk one-on-one with members of the consulting team and local officials in a more casual, informal manner. About 90 people attended the open house.

Open House Activities

The open house consisted of several “stations” where participants were asked to provide their input in a variety of ways. The stations, along with some key results, were as follows:

Station 1. Planning Priorities – This board listed some significant challenges identified at the visioning workshop and asked participants to identify which is most important to them. It also allows participants to identify an issue not listed. Below are the three most important topics and issues, according to participants.

Key Priorities

Topic: Traffic/Transportation Issue: Congestion and safety; bike/pedestrian/vehicle conflicts during summer months.

Topic: Glen Lake/Lake Michigan Issue: Threat of invasive species, loss of water quality

Topic: Economic Development Issue: Lack of business/services for permanent residents

Station 2. Planning Initiatives – This board used the issues from the Station 1 and offered potential solutions. Participants were asked to vote for a solution they liked, or to add another solution. Below are the top solutions to

Topic: Parking Top Solution: Acquire land for parking

Topic: Traffic/Transportation-Congestion & safety; bike/pedestrian/vehicle conflicts during summer

Top Solution: Work to educate residents & visitors regarding bike safety

Station 3. Penny Jars – This station consisted of ten jars with labels on them that related to various planning issues. Participants were given ten pennies and asked to “invest” their ten pennies in the jars in whatever manner they thought to be appropriate.

Top Three “investments”:

1. Enhancing downtown Glen Arbor \$0.64
2. Protecting groundwater resources \$0.61
3. Protecting surface water quality \$0.61

Station 4. Funding and Regulation – Using scales ranging from “more” to “less”, this board asked participants if they thought the Township should allocate additional resources towards planning and land use. It also asked if the Township should change the degree to which it regulates land use.

Results: Responses were generally supportive of current practices with regard to (1) How local resources are allocated toward Master Plan implementation, and (2) the degree to which the Township regulates land use and development in order to carry out the Master Plan.

Station 5. Viewsheds Map – This station consisted of a map of the Township and asked residents to identify their favorite scenic views in the Township using stickers and arrows that were provided.

Station 6. General Comments – This station simply consisted of a white board where participants could write any additional comments.

Community Opinion Survey

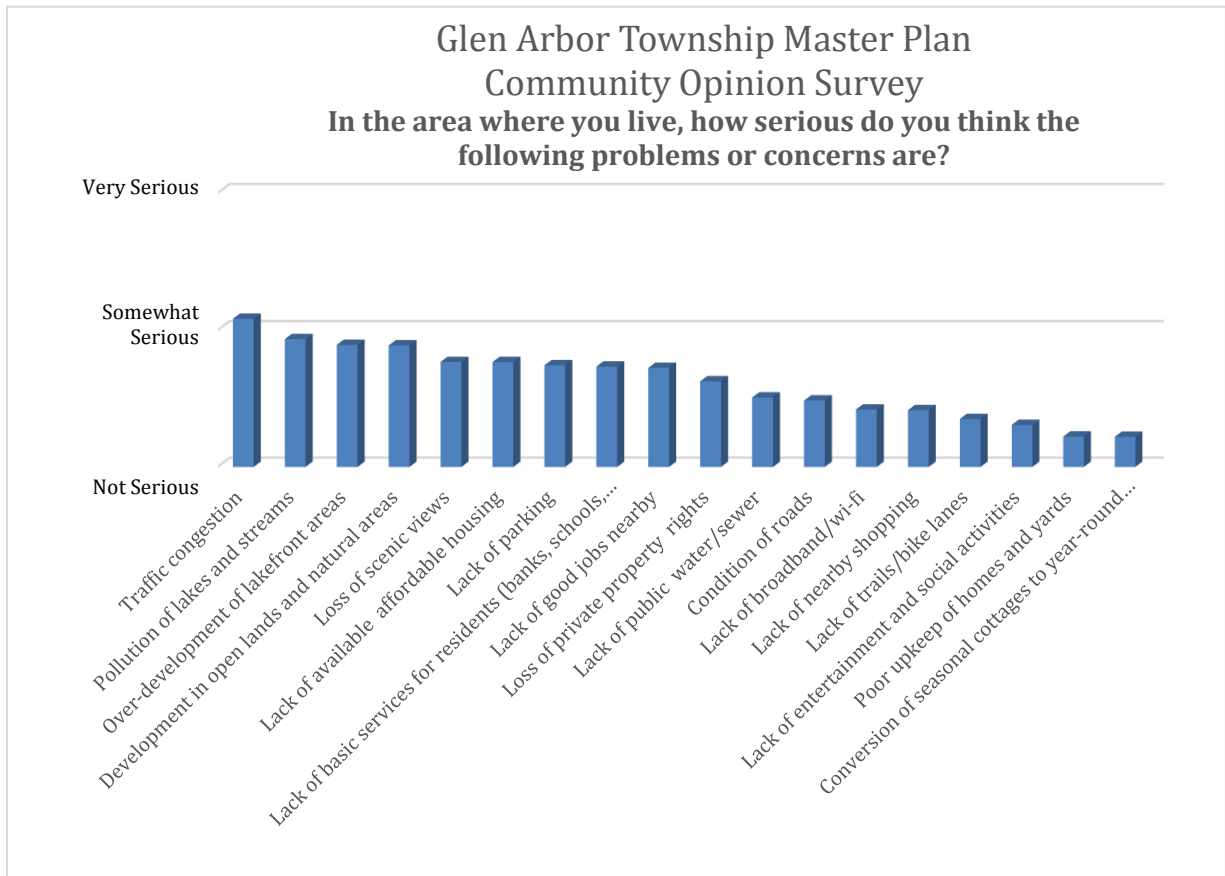
In August 2014, a community opinion survey was sent to every property owner in Glen Arbor Township. The survey was a 3 ½ pages long and contained 25 questions, many of which had multiple parts. The survey was printed and mailed from Grand Rapids along with a cover letter explaining the purpose of the survey. A business reply mail account was used so postage did not need to be provided by the recipient. A total of 1,704 surveys were mailed, and 478 were returned for a response rate of 28%.

Complete survey results can be found in Appendix C, but the following list of items are a sample of some key findings of the survey:

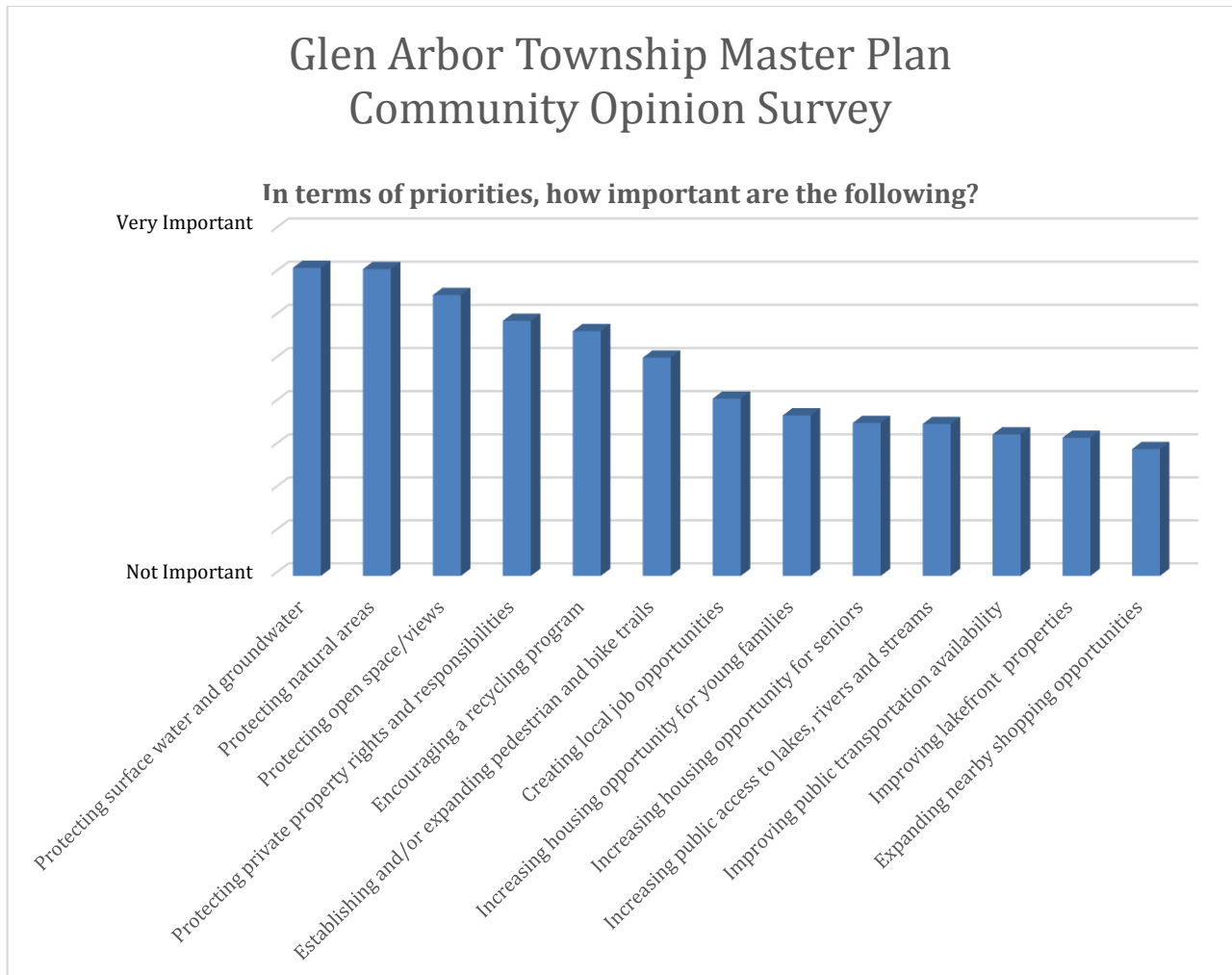
- A majority of respondents (58.5%) do not consider Glen Arbor Township to be their primary residence.

- A majority of respondents indicated that “Natural features / attractive scenery” (87.8%), Proximity to Lake Michigan (62.4%), “Abundance of recreation opportunities” (60.4%) and “small town charm” (60%) as the reasons why they purchased property in Glen Arbor Township.
- Only 6.3% of respondents indicated that they expected to move out of the Township in the next five years. However, of that 6.3% an overwhelming majority cited the cost of living in the Township as the reason they are planning to move.
- Sleeping Bear Dunes and the Sleeping Bear Heritage Trail were the only recreation facilities that are used “frequently” by a plurality of respondents.
- A plurality (58%) of respondents rate the Township’s rate of development as “about right”, and a plurality (43.1%) also felt that the Township’s efforts to guide and direct growth and development were “good.”

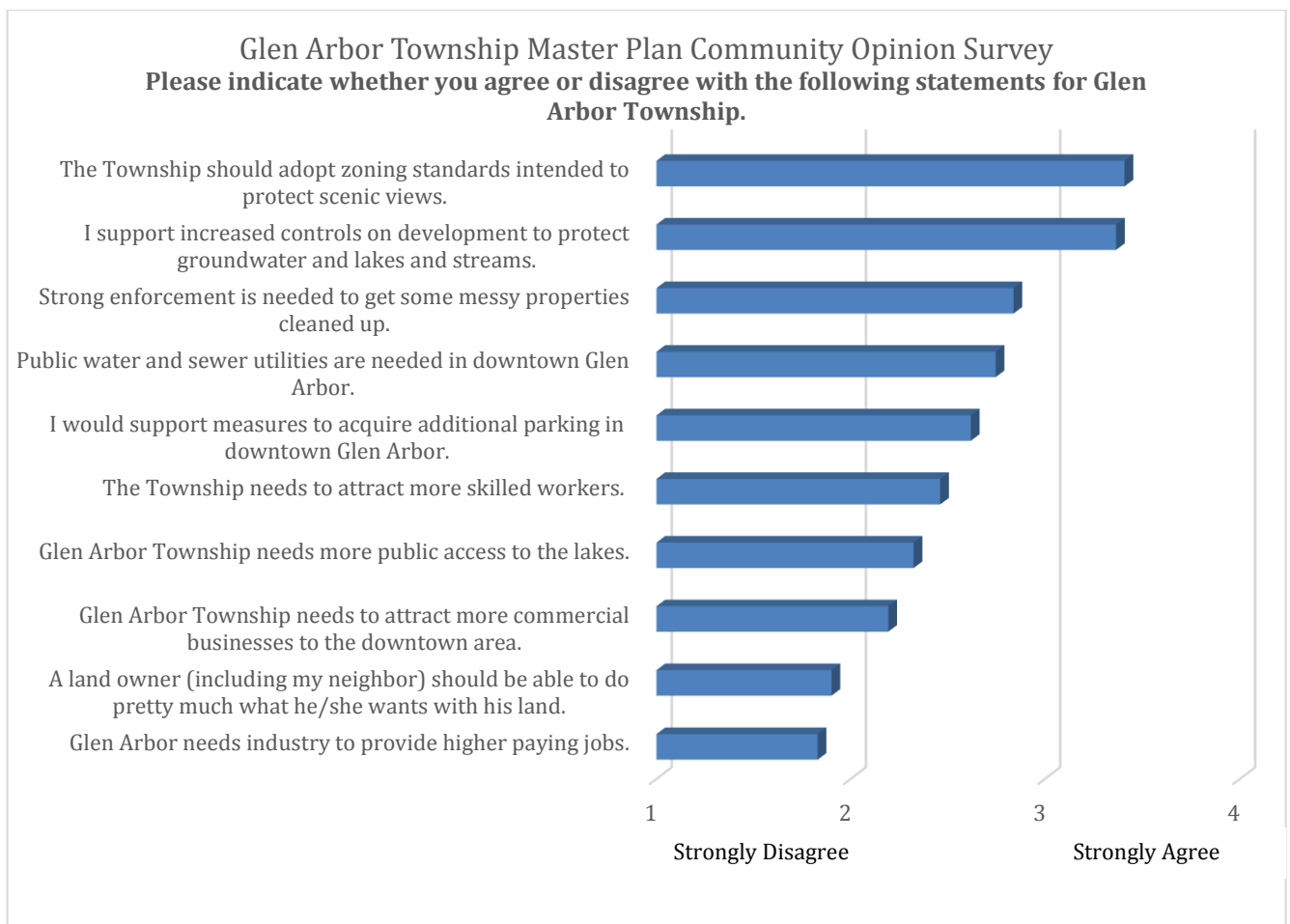
- Question 18 asked respondents to rate several concerns or problems in terms of how serious they were. The results are illustrated in the graph below.



- Question 19 asked respondents to rate several priorities in terms of how important they were. The results are illustrated in the graph below.



- In terms of specific types of commercial/ service development, a majority (51.3%) of respondents felt that health care development should be encouraged in Glen Arbor Township, while nearly half (45.8%) indicated that “goods and services for permanent residents” should be encouraged.
- Similarly, nearly half (48.5%) identified health care as a type of economic development that should be encouraged in the Township
- A plurality of respondents (29.7%) indicated that single-family homes on lots of 0.25 to 1 acre in area should be encouraged in the Township, while almost the same number (27.2%) indicated that single-family homes on lots of 1-3 acres should be encouraged.
- When asked what types of housing should be encouraged in the area where they live, a majority (50.6%) indicated “none”.
- Question 25 asked respondents to indicate if they agree or disagree with several statements. The results are illustrated in the graph below.



- When asked what measures they would support if the Township were to focus on improving downtown, a majority (52.7%) indicated that “better facilities to encourage walking and biking” were needed. Nearly half (44.4%) indicated that stronger measures were needed to protect sensitive beaches. It should also be noted that only 15.7% of respondents indicated that they thought “downtown is OK as it is.”

Stakeholder Interviews

In summer and fall 2014, a series of interviews were conducted with six key stakeholders in the community. These stakeholders were selected with the assistance of the Planning Commission, and were selected because of their expertise, importance to the local economy or community. Conversation with the stakeholders generally flowed freely, although planned questions were asked to each stakeholder ensure a meaningful outcome. The purpose of the stakeholder interviews was to garner feedback on current challenges facing Glen Arbor Township and solutions to deal with those challenges, and other pertinent issues.

Some comments from stakeholders are summarized below:

- One stakeholder felt that Glen Arbor Township (particularly downtown) has outgrown its infrastructure. In the summer, streets are dangerous, parking is difficult to come by. This is now exacerbated by the Sleeping Bear Heritage Trail.
- Several stakeholders indicated that the lack of water/sewer services in Glen Arbor limit the Township’s ability to develop and meet the increased demand that is experienced during the summer.
- One stakeholder is concerned that Township leadership, such as elected and appointed officials, volunteers and others will become “burned out” from dealing with some of the major issues that the community faces, particularly in the summer. Others indicated that the problems facing the Township will require creative, outside-the-box thinking by Township officials to properly address.
- One stakeholder thought that enhancing and preserving the downtown area was the most important challenge, and getting development to complement existing development and respecting the National Park.
- Several stakeholders also commented on the need for wayfinding signage, particularly in the village, to direct visitors to local attractions, parking, recreation facilities, and other destinations.
- One stakeholder said that the Township has everything it needs to solve some of its problems: talented, educated and engaged residents and financial resources.

- Another stakeholder said that the Township cannot make quick reactions to problems; long-term thinking and planning is necessary to accomplish many of the goals of the community.
- Several stakeholders commented on the Sleeping Bear Heritage Trail. Many are dissatisfied with routing of the trail down Northwood Drive. There are significant concerns with regard to safety for the trail users, whether on Northland Drive or M-22.
- One stakeholder thought that additional local trails should be developed to connect residents to downtown, thus lessening car dependency, traffic congestion and parking demand.
- Another stakeholder was concerned with placing additional restrictions on private property. If too many restrictions are placed on the development of a parcel it can lose value.