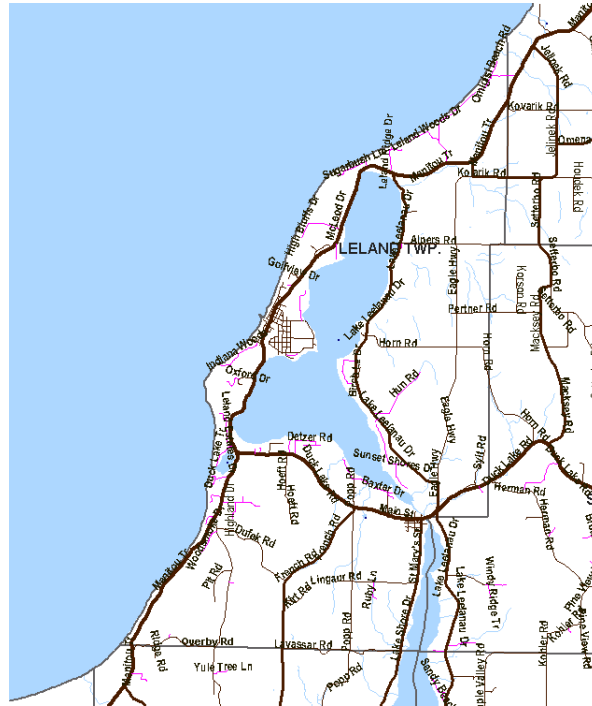


Leland Township



Master Plan

Planning Commission Adopted: TBD
Township Board Adopted: TBD

Distribution Draft

Public Hearing: TBD

Prepared by:
Leland Township Planning Commission
with input from
The Cypher Group, Inc.

Leland Township Master Plan

Leelanau County, Michigan

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Leland Township

Master Plan Update

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Chapter 1: Introduction

This Master Plan for Leland Township takes into account and expands upon the Comprehensive Development Plan of 1994 which it replaces. It is prepared according to the provisions of the Township Planning Act, Act 168 of 2008, as amended.

This Plan describes in a comprehensive and careful manner, the current land use patterns of Leland Township, the changes that are taking place, and the means to manage these patterns of change so that the future of Leland Township reflects the desires and goals of the residents of the Township. The Plan provides long range comprehensive guidelines for public and private decision making.

This Plan provides the basis for the adoption of Zoning Ordinances to implement the Plan and may also provide the basis for capital improvement expenditures and other governmental decisions as well as decisions by private citizens. Existing ordinances will be revised as required to reflect the guidelines of this Plan.

Leland Township participated in the county-wide process to create and more recently update the *Leelanau General Plan*. This process is aimed at maximum public participation in developing growth management policy guidelines and to assist local governments in their planning efforts. Thus, the information gathered and compiled for the county-wide process was considered and utilized as appropriate in the development of this Leland Township Master Plan.

1.1 Plan Development Process

The Leland Township Planning Commission prepared this Master Plan. Public input was sought throughout the process, and a Public Hearing was held. The public input efforts aided in establishing the land use goals and objectives of citizens and property owners in the Township. Additional public meetings were held to identify and review proposed land use policies promoted in this Plan before the adoption process began.

Many of the data and technical concepts in this Plan are derived from county and state sources. While care has been taken to honor Township prerogatives, the consideration of the county planning umbrella has the added advantage of linking all local governments in coordinated planning for the Leelanau Peninsula.

After describing the Township as it is today, the Plan covers trends and citizen inputs providing the basis for revised development policies, new goals and objectives, and growth management techniques. This Plan is intended to be a guide for years to come; however, it will be reviewed at least every five years and updated as necessary.

1.2 Regional Context

The Leelanau Peninsula is located in northwestern lower Michigan and is sometimes referred to as the "little finger" of the state. It is bordered on the north and west by Lake Michigan and on the east by Grand Traverse Bay.

Leelanau County is formed by the Leelanau Peninsula and is bordered on the south by Benzie County and Grand Traverse County. Leland Township is located in the west central area of the Leelanau Peninsula. Leland Township consists of the mainland area and North of Manitou Island which is federally owned and part of the Sleeping Bear National Lakeshore. Due to the protected status of the North Manitou Island portion of the Township, this Master Plan primarily focuses on the mainland portion of the Township. Traverse City, adjacent to the southeastern corner of Leelanau County, is the nearest urban area approximately 25 miles from the Township border. The County is about three-fourths open land or woodland with agricultural and low density rural residential areas. Over ten percent of the county is occupied by the Sleeping Bear Dune National Lakeshore. Figure 1-1 provides a location map of Leelanau County and Leland Township.

The unincorporated villages of Leland and Lake Leelanau provide many attractions and small businesses that result in a large amount of tourist trade. (Note: These unincorporated villages are under the jurisdiction of Leland Township and this Master Plan. However, in order to easily distinguish between the Township, the Village of Leland, the Village of Lake Leelanau and Lake Leelanau, the body of water, this document refers to the unincorporated Village of Leland as Leland Village, and the unincorporated Village of Lake Leelanau as Lake Leelanau Village.) Leland Village has a harbor of refuge which is usually filled with watercraft during the summer months. Lake Leelanau Village, located on the narrows between north and south Lake Leelanau, is the primary entrance to Leland Township from the east on highway M-204. The current zoning map for Leland Township is shown in Figure 1-2.

1.3 General Character

Leland Township surrounds north Lake Leelanau and borders the eastern shore of Lake Michigan. The topography consists of rolling hills, orchards, vineyards, and woodlands with spectacular views of lakes and islands.

This is a rural Township where the majority of land consists of wooded or vacant fields. There are large acreages planted in fruit trees and vineyards, and other crops which provide a rural pastoral character to the Township and contribute significantly to the local economy. Working farms, with primarily cherry and apple orchards and wine grapes, but also strawberry and other row crops, cover major areas of the east and south. In recent years, vineyards have replaced some cherry orchards. Agricultural uses are dictated by generally poor soil types, but the unique geography of the region provides a nationally noted "microclimate" which supports fruit growing.

Development is largely residential, with a preponderance of single-family homes in the Villages and on the shores of Lake Leelanau and Lake Michigan. Very little waterfront property remains undeveloped.

Many miles of shoreline along Lake Michigan and Lake Leelanau make Leland Township a very desirable place to live and a substantial number of people come to visit on a seasonal basis. Winter sports activities, hunting and fishing, fall colors, cherry blossoms, and other attractions bring people to this Township year-round. Tourism is the Township's primary economic anchor.

1.4 History of Leland Township

As the only Township in Leelanau County with two villages, its history can be found in these two waterfront communities. Leland Village finds its origins in settlers who crossed from North Manitou Island during the early 1850s.

The settlers came to take advantage of water transport for use in the logging industry. A dam was built on the Leland River which raised the level of Lake Leelanau (north and south lakes). This in turn made the narrows navigable for future steamboat use.

Docks and sawmills were built in Leland and Lake Leelanau Village, and by 1860 the population had grown to 200 people. Stores, hotels, and shops were added in the village centers. In 1870 an iron furnace was built on the waterfront and used to refine ore from the upper peninsula.

Leland's substantial population growth and size enabled the village to become the county seat. By 1884 the Township population had grown to 839, with 370 persons living in Leland Village. Almost a century later, the village's permanent population remains nearly the same. Many of the buildings in both Leland and Lake Leelanau Villages were built before the turn of the century and remain as historical evidence of past endeavors.

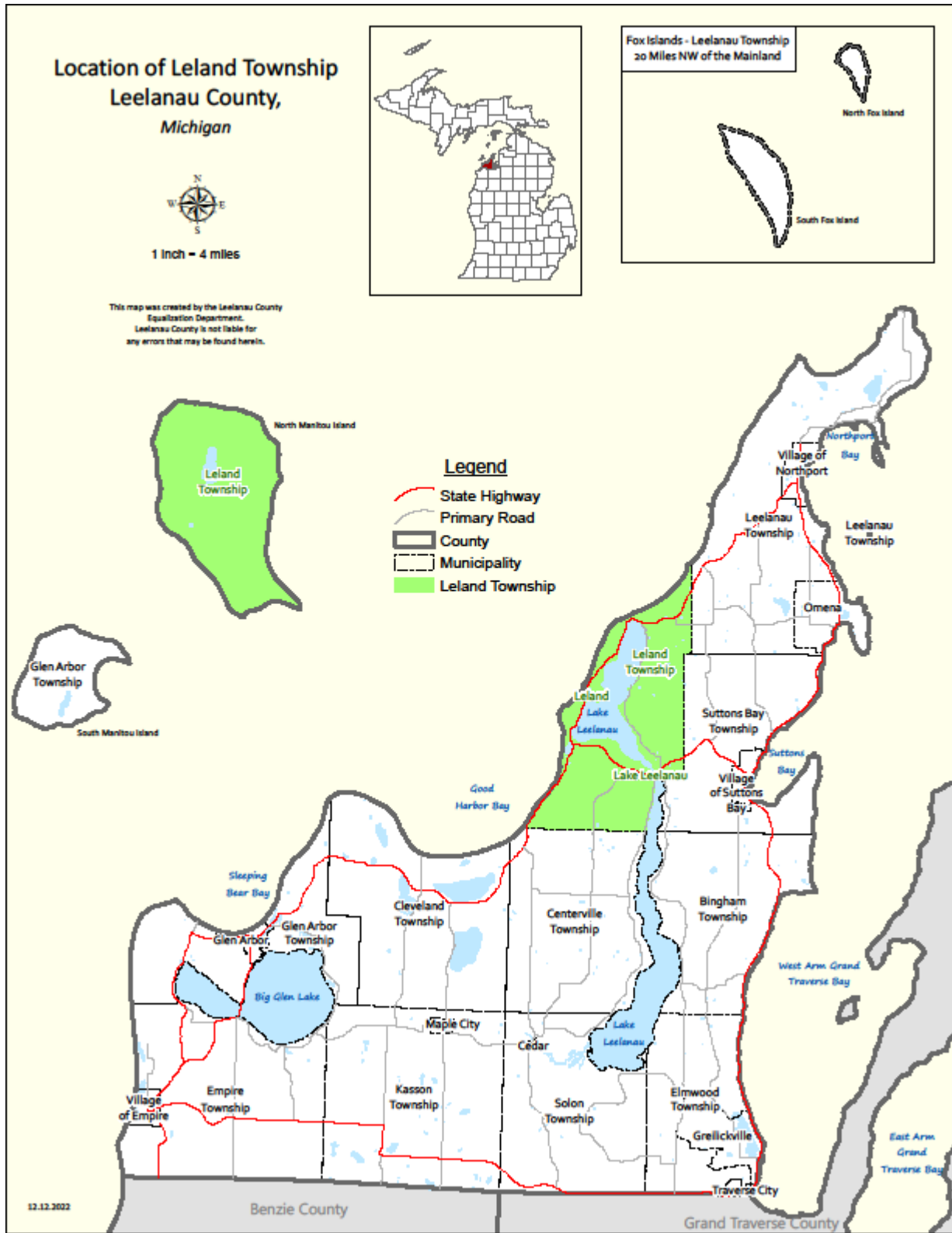


Figure 1-1 - Leland Location Map

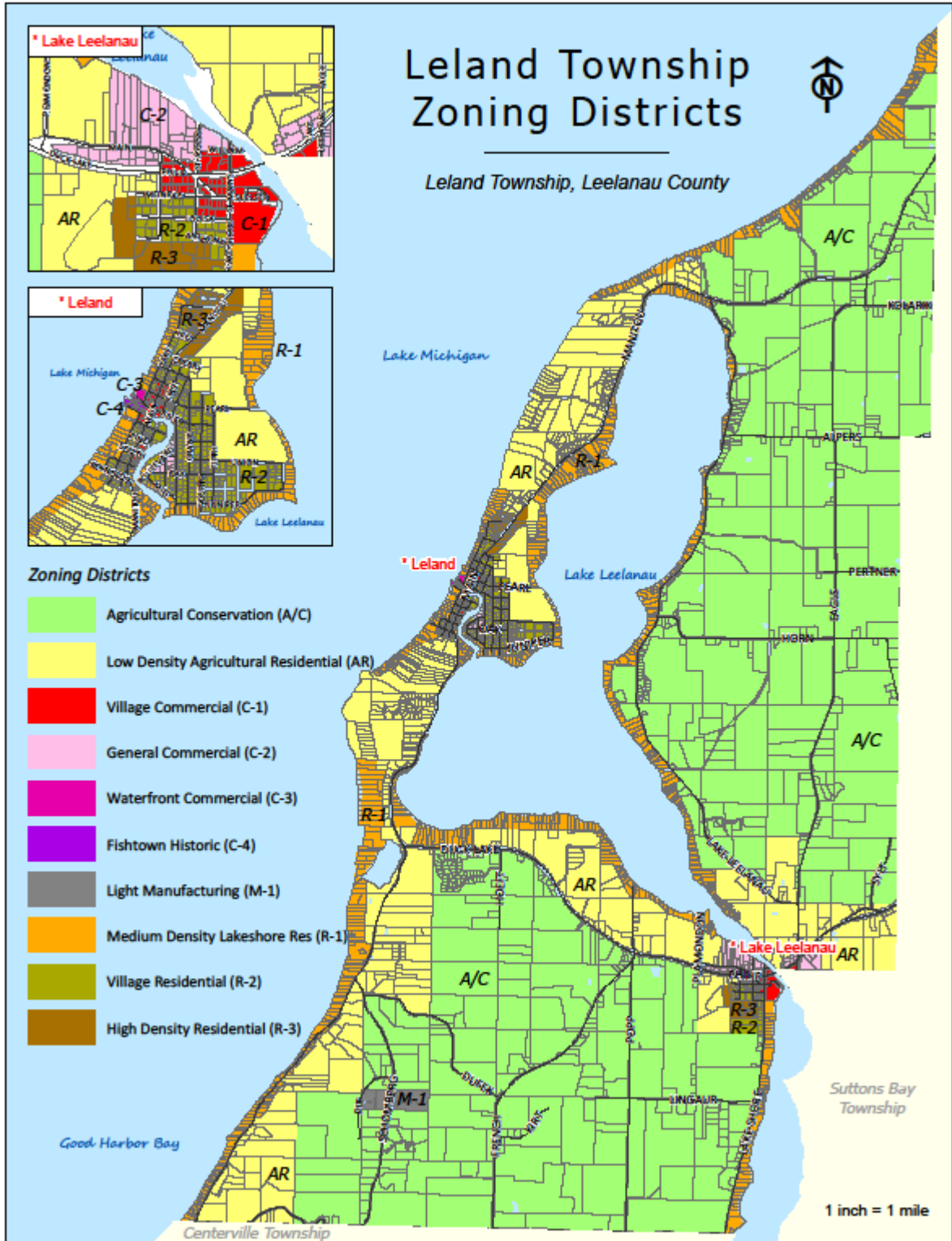


Figure 1-2 - Current Leland Township Zoning

Commercial fishing has been a Leland industry since 1880 and although diminished, it continues today with sport fishing added along the way. The demands from fishermen for a better harbor resulted in improvements in 1937. In 1965, the State of Michigan designated the harbor a “Harbor of Refuge” and installed a break wall and marina. An upgrade and expansion of the harbor was completed in 2009.

As the lumber industry ran its course and the iron business yielded to major cities, Leland Township was saved from financial failure by the blossoming tourist business. Travelers arrived by rail to Traverse City and again by rail to Fouch on the southeastern corner of south Lake Leelanau. Here travelers boarded lake steamers for transport to both Leland and Lake Leelanau Villages.

Hotels were built at Fountain Point below the narrows in 1890 and in Leland Village in 1901 and 1909. Summer visitors also began to arrive in Leland Village by steamer directly from Chicago. The Township has been a tourist destination ever since and tourism is its primary economic anchor.

The first store building was built in Lake Leelanau Village in 1881 by Noel Couturier. At that time the village was called Provemont, where the Schaub brothers had farmed since mid-century. The narrows were first bridged in 1864, and again in 1895 and 1935. Lake Leelanau Village provided wood for the steamers from a lumberyard erected in 1884. In 1903 the village became the terminus of a railroad from Traverse City which provided service until 1944. A Catholic missionary founded a church at Provemont that developed into today's church, convent, and school. (Source: Edmund M. Littell, 100 Years in Leelanau, 1965.)

Chapter 2: Township Social and Economic Characteristics

2.1 Population

Characteristics of the population of Leland Township, including size, age, and education, are described in the following paragraphs. In 1940, Leland Township was the largest population center in the Leelanau County with over 14 percent (1,212) of the people. The population remained relatively steady through 1970 at 1,219, and then increased to 1,446 by 1980. By 2000, the population had grown to 2,033, and remained steady through the 2010 Census with a population of 2,043, representing just over 9 percent of the Leelanau County population. As of 2020, the population had grown to 2,126, with 9.5 percent of the total county population.

Although one of the smaller Townships in land area, Leland Township ranks fourth in permanent population among Leelanau County's eleven townships and three Villages, with 9.5% of the County's population. However, the County estimates that the seasonal and day visitor tourist population (June through August) is seven times larger than the permanent population. Therefore, since Leland Township is one of the most popular destinations, the total number of non-permanent people in the Township could total as much as 14,800 persons on any summer day.

Table 2-1 Population Change Leland Township and Leelanau County							
	1990	Percent Change	2000	Percent Change	2010	Percent Change	2020
Leland Township	1,642	23.8	2,033	0.5%	2,043	4.0%	2,126
Leelanau County	16,527	27.8	21,119	2.8%	21,708	2.7%	22,301
Source: U.S. Census Data							

2.1.1 The Villages

The Township contains two unincorporated villages that began as lumber, fishing, trading, and agricultural centers more than a century ago. Each village has developed its own special character, and the goals and objectives of each are different.

2.1.2 Lake Leelanau Village

Lake Leelanau Village has a permanent population of about 253, with room for expansion. Current business includes tourist shops, restaurants, a grocery store, a gas station with a convenience store, tasting rooms and a newspaper. Government offices

include the Township offices. The largest employer and center of village activity is the St. Mary's Catholic School.

The village provides two public access sites on the Lake Leelanau narrows for swimming and boating.

2.1.3 Leland Village

Leland Village has a permanent population of about 377 with a market center to support winter residents. In 1988, a New England-style village green was established on the last open space in the village center. During the summer tourist season, over fifty businesses may function in the village. Leland Harbor is a prominent feature, attracting large numbers of tourists and fishing enthusiasts.

Leland Village provides visitor access by boat to the Manitou Islands, ten miles offshore, now part of the Sleeping Bear Dunes National Lakeshore. Tourists arrive daily to board the ferry, while others arrive by boat to visit Leland. Leland Harbor provides a marina and access sites where fishing enthusiasts launch and recover boats. Other public access sites provide for swimming and boating on Lake Michigan and Lake Leelanau.

Fishtown, a historically designated complex in Leland Harbor, was a former fishing village converted to shops and restaurants during the 1960s. There are commercial and several charter fishing enterprises which operate out of Fishtown, which is the only full-service marina operating on Lake Michigan in Leland Township.

The County government offices were previously moved to Suttons Bay Township from Leland Village. The recently renovated and expanded K-12 Public School is also found in Leland Village as is the Leelanau Children's Center. There is a light service business sector, composed of shops, restaurants, a grocery store, and other small businesses, in the center of the village.

2.2 Age Distribution and Racial Make-up

As of the 2020 Census, the median age of the Township's population is 56 years. The population is evenly distributed between the sexes with slightly more females than males. Of the total population, 34.5 percent are 65 years and older and 19.2 percent are 19 or younger. Registered voters as of May 2023 totaled 2,025.

Based on 2020 Census data, the racial composition of Leland Township is primarily white (91.1%), followed next by Native American at 0.8%, Asian at 0.7% Black or African American at 0.5%, with the remaining balance a combination of other races.

*Table 2-2
Age Distribution
Leland Township, Leelanau County, State of Michigan – 2000 and 2020*

Age Group	Leland Township				Leelanau County		State	
	2000 Census		2020 Census		2000	2020	2000	2020
	Total	Percent	Total	Percent	Percent	Percent	Percent	Percent
0-4 years	86	4.2%	70	3.3%	5.1%	3.8%	6.8%	5.4%
5-19 years	372	18.3%	337	15.9%	19.3%	14.5%	26.1%	18.7%
20-24 years	125	6.1%	74	3.5%	5.7%	3.5%	2.6%	6.7%
25-44 years	437	21.5%	332	15.6%	24.2%	17.7%	29.8%	24.7%
45-64 years	569	28.0%	579	27.2%	28.3%	28.2%	22.4%	26.5%
65 + years	444	21.9%	734	34.5%	17.4%	32.4%	12.3%	18.0%
Total	2,033		2,126					

Note: Due to rounding, percentages may not add to 100 percent.

Source: U.S. Bureau of the Census, Census 2000, 2020

2.3 Income and Employment

The beauty and bounty of the region's natural resources afford much of the economic opportunity within Leland Township. The characteristics of the local economy including occupations, income, and enterprise are described in the following paragraphs.

2.3.1 Occupations

There is great diversity in the occupations of the approximately 719 employed Township residents, according to the 2022 American Community Survey. Management/business, sales/office, and service provide the basis for the majority of occupations. Table 2-3 depicts the Leland Township occupations as reported in the 2022 American Community Survey. The American Community Survey is generally considered to have a larger margin of error than the US Decennial Census, but is the only source for some information that has been released since the 2010 US Census.

Services such as repairs, sales, professional specialties, and administration employ the majority of the populace. When viewed by industry category, education, health and social services is the largest group with 208 persons, followed by professional, scientific and management with 108 employees. Retail and finance/insurance/real estate are other industries with large proportions of the township employee base.

Major employers in the Township include Leelanau County, Leland Public Schools, and the Leland Lodge.

Not all of the employed residents work within the Township or county, however a mean commute time of 22 minutes, according to the 2022 American Community Survey, suggests nearby employment. This is slightly lower than the 24.3 minutes of average commute time for Leelanau County and 24.2 minutes for the state as a whole. Some residents also work remotely for companies located in other states, with 18.3% of employed residents working from home, compared to 14.7% for the county as a whole.

Table 2-3				
<i>Occupations</i>				
<i>Leland Township and Leelanau County – 2022</i>				
Occupation	Leland Township		Leelanau County	
	Number	Percent	Number	Percent
Management, business, science and arts occupations	280	38.9	4,350	44.8
Service occupations	131	18.2	1,671	17.2
Sales and office occupations	184	25.6	1,846	19.0
Natural resources, construction and maintenance occupations	70	9.7	930	9.6
Production, transportation and material moving occupations	54	7.5	923	9.5
Total	719		9,720	
Note: Due to rounding, percentages may not add to 100 percent.				
Source: U.S. Bureau of the Census, 2022 American Community Survey				

2.3.2 Income and Poverty Levels

Income and poverty levels for Township residents are provided in Table 2-4 and Table 2-5. According to the 2022 American Community Survey, the median household income of \$95,431 is higher than the Leelanau County median household income of \$82,345, and substantially higher than the State median household income of \$66,986 (all figures in 2022 dollars).

The Township median age and income levels are significantly higher than the state average, while the number of people living in poverty in the Township has decreased. The decrease in poverty rates may be due to the increased cost of housing, and many of the lower income individuals and families being essentially priced out of Leland Township.

Due to the costs of living in Leelanau County, some residents can find themselves unable to afford unexpected expenses or increases in basic expenses even while living above the poverty threshold. A 2019 United Way study found that while only 6% of Leelanau County's population falls below the poverty threshold, which only considers income, another 37% of County residents are considered to meet the "ALICE" threshold of "Asset Limited, Income Constrained, Employed", which also considers location and cost of living. This number appears to be holding relatively steady, as a 2023 study released by the United Way based on 2021 data showed 46% of the population meeting the thresholds for either poverty or ALICE.

Table 2-4						
Income Level Distribution - Household						
Leland Township, Leelanau County, State of Michigan						
Income Level	Leland Township				Leelanau County	State of Michigan
	2010 ACS		2022 ACS		2022 ACS	2022 ACS
	Number	Percent	Number	Percent	Percent	Percent
less than \$10,000	47	5.3	21	3.0	3.0	5.7
\$10,000 to \$14,999	0	NA	4	0.6	1.5	4.0
\$15,000 to \$24,999	75	8.4	44	6.2	5.2	7.6
\$25,000 to \$34,999	117	13.1	33	4.6	6.9	8.1
\$35,000 to \$49,999	188	21.0	34	4.8	11.0	12.0
\$50,000 to \$74,999	194	21.7	153	21.5	17.5	17.6
\$75,000 to \$99,999	63	7.0	116	16.3	12.6	13.2
\$100,000 to \$149,999	125	14.0	129	18.2	20.7	16.4
\$150,000 to \$199,999	26	2.9	110	15.5	10.1	7.5
\$200,000 or more	60	6.7	66	9.3	11.4	8.1
Total	895		710			
Median household income	\$55,069		\$95,461		\$82,345	\$66,986

Source: U.S. Bureau of the Census, 2010 Census, 2022 American Community Survey
Note: Due to rounding percentages may not sum to 100 percent.

2.3.3 Commercial and Industrial Enterprise

Leland Township accommodates a number of business establishments and various types of enterprise which contribute significantly to the tax base and local economy. These are described in the following paragraphs.

The steady growth in the number of building permits demonstrates that local construction is a significant economic factor. This construction growth indicates that real estate and the associated employment in financing, marketing, servicing, and construction rank with tourism as one of the fastest growing industries in the Township.

Agricultural enterprise consists mainly of family-operated, fruit-growing farms in east and south Leland Township producing sweet and tart cherries, apples, strawberries, and grapes for local and national markets. The number of wineries and vineyards has increased on the Leelanau Peninsula.

In Leland village, a large marina provides boat repair services and slips for rent. Located nearby is Carlson Fisheries, a retail and wholesale fishing business located at the Leland Harbor. A thriving sport fishing industry also operates in this harbor.

In Lake Leelanau village near the Fire Station, a construction business, and hardware store form a sector of light industry. Nearby, an excavating business contributes to the industrial surroundings.

In both villages there are restaurants, retail shops, cottage industries, and professional offices that provide goods and services. To accommodate tourists, there are a variety of overnight facilities within the Township including bed and breakfast establishments, lodges, rental homes, and cottages.

2.4 Education

There are 453 students enrolled in Leland Public Schools as of the 2023-24 school year. Enrollment in Leland Public Schools has varied between 300 and 453 during the past 30 years. The Leland Public School is an International Baccalaureate World school for kindergarten through tenth grade. The Township has a relatively high level of educational attainment with 99.6 percent of adults 25 years and older graduated from high school compared to 82.9 percent in 2010, while over 84 percent have some college up to and including graduate level degrees. Educational statistics are provided in Table 2-6.

**Table 2-6
Educational Achievement of Population 25 years and Older
Leland Township, Leelanau County, State of Michigan**

Educational Attainment	Leland Township				Leelanau County	State of Michigan
	2010 ACS		2022 ACS		2022	2000
	Number	Percent	Number	Percent	Percent	Percent
Population 25 years and over	1,652	100.0	1,359	100.0	100.0	100.0
Less than 9th grade	137	8.3	4	0.3	0.9	2.7
9th to 12th grade, no diploma	145	8.8	1	0.1	2.8	5.5
High School graduate (includes equivalency)	312	18.9	205	15.1	19.5	28.1
Some college, no degree	304	18.4	301	22.1	18.5	21.9
Associate degree	83	5.0	104	7.7	9.6	9.7
Bachelor's degree	392	23.7	477	35.1	28.1	19.5
Graduate or professional degree	279	16.9	267	19.6	20.5	12.6
Percent high school graduate or higher		82.9		99.6	96.2	91.8
Percent bachelor's degree or higher		40.6		54.7	48.6	32.1

Source: U.S. Bureau of the Census, American Community Survey 2010, 2022

2.5 Housing Stock and Property Values

2.5.1 Housing

A large summer population with multi-generational standing has built summer homes in the Township during the past century. These summer homes are often expensive, creating a unique situation for the Township by impacting property values and the tax base. As of the 2020 Census, 755 out of 1,770 total housing units in the township were for seasonal use. Table 2.8 details housing and occupancy information for Leland Township.

Information on the number, quality class, and age of single family housing units in Leland Township is provided in Table 2-7.1. The “class” designations for single family housing are based on the current quality of the housing unit, and is frequently closely associated with age. The designations range from “A” as the highest quality to “D” as the lowest quality, with class “C” being “standard” according to the State of Michigan Residential Assessor’s Manual. As of December 2023, the average overall age of the 2,021 single family residential housing units in Leland Township is 24.9 years.

**Table 2-7.1
Class and Age of Housing Units – Single Family Residential
Leland Township, Leelanau County, State of Michigan**

Class	Number	Average Age
D	88	41.0
CD	192	31.0
C	882	28.0
BC	495	19.0
B	312	14.0
A	52	9.0

Source: Leland Township Assessor, December 2023

In addition to single family residential housing units, there are also a number of mobile/manufactured homes in the Township, which are classified by condition. Table 2-7.2 covers age and condition for the mobile/manufactured homes found in the Township. Age is less closely associated with condition in the mobile and manufactured housing units in Leland Township. The average overall age of the 33 mobile/manufactured residential housing units in Leland Township is 28.24 years.

**Table 2-7.2
Class and Age of Housing Units – Mobile/Manufactured
Leland Township, Leelanau County, State of Michigan**

Class	Number	Average Age
Low	12	42.0
Fair	1	30.0
Average	9	20.0
Good	6	19.0
Very Good	3	16.0
Excellent	2	28.0

Source: Leland Township Assessor, December 2023

In addition to the above, there are also three residential units classified as Town Homes, one with a class of “C” at 19 years old and two classed as “BC” with an average age of 4 years old. There is also one residential unit classified as an A-Frame, with a class of “CD” at 30 years old.

Table 2-8 Housing and Occupancy Information - 2020 Leland Township, Leelanau County, State of Michigan				
Housing/Occupancy	Leland Township		Leelanau County	State of Michigan
	Number	Percent	Percent	Percent
Total Housing Units	1,770	100.0	100.0	100.0
Occupied housing units	926	52.3	63.1	88.4
Vacant housing units	844	47.7	36.9	11.6
For seasonal, recreational, or occasional use	755	42.7	32.3	5.3
Homeowner vacancy rate	NA	1.6	1.2	1.3
Rental vacancy rate	NA	16.8	14.1	7.8
Occupied housing units	926	100.0	100.0	100.0
Owner-occupied housing units	808	87.3	87.4	70.9
Renter-occupied housing units	118	12.7	12.6	29.1

Source: U.S. Bureau of the Census, Census 2020

In order to understand the recent residential development in the Township, recent land use permits for new single family homes, commercial buildings, and accessory structures were reviewed and are summarized below:

**Table 2-7.3
New Building Permits – 2010-2023
Leland Township**

Building Type	New Permits 2010-2014	New Permits 2015-2019	New Permits 2020-2023
Single Family Residential	63	100	74
Commercial	6	9	15
Accessory Structures	26	44	39

Source: Leelanau County Department of Building Safety

Single-family residential and accessory structure construction accelerated substantially between 2014 and 2019, and then has remained relatively steady in the years since. Approximately 20 new single family homes were built in the township each year between 2015 and 2023. No permits for multi-family dwellings were issued in Leland Township between 2010 and 2023. Commercial construction increased substantially between 2019 and 2023, after remaining relatively steady from 2010 through 2019.

Table 2-9 Types of Households Leland Township, Leelanau County, State of Michigan				
Household Types	Leland Township		Leelanau County	State of Michigan
	2020 Census		2020	2020
	Number	Percent	Percent	Percent
Total households	926	100.0	100.0	100.0
Married couple household	551	59.5	58.9	45.3
With own children under 18 years	119	12.9	13.3	16.0
Cohabiting-couple household	37	4.0	5.2	7.0
With own children under 18 years	14	1.5	1.4	2.4
Male householder, no partner present	142	15.3	15.1	19.7
Male householder, living alone	111	12.0	11.6	14.0
Male householder, living alone, 65+ y/o	61	6.6	5.8	4.2
Male householder, no partner, with children under 18	10	1.1	0.8	1.5
Female householder, no partner present	196	21.2	20.8	27.9
Female householder, living alone	147	15.9	14.8	15.7
Female householder,	97	10.5	9.5	8.1

living alone, 65+ y/o				
Female householder, no partner, with own children under 18 years	21	2.3	2.2	5.0
Households with individuals under 18 years	179	19.3	20.1	27.9
Households with individuals 65+ years old	489	52.8	49.7	32.0
Source: U.S. Bureau of the Census, Census 2020				

2.5.2 Household Size

According to the 2022 American Community Survey, the average household size in Leland Township is 2.53 persons, while the average family size is 3.08. These numbers are very similar to the average for both Leelanau County (2.39 and 2.80) and the State of Michigan (2.40 and 3.02).

2.5.3 Ownership

In Leland Township, according to the 2020 Census over 87.3 percent of occupied housing is owner-occupied, a number comparable to the 87.4 percent for Leelanau County, but substantially higher than the 70.9 percent for the State of Michigan.

A 2023 Housing Needs Assessment conducted in Northern Michigan by Housing North found that for Leelanau County as a whole, 88.4% of occupied houses in Leelanau County are owner-occupied, while the remainder are renter-occupied. In addition, the Housing North study found that 37.5% of properties in Leelanau County are considered “vacant”, which incorporates seasonal housing units, abandoned properties, unoccupied rentals, and for-sale homes.

As of February 2023, only 0.4% of the housing stock in Leelanau County was for sale, a substantially lower percentage than the 2-3% usually seen in healthy housing markets, and the median price for those for-sale homes was \$975,000. Housing North found a county-wide “housing gap” of 382 rental units and 1,953 for-sale units over the next five years, over a variety of price points. As Leland Township makes up 9.5% of Leelanau County’s population as of the 2020 Census, a basic analysis would indicate a township housing gap of approximately 36 apartments and 185 homes over the next five years, at a variety of price points.

According to the 2023 Housing North study, the largest share of rentals within Leelanau County (35.3%) had rents of between \$1,000 and \$1,500 per month. Less than half (48.7%) had rents of below \$1,000 per month, which is a substantially lower percentage

than the region (61.9%) and state (59.0%). The Housing North study concluded that “the smaller share of units with lower gross rents in Leelanau County likely indicates a lack of housing choices for low- and moderate-income households in the market”.

2.6 Property Values and Tax Base

The many, often expensive, summer homes in Leland Township result in a larger tax base than comparable townships. The 2023 state equalized value (SEV) of Leland Township real property totaled \$960,640,722 resulting in an estimated market value of \$1,921,281,444.

Residential property is by far the largest tax category with total real property, comprising over 93 percent of the SEV, although making up only 47% of non-public property by acreage. Table 2-10 provides the Leland Township SEV data from 2010 to 2023. Table 2-11 depicts the 2023 SEV data from both Leland Township and Leelanau County.

Leland Township's millage rate is one of the lowest in the county. The 2023 millage rate for Leland Township was 20.4853 mills for principal residences and 31.3866 for non-principal residences in the Leland School District, and 19.3947 for principal residences and 37.3947 for non-principal residences in the Suttons Bay School District. Most tax revenue is allocated for education, including the millages for Northwest Education Services, the State Education Tax, and millages for operations and debt for local schools. Additional millages include county millages for operations and various departments and township millages for operations of the township, library and fire department.

**Table 2-10
State Equalized Value
Leland Township**

Property Class	2010 SEV	Change	2015 SEV	Change	2020 SEV	Change	2023 SEV
Agriculture	23,752,700	-14.4%	20,343,800	1.6%	20,664,600	27.5%	26,354,600
Commercial	19,740,600	-6.6%	18,435,500	11.6%	20,572,300	28.6%	26,459,600
Industrial	474,900	-20.2%	360,000	-1.1%	356,200	59.1%	566,800
Residential	565,518,681	0.8%	570,317,303	16.4%	663,963,610	36.6%	907,259,722
Total Real Property	609,486,881	0.005%	609,456,603	15.8%	705,556,710	36.2%	960,640,722

Source: Leelanau County Equalization Department, 2010-2023

**Table 2-11
Distribution of the State Equalized Value
Leland Township and Leelanau County - 2023**

Real Property:	Leland Township		Leelanau County	
	Amount	% of total	Amount	% of total
Agricultural	26,354,600	2.7%	210,714,710	3.8%
Commercial	26,459,600	2.7%	249,903,570	4.5%
Industrial	566,800	0.06%	13,697,560	.2%
Residential	907,259,722	93.6%	4,947,662,310	90.0%
Total Real Property	960,640,722	99.1%	5,421,978,150	98.5%
Personal Property	8,859,900	0.9%	72,568,710	1.3%
Total SEV	969,500,622		5,494,546,860	
Source: Leelanau County Equalization Department				
Note: Due to rounding, percentages may not add to 100 percent				

Chapter 3: Natural Resources

3.1 Physical Description

The mainland portion of Leland Township is a triangular-shaped area about five miles across its base (east to west) and nine miles across its length (north to south). The Township contains 19,000 acres, of which about one fifth is water. There are approximately 17 miles of shoreline on Lake Leelanau and another 12 miles of shoreline on Lake Michigan, the western boundary of the Township. The Township also includes North Manitou Island, managed as part of Sleeping Bear Dunes National Lakeshore.

Lake Leelanau village is located at the narrows between north and south Lake Leelanau. Leland village is located where the Leland (Carp) River flows into Lake Michigan after a one mile run from Lake Leelanau. The river falls over a control dam just prior to forming the Leland Harbor.

The isthmus between Lake Michigan and Lake Leelanau is largely residential and wooded. Eastern Leland Township consists of fruit-growing farms and woodlands on well-drained, nearly level-to-very steep, loamy soils on moraines and till plains. South of highway M-204, woodlands and mixed farm use prevail on similar but sandier soils. There are about 2,000 acres of agricultural land in eastern Leland Township and another 2,000 in southern Leland Township. There are 2,400 acres classified as orchard; 2,200 acres classified as cropland; and 2,000 acres classified as open land.

Approximately 600 acres of wetlands (very poorly drained, nearly level, mucky soils) exist at the northeast corner of Lake Leelanau. Another 250 acres of wetlands exist north of the narrows. Approximately 89 acres of state-designated critical dune and high-risk erosion areas exist at the north end and the southwest corner of the Township.

Over one third of the Township (6,000 acres) is covered with forest land, primarily the northern hardwoods association (sugar maple, beech, basswood, black cherry, and hemlock) and white pine. Species such as white ash and beech are in danger. Red oak, lowland hardwoods (birch and elm), and conifers are also present. Some aspens are present north of Lake Leelanau, as are swamp conifers (cedar, balsam fir, spruce, and tamarack) in the wetlands.

A summary of Leland Township land use/land cover including acreages and percentages is discussed in detail in Chapter 4 of this plan.

3.2 Climate

Leelanau Peninsula's climate is tempered by the surrounding waters of Lake Michigan so that recent temperature charts compare it to the climate of the mid-Atlantic region, especially along the lakeshores. Leland village may be ten degrees cooler in summer and warmer in winter than inland areas. These conditions create a microclimate favorable to fruit growing. Leelanau County ranks as one of the Michigan counties with

the smallest amount of precipitation. Temperature and precipitation averages for the period covering 2000-2023, including snowfall, as provided by the National Weather Service and National Oceanic Atmospheric Administration weather station in Maple City, are provided in Table 3-1.

**Table 3-1
NOAA Weather Station – Maple City
Climate Averages**

Month	Avg. Maximum Temperature	Avg. Minimum Temperature	Average Temperature	Avg. Total Precipitation	Snowfall
January	45° F	1° F	23.3° F	2.50"	41.0"
February	48° F	-2° F	23.6° F	1.95"	28.9"
March	61° F	4° F	31.8° F	2.16"	14.7"
April	77° F	18° F	43.1° F	3.00"	7.1"
May	85° F	27° F	54.5° F	3.19"	0.2"
June	88° F	38° F	63.9° F	2.55"	0.0"
July	90° F	47° F	69.7° F	1.92"	0.0"
August	88° F	47° F	68.8° F	3.37"	0.0"
September	85° F	38° F	61.7° F	3.59"	0.0"
October	77° F	27° F	49.8° F	4.90"	0.7"
November	64° F	18° F	38.3° F	3.16"	14.3"
December	51° F	8° F	28.4° F	3.10"	37.2"

3.3 Geology

The bedrock underlying Leland Township was laid down during the Middle and Late Devonian ages of the Paleozoic Era. The bedrock under the Township consists of Traverse Group and Antrim Shale, see figure 3-1.

The surface geology of the Township developed 10,000 to 12,000 years ago through glacial activity. Numerous advances and retreats by the glaciers resulted in the locally complex pattern of erosion and deposition. Leland Township is dominated by coarse-textured glacial till. Till is composed of unsorted sands and gravels left by the glacier, see figure 3-2. Along much of Lake Michigan and Lake Leelanau the geological composition is primarily lacustrine (lake related) sand and gravel. In Leland Township, lacustrine sand and gravel occurs typically as former beach and near shore deposits of the glacial Great Lakes. The abandoned shorelines of glacial Lake Michigan are still visible in Leland Township as the terraces along the lake shore, see figure 3-2. Another visible indication of glacial history is the series of drumlins which extend southeast from the northwest portion of the Township. Drumlins are streamlined hills of glacial till shaped by the moving ice sheet, whose line of axis indicates the direction of local ice movement.

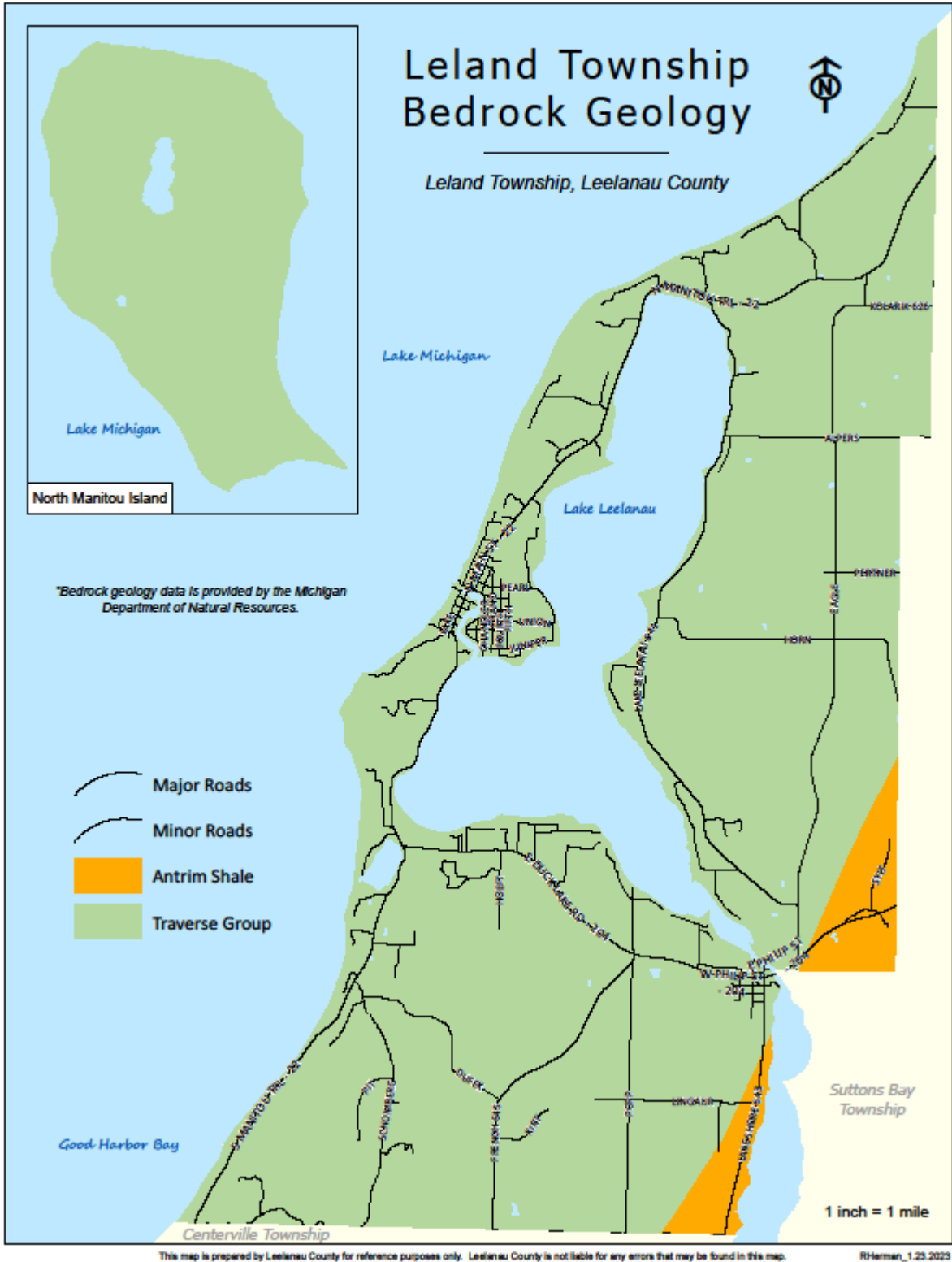


Figure 3-3.1 - Bedrock Geology of Leland Township

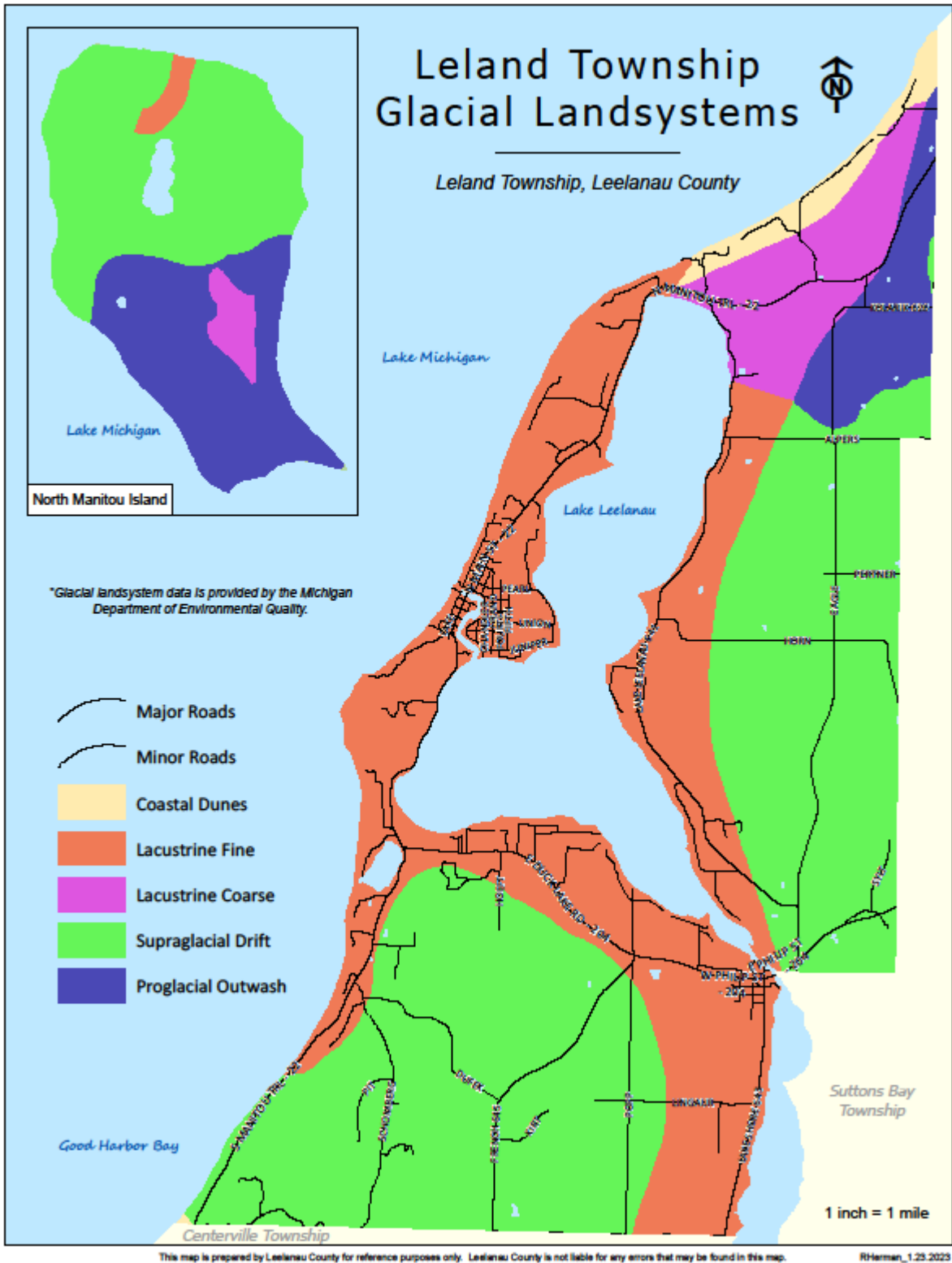


Figure 3-3.2 - Glacial Geology of Leland Township

3.4 Topography

Slope is an important development consideration associated with topographic features. Steep roadway grades, septic field failures, soil erosion, and excavation costs are some of the difficulties associated with severe grades. The topographic map, provided as figure 3-4.1, depicts the areas of steep slopes where the contour lines are close together and other areas of the township with more rolling topography. The areas of moderate and extreme slope may be a constraint for potential development.

Development in areas with severe slopes and ravines should be regulated. Where development is permitted on steep slopes, sensitive site planning should be required along these steep slopes to prevent soil erosion.

A portion of the dune areas are state classified as Critical Sand Dune and High-Risk Erosion Areas, and as such any development in this area must be in compliance with the provisions of the state statute and receive state approval in addition to local land use and zoning approvals. Figure 3-4.2 shows the general areas of Critical Sand Dunes within the Township.

3.5 Soils

One important determinant of land use is the soil's suitability for development. Land uses must correspond to the capacity of the soils on which they occur, and soil suitability for each use should be determined before development occurs.

The soils found on the mainland portion of Leland Township are in one of the following four general soil associations. Those soil associations are:

Deer Park Dune land association: Well-drained, strongly sloping to very steep, sandy soils on dunes.

East Lake-Eastport-Lupton association: Well-drained and moderately well drained, nearly level to gently sloping, sandy soils and very poorly drained, nearly level mucky soils; on lake terraces and beach ridges.

Emmet-Omena association: Well-drained, nearly level to very steep, loamy soils on moraines.

Emmet-Leelanau association: well-drained, nearly level to steep, loamy and sandy soils on moraines and till plains.

Often associated with particular topographic and soil characteristics, the development and septic limitations are either related to slope, hydric soils, or both. These limitations do not preclude the development of specific sites. The developer should realize, however, that construction on some soils may be more costly in time and money. A more detailed analysis of the soil by the District Health Department will determine suitability for siting a septic system. Health Department approval is required by State law.

Soils and topography also determine which areas are classified as prime, unique, and locally important farmland. The prime farmland classification indicates soils which are ideally suited for agricultural or timber production. Unique farmland is land other than prime that is used for the production of specific high value food and fiber crops. Locally important farmland includes soils which are nearly prime but are located on slightly steeper grades.

These soils can produce high yields when treated and managed according to modern farming methods. With good management these soils may produce yields equal to that of prime soils. Hydric soils (wetland soils) are found primarily in the vicinity of Lake Leelanau. Figure 3-4.2 show the wetland areas according to the National Wetland Inventory. This wetland mapping is based on general information and does not indicate whether the mapped areas qualify as regulated wetlands. The wetland definition used by the National Wetland Inventory is *“WETLANDS are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of the year.”*

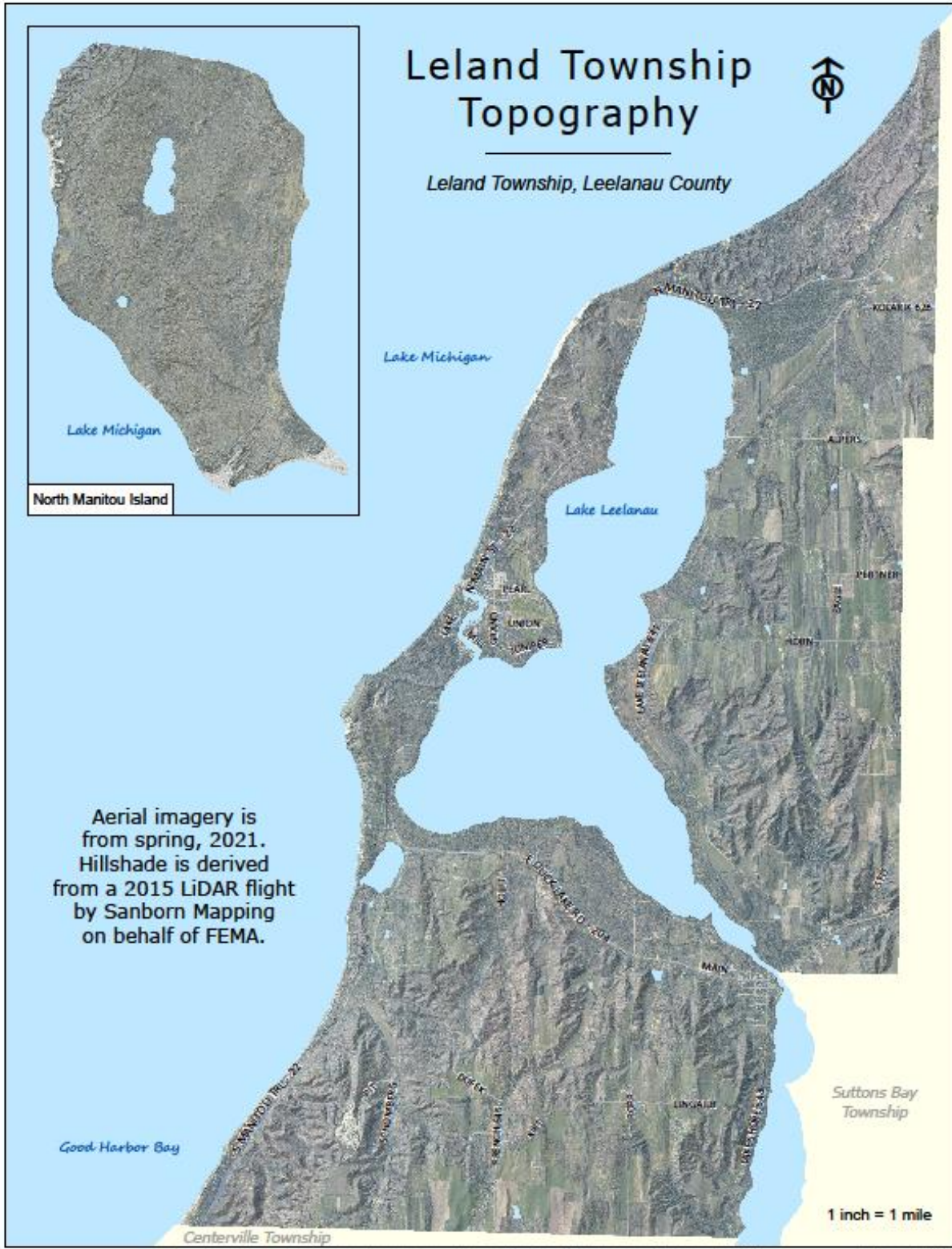


Figure 3-4.1 - Leland Topographic Map

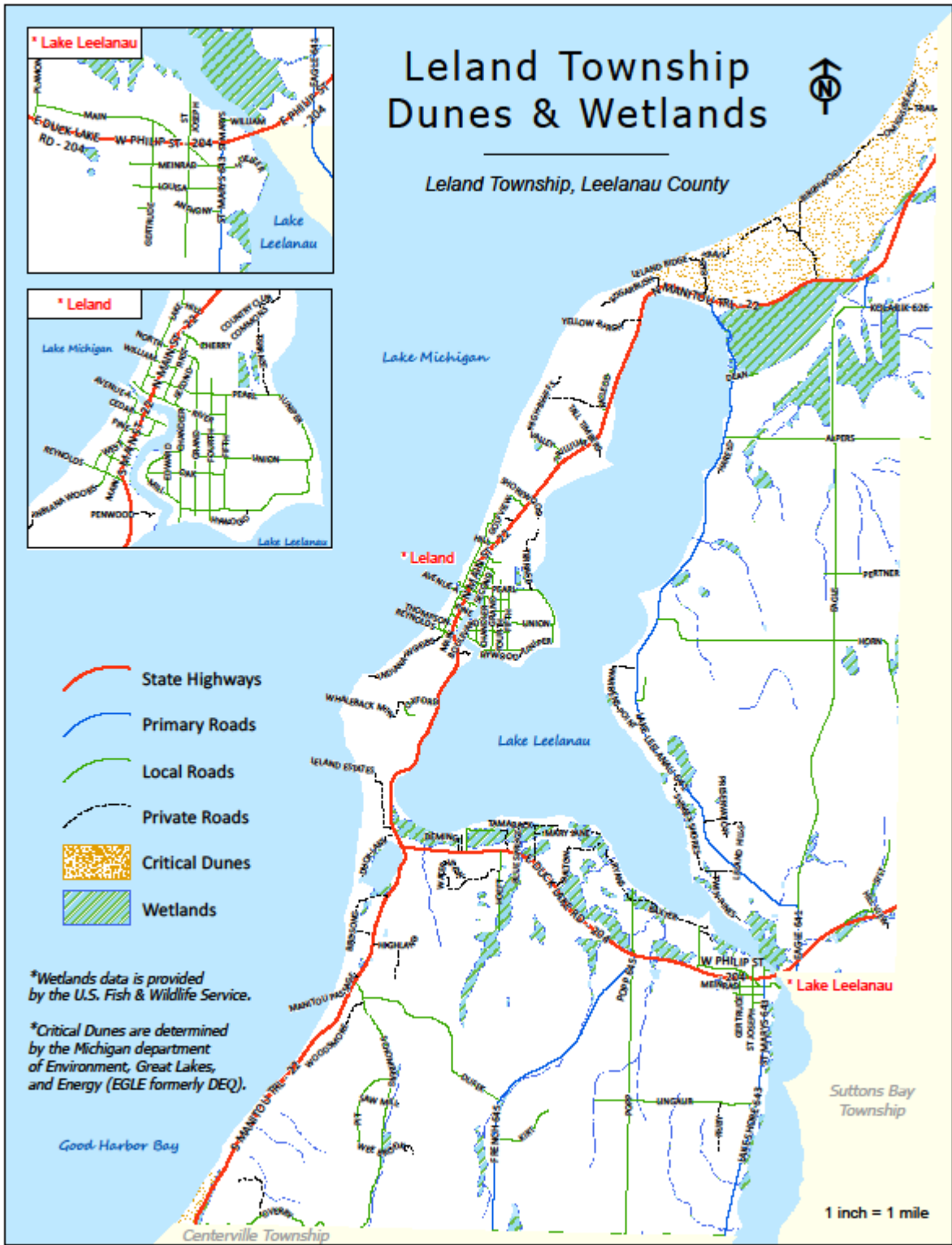


Figure 3-4.2 - Leland Dunes & Wetlands

3.6 Water Resources

One of the most valuable natural resources of Leland Township is water. The Township is located within two watersheds: the Lake Michigan watershed and the sub-watershed of Lake Leelanau. The waters of both Lake Leelanau and Lake Michigan contribute to recreational activities such as fishing, boating, and swimming.

Both groundwater and surface water are vital resources within Leland Township. Because there is no central water distribution system, residents must rely upon individual wells for drinking water. The vulnerability of drinking water aquifers to surface contamination is high in the Township due to the highly permeable soils. Surface waters in lakes and creeks of the Township are an important resource for scenic, recreational and groundwater recharge amenities. It is therefore important that water resources be protected and managed in a manner which would ensure their quality.

3.6.1 Groundwater

Important factors in the evaluation of groundwater are the quantity and quality of the water. The geologic and hydrologic features of the Township provide residents with sufficient water quantities. Water availability will not likely be a factor in limiting growth. In Leland Township, water quality is more of a limiting factor than water supply. A concern is the potential contamination of wells by septic fields, for the areas not served by the sewer systems. As of 2023, most sales and title transfers of property in Leelanau County require an inspection of existing wells and septic systems to be completed by the Benzie Leelanau District Health Department.

Another possible groundwater contamination problem is nitrate pollution. Common sources of nitrates include animal feed lots, septic systems and runoff or leachate from manure or fertilized agricultural lands.

3.6.2 Surface Water

The two major surface water resources in Leland Township are Lake Michigan and Lake Leelanau. The Township's boundaries include 12 miles of Lake Michigan frontage and approximately 17 miles of Lake Leelanau frontage. These lakes and their associated tributary streams and creeks offer scenic and recreational amenities to Township residents and visitors. It is extremely important that the quality of these surface waters be protected from the negative impacts of overdevelopment, such as pollution and loss of scenic views to open water.

Lakes, creeks, and wetlands are important for surface drainage, groundwater recharge and wildlife habitat. Alterations to the water features can contribute to flooding, poor water quality, insufficient water supply and loss of valuable wildlife habitat.

While the current quality of surface waters in Leland Township is considered good to excellent, the threat of potential water pollution from point and non-point sources is a concern. Proper land use management can help control water quality conditions in Leland Township. Some methods to curb pollution include runoff control measures, septic field corrections, proper treatment of sanitary wastes, and fertilizer applications restrictions.

Additional threats to surface water come in the form of invasive species. According to the University of Michigan, invasive zebra mussels have been present in the lake since 1996, and the Lake Leelanau Lake Association confirmed the presence of invasive Eurasian watermilfoil in 2019. Both of these species harm native species in bodies of surface water, as well as obstructing water-based recreation and decreasing the aesthetic value of lakes.

3.7 Sites of Environmental Contamination

Part 201 of the Natural Resources and Environmental Protection Act (NREPA) 1994, PA451, as amended, provides for the identification, evaluation, and risk assessment of sites of environmental contamination in the State. The Remediation and Redevelopment Divisions (RRD) of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) is charged with administering this law. A site of environmental contamination, as defined by RRD, is "a location at which contamination of soil, ground water, surface water, air or other environmental resource is confirmed, or where there is potential for contamination of resources due to site conditions, site use or management practices." The agency provides an updated list (via the MDEQ website) of environmentally contaminated sites by county, showing the sites by name, Site Assessment Model score, pollutant(s), and site status. As of December 2023, Michigan Sites of Environmental Contamination identifies 70 sites within Leelanau County, eleven of which are in Leland Township.

Leaking Underground Storage Tanks (LUSTs) are sites where underground tanks, often for storing gasoline or diesel fuel, are leaking and cleanup is required under Part 213 of NREPA. In some cases, this involves removing the tank, excavating the contaminated soil, and in some cases installing new tanks. As of December 2023, there are 18 sites listed in Leelanau County, one of which is in Leland Township

3.7.1 Surface Water Discharge Permits

All point source discharges into surface waters are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit which is issued by the EGLE Water Division. Permit requirements generally address discharge limitations, effluent characteristics, monitoring, and reporting requirements, along with facility management requirements. There are nine-point source permit holders in Leelanau County, with one in Leland Township for the sewer facility.

3.7.2 Air Quality

Air Quality is monitored by the Air Quality Division of the Michigan Department of Environment, Great Lakes, and Energy. Standards have been established as acceptable levels of discharge for any of the following air pollutants: particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and trace metals. These pollutants are monitored on a continuing basis at selected locations around the state. Monitoring in recent years has shown the level of pollutants in the region to be within the established acceptable standards.

Air discharge permits are required for businesses unless otherwise exempted by law. There is currently one known renewable operating permit in Leelanau County (Maple City). There are none in Leland Township.

3.8 Summary

The review of the natural resources in Leland Township indicates the natural features and agricultural resources are relatively unimpaired at this time; however, these resources are extremely vulnerable. Residents highly value the natural resources and scenic features of the Township, as indicated in the community survey. The environmental features of the Township are an important asset to the community and need continued protection.

Chapter 4: Existing Land Uses

4.1 Pattern of Land Divisions

As development occurs, larger tracts of land are generally broken down into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Land division patterns for Leland Township are discussed below.

The largest undivided parcels in Leland Township are typically agricultural and/or forested properties.

Other land divisions are occurring as larger parcels along the roads are split into smaller parcels. In terms of land division patterns, it is worth noting that some of the newer residential developments in Leland Township are often being created as site condominiums rather than traditional subdivisions. A site condominium does not actually create lots by land division. Therefore, a site condominium project may continue to appear as a large, undivided tract when it has already been converted to relatively dense residential use.

4.2 Existing Land Use Statistics and Characteristics

Leland Township's land and water area is 49.9 square miles, or 31,958 acres. The mainland area of Leland Township is bordered on the west and north by Lake Michigan and on the northeast by Leelanau Township. The Township is bordered on the southeast by Sutton Bay Township and Centerville Township on the south.

The land use mapping from the Leelanau County was utilized as a starting point for the Township mapping, and then updated using Michigan Department of Environment, Great Lakes, and Energy (EGLE) Natural Resources aerial photographs, and supplemental field checking. The updated information was then computerized to produce the existing land use statistics. Table 4-1 presents the percentage of Leland Township currently in each land use category, from largest to smallest. Each of the land use categories is discussed in detail later in this chapter.

Table 4-1: 2024 Existing Land Use by Assessment Category Leland Township		
Land Use Category	Acreage	Percentage
Agricultural	5,550	17.4%
Water	3,273	10.2%
Residential	8,109	25.4%
Public (Includes N. Manitou Is.)	14,774	46.2%
Industrial	53	0.002%
Commercial	199	0.006%
Total	31,958	
Source: Leelanau County Equalization		

4.2.1 Forests and Wetlands

Upland and lowland forests, which include upland hardwoods, conifers, and wooded wetlands, account for a substantial portion of the Township land area by coverage. Heavily wooded areas are found throughout the Township, as can be seen in Figure 4-1.2. A decrease in forested land is directly attributable to development, primarily residential development.

Wetlands include land that has sufficient water at, or near, the surface to support wetlands or aquatic vegetation. These areas are commonly referred to as swamps, marshes, or bogs. Wetland areas may also include land that supports lowland hardwoods and conifers. Wetland information was not verified by field inspection when these maps were compiled. Thus, the areas shown as wetlands by the Michigan Resource Information System (MIRIS) may not meet State and Federal criteria for legally regulated wetlands. As illustrated in Figure 3-4.2, the main wetland area in the Township are around Lake Leelanau.

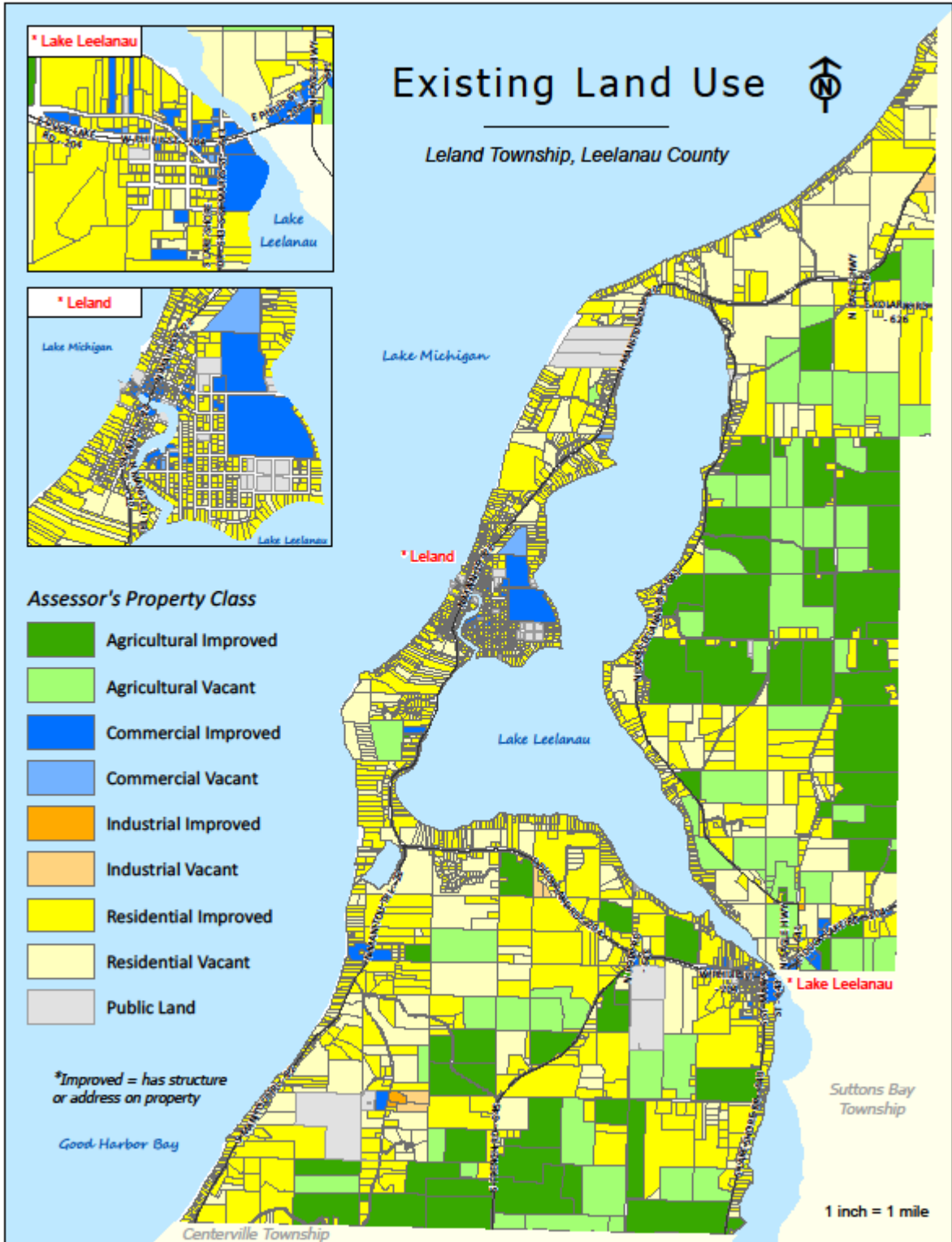


Figure 4-1.1 - Existing Land Use by Assessment Category

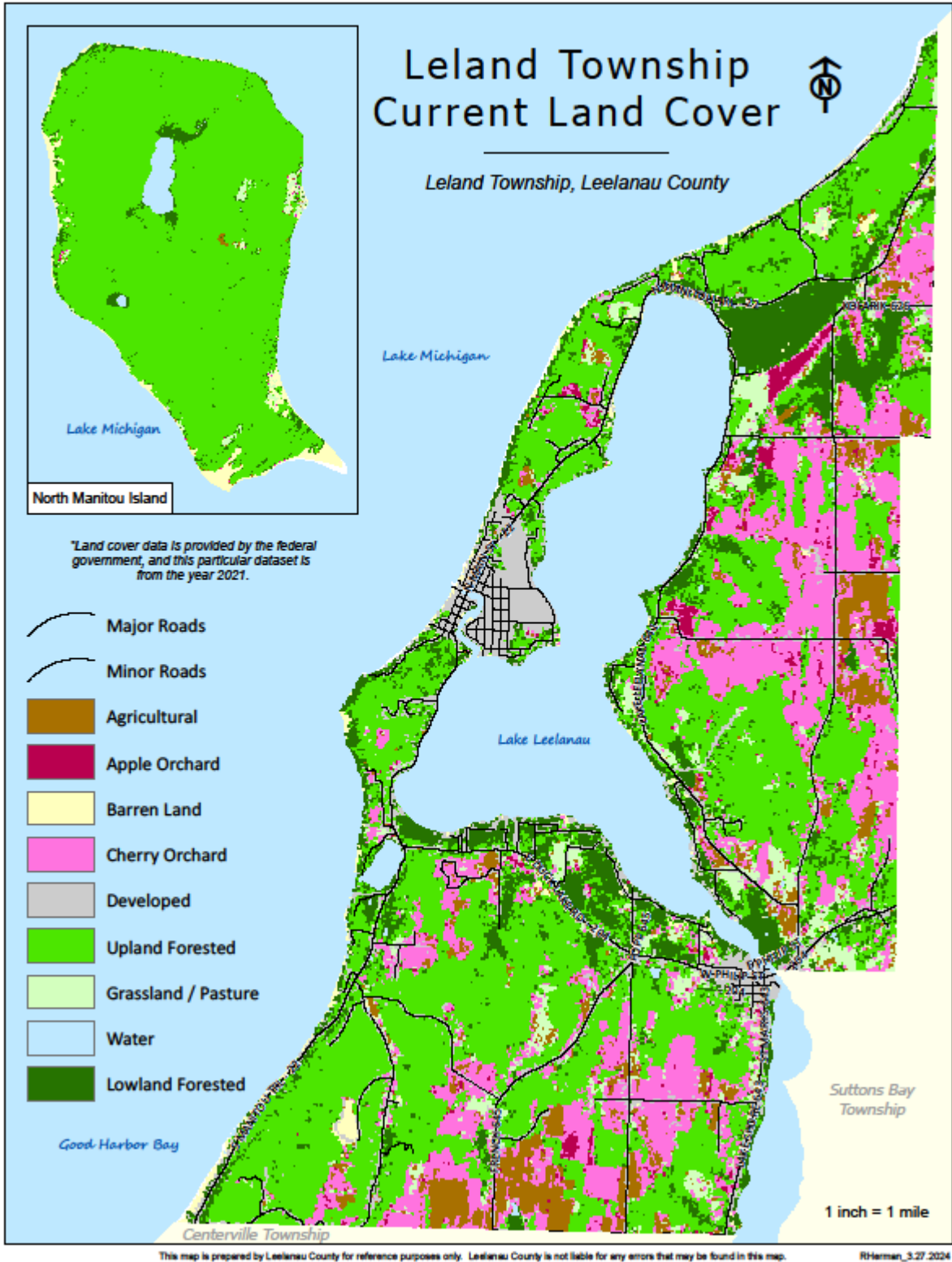


Figure 4-1.2 - Existing Land Use by Coverage Type

4.2.2 Agricultural

Agricultural use is the third most prominent land use in Leland Township, after public and residential. As shown in Table 4-1, agricultural lands occupied approximately 17 percent of the Township land area in 2024. As is illustrated in Figure 4-1.1, the agricultural lands are clustered mainly in the south and east of the Township. As illustrated in Figure 4-1.2, the majority of the agricultural lands are cherry and apple orchards, with smaller amounts of other agriculture present.

The agricultural classification also includes agricultural lands that may be enrolled in the Conservation Reserve Program. This program pays farmers to remove certain erodible lands from agricultural production.

4.2.3 Water

Open water comprises over 10 percent of the Township area, due primarily to Lake Leelanau. This does not include the portion of Lake Michigan that borders the township. Figure 4-1.1 illustrates the locations of the lakes in the Township.

4.2.4 Residential

As can be seen from Table 4-1.1, the amount of land being used for residential purposes is approximately 25.4 percent of the Township, and accounts for 47.2% of non-public land in the township.

The pattern of residential development within Leland Township is shown in Figure 4-1.1. Residential use is located throughout the township, and land along the lakeshores and in the villages is almost entirely residential in use.

4.2.5 Public and Recreation

Public lands in the Township comprise over 46% of the Township when North Manitou is included, as shown in Table 4-1. Detailed information regarding the individual recreation sites is presented in the Leland Township Recreation Plan. Leland Township with frontage on both Lake Michigan and Lake Leelanau provides tremendous water-related recreation opportunities. The largest recreation area is North Manitou Island which is part of Sleeping Bear National Lakeshore; the other mainland recreation lands mapped in Leland Township are the Leland Country Club golf course (private), Hancock Field, Clay Cliffs, the Leland Township Harbor, and the public access site on Lake Leelanau.

The Leelanau Conservancy protects 16,847 total acres of land in Michigan, over 16,000 of which is in Leelanau County. As of their 2022 Annual Report, 1,704 acres of Leland Township were protected by the Conservancy. Of the total land acreage in the county, just over 20% is open to the public through 28 natural areas hosting over 87,000 visitors in 2022. Several of these natural areas are in Leland Township, including the Narrows Natural Area north of the village of Lake Leelanau; the Whaleback Natural Area south of the village of Leland; Nedows Bay, Hall Beach, and the Leland Village Green in the village

of Leland; and Clay Cliffs Natural Area and Houdek Dunes Natural Area north of the village of Leland.

4.2.6 Industrial and Commercial

Industrial and commercial uses take up little land in Leland Township – approximately 0.008% as of 2024. These uses are found primarily in the villages, with a small concentration on South Schomberg Road.

Chapter 5: Community Services, Facilities, and Transportation

5.1 Utilities Service

Electric service is provided to the Township by Consumers Energy and Cherryland Electric.

Propane gas service is commonly used and is provided by several private businesses. There is natural gas service provided by DTE Energy in portions of the township, including the Villages of Lake Leelanau and Leland, and also south of M-204.

SBC Telephone provides communications service to Leland village and Lake Leelanau village. Century Telephone provides communications service to east Leland. Cell phone service is provided in portions of the township.

Cable, broadband, satellite and DSL services are provided in portions of the Township by a variety of companies. An expansion of internet services is currently underway within Leelanau County, with several companies expanding services through state and federal grants and funds for improving rural internet service.

5.2 Sanitary Sewer System

Leland Township has a public municipal sanitary sewer system that serves the Leland and the Lake Leelanau Areas (see Figures 5-2.1 and 5-2.2). This system was completed in 1993 after years of discussion and debate, and was developed to help protect the water quality of groundwater and surface water in the area. The system was designed and constructed with the aid of grant monies from the United States Environmental Protection Agency that covered a substantial portion of the work, with the remaining costs paid through a township Special Assessment District and municipal bonds issued by the Leelanau County Board of Public Works. These bonds were paid off by the township in 2010.

The Leland Township Sewer System is unique in that each user has a septic tank(s) maintained by the sewer system, with the liquid effluent being collected and pumped to the Wastewater Treatment Facility on Popp Road. The effluent is collected and treated through an aerated lagoon, phosphorous removal process, a clarifier, and a biofilter, before being dosed to one of twelve large drainfields at the facility. The system operates under a Groundwater Discharge Permit issued by the State of Michigan, and the township employs a Sewer Administrator and a Wastewater Technician to oversee, operate, and maintain the system.

The system currently serves approximately 540 residential and commercial accounts, and was designed to primarily serve existing buildings within the sewer district, with limited availability to serve vacant lots within the district. The township monitors sewer flows on an annual basis to verify that the system has adequate capacity to serve existing customers as well as anticipated vacant lots within the district. In the past five years, the system has been operating at approximately 70% of capacity, which is

adequate to serve the existing customers as well as a reasonable projection of anticipated growth in the district for the next ten years. The township has had engineering studies performed to determine if the overall capacity of the system could be increased if necessary, and the engineers, with agreement from the State of Michigan, have determined that the drainfield area at the Wastewater Facility could be expanded in the future. At this time, there are no plans by the township to implement this potential expansion.

The Leland Township Board is responsible for the sewer system, with advisory assistance from the Leland Township Sewer Commission, a five-member advisory commission that meets monthly. The Board is also assisted by the Sewer Administrator and the Wastewater Technician. Leland Township has adopted a Sewer Use and Rate Ordinance that governs the system.

5.3 Township Schools

Leland Public Schools in Leland village provide education for grades K-12 with a 2022/23 enrollment of about 450 students. The Leland Public School District includes portions of adjacent townships and a small portion of Leland Township is served by the Suttons Bay Public School District. See Figure 5-3 for the public school districts in Leland Township. St. Mary's School (parochial) in Lake Leelanau village provides education for grades K-12.

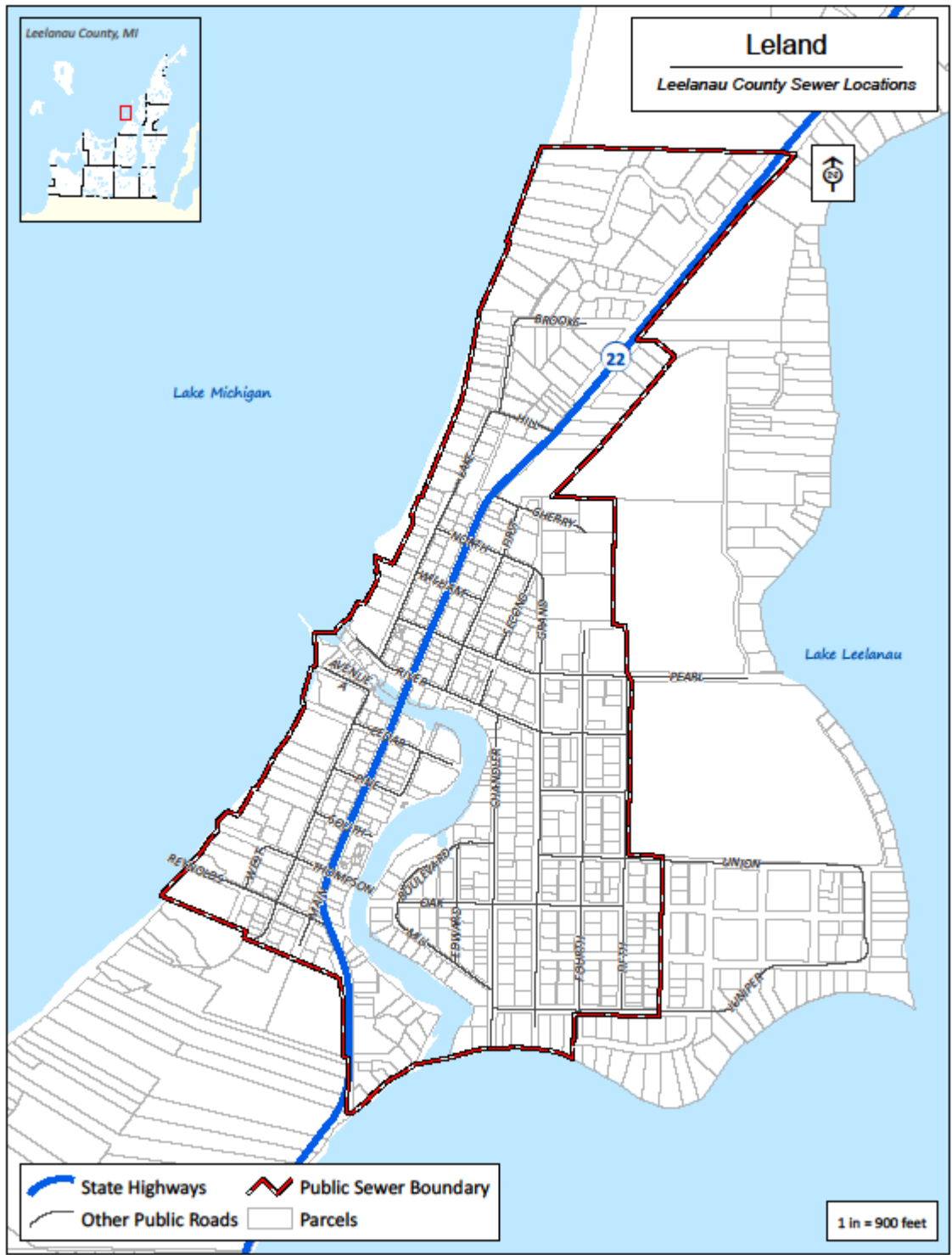


Figure 5-2.1 - Leland Sewer District

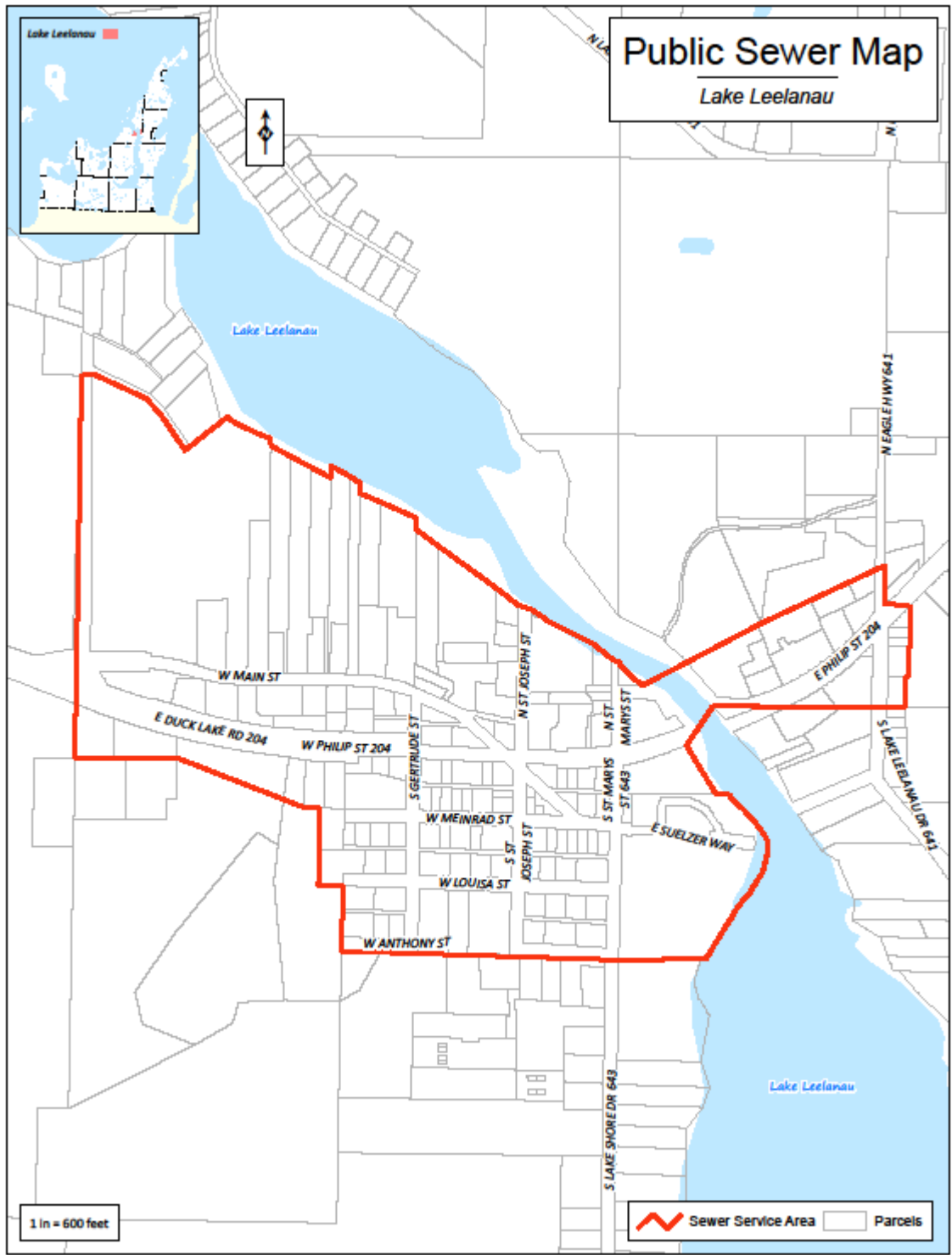


Figure 5-2.2 - Lake Leelanau Sewer District

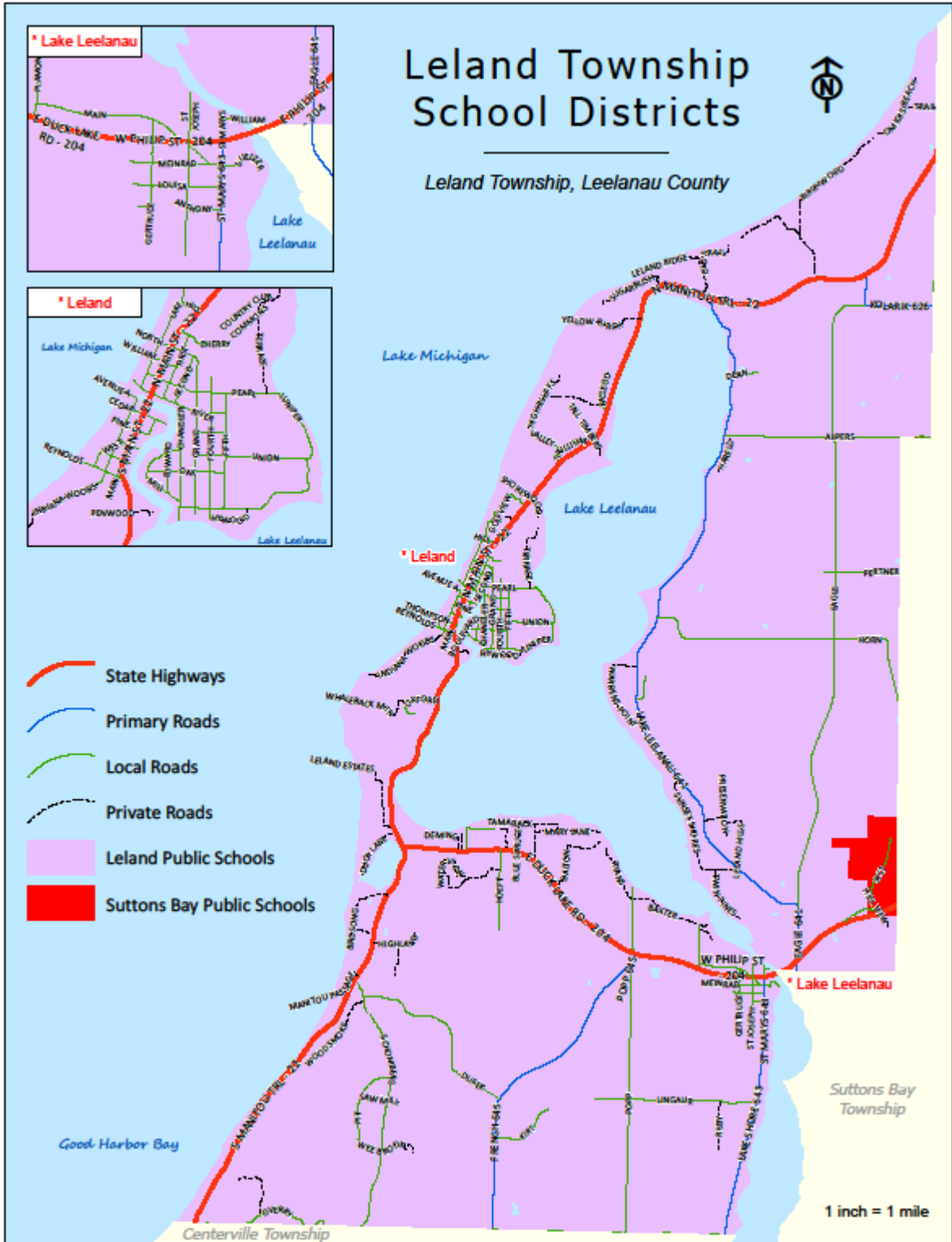


Figure 5-3 - Leland School Districts

5.4 Emergency Services

Fire, rescue, and ambulance services are provided by Leland Township Fire and Rescue from stations in Leland village and Lake Leelanau village. As of April 2023, the department is staffed by nine full-time Firefighter/EMT-Bs and Firefighter/Paramedics, working under a full-time Fire Chief under the supervision of the Fire and Rescue Board. These full-time employees are supplemented by over 20 part-time/paid-on-call employees. Mutual aid agreements are in place with other agencies state-wide through the Michigan Mutual Aid Box Alarm System (MI-MABAS) for additional fire apparatus, equipment, and supplemental ambulance services.

Police protection is provided by the Leelanau County Sheriff's Department which also provides inland lake patrols. Michigan State Police also serve the area.

5.5 Health Services

Health services are provided by local private and Munson-affiliated clinics in Leelanau County, including a pediatric office in Suttons Bay, as well as a chiropractor and a dentist in Lake Leelanau. The regional hospital is located in Traverse City.

5.6 Other Services

Solid waste disposal service is provided by GFL Environmental, Inc., Waste Management, Kalchick, Maple Disposal and American Waste provide residential service. A recycling drop-off site is available for residents, behind the Township offices in Lake Leelanau. Television cable and internet service is provided by Charter Cable Systems of Michigan. There is an antenna located in the township which also provides high-speed internet service.

5.7 Leland Harbor

Leland Harbor accommodates approximately 61 vessels, in slips ranging from 30 to 45 feet in length. There is also several hundred feet of broadside space. This is a harbor of refuge, allowing for short stays, and is a busy destination. The harbor provides fuel and sewage services, while local retail stores and a private marina offer a nearby source of supplies for boaters. Services include a boat launch ramp, a harbor building, a picnic area and playground, toilet and shower facilities, and boat trailer parking.

A fleet of charter fishing boats and commercial fishing boats operate from the privately owned Fishtown complex on the Leland River adjacent to the harbor. The harbor also accommodates commercial excursion boats and the National Lakeshore ferry concession to the Manitou Islands. Tours of the North Manitou Shoal Lighthouse, known as "The Crib", are also run from the Leland Harbor.

Maintenance of the channel entrance for the Leland Harbor is the responsibility of the U.S. Army Corps of Engineers. The daily operation of the Harbor is supervised by the Harbor Commission of Leland Township. The Harbor Commission is appointed by the

Township Board. The harbor entrance is dredged annually, with removed sand deposited onto the beach approximately 1000' south of the harbor mouth.

5.8 Library

The Leland Township Library, located in the village of Leland, was founded and funded through the private initiative of Township residents. The library serves four townships – Leland, Cleveland, Solon and Centerville. Land for the library was donated to the Township by Wilber C. Munnecke in 1974. Once established, the library received support for part of its operations from Leland Township through a millage (currently levied at 0.3 mills); the Library has its own millage and is self-operating. The Library Board is appointed by the Township Board. The Library Board expanded the building in 1992, financing it with private funds.

The library has a large collection of physical items, including books, audio books and DVDs, as well as a “library of things” and a seed library. Digital and interlibrary services are also available and are well utilized by Township residents and registered patrons from surrounding jurisdictions. A needs assessment was performed for the library in 2019, and as of 2023 there is an ongoing capital campaign for renovations to the library, including an expanded and enclosed children’s area, a teen area, private meeting spaces, and a quiet reading room.

5.9 Old Art Building, Museum and Public Meeting Room

The Leelanau Historical Society operates a museum adjacent to the Leland Township Library which serves the entire county. The Munnecke Room serves as a publicly available meeting room which separates the library from the museum and is frequently used for Township meetings. The museum board operates independently of the Township. The Old Art Building in the village of Leland, originally developed as the Walter T. Best Community Club in 1922, now hosts the non-profit Leelanau Community Cultural Center (LCCC). The LCCC was formed in 1994 to preserve the building, promote cultural enrichment, and provide a gathering place for the community.

5.10 Transportation Network

Leland Township is served by the Bay Area Transit Authority (BATA) which provides daily bus service to Traverse City and throughout the county. However, the primary means of transportation is the automobile. A map depicting the roads within Leland Township is provided in Figure 5-4. The existing road network is described in the following paragraphs.

5.11 State Roads

State highway M-22 (a designated scenic route) encircles the Leelanau Peninsula commencing north from Traverse City to Northport and continuing southwest, passes through Leland village near the west shore of Leelanau Peninsula. Highway M-22

includes ten miles from north to south within Leland Township. The portion of M-22 that runs through Leland Township is part of the M-22 Scenic Heritage Route.

Two miles south of Leland village, highway M-22 intersects with highway M-204. Highway M-204 progresses east for four miles to Lake Leelanau village and continues four miles east to Suttons Bay.

5.12 County Roads

Twelve miles of primary county roads include route 645 (French Road) and route 643 (Lake Shore Drive) leading south from highway M-204, and route 641 (Lake Leelanau Drive) which connects the narrows with highway M-22 along the east side of Lake Leelanau. Eagle Highway connects the Leelanau Narrows with highway M-22 north through the farmlands of east Leland Township. Twenty-two miles of secondary roads are also maintained by the county. Figure 5-12 shows the Leland Township Road Network.

5.13 Other Transportation Routes

Paved shoulders for non-motorized (bicycle) are located along M-204 from Lake Leelanau to Duck Lake Corner, M-22 from Duck Lake Corner to Northport and along Lake Leelanau Drive from M-204 to Bingham Rd. Sidewalk use for pedestrians is provided in the villages.

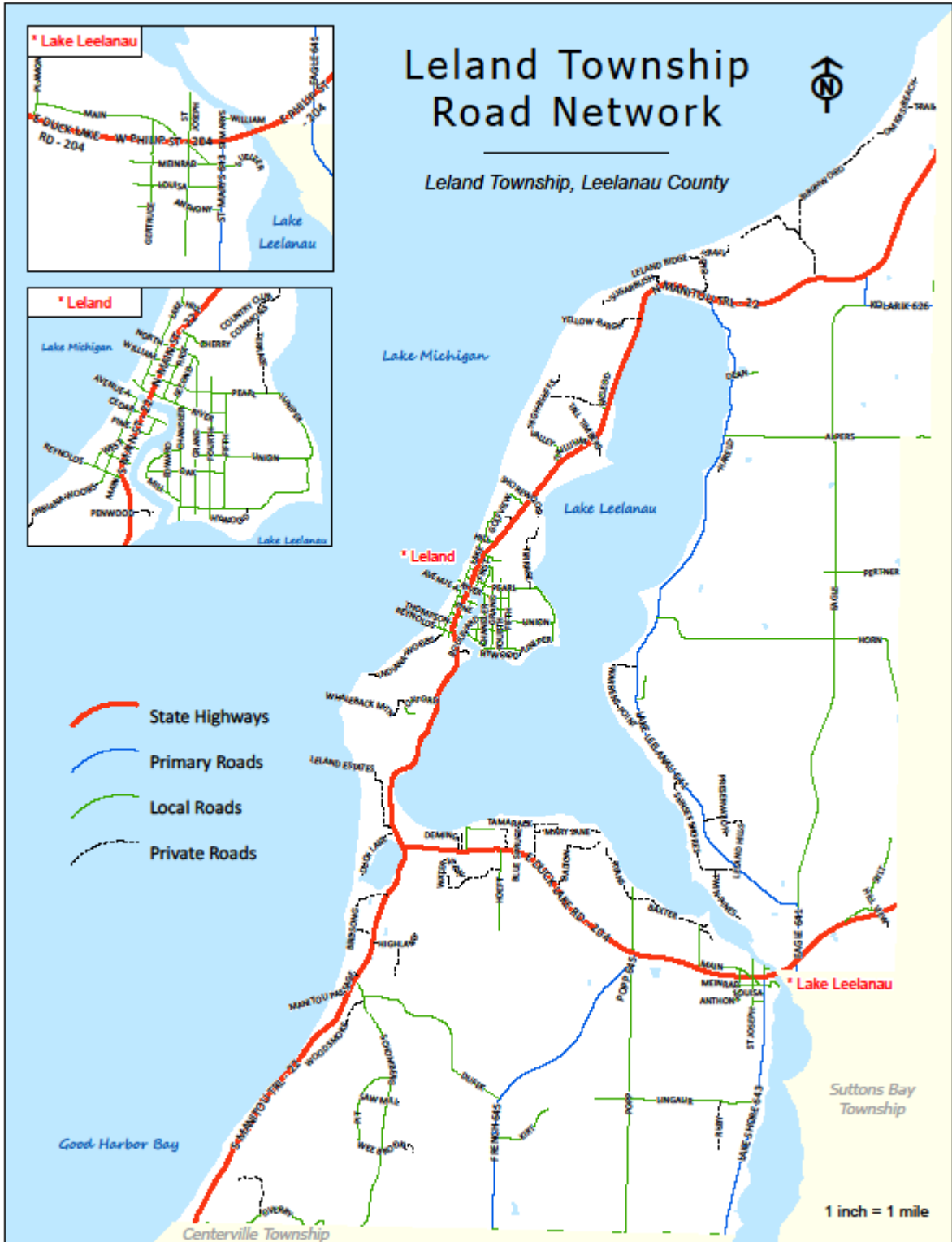


Figure 5-12 - Leland Road Network

Chapter 6: Significant Land Use Issues

This chapter presents and discusses significant land use issues identified by the Leland Township Planning Commission, township registered voters and both resident and non-resident property owners via a survey conducted in 2018. The issues identified include some specific facilities and land uses as well as some of a more general concern.

6.1 Preservation of Township Character

Leland Township has characteristics which serve to define the Township and which attracts visitors and residents to the Township. This character is defined in a number of ways. The term “character” has different meanings to different people, with these individual definitions frequently being in conflict with one another. There currently appears to be general agreement that the character of the Township focuses upon the Township’s rural, agricultural, and fishing background, in addition to the focus on small, and unique commercial establishments within the villages of Leland and Lake Leelanau, and residential development in both the villages as well as along shorelines of Lake Leelanau and Lake Michigan. It is also recognized that unique areas exist within the Township including forested areas, wetlands, significant viewsheds and prime agricultural lands which are worthy of preserving.

The Township recognizes the rights of property owners with respect to preserving the character of the Township and must involve them in its efforts to protect the character of Leland Township.

6.2 Farmland and Open Space Preservation

Agriculture and agriculture-related businesses are a critical part of the Township’s character, economy, and rural heritage; therefore, it should be supported through zoning that fosters a healthy economic environment for farmers.

The Township acknowledges that agricultural activities can result in 24-hour a day operations, noise, pesticides, insecticides, and herbicides, in effect having many characteristics similar to industrial uses. These uses are in many instances protected by the Michigan Right to Farm Act provided the uses are being conducted in accordance with “Generally Accepted Management Practices”. The Township is interested in making opportunities available to allow the farm community to make an economic return from their investment, including, but not limited to, the support of agricultural tourism.

Farmland and Open Space Preservation are very important to the property owners of Leland Township as evidenced by the finding from the 2018 Community Survey (see Appendix A). Over 82 percent of the responding property owners indicated that they either agree or strongly agree that “Leland Township should work to preserve open space”. Approximately 75 percent of the respondents indicated they agree or strongly agree that it is “Important to manage the conversion of farmland to residential or other developed uses”.

Leland Township is interested in making multiple options available for the preservation of farmland and open space, such as the Purchase of Development Rights (PDR) program. The Township recognizes any farmer's participation in a PDR or any other preservation type of program is completely voluntary.

The lands which are actively being farmed are shown on the Existing Land Use/Cover map, Figure 4-1.2 in Chapter 4 of this Master Plan. Of the existing active farmland, a limited amount of land (less than 1,200 acres) is currently enrolled in the State of Michigan's Farmland and Open Space Preservation program, also known as PA 116 (see Figure 6-2.1).

Soils and topography also determine which areas are classified as prime, unique and locally important farmland. See Figure 6-2.2 for a map of farmland considered to be prime, of unique importance, and of local importance. The prime farmland classification indicates soils which are ideally suited for agricultural or timber production. The majority of Leland Township is not prime farmland, but there are areas of prime farmland scattered throughout the Township, as well as additional areas that could be classified as prime farmland if drained. There are no areas of farmland of statewide importance in the Township. There are substantial areas of farmland of unique importance and local importance in the Township. Unique farmland is farmland that is not considered prime but is used for the production of specific high-value food and fiber crops. Locally important farmland includes soils which are nearly prime, but are located on slightly steeper grades. These soils can produce high yields when well managed.

While the survey respondents overwhelmingly believe in the need to preserve farmland and open spaces, they also believe that the acquisition of farmlands and unique open spaces or the development rights to these properties should be undertaken via land conservancies, private entities, or other sources of public and/or private funds as opposed to by Leland Township. The Township should maintain open communication with these various entities as to what the Township believes are critical areas warranting protection, with those entities working in a cooperative manner with the property owners to take those steps they believe are appropriate as befitting their specific mission and the desires of the property owners.

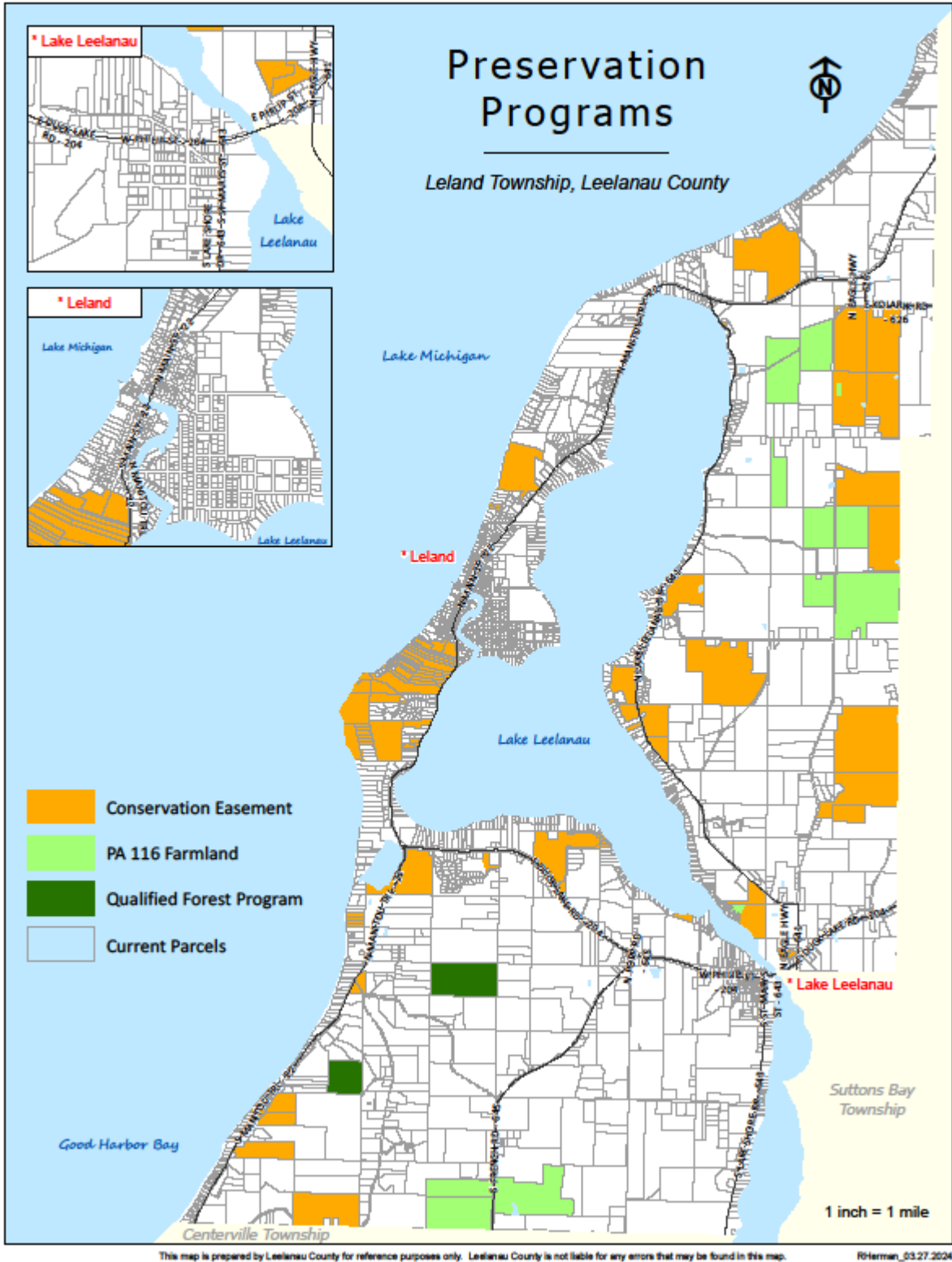


Figure 6-2.1 - Leland Preservation Programs

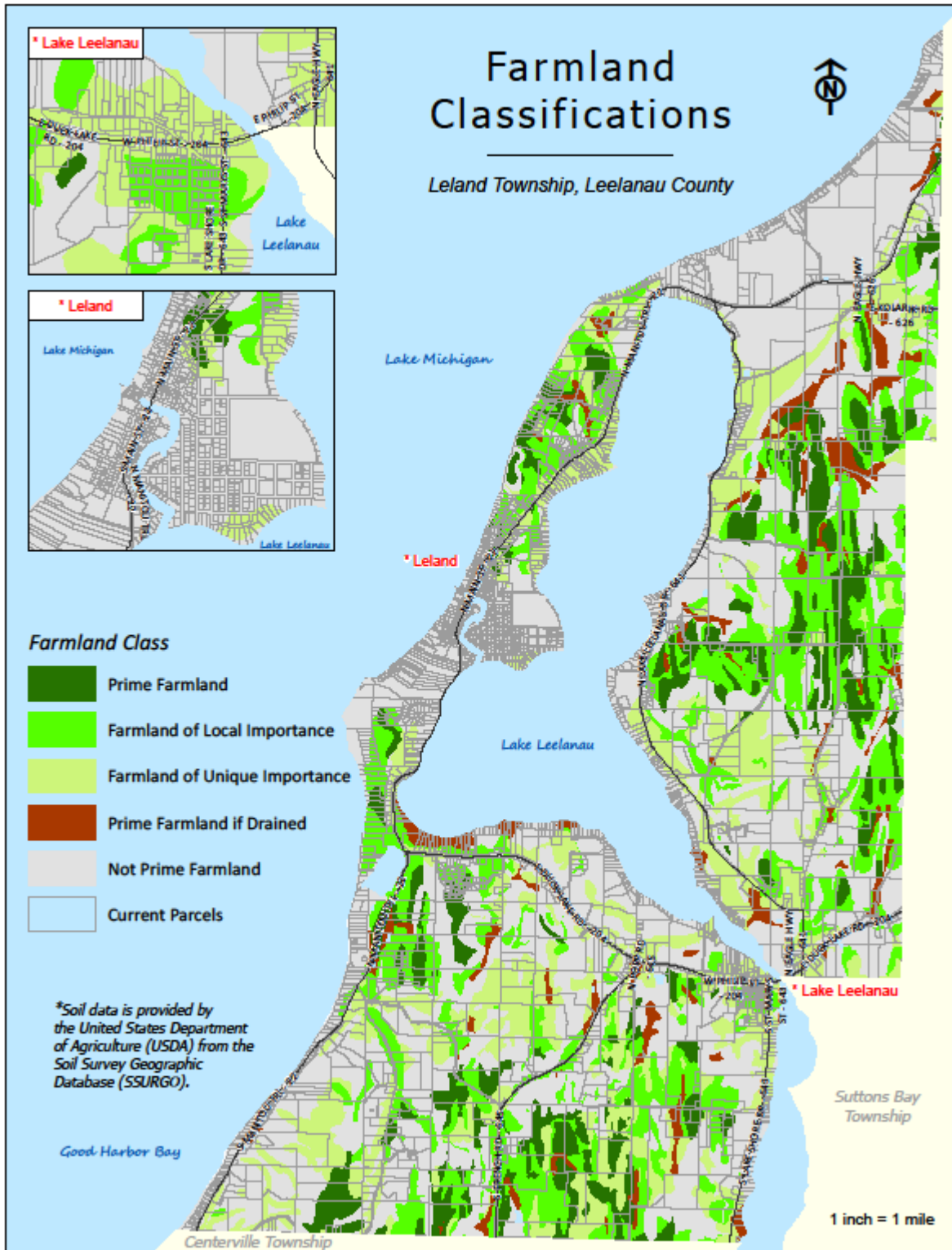


Figure 6-2.2 - Farmland Classifications

6.3 Residential Characteristics

Residential characteristics are determined by a number of factors; size of dwelling which can include ground floor or footprint as well as bulk of dwelling (footprint as well as mass or height), the placement of structures upon the property (i.e., setbacks) and location of development in neighborhoods along the lake shores and within view corridors.

Special care must be taken to ensure that provisions for housing take into account the character of Leland Township. The impact of housing upon the character of Leland Township can occur from the type, size, and location of housing upon any given property. Small lot developments and multiple family dwellings should be located in areas of the Township that are conducive to connecting with the community sewage system or allow for the use of clustered septic waste disposal systems. The Township should work to develop standards that identify those areas where the limitation of home size may support these overall objectives. Methods of achieving this could include the review and potential revisions of the lot area coverage requirements of the zoning ordinance, requiring special land use permits for dwellings exceeding a given square footage, and enduring that dwellings within Zoning Districts that limit the uses to single family occupancy are in fact limited to usage by a single family as defined in the zoning ordinance.

A large percentage of the survey respondents believe the Township should be open to working with the business community, property owners, developers, the Sewer Commission, and area organizations knowledgeable and committed to increasing the availability of housing in the Township. This will enable the planning and zoning of properties that are suitable for use for multiple family developments and small lot sizes and small square footage housing units that could provide housing for those needing affordable housing than currently exists in the Township. These types of residential development should be located in areas of the Township that are conducive to connecting with the community system or allow for the development of clustered septic waste disposal systems.

6.4 Commercial Use Characteristics

The Commercial Character of the Township is exemplified by the small, diverse commercial uses within the villages of Leland and Lake Leelanau. This type of development should be encouraged along with the ability of residential uses to be located on upper-level floors to provide for housing of business owners, employees, or others needing housing in the Township.

6.5 Service and Industrial Use Characteristics

Uses that provide services to the Township and surrounding area as well as locations for light manufacturing and industrial uses should be located in areas of the Township that allow for adequate parking and storage areas that are screened by means of

topography, fencing, and vegetative screening to minimize the visual impact of these uses.

6.6 Fishtown

Fishtown is the area of Leland located on the water, at the marina, with small shops. This area has historic significance from the days when the economy of the area was heavily dependent on the fishing industry. In early 2007, a portion of the Fishtown area was purchased by the Fishtown Preservation Society, a non-profit organization formed to promote and preserve the historical and fishing heritage of Fishtown.

The survey respondents strongly believe that Fishtown is deserving of continued community support in making improvements to ensure its long-term viability.

6.7 Demographic Changes and its Impact upon Leland Township

The permanent population of Leland Township has increased by almost 30% in the last 30 years, while the seasonal population has continued to remain high at up to seven times the permanent population during the summer. The Township median age and income levels are significantly higher than the state average, while the number of people living in poverty in the Township has decreased. The decrease in poverty rates may be due to the increased cost of housing, and many of the lower income individuals and families being essentially priced out of Leland Township.

A substantial portion (42.7%) of the total housing stock in the township is considered to be for seasonal or recreational use. The construction market for housing in the township remains strong, with 237 permits for new single family homes issued from 2010 to 2023. However, no permits for multi-family dwellings were issued during that time frame. Analysis by non-profit agencies shows a significant housing gap in Leelanau County, over a variety of price-points, and few housing choices for households that are not high-income.

Leland Township's high overall market value leads to one of the lowest millage rates in Leelanau County, while still providing for numerous township and county services. This high market value is driven mainly by high and continually increasing amounts of residential property value.

6.8 High Water Levels

High water levels, while not an everyday occurrence, have occurred in the past (1968-1989 and 2019-2021) on Lake Michigan and it is inevitable that high water levels will occur in the future. High water levels are outside of the ability of the Township to remedy; however, the Township does have the ability to put measures into place to help ensure that damage from these periods of high water are minimized. Acknowledging that much of the Lake Michigan frontage has been developed in the past, individual

parcels of property are being redeveloped at the current time, with this being a trend that will continue into the future.

The Planning Commission must be cognizant in addressing the setback requirements for properties having frontage on Lake Michigan to ensure that as properties are redeveloped, i.e., the removal of existing structures or major reconstruction of existing structures, the structures are relocated in such a manner as to eliminate the need to armor the shoreline and further to prevent structures from being subjected to high water levels. This may best be accomplished through the means of an overlay zone that has greater setback standards for the waterfront properties as opposed to the “back lot” parcels.

6.9 Utilities and Communications

Over time, society’s needs and perceived wants can and do change. Provision for and/or accommodation of services in many instances require governmental involvement, while in other instances these needs are best provided for by private companies, in some cases with the encouragement, guidance or assistance of the government. It is necessary for the Township to stay current with technology and be prepared with appropriate zoning to assure the Township recognizes and addresses the impact that these changes may have upon the community over time.

6.10 Septic and Sewer Issues

Portions of Leland Township are served by a public sanitary sewer system. The areas served are primarily limited parts of the two unincorporated villages, as depicted in Figure 8-1 Future Land Use Map. Issues were raised by survey respondents regarding the expansion of the system to serve other portions of the Township, especially around Lake Leelanau in order to help protect water quality. Over the years, the Sewer Commission has explored the concept of additional drain fields to increase the processing capacity in order to meet the anticipated demands of the existing districts. At present, the primary areas of focus for providing sewers are the two villages, which is consistent with where the Township wishes to focus growth. As the need to allow for additional numbers and varieties of housing types that are either not currently located within the Township, as well as commercial uses, the Township should ensure that the Sewer Commission is aware of those needs to expand the existing system to provide services to those portions of the community the Township believes are appropriate to accommodate those new and expanded land uses.

6.11 Solid Waste and Recycling Services

Solid waste collection needs are currently met by private companies with curbside collection being available on a weekly basis. Users of these privately provided services should be required to place the waste in varmint proof receptacles which could be addressed by the waste collection providers or by the Township via a police power ordinance. The Township, in conjunction with the Leelanau County Solid Waste Committee, needs to develop and promote viable methods and/or locations for recycling

materials generated within the Township. Possible methods could include a recycling drop off location within or close to Leland Township boundaries or by the use of residential curbside collection of recyclables.

6.12 Communication Services

As technology and society change, so too has the need for how we work and communicate. At the current time, based upon the 2018 community survey, cellular service is lacking in portions of the Township during times of peak demand (summertime) due to the seasonal population influx while in other portions of the Township, service is lacking most if not all of the year, due to the topography of the county and the lack of cellular towers.

The Township should work closely with public agencies and both cellular and internet service providers to ensure that quality service is available Township wide.

Chapter 7: Community Goals and Objectives

This chapter sets forth the Township's goals and objectives to guide future development. In analyzing the data compiled in the earlier chapters it is very clear that Leland Township faces a number of development pressures. The population is growing and development is occurring at an accelerated rate. It is unlikely that all of the new development will be occupied with year-round residences. However, if these residential properties were to be occupied year-round at the same average number of persons per household as the year-round population for the Township, the overall Township population would increase significantly, and thus could dramatically alter the character of Leland Township. However, by encouraging new development to conform to community-based standards and guidelines, both the rural character and the natural resources of the Township can be protected to the fullest extent.

7.1 Physical Opportunities and Constraints

As discussed in Chapter 3, Natural Resources, land in Leland Township is not uniformly suitable for development. The physical characteristics of Leland Township, including steep slopes, high risk erosion areas, critical dune areas, shoreline areas, wetlands, as well as active farmland, and open space are many of the features that contribute to the unique character of Leland Township and need to be considered as land use regulations are reviewed or revised to provide for development options.

7.2 Community Survey Results

A Township citizen survey was conducted in 2019. A summary of the 2019 survey results is presented below. A selection of the survey findings is provided in Appendix A, with full results available upon request.

Response Demographics: The vast majority of survey respondents (96.8%) owned property in Leland Township, and 93% own a home in Leland Township. Half of respondents described themselves as retirees, and respondents were equally split on whether they considered Leland to be their year-round place of residence.

Growth and Development: When asked about growth in the township, the majority of respondents were split between letting growth take its own course (44.5%) and limiting growth (43.3%), while substantially smaller numbers thought growth should either be encouraged (9.4%) or not allowed at all (2.9%). The majority supported or strongly supported the township preserving open spaces, purchasing undeveloped land to protect as open spaces, limiting or slowing the conversion of farmland to other development uses, and expanding economic opportunities for agricultural lands. A strong majority of respondents stated that the township should take a role in farmland and/or open space preservation.

When asked about housing, a majority of respondents agreed or strongly agreed that the need exists for workforce housing in the township, and that provisions should be

made to allow for small homes in the township. The majority disagreed or strongly disagreed that adequate affordable housing is available in the township.

Regulation: Participants were asked about new policies that may need to be developed in order to address concerns discussed in the survey. The majority of respondents supported or strongly supported architectural controls for new development, stricter sign regulation, preservation of scenic rural roads and historic buildings, burial of utility lines in village downtowns, “dark sky” lighting standards, stricter noise regulations, allowing additional broadband and/or cellular towers, allowing solar energy farms, and limiting tall and/or massive buildings.

Municipal Services: Citizens were asked for their opinions on a number of municipal and private services in the township. Respondents were generally satisfied with first responder services (fire, EMS and law enforcement), the library, and refuse collection. Almost half of respondents were dis-satisfied with recycling services and cellphone service in the township.

7.3 Land Use Goals and Objectives

The 2019 survey discussed above, as well as other discussions with township residents and staff, identified some general concerns related to the township. The Planning Commission, assisted by township staff, used these concerns in the preparation of the Township land use goals and the application of these goals in the preparation of the Future Land Use plan included in this Township Master Plan. These identified issues are expressed here as general land use goals, objectives, and action steps. More specific goals and objectives follow and are grouped by topic.

7.3.1 Land Use Goal

Retain the Township's rural and scenic character, by preserving farmlands, forestland, open space and through encouraging growth/development in and around the villages of Leland and Lake Leelanau.

Objectives and Action Steps

- Encourage retention of farmland, forestland and open space through coordinated land use plans and related regulations, including in collaboration with area organizations where possible.
- Promote the health, safety, and welfare of Township residents by coordinating the uses of land with the provision of efficient public services.
- Facilitate communication with adjacent Townships.
- Manage density and location of new development, to discourage sprawl, by encouraging protection of open space and scenic views in the Township, including but not limited to the use of appropriate conservation easements, conservation development techniques, cluster development, purchase or transfer of development rights and special use permit zoning ordinance provisions.
- Provide multiple options for land development, while allowing continued agricultural use, protection of significant natural features and important views.
- Encourage new construction to be sited below the ridgeline and encourage the preservation of existing wooded areas to provide filtered views.
- Explore and pursue methods to maintain the rural character of road corridors, scenic heritage routes, and scenic vistas within view of these corridors.
- Work with the Heritage Route Committee to enhance the corridors through Leland Township.
- Identify and promote the preservation and enhancement of significant historic, archaeological, and scenic features.
- Continue to pursue junk or blight elimination regulations.
- Reduce light and noise pollution through ordinances.
- Provide sign regulations to protect the Township's rural character and scenic beauty.

- Identify active agricultural areas for pursuit for Purchase Development Rights (PDR) program and support conservation easements.
- Update zoning ordinance to encourage development consistent with the relevant guidelines for the conservation of agricultural areas.

7.3.2 Agricultural Support Goal

Encourage opportunities for innovative programs to support continued agricultural activities.

Objectives and Action Steps

- Recognize that the presence of agricultural lands adds to the scenic and rural character of the Township, as well as its economic health.
- Allow for the pursuit of economically feasible options for continued agricultural use of active farmland, such as value-add agriculture, local agri-tourism, agricultural support services, and community-supported agriculture.
- Allow for and encourage farmland protection, such as through the transfer of development rights, purchase or lease of development rights, conservation easements and the clustering of non-farm development.
- Encourage establishment of local facilities through which resource-based products can be sold.

7.3.3 Natural Resource Goal

Utilize guidelines that encourage the protection and preservation of water quality and environmentally sensitive areas.

Objectives and Action Steps

- Identify and protect sensitive environmental areas to be preserved such as critical sand dunes areas, high risk erosion acres, woodlands, wetlands, steep slopes, shorelines, and other environmentally sensitive areas; and identify land that may not be suitable for development because of natural limitations for the erection of structures or septic systems (such as hydric soils, flood plains, steep slopes, or areas at high risk of shoreline erosion).
- Encourage the acquisition of sensitive environmental areas by public agencies or non-profit organizations for the purpose of permanent preservation.
- Establish regulations for land development in special environments, which permit development in a manner which balances natural resource protection and the use of the property. Require new developments to mitigate negative impacts on the natural environment where appropriate.
- Encourage the continuation, coordination, and areas of cooperation with watershed management programs for Leland Township and adjacent areas.
- Encourage Leland Township sewer system upgrades and explore system expansions. Promote alternative systems and septic system inspections to protect water quality of lakes. Coordinate future sewer planning with the Sewer Commission and special assessment districts and/or other localized community-based solutions.
- Consider the possible establishment of a Lake Leelanau sewer district jointly with other jurisdictions, to protect the water quality of the lake.
- Protect water quality through waterfront usage and development standards in the zoning ordinance with consideration given to setbacks, natural buffers, water access, and some impervious surface limitations.
- Preserve the natural vegetation of shoreline areas and planting of new trees and shrubs through greenbelt regulations.
- Identify and protect the Lake Leelanau Narrows as a sensitive environment.

- Work cooperatively with the Sleeping Bear Dunes National Lakeshore for the protection of North Manitou Island and continued designation and management as a “Wilderness” area.
- Review water access provisions related to key-holing, docks, and other access issues, to discourage additional expansion.

7.3.4 Residential Goal

Provide for a broad range of housing opportunities, which respond to the varying economic, family, and lifestyle needs of area residents and tourists.

Objectives and Action Steps

- Discourage development in areas identified on the Agricultural Considerations Areas map (Figure 6-2) and direct higher density residential development to be located in and around villages, through zoning regulations and incentives.
- Provide a range of development options in the zoning regulations, such as Conservation Design Subdivisions and Planned Unit Developments, to encourage a mix of housing types in a single development.
- Develop residential development options, to allow for clustering of new development within land parcels so as to encourage preservation of open space.
- Protect the residential neighborhoods from intrusion of incompatible uses.
- Due to the aging population in Leland Township, provide zoning options to meet the needs of senior citizens, such as a senior citizen center, group facilities and accessory dwellings.
- Encourage exploration of workforce housing options.

7.3.5 Economic Goals

Strengthen the local economy through the development and retention of enterprises, which provide employment opportunities.

Preserve Leland Township as a tourist-friendly community.

Objectives and Action Steps

- Work cooperatively with local economic development groups to retain and attract business.
- Allow for a diversity of commercial and light industrial development, with year-around employment opportunities, including non-tourism based ventures.
- Direct intensive commercial development to the villages and encourage mixed-use land use patterns and character.
- Review both positive and negative impacts of the local tourism industry and work to resolve any identified issues, such as traffic, parking, and the need for private restroom facilities for businesses.
- Work with the Heritage Route Committee to enhance the corridors through Leland Township.
- Establish zoning provisions to allow for knowledge-based businesses in close proximity to the Villages where support services are more available.

7.3.6 Infrastructure & Public Service Goal

Plan Township facilities and services consistent with the community needs.

Objectives and Action Steps

- Encourage the pursuit of a Capital Improvements Planning process, (CIP) to aid implementation of this Master Plan.
- Compare and coordinate proposed plans for the expansion and improvement of public services and facilities with county and adjacent township plans.
- Explore the development of a Community Center
- Promote safe pedestrian and bicycle travel by developing and designating non-motorized pathways and routes.
- Encourage pedestrian oriented design and amenities in Villages, including review of service drives, curb cuts, snow removal, and crosswalk location; additional sidewalks; public restroom facilities, way-finding signs, and site furniture such as benches and trash receptacles.
- Maintain zoning regulations to ensure adequate equipment access by emergency services (police, fire, and EMS) without overburdening property owners or unnecessarily impacting the aesthetics and character of the community.
- Continue to support countywide recycling and solid waste management programs and encourage commercial recycling and curb-side recycling.
- Explore the possibilities for coordinated planning, establishment and development of a sewer district surrounding Lake Leelanau, (the lake, not just the Village).

7.3.7 Recreational Goal

Provide and maintain recreational lands and facilities for residents and visitors.

Objectives and Action Steps

- Support the development of community recreation and sports facilities for all age groups.
- Maintain and improve Township parks to accommodate growing residential and tourist use.
- Continue to maintain public lake access and boat launch facilities.
- Promote the development or designation of non-motorized pathways and bike routes, to connect villages and recreational areas in the Township.
- Encourage designation/development of trails to direct snowmobile traffic off county road rights-of-way.
- Maintain an up-to-date Michigan DNR approvable Community Recreation Plan to specify current needs and be eligible for grant funding for recreation projects.

7.3.8 Community Institutions
(Public facilities, churches)

Maintain vital community centers by supporting the needs of existing and new community institutions in the Villages.

Objectives and Action Steps

- Encourage shared parking for facilities that are primarily used during “off peak” business hours.

Chapter 8: Future Land Use Recommendations

At present, Leland Township is primarily a rural residential, agricultural, and tourist-based community. Lakeshore living is available along the shores of Lake Leelanau and Lake Michigan. While active agricultural uses have declined from historic levels, the many active farms that remain are highly valued by the local residents, according to the 2020 Leland Township Survey.

Through land use planning and land use controls, Leland Township intends to work to ensure that existing rural residential, agricultural, and recreational uses can continue, and reasonable growth can be directed towards Leland and Lake Leelanau Villages with minimal land use conflict or negative environmental impact. Based on the social, economic and environmental characteristics of the Township, eight general categories of land use have been identified to serve existing and future development needs. These categories are listed below:

- Conservation and Parkland
- Farm-Forest
- Rural Residential
- General Residential
- Waterfront Residential
- Leland Village Mixed Use
- Lake Leelanau Village Mixed Use
- Manufacturing/Light Industry

8.1 Conservation and Parkland

The Conservation and Parkland category includes existing parkland, as well as land owned and protected by a land conservancy under conservation easements. These lands are not subject to intense development pressures due to existing public or quasi-public ownership or easement status. Consequently, only environmental preservation and low intensity recreation related development activities are anticipated on these properties. It is intended that these lands be designated for continued conservation and recreational uses. The distribution of the Conservation and Parkland designated land throughout the Township is shown on the Future Land Use Map, Figure 8-1.

The entire area of North Manitou Island is part of Sleeping Bear Dunes National Lakeshore. North Manitou Island is almost entirely managed as “Wilderness”, based on the 2014 “Sleeping Bear Dunes National Lakeshore Conservation and Recreation Act”, which designated over 32,000 acres of the Lakeshore as Wilderness. A small area of North Manitou Island surrounding the historic village/ranger station is managed to preserve the historical structures and resources. Based on current Federal legislation, areas designated as “Wilderness” must be managed by the requirements set forth under the Federal Wilderness Act.

Uses proposed in the Conservation and Parkland area include public and private forestry, wildlife habitat, recreation, and similar open space uses. The Township encourages the establishment of conservation, park land and open space, including the preservation of wetlands and riverine habitats for scenic, recreation and wildlife protection such as the Lake Leelanau Narrows, as well as the preservation of prime, unique and valuable farmland. The tools to accomplish this include donations, acquisition, and cooperative efforts with other units of government and landowners, conservation easements and zoning ordinance provisions that support the use of conservation easements and sound conservation developments. Because parcel sizes vary significantly from small road end lake access sites to large, forested tracts of land, no minimum parcel size is recommended.

8.2 Farm-Forest

The Farm-Forest category includes those lands within the Township where agricultural and/or forested land uses are encouraged to continue on a long-term basis and are afforded opportunities and protections to do so. Agricultural lands included in the Farm-Forest area embody one or more characteristics which strongly support long term economically viable agricultural operations including comparatively large parcel sizes, limited encroachment by conflicting land uses, good agricultural soils and/or topographic conditions, and enrollment in the Farmland and Open Space Protection Program (part 361 of PA 451 of 1994, formerly known as PA 116). Based on the survey responses (2020), the Township residents encourage preservation methods that maintain farmlands, farming, open space, natural resources, and rural character of the Township. Some of the methods include innovative zoning provisions that allow for the preservation or conservation of essential natural resources, farmland, or open space. Other methods to help protect and preserve agricultural land while protecting a landowner's economic investment include the Purchase of Development Rights (PDR) and donations of conservation easements to non-profit trusts, Transfer of Development Rights (TDR), and tax breaks or incentives for continuing agricultural use. While agriculture is the primary intended use for this area, it is further recognized that the encroachment of conflicting land uses must be limited in order to protect the existing agricultural uses and the rural character of the Township. It is also the intent of the Farm-Forest area to protect the quantity and quality of the special natural resources included within this area, such as wetlands, farmlands and woodlands.

In order to promote the preservation of the important local agricultural land, the areas identified and discussed in Chapter 6, and mapped in Figure 6-2 have been overlaid on the Farm-Forest future land use category and is presented in the Agricultural Preservation Priority Areas map, Figure 8-2. The priority agricultural preservation areas that are mapped as Farm-Forest on the Future Land Use map, Figure 8-1 and also are included in one or more of the following categories: 1) active agricultural area; 2) areas with prime or unique farmland soils, and/or 3) areas which are included in the Tart Cherry Inventory.

Due to the typically larger parcel sizes in this area and the lower density of existing development in the Farm-Forest designated areas, these potentially would be suitable for extractive operations provided such resources are available and an operation meets the standards set forth in the zoning ordinance for such uses in order to protect the health safety and welfare of the Township as a whole and would not result in “very serious consequences”.

8.3 Rural Residential

The Rural Residential area is intended to accommodate a mixture of primarily agricultural and residential land uses. The Rural Residential area is intended to serve both as a means of accommodating future residential development within a low-density open space setting and buffering more intensive agricultural operations from higher density residential growth areas. The Rural Residential area is intended to accommodate low density residential development with a strong emphasis upon protecting the area’s natural resources, sensitive environmental features, rural character, and open spaces, while also encouraging the continuation of viable farming operations. Recommended development densities should generally not exceed approximately one dwelling unit per 1 to 5 acres. Lower densities may be appropriate where special environmental conditions are present. The higher density range, approaching one dwelling unit per 1 acre, should be available only where the development project employs aggressive measures to protect the natural resources and rural character of the Township and the safety of the township’s thoroughfares, including the use of interior roads, the clustering of lots upon a parcel while designating the balance of the original parcel as permanent open space (such as through conservation design), and the effective screening of new dwellings from the county road network.

8.4 General Residential

The General Residential area is intended to accommodate primarily single-family residential growth and development at a slightly greater density than provided for in the Rural Residential area, but not at densities as high as the Township’s Village areas.

The General Residential category includes much of the existing residential lakeshore development and provides opportunities for additional similar development as well as residential development along some peripheral regions of the Township’s lakeshores which have historically been magnets for residential development; these resources are fragile and vitally important to the economic and environmental well-being of the Township. Development within these areas should be permitted only where the future quality and character of the surrounding waters and shoreline can be maintained. Development within the General Residential area should be discouraged where natural features present significant environmental constraints including shore erosion, degradation of wetland area, inadequate soils to accommodate septic systems, and other environmental constraints. Since public sewers are only available in a portion of the Township, and no central water system is available, the minimum lot and density standards must reflect the constraints presented by the lack of such services.

8.5 Waterfront Residential

To preserve the scenic beauty and environmental integrity of areas adjacent to Lake Leelanau and Lake Michigan, a “Waterfront Residential” designation is recommended. With such a specialized designation it will be possible to develop residential standards specific to the unique environment found in waterfront areas, such as greenbelt provisions. The Waterfront Residential designation is utilized along Lake Leelanau and Lake Michigan in areas of existing lakefront residential development. Development regulations within the waterfront residential area should be designed to address Township residents’ concerns regarding congestion of the local roads, as well as concerns regarding water quality and shoreline protection, including but not limited to, wetlands, Critical Dunes and High-Risk Erosion Areas.

8.6 Leland Village Mixed-Use

The Leland Village Mixed-Use category is intended to accommodate a mixture of residential and commercial land uses in a similar manner it has accommodated such uses to this point in time. It is the intent of this plan that Leland Village maintain its compact developed pattern and “*small village*” character and that all future development or redevelopment be of such character and design to continue the Village’s existing identity and current character. Specific recommendations regarding future land use in the Village of Leland include:

- A. Land devoted to commercial use should generally not be expanded within the Village beyond its current limits. Retail orientated establishments should be primarily limited to the rectangular area formed by Lake Street, William Street, First Street, and the Leland River, and extending along both sides of the river to include Fishtown area to the west and along the north side of the river to Chandler Street to the east, with the provision for transitional uses beyond the core. This Plan encourages the continuance of the commercial land uses located south of Leland River on the east side of M-22 between Pine and Thompson Streets but strongly discourages the expansion of commercial uses into other areas south of the Leland River.
- B. While Fishtown is within the commercial area discussed above, the Fishtown area is unique in character and design, and thus merits some special considerations. In the 2005 survey findings, the residents of Leland Township indicated a strong desire to see Fishtown continue “as is”. Since the present zoning ordinance does not adequately provide for Fishtown, this plan recommends the area be addressed with the development of an overlay district or separate zoning district to specifically accommodate the unique situation of the Fishtown and allow for the continuation of this area which is a vital part of the unique charm of Leland.
- C. Uses which are not as retail orientated as the balance of the Village’s Core business district, or which do not benefit as greatly from being located within a

central retail or business area or in close proximity to high levels of pedestrian and/or vehicular traffic, should continue to be located in that area of the Village defined by the Leland River, Oak Street, and Chandler St.

- D. The balance of the Leland Village area should be used primarily for accommodating existing and future single residential development. Development densities should be similar to development densities currently existing in the Village and measures should be taken to minimize the negative impacts of new developments and redevelopment projects upon surrounding properties. Developments of particularly high density, such as multiple family developments, should be limited to locations outside of the central village area where the village character is not as dominant, and where ease of access to M-22 is available.

8.7 Lake Leelanau Village Mixed-Use

The Lake Leelanau Village Mixed-Use category is intended to accommodate a mixture of residential and nonresidential land uses within a village setting. In light of the geographic limitations associated with Leland Village, Lake Leelanau village is intended to play a particularly important role in accommodating urban oriented growth in the Township in the future including commercial. It is the intent of this plan that Lake Leelanau Village maintain its compact developed pattern and “*small village*” character and that all future development and redevelopment be of such character and design to further continue the Village’s existing identity and current character. Where residential development may be proposed in close proximity to commercial land uses, proper site planning and buffering measures should be taken to minimize potential negative impacts and facilitate a successful integration of differing land uses. Specific recommendations regarding future land use in Lake Leelanau village include:

- A. Land devoted to commercial retail use should be encouraged within the area generally located between Gertrude Street and the Lake Leelanau Narrows, extending south to Meinrad Street, and Louise Street east of St. Joseph’s Street, and north to Old M-204 across to Williams Street.
- B. Uses which are not as retail or service in nature as the balance of the village’s core business district is intended to be, or which do not particularly benefit from being situated within the primary village business district, should be encouraged along M-204 outside of the village’s central retail area, including west of Gertrude Street and east of Lake Leelanau Narrows. However, in order to more effectively protect the village’s existing character, such commercial expansion is not intended to extend more than one half mile from the village’s retail area. Land to the north of Old M-204 across to William Street could also address non-retail oriented commercial expansion, although this area could equally accommodate additional residential development.
- C. The balance of the Lake Leelanau village should be used primarily for accommodating existing development and a future mix of residential development, especially within the R-3 zoning District. The township should

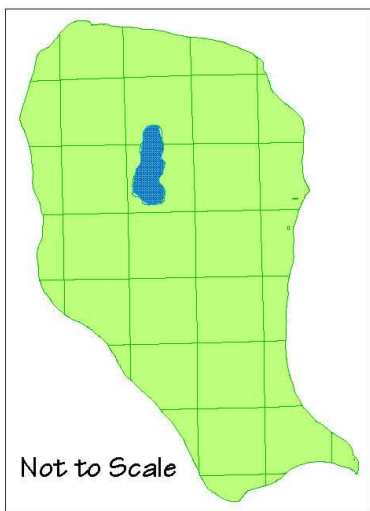
reference the Future Land Use Map for guidance when completing any amendment to the Zoning Ordinance for these expanded areas. Development densities should be generally similar to development densities currently existing in the village and measures should be taken to minimize the negative impacts of new developments and redevelopment projects upon surrounding stable neighborhoods. Uses of higher density, such as multiple family developments, should be located where access to M-204 and village streets are convenient and the increased density will not conflict with the essential character of the village and existing residential neighborhoods. Such areas include the areas immediately south and west of M-204 and Anthony Street and/or north of Old M-204 across to William Street. Where residential development may be proposed in close proximity to commercial land uses, proper site planning and buffering measures should be taken to minimize potential negative impacts and facilitate a successful integration of differing land uses.

8.8 Manufacturing/Light Industry

Consistent with the Township's desire to provide for a diversity of commercial and light industrial businesses, an area is designated for manufacturing/light industrial. The designated location is on Schomberg Road in the southwest portion of the Township. The area can readily accommodate the truck traffic but is removed from the “downtown” area of either of the Villages. Currently there is some existing industrial land use in this designated area, see Figure 8-1, Future Land Use Map.

Leland Township Future Land Use Map

Figure 8-1



Future Land Use Name

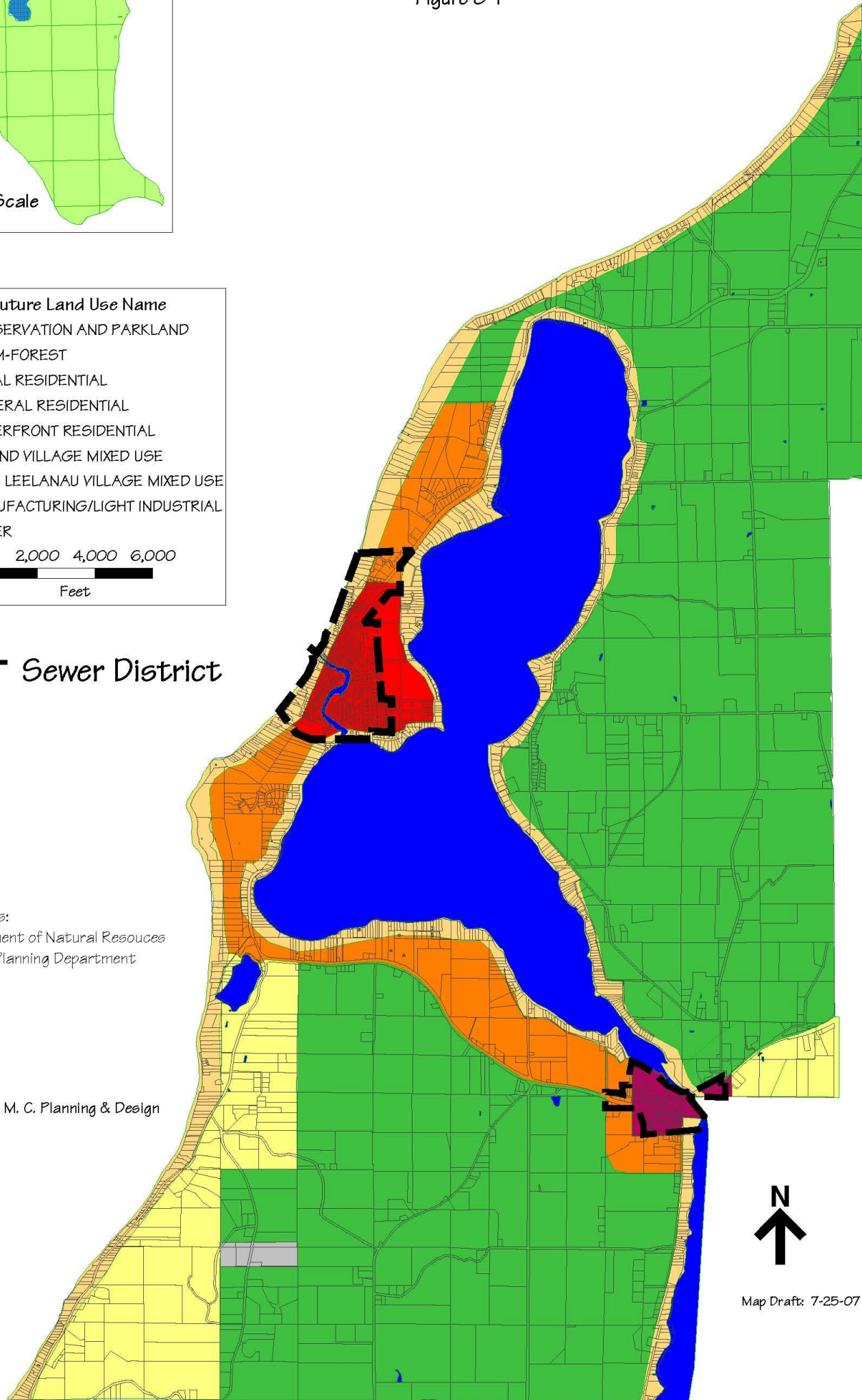
- CONSERVATION AND PARKLAND
- FARM-FOREST
- RURAL RESIDENTIAL
- GENERAL RESIDENTIAL
- WATERFRONT RESIDENTIAL
- LELAND VILLAGE MIXED USE
- LAKE LEELANAU VILLAGE MIXED USE
- MANUFACTURING/LIGHT INDUSTRIAL
- WATER

0 2,000 4,000 6,000
Feet

----- Sewer District

Base Map Sources:
Michigan Department of Natural Resources
Leelanau County Planning Department

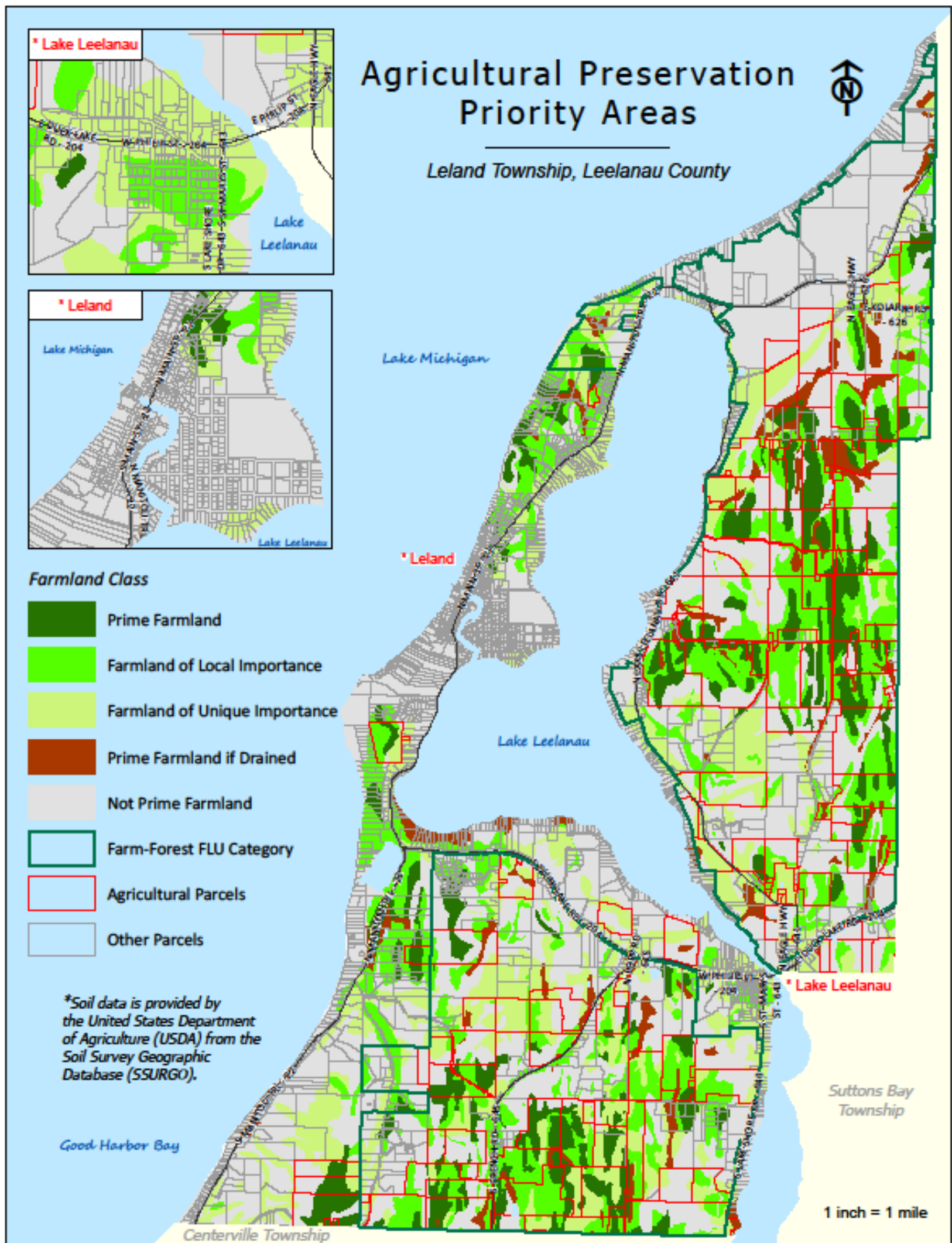
Map Prepared by: M. C. Planning & Design



N
↑

Map Draft: 7-25-07

Update map if needed.



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

RHerman_04.25.2024

Figure 8-2-Agricultural Preservation Priority Areas

Chapter 9: Implementation Strategies and Plan Adoption

NOTE: All information in this chapter is from the 2008 version of the Master Plan. All information needs to be updated for this version.

9.1 Draft Plan Circulated for Comments

The draft Leland Township Master Plan was transmitted to the Township Board for review and comment on _____. The Township Board approved the draft plan for distribution on _____. Following the Board's approval for distribution the proposed plan was distributed to the adjacent Townships (Leelanau, Suttons Bay, Bingham and Centerville) on _____, as well as to the Leelanau County Planning Commission on _____ for review and comment.

No comments were received from the adjacent townships. The comments received from the Leelanau Planning Commission and staff are included at the end of this chapter.

9.2 Public Hearing

A public hearing on the proposed Master Plan, for Leland Township as required by the Township Planning Act, Act 168 of 1959 as amended, was held on _____. The Act requires that two notices of public hearing be given, the first to be published 20-30 days prior to the public hearing, and the second to be published not more than eight days prior to the public hearing. Notice of the public hearing was published in the Leelanau Enterprise on _____ and _____. A copy of the public hearing notice is reproduced at the end of this chapter. During the review period, the draft plan was available for review on the Township's website, at the Leland Township Library, or by contacting the Leland Township Clerk.

The purpose of the public hearing was to present the proposed Master Plan to accept comments from the public. In addition to the Planning Commission members, Township Board Members and _____ Township residents and/or business owners of the township attended the public hearing.

The public hearing began with a brief explanation of the planning process. Plan development included several Planning Commission and steering committee workshop meetings, and public input sessions. During the hearing, maps of existing land use, color coded resource, and proposed future land use recommendations were presented. The public hearing minutes are included at the end of this chapter.

9.3 Plan Adoption

At a Planning Commission meeting following the public hearing, on _____, the Planning Commission discussed the comments received. At the Planning Commission meeting on _____ and took action to formally adopted the Leland Township Master Plan, including all the associated maps, on _____.

Per the Township Planning Act (PA 168 of 1959, as amended), in _____ 2023, the Township Board **has/has not** asserted the right to approve or reject the plan. The Township Board formally adopted the plan on _____.

9.4 Legal Transmittals

Michigan planning law requires that the adopted Master Plan be transmitted to the Township Board, as well as to the adjacent Townships and the County Planning Commission. Copies of these transmittal letters appear at the end of this chapter.

9.5 Plan Implementation

A Master Plan is developed to provide a vision of the community's future. It is designed to serve as a tool for decision making on future development proposals. A Master Plan will also act as a guide for future public investment and service decisions, such as the local budget, grant applications, road standards development, community group activities, tax incentive decisions, and administration of utilities and services.

According to the Township Zoning Act, comprehensive planning is the legal basis for the development of a zoning ordinance. Section Three of the Act states: "The zoning ordinance shall be based on a plan designed to promote the public health, safety and general welfare; to encourage the use of lands in accordance with their character and adaptability, and to limit the improper use of land; to conserve natural resources and energy; to meet the needs of the state's residents for food, fiber, and other natural resources, places to reside, recreation, industry, trade, service, and other uses of land; to insure that use of the land shall be situated in appropriate locations and relationships; to avoid the overcrowding of population; to provide adequate light and air; to lessen congestion of the public roads and streets; to reduce hazards to life and property; to facilitate adequate provision for a system of transportation, sewage disposal, safe and adequate water supply, education, recreation, and other public requirements; and to conserve the expenditure of funds for public improvements and services to conform with the most advantageous use of land resources, and properties."

9.6 Zoning

The Zoning Ordinance is the most important tool for implementing the Master Plan. Zoning is the authority to regulate the use of land by creating land use zones and applying development standards in various zoning districts. Leland Township is covered by the Leland Township Zoning Ordinance regulating land use activities. The first Zoning Ordinance was adopted in 1980. The current ordinance was last amended in 2004. The Zoning Ordinance should now be reviewed to ensure the Ordinance is consistent with the goals and the Future Land Use as presented in this Master Plan. Leland Township intends to update the Zoning Ordinance consistent with the Township's vision for the future and promote the "village mixed use" areas and provide development options to better meet the goals of this plan.

9.7 Grants and Capital Improvement Plan

The Master Plan and Recreation Plan can also be used as a guide for future public investment and service decisions, such as the local budget, grant applications and administration of utilities and services. Many communities find it beneficial to prioritize and budget for capital improvement projects, such as infrastructure improvements, park improvements, etc. A Capital Improvements Program (CIP) is one tool which is often used to establish a prioritized schedule for all anticipated capital improvement projects in the community. A CIP includes cost estimates and sources for financing for each project, therefore can serve as both a budgetary and policy document to aid in the implementation of a community's goals defined in the Master Plan.

Comments received from Leelanau County Planning Commission.

Appendix A: 2019 Community Survey Summary Results

Leland Township Community Survey

Please rate the following services (public and private) using the following possible responses:

	Satisfied		Neutral		Dissatisfied		No Opinion	
Fire Protection	59.20%	148	16.00%	40	4.00%	10	20.80%	52
Ambulance/EMS Service	60.87%	154	16.21%	41	3.56%	9	19.37%	49
Law Enforcement	64.03%	162	22.13%	56	3.95%	10	9.88%	25
Library Services	85.38%	216	6.72%	17	0.40%	1	7.51%	19
Refuse Collection	56.80%	142	17.60%	44	10.00%	25	15.60%	39
Recycling Service	28.52%	73	16.02%	41	48.05%	123	7.42%	19
Road Maintenance	48.43%	123	31.10%	79	18.11%	46	2.36%	6
Sidewalk Maintenance	29.48%	74	32.67%	82	16.33%	41	21.51%	54
Cemeteries	30.95%	78	25.00%	63	3.57%	9	40.48%	102
Cellphone Service	31.50%	80	22.83%	58	44.09%	112	1.57%	4
Internet Service	34.65%	88	26.77%	68	34.65%	88	3.94%	10
Municipal Sewer System	19.92%	50	20.32%	51	19.52%	49	40.24%	101
Zoning Enforcement	21.43%	54	38.89%	98	16.67%	42	23.02%	58

Leland Township Community Survey

Please select the statement below that best matches your opinion regarding growth in Leland Township:

Answer Choices	Responses	
Growth should be encouraged	9.39%	23
Growth should take its own course	44.49%	109
Growth should be limited	43.27%	106
No additional growth should be permitted	2.86%	7

Leland Township Community Survey

Please respond to the following statements using one of the following responses:

	Strongly Support	Support	Net
Require the clustering of homes on small lots in order to preserve the Land development on hilly terrain should be limited to areas below th	9.91%	23	21.55%
The Township should acquire undeveloped shoreline	17.52%	41	26.07%
The Township should preserves open spaces	25.53%	60	14.47%
The Township should purchase undeveloped land to protect as open	22.55%	53	14.47%
A special millage should be used to acquire land for open spaces	40.85%	96	16.88%
It is important to limit or slow the conversion of farmland to other dev	24.47%	58	24.58%
Economic opportunities for agricultural lands should be expanded	16.95%	40	16.95%
A millage should be dedicated to preserving farmland	37.71%	89	27.90%
Boathouses should be allowed in the Lake Leelanau Narrows and the	19.74%	46	26.92%
	15.81%	37	25.21%
	8.40%	20	

utral	Oppose	Strongly Oppose	No Opinion	Total	Weighted Average
50	23.28%	54	17.67%	41	6.03%
61	14.53%	34	7.69%	18	5.98%
34	21.28%	50	13.19%	31	2.98%
34	7.66%	18	4.26%	10	0.43%
40	20.25%	48	9.70%	23	1.69%
58	17.37%	41	22.88%	54	2.54%
40	9.75%	23	4.66%	11	1.69%
65	9.44%	22	3.86%	9	4.72%
63	14.53%	34	21.37%	50	3.42%
60	16.39%	39	28.99%	69	4.62%
				14	
				232	2.65
				14	3.15
				7	3.17
				1	3.97
				4	3.31
				6	2.79
				4	3.81
				11	3.42
				8	2.82
				11	2.45
				238	2.45
				Answered	238

Leland Township Community Survey

Should the Township take a role in farmland and/or open space preservation?

Answer Choices	Responses	
Yes, only if the property is available for public use	39.30%	90
Yes, even if the property is not available for public use	32.75%	75
No	27.95%	64
	Answered	229

Leland Township Community Survey

Please respond to the following statements using the following response choices:

	Strongly Agree		Agree		Net
The mix of housing is appropriate to meet the needs of Township residents	6.84%	16	23.93%	56	16.24%
Adequate affordable housing is available in Leland Township	2.54%	6	13.56%	32	14.83%
Accessory apartments should be allowed wherever residences are allowed	8.51%	20	28.94%	68	22.98%
The need exists for workforce housing within the Township	28.39%	67	44.49%	105	11.02%
Provisions should be made to allow for small homes in the Township	19.92%	47	39.41%	93	19.49%

Statement	Disagree	Strongly Disagree	No Opinion	Total	Weighted Average
	38 35.90%	84 13.68%	32 3.42%	8 234	2.64
	35 31.78%	75 33.05%	78 4.24%	10 236	2.08
	54 21.28%	50 13.19%	31 5.11%	12 235	2.83
	26 9.32%	22 2.54%	6 4.24%	10 236	3.74
	46 11.86%	28 8.47%	20 0.85%	2 236	3.48
				Answered	237

Leland Township Community Survey

In order to address the many concerns discussed in this survey, local public officials may need to develop new policies

	Strongly Support	Support	Net
Architectural controls for new development	25.32% 59	37.34% 87	13.73%
Stricter sign regulation	16.81% 39	37.07% 86	28.88%
Preservation of scenic rural roads	45.06% 105	46.35% 108	5.58%
Preservation of historic buildings	44.83% 104	42.67% 99	7.76%
Burial of utility lines in Lake Leelanau and Leland's "downtown" areas	44.44% 104	39.32% 92	12.39%
Lighting standards to protect dark night sky	47.21% 110	33.05% 77	11.59%
Stricter noise regulations in the Township	22.08% 51	29.44% 68	37.23%
Additional broad band and/or cellular towers should be allowed in the Township	35.34% 82	34.05% 79	18.97%
Wind turbine generators should be allowed in the Township	15.02% 35	25.32% 59	23.61%
Solar energy farms should be allowed in the Township	23.71% 55	34.48% 80	21.12%
Tall and/or massive buildings should be limited in the Township	57.69% 135	23.50% 55	5.98%

s. Please provide your opinion on each of the following policies and statements using the following responses:

Statement	Strongly Support	Support	Neutral	Strongly Oppose	No Opinion	Total	Weighted Average		
Architectural controls for new development	32	14.16%	33	7.73%	18	1.72%	4	233	3.53
Stricter sign regulation	67	11.64%	27	3.88%	9	1.72%	4	232	3.46
Preservation of scenic rural roads	13	0.43%	1	1.72%	4	0.86%	2	233	4.3
Preservation of historic buildings	18	2.16%	5	1.72%	4	0.86%	2	232	4.24
Burial of utility lines in Lake Leelanau and Leland's "downtown" areas	29	1.71%	4	1.71%	4	0.43%	1	234	4.22
Lighting standards to protect dark night sky	27	4.29%	10	3.43%	8	0.43%	1	233	4.15
Stricter noise regulations in the Township	86	6.93%	16	2.16%	5	2.16%	5	231	3.56
Additional broad band and/or cellular towers should be allowed in the Township	44	4.31%	10	5.17%	12	2.16%	5	232	3.84
Wind turbine generators should be allowed in the Township	55	11.16%	26	23.18%	54	1.72%	4	233	2.93
Solar energy farms should be allowed in the Township	49	7.33%	17	12.07%	28	1.29%	3	232	3.47
Tall and/or massive buildings should be limited in the Township	14	5.98%	14	6.84%	16	0.00%	0	234	4.19
								Answered	235

Leland Township Community Survey
Do you own property in Leland Township?

Answer Choices	Responses
Yes	96.83% 214
No	3.17% 7
Answered	221
Skipped	36

Leland Township Community Survey

Which of the following best describes your affiliations (check all that apply):

Answer Choices	Responses
Farmer	4.05% 9
Owner of over 20 acres of land	10.36% 23
Business Owner	17.12% 38
Employee	12.61% 28
Unemployed	0.90% 2
Retiree	50.00% 111
Family with school-age children	11.71% 26
Elected or appointed Township official	0.45% 1
Renter	1.80% 4
None of the above	17.12% 38
Answered	222

Leland Township Community Survey

Do you consider Leland Township to be your year-round place of residence?

Answer Choices	Responses	
Yes	50.45%	112
No	49.55%	110
	Answered	222

Leland Township Community Survey

Do you own your home in Leland Township?

Answer Choices	Responses	
Yes	93.02%	200
No	6.98%	15
	Answered	215

These results are a selection of the results from the 2019 community survey. The full results can be obtained on request from the Township Offices.

Appendix B: Master Plan Development Documents

COMMENTS FROM LCPC and STAFF
PUBLIC HEARING NOTICE
PUBLIC HEARING MEETING MINUTES
FINAL PLAN TRANSMITTAL LETTER and DISTRIBUTION LIST

