



Leelanau Township

**Master Plan Update**  
2010

Adopted by the Leelanau Township  
Planning Commission on August 26, 2010



Grand Traverse  
Lighthouse

# LEELANAU TOWNSHIP

119 E. Nagonaba • P.O. Box 338 • Northport, MI 49670

Phone (231) 386-5138 • Fax (231) 386-7909

[www.leelanau.cc/leelanautwp.asp](http://www.leelanau.cc/leelanautwp.asp)

## LEELANAU TOWNSHIP PLANNING COMMISSION RESOLUTION OF ADOPTION: LEELANAU TOWNSHIP MASTER PLAN UPDATE 2010

Resolution Number: PC 01 of 2010

The following Resolution was offered by Commissioner Reinsch and seconded by Commissioner Kalchik:

WHEREAS, Leelanau Township, Leelanau County, Michigan has a duly constituted Planning Commission whose responsibilities under the Michigan Planning Enabling Act, Public Act 33 of 2008, as amended, include the preparation of a Master Plan to guide future land use development in the community; and,

WHEREAS, the Township Planning Commission did issue its notice of intent to prepare a plan in accordance with Section 39, (2) of Public Act 33; and,

WHEREAS, the Township Planning Commission has worked with the consultants at Wade Trim to oversee a planning process that included significant public input, as well as investigations and surveys of existing resources; and,

WHEREAS, a draft plan was prepared by the Planning Commission and presented to the Township Board in accordance with Section 41, (1) of Public Act 33, and the Township Board at its April 13, 2010 regular meeting approved the distribution of the draft plan for review and comment pursuant to Section 41, (2) of said Act; and,

WHEREAS, the Leelanau County Planning Commission, at a regular meeting held on May 25, 2010, unanimously approved a motion indicating the plan's consistency with the Leelanau County General Plan; and,

WHEREAS, after expiration of a 63 day review and comment period, the Leelanau Township Planning Commission did give notice of a public hearing on the draft plan in accordance with Section 43, (1) of Public Act 33, with such public hearing being held on August 12, 2010; and,

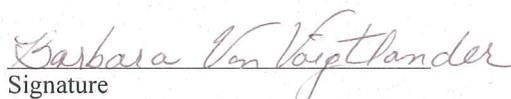
WHEREAS, the Planning Commission did revise the draft plan to address comments received at the public hearing, with such changes to the text and maps being recorded in the minutes of this meeting;

NOW THEREFORE BE IT RESOLVED THAT, the contents of the draft plan, dated April 14, 2010, together with all the maps attached thereto and contained therein, and with such revisions as have been recorded in the minutes of this meeting, are hereby adopted by the Leelanau Township Planning Commission in accordance with Section 43, (2) of Public Act 33 by not less than a majority of its membership.

AYES: Jackson, Mitchell, Reinsch, Kalchik, Baumberger, Von Voigtlander, Leighton

NAYS: None

I, Barbara Von Voigtlander, Secretary of the Leelanau Township Planning Commission, do hereby certify the foregoing to be a true and correct copy of a resolution that was adopted by the Leelanau Township Planning Commission at their regular meeting held on August 26, 2010.

  
Signature

Jim Neve  
Supervisor

Deb Van Pelt  
Clerk

Denise Dunn  
Treasurer

Gary Fredrickson  
Trustee

Ed Reinsch  
Trustee



## Acknowledgements

## Leelanau Township Master Plan Update

Adopted August 26, 2010

The Master Plan of 2010 is the cumulative work product of many Leelanau citizens over a thirty-seven year period. Important and valued inputs to this Plan have been made by:

- Planning Commission members from 1973 to the present time, particularly those who developed the first Leelanau Township Master Plan in 1990
- Individuals who have written background and historic narratives for each version of the Plan
- Citizens who have served in advisory committees and provided thoughtful inputs
- Interested persons who participated in focus groups to review and comment on various Plan drafts. These groups were comprised of farmers and fruit growers, realtors and business owners, persons interested in conservation, retirees, and citizens at large.
- Professional planning and legal consultants and Township Zoning Administrators who have given advice based on their professional knowledge or experience
- Members of the Leelanau Township Board, past and present, who have provided helpful suggestions and who have supported the Plans

The Leelanau Township Planning Commission gratefully acknowledges the contributions to the Master Plan of 2010 made by all who have participated in the writing of this and previous Master Plans.

Technical assistance by:



241 East State Street  
Traverse City, MI 49684  
[www.WadeTrim.com](http://www.WadeTrim.com)

Financial Assistance for this project was provided, in part, by the Michigan Coastal Management Program, Michigan Department of Natural Resources & Environment (MDNRE), through a grant from the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.



Michigan  **DNRE**  
natural resources & environment

[This page intentionally left blank]



# Table of Contents

- Preface .....1
  
- 1. Introduction .....3
  - Township Setting
  - Authority
  - Purpose
  - Report Organization
  
- 2. Population, Housing and Economy .....5
  - Introduction
  - Population Profile
  - Housing Profile
  - Economic Profile
  
- 3. Natural Features and Resources Assessment .....21
  - Introduction
  - Natural Resource Inventory
  - Natural Areas
  - Scenic Views
  
- 4. Maritime History and Structure Inventory .....29
  - Maritime History of Leelanau Township
  - Maritime Structure Inventory
  - Maritime Planning Principles
  
- 5. Public Facilities and Services .....37
  - Introduction
  - Roads
  - Airport
  - Public Transportation
  - Public Marina
  - Emergency Services



Health Services	
Utilities	
Electric and Gas Service	
Broadband Internet	
Schools	
Parks and Recreation	
6. Existing Land Use . . . . .	43
Introduction	
Methodology	
Land Use Classifications	
7. Planning Goals, Objectives and Strategies . . . . .	47
Introduction	
Guiding Principles	
Visioning Exercise	
Goals, Objectives and Strategies Defined	
Goals, Objectives and Strategies	
8. Future Land Use Plan . . . . .	57
Introduction	
Evaluation of Future Land Use Alternatives	
Future Land Use Categories	
Zoning Plan	
Implementation	
Appendix: Mapping . . . . .	67
1. Natural Resource Inventory	
2. Maritime Structures and Community Facilities	
3. Existing Land Use	
4. Future Land Use	





## Preface

The original Leelanau Township Master Plan was first adopted in 1990. The citizens of Leelanau Township were actively involved in the planning process. A survey questionnaire was used to determine the attitudes, needs, and desires of property owners in the Township. In addition, a number of public working meetings were held by the Planning Commission at which citizens' input was obtained. The Master Plans of the Village of Northport and neighboring townships were also studied in order to achieve consistency. In developing the 1990 Plan, the Planning Commission compiled information on the soil characteristics, topography, and environmentally sensitive areas in the Township. Lands suitable for agriculture and horticulture were identified during field trips by knowledgeable Commission members and from information received from appropriate governmental agencies.

In 1999, the Planning Commission acted to revise the Plan to include pertinent planning concepts and guidelines that had been advanced since 1990 and to add language that would more clearly define the intent of the Plan. In the 1999 Plan, the Commission adopted those planning principles set forth in the *Grand Traverse Bay Region Development Guidebook* and the book *Rural By Design, Maintaining Small Town Character* (by Randall Arendt) that are applicable to Leelanau Township. Additionally, revisions to the Township Plan were made to ensure its compatibility with the 1994 Leelanau

General Plan, developed and adopted for Leelanau County. An amendment to the Plan was later adopted by the Planning Commission in November 2000.

In 2007, the Leelanau Township Planning Commission embarked on a process aimed at "testing" the goals, policies and recommendations of the Plan. At the culmination of the process, the Planning Commission determined that an update to the Plan was necessary. The need for the Plan update was demonstrated by a variety of factors, including continued growth pressures and the potential impacts resulting from the construction of a new public sewer system servicing the Township's shoreline areas north and south of the Village of Northport. In early 2008, the Township was successful in securing a Coastal Zone Management grant through the Michigan Department of Natural Resources and Environment (MDNRE) to support the development of the updated Master Plan. The Plan update process was officially initiated in early 2009.

This 2010 Master Plan Update for Leelanau Township has been prepared and adopted in order to bring about the most appropriate uses of lands within the Township to enhance and protect the health, safety, and welfare of its citizens. It is intended to guide change in a manner that will conserve the economic resources and maintain the rural appearance and character of the area. It is further intended to provide the background and direction for developing land use regulations that will achieve the planning goals and objectives established in the Plan. It has been prepared according to the provisions of Act 33 of 2008, as amended – the Michigan Planning Enabling Act.

The Leelanau Township Planning Commission has based this Master Plan Update on the best infor-

mation available at this time. However, amendments to the Plan may be necessary from time to time if they:

- Are required by new legislation or technology;
- Are needed to compensate for unforeseen actions taken by neighboring communities or State or Federal agencies; or,
- Provide clarifications or additions that facilitate achieving the goals and objectives set forth herein.

Additionally, citizens may petition the Commission for changes that will further the objectives of the Plan and will be of benefit to the Township as a whole.

# 1

## Introduction

### Township Setting

Leelanau Township is a community in Michigan's northern lower peninsula. The natural beauty of Leelanau Township is striking, contributed in large part by its rolling topography and approximately 52 miles of shoreline on Lake Michigan and the Grand Traverse Bay. Leelanau Township is situated at the "tip" of the Leelanau Peninsula within Leelanau County. The Township also includes two offshore islands, South Fox Island and North Fox Island, located 15-20 miles northwest of the mainland. In total, the Township encompasses 30,660 acres or 47.9 square miles of land (excluding the Village of Northport). The Village of Northport is located within the east-central portion of Leelanau Township, while the unincorporated village of Omena is located in the southeastern corner of the Township. Traverse City is located 20 miles southeast of the Township's southern border (see **Figure 1**).

Leelanau Township, in particular, and the Leelanau Peninsula, in general, has seen significant population growth and development in recent years. Over the last 17 years (between 1990 and 2007), the Township's population grew by nearly 500 residents, a 45 percent increase. The draw of the shoreline is immense, resulting in much of the residential growth and other urban development occurring along the waterfront. However, large segments of the shoreline have remained relatively

untouched, supporting many types of aquatic habitats including dunes and wetlands.

The topography of the Township varies greatly. The glaciers and erosion forces that shaped the peninsula's land mass left a variety of soil types and topographical features, including drumlins with high ridges and steep slopes, former lake bottoms and lake terraces, and dunes. The location for certain land uses is dictated by these natural features. As a result, land use patterns within the Township cannot be as uniform as is typically suggested in planning guidelines.

Farming, particularly horticulture, has been and continues to be a major economic factor in the Township. Although the residential uses, both permanent and seasonal, have coexisted with farming activities for many years, the increasingly industrial nature of farming and the continuing development of residential properties in all sections of the



**Figure 1: Location Map**

*Leelanau Township (highlighted in yellow) is located at the tip of the Leelanau Peninsula and includes North and South Fox Islands.*

Township make clear the need to anticipate potential conflicts and to enact zoning regulations that will consider the equity of all landowners.

Those who visit Leelanau Township, as well as its summer and permanent residents, appreciate and value the natural beauty and the rural character of the area. These qualities are also important to the long term economic well-being of the Township's citizens.

## Authority

The Township derives its authority to develop a Master Plan from the Michigan Planning Enabling Act, PA 33 of 2008, which was recently adopted by the State Legislature to replace the Township Planning Act. The Planning Enabling Act states:

“The planning commission shall make and approve a master plan as a guide for development within the planning jurisdiction.”

The master planning process is cooperative and public. Input from the public and various governmental entities is gathered throughout the planning process. Public Act 33 requires the Planning Commission to hold a public hearing before the final adoption of a master plan. Also, Public Act 33 requires review of a community's master plan after a five-year period but allows for change at any time. However, a public hearing is required if the Planning Commission wishes to alter or amend their master plan after its original adoption, as is the case with this 2009-2010 Master Plan Update.

## Purpose

The planning process was designed to involve conscious selections of policies and land use choices relating to growth and development in the Township. The Master Plan Update serves to promote these policies through the following:

- Provides a general statement of the Township's goals and provides a comprehensive view of the community's preferred future.
- Serves as the primary policy guide for local officials when considering zoning, land division, capital improvement projects and any other matters related to land development. Thus, the Master Plan provides a stable and consistent basis for decision-making.
- Provides the legal foundation for the Township Zoning Ordinance, as required by the State of Michigan.
- Helps to coordinate public improvements and private development activities to assure the judicious and efficient expenditure of public funds.

## Report Organization

The process of preparing a Master Plan Update involves many steps, but is generally described in three stages starting with an evaluation of “where are you” (i.e., background studies), followed by “where you want to go” (i.e., visioning), and culminating in “how you get there” (i.e., future land use planning and implementation strategies). The Leelanau Township Master Plan Update generally follows this process. Chapters 1 through 6 detail the background studies, Chapter 7 features the vision, and Chapter 8 outlines the future land use planning and implementation strategies.



## Population, Housing and Economy

### Introduction

The purpose of this examination is to identify the characteristics of the population, housing stock, and local employment base in order to anticipate what opportunities may exist for future land use development activities. For example, a population comprised primarily of members in the family formation group would indicate a need for multiple-family dwellings, active recreation areas, primary educational facilities, and ample employment opportunities. On the other hand, a population with significant numbers of retirees could suggest a need for alternative housing options, unique recreation facilities and programs, and other specialized community services.

The primary sources of information for this demographic profile are the decennial census reports from the U.S. Census Bureau.

**Table 1: Population Trends, 1980-2007**

Place	1980	1990	% Change (80-90)	2000	% Change (90-00)	2007 <sup>2</sup>	% Change (00-07)	% Change (80-07)
<b>Leelanau Township <sup>1</sup></b>	<b>949</b>	<b>1,089</b>	<b>14.8%</b>	<b>1,491</b>	<b>36.9%</b>	<b>1,578</b>	<b>5.8%</b>	<b>66.3%</b>
Suttons Bay Township	1,774	2,150	21.2%	2,982	38.7%	3,047	2.2%	71.8%
Leland Township	1,446	1,647	13.9%	2,033	23.4%	2,115	4.0%	46.3%
Village of Northport	611	605	-1.0%	648	7.1%	637	-1.7%	4.3%
Leelanau County	14,007	16,527	18.0%	21,119	27.8%	21,898	3.7%	56.3%
Michigan	9,262,078	9,295,297	0.4%	9,938,444	6.9%	10,071,822	1.3%	8.7%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

<sup>2</sup> 2007 Population Estimate Source: Population Division, US Census Bureau.

Source: 1980, 1990, 2000 US Census Reports

In many instances, the figures for Leelanau Township are compared to regional jurisdictions such as Leelanau County and the State of Michigan. Additionally, many tables include data from the communities that are adjacent to Leelanau Township as a comparison. These surrounding communities include the Village of Northport (within Leelanau Township), Leland Township and Suttons Bay Township. Where noted, the figures for the Village of Northport have been separated out from the Leelanau Township figures in order to give a true profile of each community.

### Population Profile

#### Historical Population Growth

Population growth is an important factor that influences many land use decisions within a community and the larger marketplace.

Population trends for Leelanau Township and its neighboring communities are presented in **Table 1**. From 1980 to 2007, the population of the Township increased from 949 persons to 1,578 persons, a change of over 66 percent. During the same period, Leelanau County experienced an approximately 56 percent increase in population while the total population of the State of Michigan increased by only 8.7 percent. Most of the Township's in-

crease was during the decade from 1990 to 2000, when 402 persons accounted for a 36.9 percent increase in population. Significantly, Leelanau Township’s growth rate between 2000 and 2007 was 5.8 percent, which was the highest growth rate of all of the units of government compared in **Table 1**.

Overall, the data for Leelanau Township and the surrounding communities indicate strong historical growth within the region and the potential for continued growth into the future.

## Population Projections

Data in **Table 2** provide the results of two approaches to projecting Leelanau Township’s population levels for the year 2025.

The two projections, linear curve extrapolation and exponential curve extrapolation, aim to provide a “best fit” scenario for trends stemming from the Township’s past population figures. In the case of linear curve extrapolation, the historical numerical growth is extended forward, while the exponential curve extrapolation extends forward the historical rate of growth. According to the linear curve extrapolation method, Leelanau Township will reach a population of 2,104 by 2025, while the exponential curve extrapolation method predicts a population of 2,446 by 2025. The average of these two population figures, 2,275, will be used throughout this Master Plan Update as the assumed 2025 Township population.

As with all population projections, however, these numbers are based on past trends and do not take into consideration any significant developments, economic occurrences, or changing personal habitation preferences that may occur in the future. These figures should, therefore, be seen only as a preliminary benchmark for analysis of future population attributes.

## Age Groups

As shown in **Table 3**, the median age in Leelanau Township of 47.1 years is slightly higher than neighboring Leland Township (44.9), higher than Suttons Bay Township (39.7) and substantially higher than the State of Michigan (35.5). Only the Village of Northport residents had a higher median age (50.6).

In terms of percentage of the 2000 census population within certain age groups, there are some interesting findings in **Table 3**. The percentage of population in the under 5 age group in both Northport (3.2) and Leelanau Township (3.3) is slightly lower than neighboring Leland Township (4.2) but about one-half of the percentages found in Suttons Bay Township (6.7) and the State of Michigan (6.8). Significantly, the Leelanau Township under 5 age group in 2000 was one-half of its 1990 census percentage (see **Table 4**).

The 20 to 34 age group in Leelanau Township was slightly smaller than those of the neighboring townships and Leelanau County, but greater

**Table 2: Township Population Projections, 2010-2025**

Source or Projection Method	Historical Population				Population Projections			
	1980	1990	2000	2007	2010	2015	2020	2025
U.S. Census Reports and 2007 Estimate	949	1,089	1,491	1,578				
Linear Curve Extrapolation					1,699	1,834	1,969	2,104
Exponential Curve Extrapolation					1,766	1,968	2,194	2,446
<b>Average</b>					<b>1,732</b>	<b>1,901</b>	<b>2,082</b>	<b>2,275</b>

*Note: Leelanau Township figures do not include the Village of Northport  
Linear and exponential projection analysis by Wade-Trim*

**Table 3: Age Group Comparison, 2000**

Place	Total Population	Under 5 Years		5 to 14 Years		15 to 24 Years		25 to 34 Years		35 to 44 Years		45 to 54 Years		55 to 64 Years		65 and Over		Median Age (Years)
		#	%	#	%	#	%	#	%	#	%	#	%	#	%			
Leelanau Township <sup>1</sup>	1,491	49	3.3%	200	13.4%	132	8.9%	104	7.0%	179	12.0%	263	17.6%	205	13.7%	359	24.1%	47.1 <sup>2</sup>
Suttons Bay Township	2,982	199	6.7%	523	17.5%	326	10.9%	264	8.9%	442	14.8%	474	15.9%	320	10.7%	434	14.6%	39.7
Leland Township	2,033	86	4.2%	286	14.1%	211	10.4%	179	8.8%	258	12.7%	316	15.5%	253	12.4%	444	21.8%	44.9
Village of Northport	648	21	3.2%	75	11.6%	50	7.7%	34	5.2%	79	12.2%	111	17.1%	75	11.6%	203	31.3%	50.2
Leelanau County	21,119	1,075	5.1%	3,134	14.8%	2,155	10.2%	1,833	8.7%	3,273	15.5%	3,574	16.9%	2,406	11.4%	3,669	17.4%	42.6
Michigan	9,938,444	672,005	6.8%	1,492,193	15.0%	1,363,706	13.7%	1,362,171	13.7%	1,598,373	16.1%	1,367,939	13.8%	863,039	8.7%	1,219,018	12.3%	35.5

<sup>1</sup> Leelanau Township figures do not include the Village of Northport.

<sup>2</sup> Median age data is not available for the Township excluding the Village. Figure is estimated by the Leelanau Township Planning Commission.

Source: 2000 US Census Reports

than the Village of Northport. The 35 to 64 age group population was almost uniform across the townships, Village, and County, ranging from 40.7 percent to 43.8 percent.

The 65 and older age group varied from the low of 14.6 percent for Suttons Bay Township (the State of Michigan figure is 12.3 percent) to a high of 31.3 percent for Northport. Leelanau Township’s 24.1 percent of population 65 and over was the second highest of the neighboring communities.

Overall, the data in **Table 3** demonstrate the Township’s mature population (55 percent of residents are 45 years or older) and role as a second

home, vacation and retirement destination. As a result, fewer children, young adults and young families are found in the community.

### Changes in Age Structure

Data in **Table 4** show that the Leelanau Township population is aging, as the median age rose from 41.4 years of age to 47.1 years of age between 1990 and 2000. It is significant that one of every four Township residents is 65 years or older. In Northport, one of every 3.2 residents falls in the 65 and over group.

In terms of the change in total percentage of the population by age group, the largest decrease occurred in the 35 to 44 age group (-5.3 percentage points), followed by the 25 to 34 age group (-3.2 percentage points) and under 5 age group (-3.1 percentage points). The largest increases occurred in the 65 to 74 age group (+3.9 percentage points), followed by 45 to 54 age group (+3.1 percentage points) and 75 to 84 age group (+2.9 percentage points).

To summarize, the figures indicate an increasing share of mature families (commonly referred to as “empty nesters”) and retirees and a decreasing share of young children, young adults and family formation age groups.

**Table 4: Age Group Trends, 1990-2000**

Leelanau Township Age Groups <sup>1</sup>	1990		2000		Change in Percent of Population
	#	%	#	%	
Under 5 Years	73	6.4%	49	3.3%	-3.1%
5 to 9 Years	65	5.7%	91	6.1%	0.4%
10 to 14 Years	62	5.4%	109	7.3%	1.9%
15 to 19 Years	62	5.4%	79	5.3%	-0.1%
20 to 24 Years	46	4.0%	53	3.6%	-0.5%
25 to 34 Years	116	10.2%	104	7.0%	-3.2%
35 to 44 Years	197	17.3%	179	12.0%	-5.3%
45 to 54 Years	166	14.6%	263	17.6%	3.1%
55 to 59 Years	68	6.0%	97	6.5%	0.5%
60 to 64 Years	97	8.5%	108	7.2%	-1.3%
65 to 74 Years	126	11.1%	223	15.0%	3.9%
75 to 84 Years	50	4.4%	108	7.2%	2.9%
85 Years and Over	12	1.1%	28	1.9%	0.8%
<b>Totals</b>	<b>1,140</b>	<b>100.0%</b>	<b>1,491</b>	<b>100.0%</b>	
Median Age (Years)	41.4 <sup>2</sup>		47.1 <sup>2</sup>		

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

<sup>2</sup> Median age data is not available for the Township excluding the Village. Figure is estimated by the Leelanau Township Planning Commission.

Source: 1990 and 2000 US Census Reports

## Birthplace and Migration

Statistics relating to place of birth and migration for the citizens of Leelanau Township are available from the U.S. Census Bureau. As of the 2000 Census, 71.3 percent of Township residents (1,070 of 1,501 total) were born in Michigan. This percentage is somewhat lower than the State-wide average of 75.4 percent. At 24.1 percent, the percentage of Leelanau Township citizens that were born outside of Michigan is much higher than the State-wide average of 18.8 percent. At 4.3 percent, the percentage of foreign born citizens in Leelanau Township is slightly lower than the State-wide average (5.3 percent).

Recent migration trends are tracked in the 2000 Census through the recording of the number of citizens (over 5 years old) that lived in the same house in 1995. If they did not live in the same house, the Census Bureau records where they lived previously. For Leelanau Township, 60.2 percent of the population lived in the same house in 1995. Of the 550 citizens who did not live in the same house in 1995, 54.9 percent lived in a different county, while 27.1 percent lived in a different state. The percentage of Leelanau Township citizens that lived in a different county or state in 1995 was much higher than the State-wide average

ages of 38.9 percent and 12.3 percent, respectively.

The Township's birthplace and migration figures are an indication that the Township's natural features, amenities and overall quality of life is attracting permanent residents from a large, out-of-state market base.

## Household Characteristics

This section examines households in terms of the relationships among the persons who share a household. Some households are families, consisting of two or more persons related by blood, marriage, or adoption, while others are non-family households comprised of persons living alone or with unrelated persons. Data in **Table 5** outline the total number of households in Leelanau Township, the neighboring Townships, Leelanau County and the State of Michigan, as well as a breakdown of family and non-family households, and other household characteristics.

Of the 631 total households in Leelanau Township in the 2000 census, 72.9 percent are family households. This percentage is similar to the neighboring Townships and Leelanau County, but higher than the Village of Northport and the State of Michigan. Married couple family households account for

**Table 5: Household Characteristics, 2000**

Place	Total Households	Family Households						Non-Family Households				Households with Individuals Under 18 Years		Households with Individuals 65 Years and Over	
		Any Type		Married Couple Families		Female Householder, No Husband Present		Any Type		Householder Living Alone		#	%	#	%
		#	%	#	%	#	%	#	%	#	%				
<b>Leelanau Township</b> <sup>1</sup>	<b>631</b>	<b>460</b>	<b>72.9%</b>	<b>418</b>	<b>66.2%</b>	<b>27</b>	<b>4.3%</b>	<b>171</b>	<b>27.1%</b>	<b>150</b>	<b>23.8%</b>	<b>161</b>	<b>25.5%</b>	<b>235</b>	<b>37.2%</b>
Suttons Bay Township	1,114	834	74.9%	661	59.3%	122	11.0%	280	25.1%	240	21.5%	393	35.3%	304	27.3%
Leland Township	818	590	72.1%	523	63.9%	52	6.4%	228	27.9%	197	24.1%	216	26.4%	293	35.8%
Village of Northport	272	175	64.3%	142	52.2%	25	9.2%	97	35.7%	88	32.4%	63	23.2%	108	39.7%
Leelanau County	8,436	6,216	73.7%	5,362	63.6%	600	7.1%	2,220	26.3%	1,882	22.3%	2,641	31.3%	2,412	28.6%
Michigan	3,785,661	2,575,699	68.0%	1,947,710	51.4%	473,802	12.5%	1,209,962	32.0%	993,607	26.2%	1,347,469	35.6%	862,730	22.8%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 2000 US Census Reports

66.2 percent of the total households, a percentage comparable with the Township of Leland and the County but higher than Suttons Bay Township, the Village of Northport, and the State of Michigan. Female headed family households (no husband present) account for only 4.3 percent of total households in Leelanau Township.

Non-family households account for 27.1 percent of the total households in Leelanau Township. This percentage is comparable to the neighboring townships and the County but lower than the 35.7 percent non-family households in the Village of Northport. Households consisting of a householder living alone account for 23.8 percent of the total households.

At 25.5 percent, Leelanau Township has a lower percentage of households with individuals under 18 years of age than Suttons Bay Township (35.3 percent) and the County (31.3 percent). Leland Township and the Village of Northport's percentages of such persons are similar to that of Leelanau Township.

At 10.8 percent, the percentage of households with individuals 65 years and over in Leelanau Township is fairly low in comparison to the surrounding communities.

## Household Size

The number of persons per household constitutes average household size. Since the 1970's, the nationwide trend has been a decline in household size. This trend has occurred because of a number of reasons which include young adults postponing marriage, a declining number of children per family, higher divorce rates, and a growing number of elderly living alone. This trend is expected to continue, and is important because declining numbers of persons per household often are accompanied by an increase in the total number of households and demand for new housing units.

According to the Census Bureau in 1990, a total of 1,089 citizens in Leelanau Township lived in 437 households for an average household size of 2.49. In 2000, a total of 1,491 citizens lived in 631 households for an average household size of 2.33. This equated to a 6.4 percent decrease in average household size. Unfortunately, no future household size projections have been published for Leelanau Township. However, assuming the rate of decrease between 1990 and 2000 continues through 2025, the average household size in Leelanau Township would drop to 2.17 in 2010, 2.01 in 2020 and reach 1.93 by 2025 (see **Table 6**). Between 1990 and 2025, this represents a persons per household decline of 22.5 percent for Leelanau Township.

**Table 6: Household Trends and Projections, 1990-2025**

Leelanau Township <sup>1</sup>	1990	2000	2010 Projection	2015 Projection	2020 Projection	2025 Projection	% Change 1990-2025
Population <sup>2</sup>	1,089	1,491	1,732	1,901	2,082	2,275	108.9%
Persons Per Household <sup>3</sup>	2.49	2.33	2.17	2.09	2.01	1.93	-22.5%
Households <sup>4</sup>	437	631	798	910	1,036	1,179	169.7%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

<sup>2</sup> Population projection is the average of the linear and exponential projections (see Table 2)

<sup>3</sup> Persons per household projection is a linear trend based on the rate of change between 1990 and 2000

<sup>4</sup> Household projection is the projected population divided by the projected persons per household

Source: 1990 and 2000 US Census Reports; projection analysis by Wade-Trim

Based on the Township’s projected 2025 population of 2,275 divided by the 2025 projected persons per household of 1.93, the Township is estimated to have a total of 1,179 households by 2025. As is shown in **Table 6**, the Township’s total households are expected to grow at a much faster rate than the Township’s overall population through 2025.

on the projections for future population and households. Such an analysis is essential in determining the amount and type of new housing that can and should be marketed and built in the Township in the future.

## Type of Housing Units

## Housing Profile

This section details the characteristics of Leelanau Township’s housing stock by type, age, value, occupancy characteristics and other indices. Additionally, future housing needs are estimated based

Type of housing units is the most basic measure of housing stock within a community. Data in **Table 7** show the distribution of housing unit types for the Township and surrounding communities.

**Table 7: Type of Housing Units, 2000**

Place	Total Housing Units	1-unit, detached		1-unit, attached		2 units		3 or 4 units	
		#	%	#	%	#	%	#	%
<b>Leelanau Township<sup>1</sup></b>	<b>1,347</b>	<b>1,260</b>	<b>93.5%</b>	<b>12</b>	<b>0.9%</b>	<b>8</b>	<b>0.6%</b>	<b>2</b>	<b>0.1%</b>
Suttons Bay Township	1,379	1,109	80.4%	59	4.3%	33	2.4%	46	3.3%
Leland Township	1,619	1,501	92.7%	13	0.8%	23	1.4%	17	1.1%
Village of Northport	397	344	86.6%	14	3.5%	13	3.3%	4	1.0%
Leelanau County	13,297	11,030	83.0%	421	3.2%	227	1.7%	299	2.2%
Michigan	4,234,279	2,988,818	70.6%	164,910	3.9%	146,414	3.5%	118,067	2.8%

Place	5 to 9 units		10 to 19 units		20 or more units		Mobile home		Boat, RV, Van, etc.	
	#	%	#	%	#	%	#	%	#	%
<b>Leelanau Township<sup>1</sup></b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>63</b>	<b>4.7%</b>	<b>2</b>	<b>0.1%</b>
Suttons Bay Township	10	0.7%	14	1.0%	5	0.4%	103	7.5%	0	0.0%
Leland Township	13	0.8%	0	0.0%	0	0.0%	48	3.0%	4	0.2%
Village of Northport	2	0.5%	0	0.0%	0	0.0%	20	5.0%	0	0.0%
Leelanau County	311	2.3%	183	1.4%	73	0.5%	736	5.5%	17	0.1%
Michigan	169,946	4.0%	144,848	3.4%	216,573	5.1%	277,158	6.5%	7,545	0.2%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 2000 US Census Reports

As can be expected for a rural community that lacks public utilities, the Township’s housing stock is composed mostly of single-family detached dwelling units. In 2000, 93.5 percent of the housing stock was categorized as one-unit detached structures. This is above the percentage for all surrounding communities. This is also above both the State and Leelanau County averages. The next largest category of housing units in Leelanau Township is mobile homes, which makes up 5.0 percent of the total housing stock. Each of the other housing categories is less than 1 percent, a figure that is quite low compared to the County and State averages for like categories. There are no housing developments in the Township having more than four units in a structure. The relatively high percent of mobile homes may be attributable to their use for migrant workers.

### Age of Housing Units

The average industry standard for the life span of a dwelling unit is generally 50 years. However, this typical life span often depends on the quality of the original construction and continued maintenance of the unit. Using this standard, some homes within the Township constructed prior to 1960 may be approaching the end of their utility.

Data in **Table 8** reveal the age of residential structures for Leelanau Township as compared to the Village of Northport and Leelanau County according to the 2000 Census. The largest percentage of housing units in the Township were built between 1990 and March 2000 (28.5 percent). The decade of the 1970’s saw significant housing unit construction, as nearly 21 percent of the Township’s housing structures were constructed during that time period.

Approximately thirty percent of the Township’s housing structures are close to or greater than 50 years old (built prior to 1960), the typical life-span of a dwelling unit. This is comparable to the County percentage of 29.9 percent but much lower than the 51 percent for the Village of Northport. The Township should direct all interested property owners to Leelanau County’s existing housing rehabilitation programs, which can provide financial assistance in the improvement of older housing units.

### Seasonal Housing

The figures in **Table 9** illustrate the extent of seasonal housing within Leelanau Township and the surrounding communities. As of 2000, Leelanau Township had 1,346 total housing units, of which

**Table 8: Age of Housing Units, 2000**

Year Structure Built	Leelanau Township <sup>1</sup>		Village of Northport		Leelanau County	
	#	%	#	%	#	%
1990 to March 2000	384	28.5%	54	13.6%	3,173	23.9%
1980 to 1989	192	14.3%	45	11.3%	2,407	18.1%
1970 to 1979	279	20.7%	56	14.1%	2,613	19.7%
1960 to 1969	92	6.8%	40	10.1%	1,124	8.5%
1940 to 1959	80	5.9%	37	9.3%	1,600	12.0%
1939 or earlier	320	23.8%	165	41.6%	2,380	17.9%
<b>Total Housing Units</b>	<b>1,347</b>	<b>100.0%</b>	<b>397</b>	<b>100.0%</b>	<b>13,297</b>	<b>100.0%</b>

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 2000 US Census Reports

715 or 53.1 percent were vacant. The vast majority of these vacant units (659 or 92.2 percent) were seasonally occupied. Examples of such units include summer homes, cottages and timeshares. This high number of seasonal housing units is reflective of the region's standing as a highly desirable tourist area, which is attributable to the area's natural amenities and setting along Lake Michigan.

When the average household size of 2.33 (2000 Census) is applied to the total number of seasonally vacant units (659), it can be estimated that as many as 1,500 seasonal residents live within Leelanau Township during the peak summer season.

However, Census figures for Leelanau Township illustrate a trend where seasonal housing units are increasingly being converted into year-round housing units, likely the result of home owners retiring and establishing year round residence within the Township. In 1990, the Township featured 667 seasonally vacant units, which represented 56.2 percent of all housing units. However, by 2000, only 659 seasonally vacant units remained in the Township, representing only 49.0 percent of all housing units.

## Housing Ownership and Occupancy

The home ownership rate is a very important aspect of a community. A high home ownership rate could be an indication that the community has stable and well kept neighborhoods. A higher percentage of rental housing might indicate a more transient population. Owner and renter occupancy rates can also reveal whether the housing stock in the community is affordable.

Data in **Table 9** highlight housing occupancy statistics for Leelanau Township and the surrounding communities from the 2000 Census. An understanding of the occupancy within a community is helpful in predicting future growth and housing needs. A high vacancy rate might be an indicator of residential decline, but also shows that in the event of growth, housing units are available. Generally, a five- percent vacancy rate is considered necessary to provide an adequate housing selection and to keep home prices from rising faster than inflation. Vacancy rates below five percent indicate a restricted housing market.

As shown in the table, Leelanau Township has the lowest percentage of occupied housing units (46.9

**Table 9: Housing Occupancy and Ownership, 2000**

Place	Total Housing Units	Occupied Housing Units						Vacant Housing Units			
		Number	% of Total Housing Units	Owner-Occupied Housing Units		Renter-Occupied Housing Units		Number	% of Total Housing Units	For Seasonal Use	
				Number	% of Total Occupied Units	Number	% of Total Occupied Units			Number	% of Total Vacant Units
<b>Leelanau Township<sup>1</sup></b>	<b>1,346</b>	<b>631</b>	<b>46.9%</b>	<b>532</b>	<b>84.3%</b>	<b>99</b>	<b>15.7%</b>	<b>715</b>	<b>53.1%</b>	<b>659</b>	<b>92.2%</b>
Suttons Bay Township	1,406	1,114	79.2%	847	76.0%	267	24.0%	292	20.8%	234	80.1%
Leland Township	1,550	818	52.8%	695	85.0%	123	15.0%	732	47.2%	676	92.3%
Village of Northport	391	272	69.6%	212	77.9%	60	22.1%	119	30.4%	87	73.1%
Leelanau County	13,297	8,436	63.4%	7,138	84.6%	1,298	15.4%	4,861	36.6%	4,111	84.6%
Michigan	4,234,279	3,785,661	89.4%	2,793,124	73.8%	992,537	26.2%	448,618	10.6%	233,922	52.1%

<sup>1</sup> LeelanauTownship figures do not include the Village of Northport

Source: 2000 US Census Reports

percent) and highest percentage of vacant housing units (53.1 percent) as compared to the surrounding communities, County and State. The low occupancy percentage and high vacancy percentage is primarily the result of the Township’s high number of seasonally vacant “second homes.”

With the seasonally vacant housing units excluded, only 56 total vacant units are found in the Township out of 1,346 total housing units. This true vacancy rate of 4.2 percent generally indicates a positive demand for housing within the Township, but is also an indicator of a restricted housing market, given that a 5 percent vacancy rate is considered optimum.

Data in **Table 10** show housing unit and home ownership trends for Leelanau Township between 1990 and 2000. In 1990, the Township had a home ownership rate of 82.4 percent, but that rate increased to 84.3 percent as of 2000. Correspondingly, the renter occupancy rate decreased from 17.6 percent in 1990 to 15.7 percent in 2000.

## Housing Values

Analyzing housing values and rent could be the best way to determine both the quality and affordability of housing. It is of crucial importance that both quality and affordable housing be maintained to help retain current residents and attract new homeowners to a community.

As presented by data in **Table 11**, a large percentage (40.6 percent) of specified owner-occupied housing units were valued at \$300,000 or more. Moreover, a significant number of homes were valued between \$150,000 to \$199,000 (17.0 percent) and \$200,000 to \$299,999 (14.7 percent). Only 12.7 percent of Township homes were valued less than \$100,000. These high home values are reflective of general prosperity within the community; however, the home value figures are skewed, to a certain extent, by the large number of properties in the Township that are located along the Lake Michigan/Grand Traverse Bay shoreline.

In terms of median values of owner-occupied housing units, Leelanau Township, at \$202,400, trails only Leland Township at \$223,000. Both figures are substantially higher than the \$165,400 median value for Leelanau County and the \$115,000 median value for the State.

In Leelanau Township, the majority of rental units cost between \$300 and \$499 (32.9 percent) to rent, followed by the \$500 to \$749 category at 23.7 percent. The next highest rent category was \$750 to \$999, representing 22.4 percent of rental units. The median rent for the Township is \$514, which is comparable to the Leland and Suttons Bay Townships, but lower than the \$594 median rent in the Village of Northport.

**Table 10: Township Housing Unit and Ownership Trends, 1990-2000**

Leelanau Township <sup>1</sup> Category	1990		2000	
	#	%	#	%
<b>Total Housing Units</b>	<b>1,186</b>		<b>1,346</b>	
<b>Total Occupied Housing Units</b>	<b>437</b>	<b>100.0%</b>	<b>631</b>	<b>100.0%</b>
Owner-Occupied Housing Units	360	82.4%	532	84.3%
Renter-Occupied Housing Units	77	17.6%	99	15.7%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 1990 and 2000 US Census Reports

**Table 11: Housing Unit Values, 2000  
Owner-Occupied**

Place	Specified Owner Occupied Housing Units <sup>2</sup>	Less than \$50,000		\$50,000 to \$99,999		\$100,000 to \$149,999		\$150,000 to \$199,999		\$200,000 to \$299,999		\$300,000 to \$499,999		\$500,000 or more		Median (dollars)
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Leelanau Township<sup>1</sup></b>	<b>300</b>	<b>6</b>	<b>2.0%</b>	<b>32</b>	<b>10.7%</b>	<b>46</b>	<b>15.3%</b>	<b>51</b>	<b>17.0%</b>	<b>44</b>	<b>14.7%</b>	<b>58</b>	<b>19.3%</b>	<b>64</b>	<b>21.3%</b>	<b>202,400</b>
Suttons Bay Township	629	15	2.4%	100	15.9%	118	18.8%	93	14.8%	154	24.5%	101	16.1%	48	7.6%	193,300
Leland Township	554	6	1.1%	63	11.4%	101	18.2%	75	13.5%	127	22.9%	76	13.7%	106	19.1%	223,200
Village of Northport	198	24	12.1%	49	24.7%	42	21.2%	41	20.7%	24	12.1%	11	5.6%	7	3.5%	136,200
Leelanau County	5,008	94	1.9%	854	17.1%	1,254	25.0%	816	16.3%	924	18.5%	603	12.0%	463	9.2%	165,400
Michigan	2,269,175	224,603	9.9%	711,648	31.4%	603,454	26.6%	339,716	15.0%	252,044	11.1%	104,079	4.6%	33,631	1.5%	115,600

**Renter-Occupied**

Place	Specified Renter Occupied Units <sup>3</sup>	Less than \$200		\$200 to \$299		\$300 to \$499		\$500 to \$749		\$750 to \$999		\$1,000 or more		No cash rent		Median (dollars)
		#	%	#	%	#	%	#	%	#	%	#	%	#	%	
<b>Leelanau Township<sup>1</sup></b>	<b>76</b>	<b>0</b>	<b>0.0%</b>	<b>2</b>	<b>2.6%</b>	<b>25</b>	<b>32.9%</b>	<b>18</b>	<b>23.7%</b>	<b>17</b>	<b>22.4%</b>	<b>0</b>	<b>0.0%</b>	<b>14</b>	<b>18.4%</b>	<b>514</b>
Suttons Bay Township	237	5	2.1%	13	5.5%	85	35.9%	72	30.4%	22	9.3%	9	3.8%	31	13.1%	500
Leland Township	114	0	0.0%	2	1.8%	40	35.1%	36	31.6%	18	15.8%	2	1.8%	16	14.0%	535
Village of Northport	59	0	0.0%	5	8.5%	6	10.2%	27	45.8%	7	11.9%	2	3.4%	12	20.3%	594
Leelanau County	1,138	9	0.8%	31	2.7%	299	26.3%	437	38.4%	147	12.9%	47	4.1%	168	14.8%	565
Michigan	976,313	53,844	5.5%	52,030	5.3%	275,832	28.3%	373,820	38.3%	122,289	12.5%	55,732	5.7%	42,766	4.4%	546

<sup>1</sup> Township figures do not include the Village of Northport

<sup>2</sup> One-family houses, excluding mobile homes, on less than 10 acres without a business or medical office on the property.

<sup>3</sup> Excludes one-family houses on 10 or more acres.

Source: 2000 US Census Reports

## Housing Affordability

The housing stock in a community should be affordable to its residents. If housing costs are prohibitive, housing needs remain unmet in spite of housing unit availability. Total household income determines the price range of affordable housing for virtually all families.

According to the Census, the median household income in Leelanau Township was \$42,864 as of 1999. Housing affordability is generally determined to be three times the household’s yearly gross income. Thus, it is assumed that a family earning \$42,864 per year can afford a \$128,592 home. As of the 2000 Census, the median owner-occupied housing value in Leelanau Township was \$202,400, which is appreciably higher than the affordability limit. However, as has been noted in **Table 9**,

nearly 50 percent of the housing units in Leelanau Township are seasonally vacant, meaning that they are not occupied by residents of Leelanau Township. These seasonally vacant housing units are included in the calculation of the Township’s median housing value; however, the Township’s median household income is a measure of the incomes of year round residents only. It is likely that the household incomes of seasonal residents are higher than year round Leelanau Township residents. Because many of the higher valued homes within the community, particularly those located on the lakefront, are owned by seasonal residents, the true housing affordability situation is likely not as extreme as the numbers indicate.

To provide a more accurate picture of housing affordability within Leelanau Township, we can look at monthly owner or renter cost figures for year-

round residents as a percentage of their household income. In the 2000 Census, as derived from a sampling of 300 owner-occupied housing units in the Township, the Census Bureau indicated that nearly 25 percent of homeowners in Leelanau Township had monthly owner costs (mortgage, utility bills, property taxes, etc.) that exceeded 30 percent of their household income. Of a sampling of 76 renter-occupied housing units, 21.1 percent of renters in Leelanau Township were spending more than 30 percent of their household income on gross rent. These figures indicate that housing affordability and housing cost burden for year-round residents is an issue that should be addressed within Leelanau Township. Of particular concern is the need to provide sufficient and affordable housing for the Township's service workforce, such as educators, police officers, nurses and those who are employed in the region's tourism industry.

Significantly, recent trends in the national housing market are impacting housing costs and housing affordability at the local level. In 2008, the nation witnessed a housing foreclosure crisis, due in part to sub-prime mortgages and other errant lending practices. Fueled also by a larger economic recession, a sharp drop in home prices has occurred. Through the first quarter of 2009, U.S. home values had fallen 21.8 percent since the market peak in 2006, while one in five of all home transactions were foreclosures.<sup>1</sup> Although this trend is troubling and has undoubtedly impacted the lives of many households, it may represent a positive benefit to longer-term housing affordability as lower cost homes and foreclosed properties are now entering the housing market.

## Housing Projections

As outlined in **Table 6**, the number of households in Leelanau Township is projected to increase from 631 in 2000 to 1,179 by 2025. Typically, the number of households in a community is generally equal to the number of occupied housing units (in 2000, Leelanau Township featured 631 occupied housing units). Therefore, by 2025, it can be estimated that approximately 1,179 housing units would be necessary within the Township to house its 1,179 households. This means that an additional 548 occupied housing units will need to be added within the Township by the year 2025.

As is detailed below, many new residential units have already been constructed since 2000. Additionally, a new residential development has been approved by the Township that, if completed, would represent nearly all of the expected housing growth through 2025.

### Recent Housing Construction Activity

Data in **Table 12** detail the building permits issued for new housing starts within Leelanau Township from 2001 through 2008. As can be seen, a steady number of new homes have been constructed during this decade, ranging from a low of 9 (2008) to a high of 27 (2003). Housing unit construction was the most robust between 2001 and 2004, and has gradually slowed since that time. In total, 151 new housing units were constructed between 2001 and 2008.

### Timber Shores Development

In 2007, the Township approved the Timber Shores planned residential development, to be located along M-22 south of the Village. This project encompasses approximately 450 acres of land and will feature 474 new residential units. As of this writing, construction has not yet begun.

**Table 12: Building Permits Issued for New Housing Starts, 2001-2008**

Year	Leelanau Township <sup>1</sup>	Change from Previous Year
2008	9	-40.0%
2007	15	0.0%
2006	15	-21.1%
2005	19	-20.8%
2004	24	-11.1%
2003	27	50.0%
2002	18	-25.0%
2001	24	
<b>Total</b>	<b>151</b>	

<sup>1</sup> Leelanau Township figures do not include the Village of Northport. Note: New Housing Starts include single family, multi-family and mobile homes, minus demolitions of the same.

Source: Leelanau County Inspections, 2009

## Economic Profile

Economic characteristics comprise a major part of census data. Economic characteristics are important because they help determine a community's viability and ability to fuel regional commercial, residential and industrial growth. The economic strength of Leelanau Township is related to the number and type of employment opportunities in the labor market area as well as the level of educational attainment by its residents.

Within a labor market area, some communities function as major employment centers while others serve primarily as residential communities. According to the U.S. Census, 639 Leelanau Township residents 16 years of age and older were in the labor force in 2000. The following text identifies educational attainment levels, income levels, the industries that employ Leelanau Township residents, what positions are held, and the wages earned.

## Educational Attainment

Educational attainment is an important factor in analyzing the capabilities of the local work force and the economic vitality of the community. The educational attainment of the citizens plays a role in determining the types of employment industries that are suitable or necessary.

Data in **Table 13** show the educational attainment of the residents of Leelanau Township, surrounding communities, Leelanau County, and the State of Michigan. The data show the percentage of citizens (age 25 and older) that have achieved the educational level of high school graduate (or higher) and those that have obtained their bachelor's degree (or higher).

In terms of the high school graduate percentage, the numbers for the Township, the neighboring communities, and Leelanau County range from 87.5 for the Village of Northport to 92.7 for Leland Township. The 90.3 percentage for Leelanau Township is thus almost in the middle of those for communities, all of which rank well above the State of Michigan percentage of 83.4.

When compared to the surrounding communities, Leelanau Township, at 36.1 percent, has the

**Table 13: Educational Attainment: 2000**

Place	Percent High School Graduate or Higher <sup>2</sup>	Percent Bachelor's Degree or Higher <sup>2</sup>
<b>Leelanau Township <sup>1</sup></b>	<b>89.4%</b>	<b>34.9%</b>
Suttons Bay Township	89.6%	30.2%
Leland Township	92.4%	38.9%
Village of Northport	87.5%	32.2%
Leelanau County	90.7%	31.4%
Michigan	83.4%	21.8%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

<sup>2</sup> Percent of the population 25 years and over.

Source: 2000 US Census Reports

second highest percentage of citizens (age 25 and older) who have earned a bachelor's degree or higher. Only Leland Township (38.9 percent) has a higher percentage. Overall, Leelanau County, at 31.4 percent, ranks well above the 21.8 percent for the State of Michigan. These figures indicate a well-educated population within the Township.

## Employment by Occupation and Industry

Employment by occupation and employment by industry are two related, yet individually significant indicators of community welfare. Employment by occupation describes the trades and professions in which Township residents are employed, such as a manager or salesperson. Employment by industry specifies the field in which that manager or sales person is employed. For instance, two sales persons may be present in the "Sales and Office Occupations" category of the employment by occupation table, but may be employed in two different fields. That is, a sales person in the manufacturing industry and a sales person in the real estate trade would be categorized within those different classifications in the employment by industry table.

Employment data by industry for the Township and surrounding areas are detailed in **Table 14**. The three largest industry classifications for Leelanau Township include educational, health and social services (24.6 percent), manufacturing (14.2 percent), construction (12.1 percent), and arts, entertainment, recreation, accommodation and food services (12.1 percent). These figures are generally consistent with those of the County and surrounding communities. In comparison to the State, however, Leelanau Township has a much lower percentage of workers in the manufacturing industry and higher percentages in other categories such as construction, education and agriculture.

Employment data by occupation for Leelanau Township, and surrounding communities are detailed in **Table 15**. Management, professional, and related occupations employ the largest percentage of residents (civilian population 16 years and over) in Leelanau Township at 33.5 percent. Sales and office occupations employ 21.8 percent of the population, followed by service occupations (14.9 percent), and construction, extraction and maintenance occupations (13.6 percent). Although farming, fishing and forestry occupations occupy only 3.4 percent of the workforce in the Township, this percentage is higher than all surrounding communities, County and State. This agricultural workforce is reflective of the Township's thriving fruit growing industry.

## Income Characteristics

Studying income and poverty levels is a good way to measure the relative economic health of a community. Three measures of income (median household, median family, and per capita) are recorded by the Census Bureau. Household income is a measure of the total incomes of the persons living in a single household. Family income is a measure of the total incomes of a family unit. Family income does not include non-family units, such as single persons living alone, and for this reason is usually higher than household income. Per capita income is a measure of the incomes of every citizen of an area. Because per capita income is based on all individuals, they are much lower than family or household incomes.

Data in **Table 16** reveal incomes and poverty levels for Leelanau Township and surrounding communities between 1989 and 1999. The income values from 1989 are shown in 1999 constant dollars based on the Consumer Price Index (CPI) values provided by the U.S. Department of Labor, Bureau of Labor Statistics (\$1 in 1989 equals \$1.34 in 1999).

**Table 14: Employment by Industry, 2000**

Place	Employed Civilian Population 16 Years and Over	Agriculture, Forestry, Fishing and Hunting, and Mining		Construction		Manufacturing		Wholesale Trade		Retail Trade		Transportation and Warehousing, and Utilities	
		#	%	#	%	#	%	#	%	#	%	#	%
<b>Leelanau Township<sup>1</sup></b>	<b>639</b>	<b>21</b>	<b>3.3%</b>	<b>77</b>	<b>12.1%</b>	<b>91</b>	<b>14.2%</b>	<b>6</b>	<b>0.9%</b>	<b>66</b>	<b>10.3%</b>	<b>20</b>	<b>3.1%</b>
Suttons Bay Township	1,327	56	4.2%	118	8.9%	101	7.6%	42	3.2%	151	11.4%	19	1.4%
Leland Township	880	25	2.8%	91	10.3%	61	6.9%	16	1.8%	127	14.4%	37	4.2%
Village of Northport	260	7	2.7%	31	11.9%	30	11.5%	6	2.3%	28	10.8%	9	3.5%
Leelanau County	9,945	329	3.3%	1,144	11.5%	981	9.9%	238	2.4%	1,121	11.3%	264	2.7%
Michigan	4,637,461	49,496	1.1%	278,079	6.0%	1,045,651	22.5%	151,656	3.3%	550,918	11.9%	191,799	4.1%

Place	Information		Finance, Insurance, Real Estate and Rental, and Leasing		Professional, Scientific, Management, Administrative, and Waste Management		Educational, Health and Social Services		Arts, Entertainment, Recreation, Accommodation and Food Services		Other Services (Except Public Administration)		Public Administration	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Leelanau Township<sup>1</sup></b>	<b>14</b>	<b>2.2%</b>	<b>35</b>	<b>5.5%</b>	<b>21</b>	<b>3.3%</b>	<b>157</b>	<b>24.6%</b>	<b>77</b>	<b>12.1%</b>	<b>29</b>	<b>4.5%</b>	<b>25</b>	<b>3.9%</b>
Suttons Bay Township	28	2.1%	70	5.3%	114	8.6%	240	18.1%	223	16.8%	60	4.5%	105	7.9%
Leland Township	26	3.0%	60	6.8%	77	8.8%	159	18.1%	107	12.2%	52	5.9%	42	4.8%
Village of Northport	0	0.0%	5	1.9%	24	9.2%	54	20.8%	32	12.3%	15	5.8%	19	7.3%
Leelanau County	203	2.0%	651	6.5%	747	7.5%	2,221	22.3%	1,168	11.7%	452	4.5%	426	4.3%
Michigan	98,887	2.1%	246,633	5.3%	371,119	8.0%	921,395	19.9%	351,229	7.6%	212,868	4.6%	167,731	3.6%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 2000 US Census Reports

**Table 15: Employment by Occupation, 2000**

Place	Employed Civilian Population 16 Years and Older	Management, Professional, and Related Occupations		Service Occupations		Sales and Office Occupations		Farming, Fishing and Forestry Occupations		Construction, Extraction, and Maintenance Occupations		Production, Transportation, and Material Moving Operations	
		#	%	#	%	#	%	#	%	#	%	#	%
<b>Leelanau Township<sup>1</sup></b>	<b>639</b>	<b>214</b>	<b>33.5%</b>	<b>95</b>	<b>14.9%</b>	<b>139</b>	<b>21.8%</b>	<b>22</b>	<b>3.4%</b>	<b>87</b>	<b>13.6%</b>	<b>82</b>	<b>12.8%</b>
Suttons Bay Township	1,327	448	33.8%	244	18.4%	335	25.2%	27	2.0%	126	9.5%	147	11.1%
Leland Township	880	304	34.5%	132	15.0%	253	28.8%	9	1.0%	102	11.6%	80	9.1%
Village of Northport	260	95	36.5%	45	17.3%	54	20.8%	4	1.5%	23	8.8%	39	15.0%
Leelanau County	9,945	3,488	35.1%	1,557	15.7%	2,449	24.6%	144	1.4%	1,218	12.2%	1,089	11.0%
Michigan	4,637,461	1,459,767	31.5%	687,336	14.8%	1,187,015	25.6%	21,120	0.5%	425,291	9.2%	856,932	18.5%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

Source: 2000 US Census Reports

**Table 16: Income Trends, 1989-1999**

Place	Median Household Income			Median Family Income			Per Capita Income			Percent Below Poverty Level	
	1989	1999	% Change	1989	1999	% Change	1989	1999	% Change	1989	1999
<b>Leelanau Township<sup>1</sup></b>	<b>\$39,652</b>	<b>\$42,864</b>	<b>8.1%</b>	<b>\$41,766</b>	<b>\$51,804</b>	<b>24.0%</b>	<b>\$20,913</b>	<b>\$23,805</b>	<b>13.8%</b>	<b>9.7%</b>	<b>8.4%</b>
Suttons Bay Township	\$37,658	\$48,068	27.6%	\$45,225	\$52,596	16.3%	\$16,644	\$22,640	36.0%	16.7%	7.1%
Leland Township	\$36,579	\$46,629	27.5%	\$41,442	\$55,714	34.4%	\$18,110	\$27,556	52.2%	7.6%	3.2%
Village of Northport	\$29,522	\$40,368	36.7%	\$40,669	\$48,750	19.9%	\$15,137	\$23,786	57.1%	6.3%	9.1%
Leelanau County	\$38,309	\$47,062	22.8%	\$43,313	\$53,228	22.9%	\$17,831	\$24,686	38.4%	9.0%	5.4%
Michigan	\$41,567	\$44,667	7.5%	\$49,114	\$53,457	8.8%	\$18,966	\$22,168	16.9%	13.1%	10.5%

<sup>1</sup> Leelanau Township figures do not include the Village of Northport

1989 dollars have been adjusted for inflation to equal the value of 1999 dollars. Inflation rate: \$1 in 1989 equals \$1.34 in 1999.

Source: U.S. Department of Labor, Bureau of Statistics, June, 2008; 1990 and 2000 US Census Reports

As shown in the table, Leelanau Township reported increases in all three income categories between 1989 and 1999. The median household income increased 8.1 percent from \$39,652 a year to \$42,864 a year. Median family income increased 24.0 percent from \$41,766 a year to \$51,804 a year. Finally, the Township's per capita income grew at a rate of 13.8 percent, from \$20,913 to \$23,805. The median household income and per capita income growth rates for Leelanau Township were substantially less than those in all neighboring communities and the County and were near or below those for the State. However, the growth of median family income for Leelanau Township (24.0 percent) was second to that of Leland Township (34.4 percent) and exceeded that of Suttons Bay Township, the Village of Northport, the County, and the State.

For Leelanau Township, the poverty level lowered slightly, from 9.7 percent in 1989 to 8.4 percent in 1999. With the exception of the Village of Northport, all other surrounding communities and the county saw the poverty level decrease.

**Footnotes:**

1. *More Than One Fifth of All American Homeowners Now Underwater on a Mortgage: Continued Declining Home Values Nationwide Contribute to Fast-Accelerating Rates of Negative Equity.* Zillow Real Estate Market Reports, May 6, 2009 Press Release. [Http://www.Zillow.com](http://www.Zillow.com)

[This page intentionally left blank]

# 3

## Natural Features and Resources Assessment

### Introduction

Leelanau Township, encompassing land at the tip of the Leelanau Peninsula as well as two offshore islands, enjoys a rich abundance of natural resources. These natural resources serve a number of important functions, such as supporting plant and wildlife habitat, filtering water, providing recreational opportunities and reducing the potential for hazards such as flooding.

The development of land, including the excavation, fill, cleaning, grading, and construction that can occur on a site can significantly impact the natural environment. Therefore, striking a proper balance between private property rights and the preservation of natural resources is a key goal of Leelanau Township as a means to promote the long term environmental and economic health of the Township.

### Natural Resource Inventory

A variety of natural features, including sand dunes, woodlands, wetlands and steep slopes, are found within Leelanau Township. To better assess the extent of these natural features, a natural resource inventory has been conducted.

### Sand Dunes

Michigan sand dunes are a resource of global significance; they are the largest assemblage of fresh water dunes in the world. There are about 250,000 acres of sand dunes in Michigan, of which about 70,000 acres are classified as critical sand dune formations. The Michigan Legislature has found that the critical dune areas of this State “are a unique, irreplaceable, and fragile resource that provide significant recreational, economic, scientific, geological, scenic, botanical, educational, agricultural, and ecological benefits to the people of this State and to people from other states and countries who visit this resource”.<sup>1</sup>

The locations of sand dunes within Leelanau Township are shown on **Map 1**. The two largest sand dune areas are found on South Fox Island and along Cathead Bay in the northern tip of the peninsula. Large portions of these sand dunes are owned by the State.



*Sand dunes on South Fox Island*

*Photo Courtesy of Fox Island Lighthouse Association*

To protect critical dune areas, the Michigan Department of Natural Resources & Environment (MDNRE) operates a sand dune protection and permitting program. Any earthmoving, vegetation removal and construction activities within a critical dune area, as defined by the State, requires approval by the MDNRE.

## Woodlands

Woodland information for Leelanau Township is derived from the Michigan Resources Information System (MIRIS) 1978 Land Use/Land Cover Data obtained by the Michigan Geographic Data Library (MiGDL).

**Map 1** shows the locations of woodlands within Leelanau Township. Generally, woodlands are scattered throughout the Township; however, particular concentrations are found at the tip of the peninsula and on both North and South Fox Islands.

It is important to note that the MIRIS woodland data is general in nature, originally created by identifying the larger conglomerations of woodlands throughout the entire State. Because of this, the data does not often account for smaller and less dense woodland areas that exist throughout Michigan, such as trees in urban areas or narrow tree rows.

Because of the many benefits associated with wooded areas, the significant amount of woodlands found in the Township should be considered an asset to the community. For human inhabitants, forested areas offer scenic contrasts within the landscape and provide recreational opportunities such as hiking and nature enjoyment. In general, woodlands improve the environmental quality of the whole community by reducing pollution through absorption, reducing the chances of flooding through greater rainwater infiltration, stabiliz-

ing and enriching soils, moderating the effects of wind and temperature, and providing habitats for wildlife.

## Wetlands

In 1979, the Goemaere-Anderson Wetland Protection Act was enacted by the State of Michigan, which is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994. This legislation was passed to protect wetlands by restricting their use to certain activities (fishing, boating, farming, among others) while permitting other activities only after permit approval. Today, wetlands are regulated by the Department of Natural Resources & Environment if they are any of the following:

- Connected to one of the Great Lakes or Lake St. Clair
- Located within 1,000 feet of one of the Great Lakes or Lake St. Clair
- Connected to an inland lake, pond, river or stream
- Located within 500 feet of an inland lake, pond, river or stream
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, but the MDNRE has determined that these wetlands are essential to the preservation of the State's natural resources and has notified the property owner.

A permit is required from the State for the following:

- Depositing fill material in a wetland
- Dredging, removing, or permitting the removal of soil or minerals from a wetland
- Constructing, operating, or maintaining any use or development in a wetland
- Draining surface water from a wetland

The MDNRE must determine the following before a permit can be issued:

- The permit would be in the public interest
- The permit would be otherwise lawful
- The permit is necessary to realize the benefits from the activity
- No unacceptable disruption to aquatic resources would occur
- The proposed activity is wetland dependent or no feasible and prudent alternatives exist

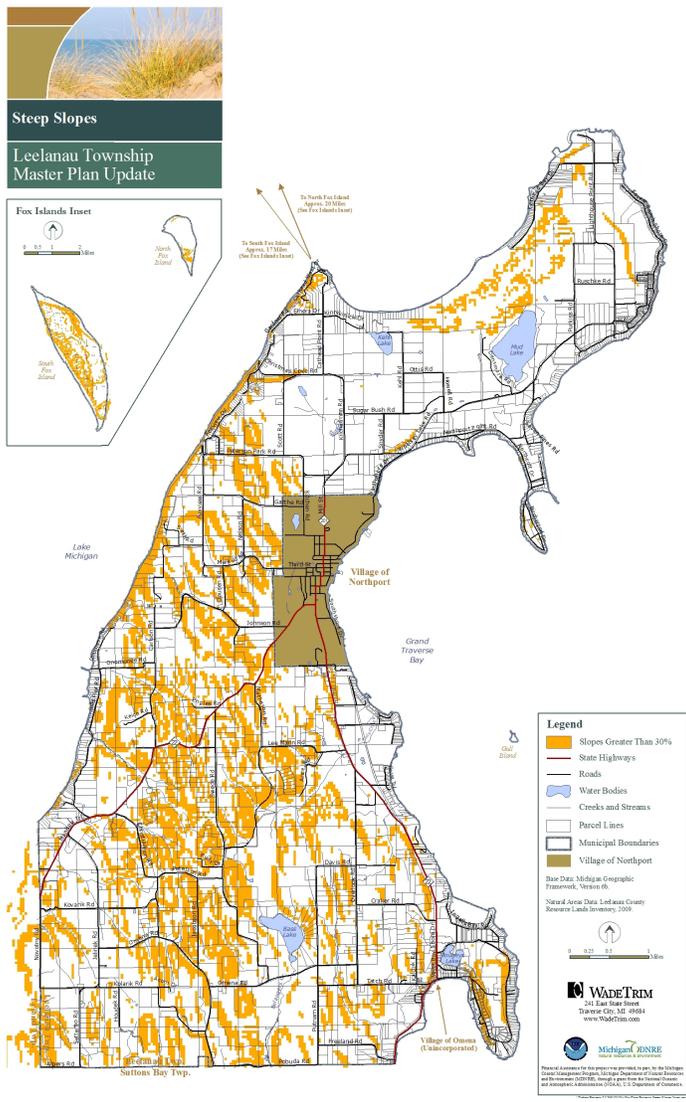
The Act also permits a municipality, by ordinance, to provide for additional regulation of wetlands, including the regulation of wetlands less than 5 acres in size, if certain criteria are met. These criteria include consistency with the Wetland Protection Act and notification of the MDNRE after adoption of such an ordinance.

The U.S. Fish and Wildlife Service has conducted a wetlands inventory of Leelanau Township using stereoscopic analysis of high altitude aerial photographs, classifying the various wetlands into various wetland types. The wetlands inventory is shown on **Map 1**. The map shows that many large and small wetland areas are scattered around the Township, particularly along the Township's inland lakes and streams.

## Steep Slopes

Topographic conditions can have a significant influence on land development patterns. Topography, for example, can impact the site location, orientation and design of buildings, roads and utilities. Where topography is extreme, slopes become an important consideration due to concerns relating to the ability of the land to bear the weight of buildings and the danger of erosion. Topographic variations also offer opportunities to appreciate the scenic environment, providing attractive views and recreational opportunities.

Generally, the topography of Leelanau Township features gently rolling hills with scattered areas of steep slopes. In particular, the southern and central portions of the Township feature significant slopes that might pose constraints to land development. Derived from a digital elevation model of Leelanau County, the locations of steep slopes (slopes greater than 30%) within Leelanau Township are shown on **Figure 2** (next page).



**Figure 2: Steep Slopes Map**

## Floodplains

A review of Flood Insurance Rate Maps (FIRM) of Leelanau Township as prepared by the Federal Emergency Management Agency (FEMA) reveals that relatively few areas of the township are located within the 100-year floodplain. These areas are primarily concentrated along the lakeshore, surrounding some inland lakes (Bass Lake, Mud Lake) and along some creeks (Ennis Creek and Belanger Creek).

Areas located within the 100-year floodplain have a 26 percent chance of flooding over the life of a 30-year mortgage, or roughly a 1 percent chance of occurrence in any given year. Because 100-year flood zone areas have a higher risk of flooding, they should be considered as candidates for recreation or conservation uses.

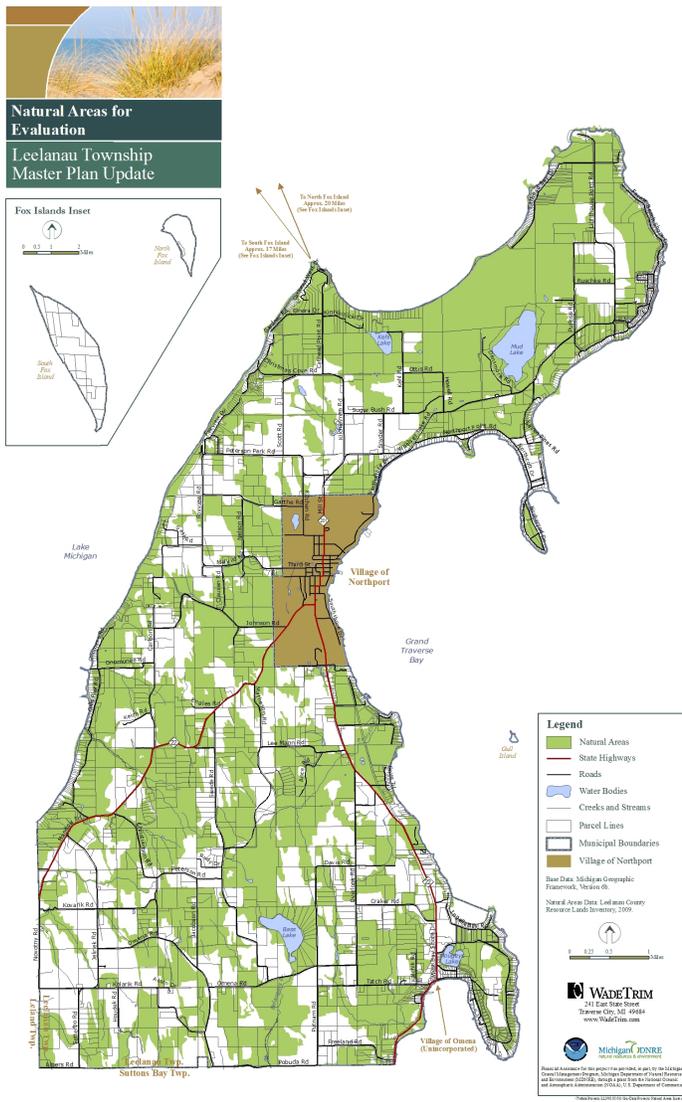
## Natural Areas

Between 2008 and 2009, the Center for Applied Environmental Research at the University of Michigan-Flint developed a Resource Lands Inventory of Leelanau County. The purpose of the project was to identify and rank the natural areas most vital to the environmental integrity of Leelanau County and those lands having the greatest potential of supporting a wide variety of native plants and wildlife.

The process used in the Resource Lands Inventory was first established by the Michigan Natural Features Inventory. Used more extensively in southern Michigan, the process was adapted to assess and rank the natural areas of Leelanau County.

The locations of the natural areas identified and evaluated in the County Resource Lands Inventory are shown on **Figure 3**. Along with the other natural features data inventoried in this Chapter, this natural area information was used by Leelanau Township as a starting point for the evaluation of appropriate future land uses within the Township.

More detailed information about the University of Michigan's Leelanau County Resource Lands Inventory Project can be found at: [www.theconservancy.com](http://www.theconservancy.com).



**Figure 3: Natural Areas Map**

## Scenic Views

In the broadest sense, visual resources are the visible features that make up the landscape – the landforms, the vegetation, the water bodies, and the cultural patterns that we are familiar with. Visual resources define our sense of place, where we work, live, and recreate.<sup>2</sup> A visual resource becomes “scenic” when it is recognized and enjoyed by the general public for their inherent visual qualities. As experienced from a public place, particularly along public roads, a point may be scenic because it offers views of historic structures,

agricultural fields, hills, woodlands, water bodies or a variety of other picturesque landscapes. Within Leelanau Township, with its rolling topography, varied agricultural landscapes, and miles of Great Lakes shoreline, an abundance of scenic views can be found. These scenic landscapes contribute to the short-term and long-term quality of life for the citizens and visitors of Leelanau Township.

## Scenic View Inventory

In the summer of 2009, members of the Leelanau Township Planning Commission conducted fieldwork to assess some of the more exceptional scenic views within the Township. During the fieldwork, the Planning Commissioners noted the particular visual characteristics that contributed to the overall appeal of each scenic view. These characteristics included:

- Views to Lake Michigan, Grand Traverse Bay and Omena Bay
- Views to offshore islands
- Views to inland water bodies
- Views of the rural agricultural landscape
- Views of rolling topography and natural vegetation
- Views of historic structures such as farmsteads and lighthouses

Representative photographs of scenic views within Leelanau Township are included in the inset.

## Scenic View Preservation

It is important to understand that scenic views and vistas are very sensitive resources that can be easily lost or damaged as a result of urban development and other changes in the landscape. The addition of homes, businesses, roads, signs, cell towers, and wind generators and the removal of woodlands, vegetation, or other site grading activities may severely impact the scenic quality of the



**Representative photographs of scenic views within Leelanau Township**



landscape. Therefore, local municipalities may consider proactive measures to ensure that the pristine nature of these scenic landscapes and positive benefits associated with them are preserved.

A variety of regulatory and non-regulatory strategies are available to address the protection of scenic views, including the protection of open space, farmland, and scenic road corridors, and managing the amount and character of land development. More specifically, scenic view protection strategies can include regulating the type and intensity of development, design requirements, tree planting, location and design standards for utilities, scenic (conservation) easements, sign standards, and specific transportation designs.<sup>3</sup>

The preparation and distribution of promotional materials, such as scenic corridor guide-maps and historical documentation, is an effective means to educate the public on the importance and value of scenic views. These promotional and educational efforts would have a positive impact on a larger community-wide planning program.

**Footnotes:**

1. *Protecting Michigan's Sand Dunes*. Michigan DNRE. Accessed March 2010. [http://www.michigan.gov/deq/0,1607,7-135-3311\\_4114-14993--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3311_4114-14993--,00.html)
2. *Scenic Assessment Handbook*. State Planning Office, Maine Coastal Program. October 2008.
3. *Protecting Natural Resources, Scenic Viewshed Protection*. I-69 Planning Toolbox. Indiana Department of Transportation, 2007.

[This page intentionally left blank]

# 4

## Maritime History and Structure Inventory

### Maritime History of Leelanau Township<sup>1</sup>

As much as any place on earth, Leelanau Township is a story of people, land, and water. Its maritime history began more than ten thousand years ago when the mile-thick glaciers that covered the area melted, leaving behind the Great Lakes region, with Michigan at its center. The Leelanau Peninsula, a thirty mile long finger of land rising from northwest Lower Peninsula, was an extraordinary feature of the new landscape. It did not take long for the original people to discover Leelanau, camping here during the summer months to fish, hunt, and harvest a variety of wild crops that flourished along its coast and offshore islands. There were no roads to the area, and almost all visitors arrived and departed the region on the Great Lakes water highway.

Throughout time, whenever land and water have met, people have built and used boats as a way of life. The first boats of people living near water were usually dugout canoes. In time, the Native people of the western Great Lakes invented a significantly more complex vehicle – the elegant birch bark canoe. Birch bark canoes were lighter, faster, and, due to their flexibility, could handle heavier seas than dugout canoes. Bark canoes also carried heavy loads – an important feature for the succession of Native people who packed up their settlements in the warm months and traveled north to their hunting and fishing grounds.

Weighed by the scale of time, Native American canoes were by far the most significant boats in the maritime history of the Great Lakes, including Leelanau. Their importance to the early people of the region cannot be overstated. Travel through the dense forests of Michigan was far more difficult than by water, and horses and wheels were European imports of the future. For nearly one hundred centuries, if you wanted to travel the waters of Leelanau, you did so by canoe.



*The Birch Bark Canoe*

Photo courtesy of the book *Wood Boats of Leelanau, A Photographic Journal*, by John C. Mitchell.

The written history of the western Great Lakes began four hundred years ago with the arrival of the French, who paddled along the coast of Lake Michigan in bark canoes during voyages of discovery from their North American bases at Montreal and Quebec. A flourishing trade between the French and Indians soon commenced, with the French supplying metal goods in exchange for furs trapped by the Indians. For two centuries, the fur trade reigned as the first international economy of the Great Lakes. The French employed enlarged canoes to transport trade items from the Atlantic coast to the Michigan wilderness and back. These traders called the region containing Leelanau “Le Grande Traverse” - The Great Crossing – after the dangerous stretch of open water that lay between present day Northport and Charlevoix. By the 18th

century, sailing mackinaw boats, built of cut wood in the shape of a canoe, were also being used in the Great Lakes fur trade, which was based on Mackinac Island. The mackinaw boats, which functioned much like pick-up trucks do today, were a common sight in the waters off Leelanau into the 20th century.

The maritime history of the Great Lakes began to change dramatically with the opening of the Erie Canal in 1825. The Canal allowed large ships to travel directly from New York City to the port of Buffalo on Lake Erie, making access to the western lakes much easier for Euro-American settlers. Chicago, a swampy town of 300 when the Canal opened, grew to a population 30,000 by 1850 and 100,000 by 1860, with almost all residents arriving by water. The sails of lake schooners replaced the silhouette of canoes on the horizon. Many of the trans-lake travelers heading to Chicago passed the Leelanau Peninsula and nearby islands and noted their exceptional beauty.

Leelanau Township began its sprint toward modernity in 1849 when the Reverend George Smith founded an Indian mission called Wakazooville, at the present site of Northport. His home and mission buildings were the first structures on Northport Bay. At the same time, a growing fleet of steam-powered vessels worked the Great Lakes trade, and relied on a network of safe harbors that provided shelter in bad weather and hardwood fuel for their boilers.

Within a decade, Northport grew into the most populous town in Northwest Michigan, on the strength of its excellent harbor and ready supply of hot burning maple and beech cordwood. By 1860, Northport had become a major expressway stop on the Great Lakes water highway. Just before the outbreak of the Civil War, the regional newspaper, the Grand Traverse Herald, wrote, "The old Indian village of Wau-ka-zoo-ville and Northport

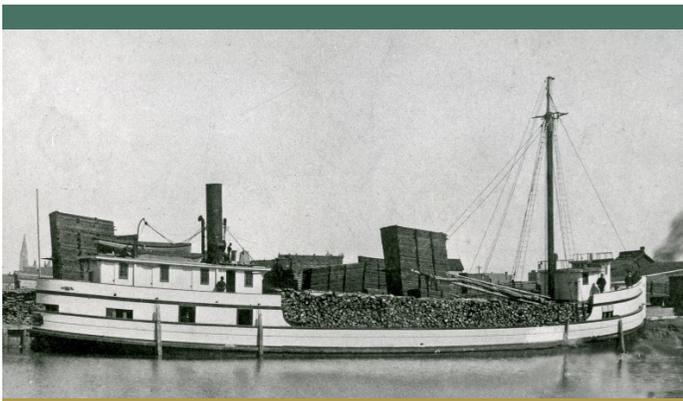
are now one in the same...and the largest village on the Bay, containing four hundred inhabitants... It is an important wooding point for the propellers trading between Chicago and the Lower Lakes, and has two extensive wharves, five stores, three hotels, several saloons, one saw mill, and a number of mechanic shops. The largest hotel in the county was erected here last year." <sup>2</sup> The paper also reported there were 1600 vessels working the western Great Lakes at that time. During the Civil War, most of the hundreds of volunteers who joined the Union Army from the greater Grand Traverse region said their last goodbyes on the docks of Northport before they headed south to training camps and eventually the battlefields.



*The sidewheel steamer Lady Elgin at a freight-filled dock in Northport, 1859.*

Photo courtesy of the book *Wood Boats of Leelanau, A Photographic Journal*, by John C. Mitchell.

By the 1880's, roads and trains cut into the lake trade, and coal replaced logs as fuel for steamships. Ship traffic on the Great Lakes shifted to ever larger ships that carried one specific type of cargo over long distances. Northport declined as a stop for these new trans-lake ships, but was sustained as a commercial fishing port, a lumber shipping center, and a regional transportation hub.



*The Alice M. Gill, built for the Northport lumbering family, loads up at Gills Pier on the Lake Michigan side of Leelanau Township, circa 1890.*

Photo courtesy of the book *Wood Boats of Leelanau, A Photographic Journal*, by John C. Mitchell.

Rather than being burnt in the boilers of ships, the wood harvested from Leelanau's forests now fetched top dollar as finished lumber for homes being built in the growing industrial cities that lined the southern Great Lakes.

Six miles to the south on Grand Traverse Bay, another Leelanau Township port town with an excellent harbor - Omena - became a center of the fledgling Great Lakes tourist trade. By the first decade of the 20th century, a number of prestigious hotels graced the shores of both Northport and Omena, including the Northport Beach Hotel, which was designed by the same firm as the Grand Hotel on Mackinac Island. Omena boasted the greatest number of fine hotels, and at its height, had three train stops within the community and was serviced by a fleet of inter bay boats.

At the beginning of the 20th century, Northport again enjoyed a brief stint as a major commercial Great Lakes port when it became home to a trans-lake train ferry service to the Upper Peninsula town of Manistique. The Manistique, Marquette, & Northern No. 1 was launched in 1902, the largest car ferry ever built for work on the Great Lakes,

with Northport as her base. However, the ferry proved unprofitable, and the route was abandoned within a few years.

In 1922, Leelanau Township became home to Gilman D., the only boat built specifically for the cherry trade. The stodgy vessel regularly traveled to Old Mission, Suttons Bay, and other area ports to pick up cherries, carrying them back to the Cherry Home processing plant - at the time the largest tart cherry operation in the world. A number of township residents enjoyed their first summer jobs on the decks of the Gilman D., helping unload the cherry lugs from the farmers' wagons that awaited at various docks along the boat's route.



*The Gilman D. unloads at the cherry processing factory.*

Photo courtesy of the book *Wood Boats of Leelanau, A Photographic Journal*, by John C. Mitchell.

Commercial fishing in Northport remained a vital component of Leelanau Township's economy through the 1960's. A fleet of owner-operated boats and larger company run trawlers netted the thick schools of fish that frequented the sheltered bays and offshore islands of Leelanau. In an associated business, Raff's Trolling Camp became the first charter fishing center on the Great Lakes, with dozen of vessels working from its docks north of Northport. However, by the middle of the 20th century, over-fishing and the sea lamprey had



*A view toward shore from the Northport docks, circa 1930.*

Photo courtesy of the book *Wood Boats of Leelanau, A Photographic Journal*, by John C. Mitchell.

decimated stocks of the coveted Mackinac trout, and both businesses collapsed.

Today, the unique and splendid mix of land and water that is the essence of Leelanau Township continues to attract people from all over the world. The Township strives to make decisions that will enhance the health, safety, welfare and prosperity of its residents and visitors while preserving the great gifts of nature the area has been blessed with.

## Maritime Structure Inventory

### South Fox Island Light<sup>3</sup>

The most enduring maritime structure on the Fox Islands is the South Fox Island Light, commissioned and built in 1867. A federal appropriation of \$18,000 financed the construction of the light tower with its attached keeper's quarters. Located on the southern tip of this crescent shaped island, the light first cast its beam November first of that year. It was an important aid to navigation as many passenger and cargo ships traveled up and down Lake Michigan before the arrival of trains and automobiles. In 1895, the government commissioned the construction of a steam-powered fog signal at the South Fox Light. An assistant's quarters, with three apartments and featuring indoor plumbing, was constructed next to the lighthouse in 1910. In

1934, a 132 foot metal tower arrived from Sapelo Island, Georgia, and Leelanau Township residents reconstructed the tower in its new location toward the western side of South Fox Island, near the fog signal house and a short walk from the original lighthouse. A diesel engine generated electricity for the 160,000 candlepower light, and the fog signal was converted from steam power to compressed air. The original lighthouse stayed in operation as a back-up to the new tower. In 1958, the light was converted to an automatic one, until 1968 when the light was turned off permanently – 101 years



*South Fox Island Light*

Photo Courtesy of Fox Island Lighthouse Association

after a light first signaled Lake Michigan seamen off South Fox Island.

Both the original South Fox Lighthouse and the companion metal light tower are still standing, as well as the brick assistant keeper quarters, the fog signal building, and the brick oil house (see lighthouse location on **Map 2**).

A boathouse, formerly used for the keeper's launch, still sits at the southern shore, and rail tracks lead from the water to the inside of the structure where "Old 63" used to be tied. Next to the boat way is a large cement slab used for docking, surrounded by beach boulders.

The lighthouse property with its various structures is presently owned by the Michigan Department of Natural Resources. Stabilization and restoration efforts are being undertaken by private citizens under the direction of the Fox Island Lighthouse Association (FILA).

## Grand Traverse Lighthouse

The Grand Traverse Lighthouse, located at the tip of the Leelanau Peninsula within the Leelanau State Park, was commissioned for construction in 1850. The original lighthouse, completed in 1851, was threatened by erosion, resulting in the need for the construction of a new lighthouse. This new lighthouse, a two-story, brick lighthouse designed by engineer W. F. Smith of the Eleventh Lighthouse District, was completed in 1858 and is still standing today. A single story, brick, gabled-roofed unit was added in 1916 to house a kitchen. The complex also contains a brick, gable-roofed, fog signal building built in 1899.<sup>4</sup>

The Grand Traverse Lighthouse was important to Lake Michigan commerce and the development of the nearby community of Northport, which erected its first docks soon after the light was completed. The lighthouse continued in active service until the U.S. Coast Guard replaced it with a steel frame tower in 1972. The lighthouse was vacant until the Grand Traverse Lighthouse Foundation restored the facility during the late 1980's. In 1984, the lighthouse was registered as a National Historic Site.<sup>5</sup> By 1985, a local group organized and formed the Grand Traverse Lighthouse Foundation, with the goal of preserving the historic buildings for the public to enjoy. Through their efforts, the lighthouse has been restored and is open to the public as a museum (see **Map 2**).<sup>6</sup>

## Shipwrecks

There are many shipwrecks along the passages between the Beaver Islands, Fox Islands, Manitou Islands and mainland shores. One such shipwreck, the remains of the schooner Sunnyside, which sunk in 1883, is located west of North Fox Island.<sup>7</sup> Another shipwreck can be found in Cathead Bay, where the masts of the schooner Tribune, lost in 1849, are visible just below the water's surface (see **Map 2**).<sup>8</sup>

## Beaches, Marinas & Public Access

Numerous maritime structures and Great Lakes access points are found within Leelanau Township and the Village of Northport. An inventory of these facilities is provided below, while the location of the features are shown on **Map 2**.

### Peterson Park

Peterson Park, owned and operated by the Township, features 1,000 feet of frontage on Lake Michigan. The park also contains picnic tables,

outdoor grills, a pavilion, a playground area, and vault toilets.

### Christmas Cove Park

Christmas Cove Park is located at the end of Christmas Cove Road in the northwestern portion of the Township. This Township-owned beach features 200 feet of frontage along Lake Michigan and offers a swimming area, picnic tables, vehicle parking and a vault toilet.

### Omena Beach

Omena Beach has 100 feet of water frontage on the Grand Traverse Bay. The Township-owned beach provides a swimming area, playground area, picnic tables and a vault toilet.

### Haserot Waterfront Park

This public park, located within the Village of Northport, features a beach, picnic tables and grills, pier fishing, restrooms, boat moorings, and a community visitors center.



*Beach at Christmas Cove Park*

### G. Marsten Dame Municipal Marina

The G. Marsten Dame Municipal Marina in the Village of Northport has 100 slips plus an additional 16 mooring locations to serve recreational boaters. The marina also provides a boat launch ramp, fuel, sewage pump out facilities, a pavilion, picnic tables, horseshoe pits, beach, playground, volleyball courts, restrooms and shower facilities.

### Omena Traverse Yacht Club

The Yacht Club is a private social club and clubhouse facility located on Omena Point Road with frontage on Omena Bay, a part of Grand Traverse Bay.

### Private Marinas

Two small, privately-owned marinas provide access to the Grand Traverse Bay, south of the Village of Northport.

### Leelanau State Park

The Leelanau State Park encompasses approximately 1,350 acres in the northern tip of the Township. The park includes the Grand Traverse Lighthouse Museum, a rustic campground, two mini cabins, hiking/skiing trails and picnic areas. The park also features environmentally significant lands and habitats including large sand dunes.

### Gills Pier Public Access (County)

Gills Pier is a County public access site to Lake Michigan, located at the end of Onomonee Road in Leelanau Township. No boat access is available; however, a small land spit and beach area is available.

## Maritime Planning Principles

In recent years, Leelanau Township has experienced significant new development. This development pressure is the result of the attraction of the Township's approximately 52 miles of shoreline, along with its rural atmosphere, environmental resources, agricultural heritage, and recreational opportunities. The Township's rich maritime history, described in this Chapter, also enhances the Township's attractiveness for new development.

Given the draw of the water, it is no surprise that the development pressure is greatest within the Township's waterfront areas. Therefore, it is of vital importance to properly manage development within waterfront areas to ensure that the Township's rich maritime history is preserved and promoted and that the enjoyment of the waterfront is secured for future generations. In this regard, this Master Plan seeks to achieve the following principles:

- To preserve, inform and promote the rich maritime history of Leelanau Township to residents and visitors



View of Lake Michigan from Peterson Park

- To preserve historic and architecturally significant buildings through the adaptive reuse of such buildings
- To enhance the opportunity for public enjoyment of the waterfront, including the improvement of existing public accesses and acquiring of additional land for new public accesses
- To ensure that new development is of a character and scale that is consistent with surrounding land uses and the Township's maritime history, and is respectful of the natural environment
- To strengthen existing, and promote new maritime based activities, organizations, businesses and industries
- To preserve and enhance water quality and the natural environment of the waterfront

### Footnotes:

1. *A Brief Maritime History of Leelanau Township*. By John C. Mitchell, May 13, 2009.
2. Grand Traverse Herald. September 28, 1860.
3. *Maritime Structure Inventory for the Fox Islands*. By Kathleen Firestone. May, 2009.
4. *Grand Traverse Light Station*. Michigan State Historic Sites Online. Michigan Department of History, Arts and Libraries. Accessed June 2009.
5. *Grand Traverse Light Station*. Michigan State Historic Sites Online. Michigan Department of History, Arts and Libraries. Accessed June 2009.
6. *Grand Traverse Lighthouse*. Grand Traverse Lighthouse Foundation. Penrod/Hiawatha, 1999.
7. *Maritime Structure Inventory for the Fox Islands*. By Kathleen Firestone. May, 2009.
8. *Grand Traverse Lighthouse*. Grand Traverse Lighthouse Foundation. Penrod/Hiawatha, 1999.

[This page intentionally left blank]

# 5

## Public Facilities and Services

### Introduction

Leelanau Township, including the Village of Northport, has a full complement of services and facilities available to residents and visitors, including a public school, library, airport, bank, restaurants, shopping, gas station, groceries, outdoor recreational opportunities, fire protection, emergency medical services, and police protection.

### Roads

There are 103 miles of public roads in Leelanau Township and many miles of private roads and easements. These roads provide essential access to Township lands and from these lands to distant destinations outside the Township. Their year-round condition is important to emergency and other service providers, tourism and getting agricultural products to the market.

Leelanau Township is served by M-22, a State highway under the jurisdiction of the Michigan Department of Transportation, as it links Traverse City to the south with Northport and loops southwest to Leland, the Sleeping Bear Dunes National Lakeshore and Empire. State route M-201 connects to M-22 and passes through Northport. These two State routes comprise 14 miles of public roads in the Township.

The other 89 miles of public roads in Leelanau Township are under the jurisdiction of the Leelanau County Road Commission and are classified as local and primary. The county primary routes are numbered. County roads 629, 631, 633 and 637 provide north and south access through the Township while 626 and 640 provide east and west access. All of the 25 miles of primary roads are paved, while 44 miles of the local roads are paved, 16 miles are gravel, and 4 miles are unpaved. The Road Commission maintains all of the public roads in the Township; however, it requires the Township to share equally in the cost of any improvements to the local roads beyond grading, patching, seal coating, snow removal and ice control.

In 2009, the Township paid over \$410,000 to the Road Commission as its share of the cost of badly needed asphalt wedging and resurfacing of some 8.6 miles of existing paved local roads in the Township. Another 33 miles of local paved roads are in need of paving with asphalt. At their expense, the Road Commission, in 2009, resurfaced with asphalt 3.3 miles of existing paved primary roads in the Township. Another 15 miles of primary paved roads need to be repaved with asphalt. Improvements such as these are necessary to assure



*Scenery along Omena Point Road*

the safety, quality of ride, effectiveness of snow and ice control, adequate drainage, and structural integrity of existing paved roads.

The unpaved portions of Gills Pier Road, Putnam Road and North Shore Drive are designated “Natural Beauty Roads” as requested by the adjoining property owners and approved by the Leelanau Township Board and Leelanau County Road Commission. As a result, they will remain unpaved.

## Airport

Woolsey Airport, north of Northport, provides a seasonal air facility for small private aircraft. The field features runway lights and has parking, electricity, picnic tables and vault toilets. Hangar rental is available.

## Public Transportation

Public transportation is provided by Bay Area Transportation Authority (BATA), which serves all of Leelanau County and Traverse City.

## Public Marina

The public marina in the Village of Northport has 100 slips plus an additional 16 mooring locations to serve recreational boaters. The marina also provides: a boat launch ramp, fuel, sewage pump out facilities, a pavilion, picnic tables, horseshoe pits, beach, playground, volleyball courts, restrooms and shower facilities.

## Emergency Services

Police protection is provided by the Leelanau County Sheriff’s Department. Leelanau Township contracts with the Sheriff’s department for a full-time officer that provides protection to both the Village of Northport and the rest of the Township. The Michigan State Police also serves the area.



*Overlook Road*



*Northport Municipal Marina*

Fire protection is provided through the Township Fire Department, which has two stations, one in Omena and one in the Village of Northport. 24-hour emergency medical and ambulance services are provided by the Township Emergency Medical Services, located at the fire station in the Village of Northport.

## Health Services

Health services are provided by local physicians. Assisted living and memory care services are provided in a 42 unit facility located within the Village of Northport.

## Utilities

### Public Wastewater Treatment

In a joint effort with the Village of Northport, most of the Village and certain areas of Leelanau Township are being served by a municipal waste water treatment system as of August 2008. The wastewater collection system is operated by the Northport/Leelanau Township Utilities Authority and features a total collection system pipe length of more than 5 miles. The system serves the township residents in three areas (see **Map 2**):

- The North Township area begins at the Village of Northport north limits near the shoreline and North Shore Drive, and proceeds northeasterly along the shoreline to where North Shore Drive becomes Northport Point Road.
- The Paradesia Point area begins at Woolsey Lake Road and proceeds easterly along Northport Point Road and the shoreline to near the entrance to Northport Point Resort.

- The South Township area begins at the south limits of the Village of Northport near the shoreline and East Wagonwheel Drive and proceeds southeasterly along the shoreline to where the vacated railroad easements meets Dawn Haven Road and continues south along Dawn Haven Road to Indian Beach Road.

The Township's portion of the wastewater collection system features 22,479 linear feet of low pressure force main, 124 simplex grinder pump stations, and a duplex grinder pump station. The system is served by a 0.132 million gallons per day (mgd) wastewater treatment facility that is located within the Village of Northport, west of West Street. The plant was built to accommodate the 20-year growth within the boundaries of the wastewater treatment "district." However, the plant was also designed to accommodate future expansion, if warranted.

All new development within the district must connect with the system. For properties adjacent to the district, but not located within the district, an application process was established where property owners could petition the Northport/Leelanau Township Utilities Authority to be included in the district and tap-in to the system.

### Private Wastewater Treatment

One private wastewater treatment system exists within the Township and serves the Northport Point residential development. The extent of this private wastewater treatment system is shown on **Map 2**.

The remainder of the Township is served by private, on-site septic systems. The majority of these systems are gravity based, while other systems utilize holding tanks or are low pressure systems. A description of these private septic systems follows.

### Gravity Based

About 80 to 85 percent of the Township is served by on-site gravity septic systems. These consist of one or two septic tanks for treatment of the sewage, and a leach bed to disperse the treated effluent.

### Holding Tanks

Holding tanks are becoming more common as areas are being developed that are not suitable for the on-site gravity septic system. The high water tables of the last few years have caused some leach bed systems to fail, and holding tanks were required to be installed. Holding tanks are installed not only where the ground water is too high to allow a leach bed, but also where clay is present and will not allow a leach bed to function properly, or where there is insufficient space for an adequately sized leach bed for the sewage that is expected to be generated on the site. The most predominant locations requiring holding tanks are along a small area on the west side of Omena Point, and in the unincorporated community of Omena. There are also other areas in the Township, should they be opened up for development, that would require holding tanks.

### Low Pressure Systems

Low pressure systems are used where it becomes necessary to move the effluent from the building site to another site where a leaching field can be approved. This system requires an additional tank and pump that is not required by the gravity system. These systems are capable of serving one or several buildings. Where there are several homes experiencing problems with the on-site gravity sewage system, a special assessment district can be created to develop an alternate system.

## Potable Water

Private wells supply potable water to the bulk of Leelanau Township residents, except for the Village of Northport, which is served by a municipal water system, and the residents of Northport Point Resort, who are served by a privately operated water system. Oversight and permitting of wells within Leelanau Township is conducted by the Benzie-Leelanau District Health Department.

The Northport Point development, located northeast of Northport, is exploring the possibility of upgrading the existing water system to serve its residents. A new water system will be developed for the proposed Timber Shores development, located south of the Village of Northport. This project has been approved by the Township, but construction has not yet begun. If constructed, the project would include both private wastewater and potable water facilities and infrastructure to serve future residents of that development (see **Map 2**).

## Electric and Gas Service

Consumers Energy Company and Cherryland Rural Electric Cooperative both provide electric service to Leelanau Township. Consumers Energy Company services most of the Township except for a strip along the Lake Michigan shore and in Sections 20, 21, 22, 27, 28, 29, 31, 32, and 33 in the south central portion of the Township, which is served by Cherryland Rural Electric Cooperative.

Detroit Edison Energy (DTE) Company provides natural gas along the main highway from Suttons Bay northward into the Village of Northport, and along North Bay Shore Drive to Woolsey Lake Road.

## Broadband Internet

Broadband internet service is available within the Township through a variety of providers. Charter Communications, the area's cable TV provider, offers broadband internet. Satellite broadband internet providers include Hughes Net, Chain 'o Lakes Internet (COLI), Connect Leelanau, and Cherry Capitol Connection.

## Schools

The Northport Public School District has a K-12 school located in the Village of Northport. Nearly all of Leelanau Township is in the Northport Public School District, with the exception of the southwest portion of the Township in Sections 30, 31, and 32, which is in the Leland School District, and Section 33, which is in the Suttons Bay School District.

## Parks and Recreation

### Administration

The park and recreation functions for Leelanau Township are under the auspices of the Township Board. The Township Board works cooperatively with the Village of Northport, the Department of Natural Resources, the Leelanau County Board of Commissioners and the Northport Public School Board to assure recreation for Township residents and visitors.

### Planning

The Leelanau Township Board has adopted a Recreation Plan, including a long and short range program for improvements. A five year plan can be submitted to the Department of Natural Resources and Environment for the purpose of acquiring grants to help fund improvements. The Township

Board has a Recreational Plan Committee to serve in a planning capacity for the Recreational Plan. The committee consists of representatives from the Township Board, the Village Council, the Northport Public School, the Chamber of Commerce and several citizens at large.

## Programs and Facilities

Staffing for recreation through the Township consists of seasonal ground maintenance personnel for all Township facilities, including recreation. The Township operated recreation facilities include: Omena Beach, Christmas Cove Park, Peterson Park and Braman Hill Recreation Area. There are also private recreational facilities in the Township which are listed in the Township Recreation Plan.

## Township Parks

A brief description of each Township park is included below:

- Peterson Park is located at the end of Peterson Park Road and has 1,000 feet of frontage on Lake Michigan, and has picnic tables, outdoor grills, a pavilion, a playground area, and vault toilets.
- Omena Beach, located in the unincorporated community of Omena, has 100 feet of water frontage, unsupervised swimming, a playground area, picnic tables and a vault toilet.
- Located just west of the Village, Braman Hill Recreation Area features tennis courts, a skate park, sledding, the Sportsman's Club's Shooting Range and Clubhouse, handicapped accessible restrooms, a basketball court and a tot lot.

- Christmas Cove Park has 200 feet of water frontage and vault toilet facilities. The beach is located at the end of Christmas Cove Road in the northwestern portion of the Township.
- Leelanau Township's Buster Dame Ball Field has three ball diamonds, a concession stand, bleachers, and handicapped accessible restrooms. The park is located in the north central part of the Village of Northport.



*Braman Hill Recreation Area*

# 6



## Existing Land Use

### Introduction

The rational application of the planning process in the preparation of the Future Land Use Plan is possible only when there is a clear understanding of existing conditions and relationships between land uses. Knowledge of existing land development furnishes the basic information by which decisions can be made concerning proposals for future residential, commercial, industrial, and public land use activities.

The existing land use analysis will also serve as a ready reference for the Township in its consideration of everyday problems in land use management and public improvement proposals.

### Methodology

The starting point for the update of existing land use was the map prepared for the 2000 Leelanau Township Master Plan. Leelanau Township staff worked during the summer of 2009 to mark-up the 2000 land use map for revisions. The 2000 existing land use data and the 2009 revisions were then transposed digitally into ArcMap GIS software and integrated into a new existing land use map utilizing up-to-date parcel information (see **Map 3**).

Each parcel of property in the Township has been categorized in accordance with a predetermined land use classification system. A total of ten existing land use categories were utilized for this 2009 analysis.

### Land Use Classifications

**Map 3**, Existing Land Use, shows the distribution of land use within Leelanau Township. A description of the ten land use classifications and their general distribution within the Township is provided below.

#### Agricultural

This category includes any related land use of, or developed in conjunction with, farms or farming related uses, including orchards.

This land use occupies 9,188.9 acres or 30 percent of the total land area of the Township, making it the Township's second most prevalent land use. Leelanau Township's farms are utilized for a wide variety of purposes including field crops, orchards, Christmas tree farms and vineyards. Organic farming has become an important and increasingly

**Table 17: Existing Land Use Statistics, 2009**

Category	Acres	Percent of Total
Agricultural	9,188.9	30.0%
Single Family Residential	5,103.4	16.6%
Multi-Family Residential	0.0	0.0%
Commercial/Office	83.2	0.3%
Industrial	49.0	0.2%
Public/Semi-Public (Non Recreation)	239.5	0.8%
Public Parkland	1,831.6	6.0%
Private Recreation Facilities	373.1	1.2%
Vacant/Rights-of-Way	13,542.6	44.2%
Leelanau Conservancy	248.8	0.8%
<b>TOTALS</b>	<b>30,660.1</b>	<b>100.0%</b>

Source: Leelanau Township, 2009



*Leelanau Township's unique climate and geological characteristics make it one of the most productive fruit growing sites in the State. These cherry trees are located along Scott Road.*

popular approach to cultivating the Township's productive farmlands.

### Single Family Residential

This category includes one family detached dwelling units, two family duplex dwelling units, trailers and mobile homes outside of designated mobile home parks, and accessory buildings such as garages that are related to these units. It also includes farmsteads and related agricultural buildings located near the principal dwelling.

Single family residential land use presently occupies 5,103.4 acres of land, which accounts for about 16.6 percent of the total Township area. Residential use is generally located along major roads, the shoreline of Lake Michigan and Grand Traverse Bay, and on large lots in the central portions of the Township. Many of the large lot home sites are the result of the division of larger agricultural parcels.

### Multi Family Residential

This category includes any parcel that is occupied by three or more dwelling units such as attached townhomes, stacked ranches, apartment complexes, and senior housing along with any related accessory structures such as shared recreation facilities.

No multiple family residential use is found in Leelanau Township as of 2009.

### Commercial

The commercial classification includes general commercial uses as well as office uses. Land areas consisting of relatively compact groups of stores and/or services which satisfy the day-to-day shopping needs of residents are considered general commercial uses. Uses included in this category are food, hardware, personal services, lumber, building materials, eating and drinking establishments, gasoline service stations, and providers of general merchandise, apparel and accessories, furniture and appliances, and other comparison-type commercial establishments. These uses do not require location in a shopping center; rather,



*The Omena Bay Country Store in Omena*

they benefit by a location on a major thoroughfare permitting good access.

A total of 83.2 acres of commercial land use currently exists, accounting for 0.3 percent of the Township. General commercial uses are mainly located in the unincorporated Village of Omena.

## Industrial

Included in this category are research and development laboratories, warehouses, lumberyards, food and fruit processing plants, light manufacturing operations, self storage facilities, public utility facilities, bulk storage of petroleum products, vehicle and boat repair shops, contractors' yards, and other uses of like nature. Wholesale and retail sale of products manufactured or processed on the premises are allowed on a limited basis as an ancillary part of the manufacturing operation.

There are 49.0 acres of land used for industrial purposes, accounting for 0.2 percent of the Township. This figure includes Leelanau Cellars Winery on West Bay Shore Drive (M-22) and the old paint catalyst plant site adjacent to Woolsey Airport located on Woolsey Lake Road.

## Public/Semi-Public (Non-Recreation)

Public land includes those properties owned by public entities and reserved for use by the public for cultural, assembly, educational, and civic purposes (public recreational uses are included in the Public Parkland category described below). Such uses include schools, government facilities and emergency facilities. Properties owned by utility providers, such as gas, electric, telephone and cable companies are included in this category. Semi-public land includes privately owned properties which are generally available to the public for educational, religious, fraternal, and cultural activi-

ties. Such uses include private schools, churches, and clubs.

There are 239.5 acres of land in public and semi-public use, accounting for 0.8 percent of the Township. Public and semi-public uses include Woolsey Airport, Hillcrest Cemetery in Omena, St. Wencleslaus Church, Omena Presbyterian Church, and the Omena Fire Station.

## Public Parkland

This category includes all City, County, State, and other publicly owned park and recreation properties and facilities.

In total, 1,831.6 acres or 6.0 percent of the lands in the Township are categorized as public recreation land uses. The largest such use is the Leelanau State Park located at the north end of the Leelanau Peninsula. Other public recreation uses



*Omena Presbyterian Church*

include the Peterson Park, Braman Hill Recreation Area, Omena Beach, and Christmas Cove Park.

### **Private Recreational Facilities**

This category includes all privately owned recreational facilities that may be available for use by the general public for a fee or on a membership basis. Typical facilities include golf courses, private recreation facilities (clubhouses) and campgrounds.

Approximately 373.1 acres or 1.2% of the lands in the Township are categorized as private recreational facilities. These facilities include the Northport Point Gun Club and Golf Course, Shady Trails Camp and some private resorts with or without private marinas.



*An open field in Leelanau Township*

### **Vacant/Rights-of-Way**

Open spaces and vacant lands, including water bodies, are included within this category. Also included are road and other dedicated rights-of-way.

This category represents the largest amount of land area in the Township, comprising 13,542.6 acres or 44.2 percent of the Township. Open spaces and vacant lands, including environmentally significant woodlands and wetlands, comprise a significant amount of land within this category.

### **Leelanau Conservancy Lands**

This category represents properties owned by Leelanau Conservancy that have been preserved through conservation easements and are open to the general public for educational and light recreational uses.

The lands included in this category comprise 248.8 acres or 0.8% of the land area of Leelanau Township.



## Planning Goals, Objectives and Strategies

### Introduction

Before a community can actively plan for its future growth and development, it must first set certain goals and objectives to guide future policy and land development. The Goals and objectives are the foundation of this Master Plan. They are based on the information gathered by the Commission during the preparation of the Plan and are presented in understandable terms that can be translated into ordinance language. The strategies presented herein outline specific action items necessary to accomplish the goals and objectives.

### Guiding Principles

Leelanau Township's goals and objectives are rooted in the principles of sustainability. By incorporating sustainability as one of its foundations, the Township seeks to meet the social and economic needs of its citizens in a manner harmonious with the environment so as to not compromise the ability of future generations to meet their own needs.

### Visioning Exercise

At a meeting held on September 10, 2009, the Township Planning Commission participated in a brief visioning session to gain consensus on community values and expectations. The meeting included an exercise entitled "Postcard of Tomorrow." For this exercise, meeting participants were divid-

ed into two teams and asked to create a postcard that expressed their desires for the Township 10 to 15 years from now. Major themes that emerged through the postcards included:

- Promote housing and job opportunities
- Farming remains a viable and thriving enterprise
- Maintain the existing character of the Township
- Plan with our history in mind

In the end, the postcard exercise was successful in building consensus and provided the project team with direct insight about important community values and a variety of points of view. The exercise provided the framework for a detailed review of the Township's currently adopted goals and objectives that followed.

### Goals, Objectives and Strategies Defined

In order to appropriately administer goals, objectives and strategies, it is important to understand the roles of each and their relationship to one another. To that end, the following definitions are given:

#### Goals

Goals provide the general direction and serve as the description of the desired future. Goals are ambitious but are more general in nature. They address issues and specific needs or problems, but they are grand in scope and speak to fundamental change and directly serve the mission of the community.

#### Objectives

Objectives are a means for achieving goals. Objectives must be relative and attainable. The human,

financial, and institutional resources necessary to achieve them must be in hand, accessible, or at the very least, identifiable.

## Strategies

A strategy sets forth the specifics for accomplishment of an objective. One strategy may be used to accomplish multiple objectives, or an objective may require multiple strategies.

## Goals, Objectives and Strategies

The Master Planning process offered planning decision-makers and the public an opportunity to verbalize attitudes and values about community development and, at the same time, establish the parameters around which the future land use recommendations will be designed. Presented below are the goals, objectives and strategies for Leelanau Township, organized under nine headings.

## Community-Wide Planning and Land Use

### Goal

Encourage the development of a balanced community land use pattern, consisting of agricultural, residential, commercial, industrial, civic, recreation and conservation land uses.

### Objectives

- Support and conform to the essentials of the General Plan for Leelanau County.
- Adopt and utilize those planning principles and other regional planning efforts that are specifically applicable to Leelanau Township.

- Relate land use primarily to the natural characteristics of the land and the long-term needs of the community, rather than to short-term private economic gain.
- Anticipate land use needs in a proactive manner.
- In line with market demand, plan for higher density development adjacent to existing developed areas and in areas having an adequate capacity to support such development.
- Preserve the rights and promote the responsibilities of the individual property owner while maintaining the rural character of the Township.
- Coordinate area growth and development concurrent with improvements to community facilities and infrastructure.
- Allow for involvement and participation by Township citizens and stakeholders in all planning processes.

### Strategies

- Identify the significant resources of the Township and provide regulations that will enable them to be used in a manner that is appropriate to their characteristics and is consistent with the goals of the Plan.
- Establish and guide growth patterns that will sustain the agricultural and tourism industries.

## Environment

### Goal

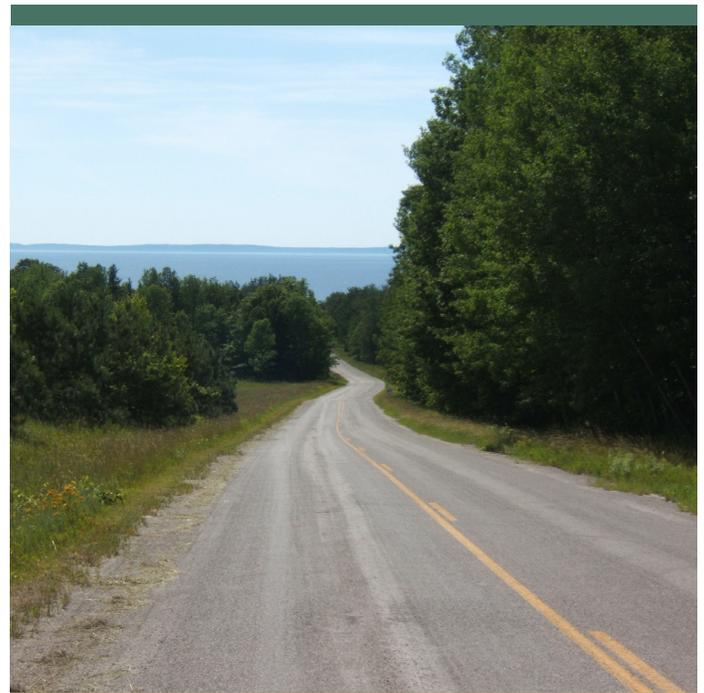
Strive for the protection of important natural resources and open spaces that contribute to the health of natural systems, wildlife habitats, community character, and quality of life.

### Objectives

- Encourage conservation of those lands that are economically and environmentally important such as wetlands, dune lands, forest lands, steep slopes, and scenic views through the use of conservation easements, planned siting of structures, and the purchase, lease, or transfer of development rights.
- Whenever possible, link natural features and open space areas to create a system of natural corridors.
- Utilize zoning tools that conserve natural areas, provide community recreational space and promote watershed protection.

### Strategies

- Include ground water quality and other environmental protection provisions in the Zoning ordinance to maintain a healthy environment.
- Encourage site designs that are consistent with the natural characteristics of a site through the retention of native vegetation, preserving wildlife corridors and other sensitive lands, mitigating the visual impact of structures, and reducing the amount of disturbed areas.



*Scenic views, such as this view to Lake Michigan from Onomonee Road, are important components of the Township's character and quality of life.*

- Increase citizen awareness of the Township's natural resource objectives by communicating and educating them in newsletters and in forums arranged for this purpose.

## Agricultural Resources

### Goal

Encourage the retention of prime agricultural lands within the Township in recognition of the agricultural industry's direct impact on the region's economy and quality of life.

### Objectives

- Provide for entrepreneurial agricultural and limited rural development that preserves large agricultural and forested areas.

- Protect those land areas that are economically important to the agricultural and horticultural industries from encroachment and interference by incompatible uses.
- Acknowledge techniques such as the purchase, lease, or transfer, of development rights and conservation easements for preserving fruit growing sites, croplands, and other lands used for farming.
- Protect prime agricultural lands from high density development through the concentration of growth in more suitable areas.

### Strategies

- Ensure that land development codes allow for activities that might reduce costs or provide supplementary income for local farmers, such as wineries, farm stands and agri-tourism activities, consistent with community character.
- Require that a site plan or planned development application within a prime farmland area includes an agricultural impact state-



*Cherry orchards are an economically important industry in the Township that should be protected from encroachment by incompatible land uses.*

ment that would outline the steps to be taken to minimize the effects of a proposed development on nearby agricultural operations.

## Housing

### Goal

Promote the development of planned residential areas that offer a variety of housing options.

### Objectives

- Encourage a variety of housing types and densities to serve the needs of all the people in the Township.
- Plan for higher densities in areas that are adequately served by public utilities, transportation access and community services.
- Incorporate environmental features and assets into the design of residential development.
- Encourage the development of affordable housing that blends with the existing housing stock.

### Strategies

- Include provisions for mobile home parks that meet or exceed the State of Michigan regulations and are appropriately located and landscaped.



*Carefully designed affordable units increase housing opportunities and can be easily integrated within existing neighborhoods.*

## Economic Development

### Goal

Encourage commercial, office and industrial growth and expansion to provide adequate services to Township residents, a stable tax base and increased employment opportunities in Leelanau Township.

### Objectives

- Recognize the role that the communities of Northport, Suttons Bay and Traverse City play as the primary commercial, shopping, employment, cultural and entertainment destinations within the area.
- Facilitate economic development that meets the needs of the residential, tourist, and business communities while enabling entrepreneurship and a setting for skilled and unskilled jobs.
- Support the creation of full time, all-season jobs in Leelanau Township so that working families can afford to live here.
- Locate commercial, office and industrial development in proximity to existing and/or growing population centers which, after a careful planning study, are determined to be necessary to meet market demand, compatible with adjoining development and the character of the site, and offer safe and convenient access.
- Establish architectural design and development standards for commercial, office and industrial buildings that will maintain the character of the area in which they are located.
- Provide for light industrial operations in a limited number of areas where they will least conflict with the surrounding land uses and where they will have access to the needed utilities.
- Strengthen existing, and promote new maritime based activities, organizations and industries, where consistent with the availability of public services and the character of adjacent lands.
- Encourage the creation of home businesses that are compatible with adjacent properties.
- Facilitate the study of the Township's renewable resources as an economic development tool and means to reduce energy consumption, weighed against potential impacts to the natural environment and rural character.

## Strategies

- Relate the amount of commercial, office and industrial zoning within Leelanau Township to the amount of such land already zoned or planned in adjacent communities.
- Enact zoning controls that restrict and/or prohibit strip commercial development.
- Revisit site plan review standards for commercial development to ensure that such development provides ample landscaping and site amenities.
- Develop Zoning standards that allow for a variety of home businesses while ensuring consistency with neighborhood character.
- Participate with the neighboring communities and County in planning efforts related to wind generation facilities and the development of regulations that would mitigate their impact on community character and environmentally sensitive lands.



*New commercial and office development may be appropriate within existing community centers, such as within the unincorporated village of Omena, when carefully integrated with existing development.*

## **Tourism**

### Goal

Promote tourism as an important part of the local economy, structured to offer visitors year-round memorable and enjoyable experiences while balancing the interests of other sectors of the economy, local residents, and the natural environment.

### Objectives

- Encourage desirable forms of tourism, particularly those which occur during off-season and have low environmental impact.



*Tourism activities should capitalize on the Township's rich maritime heritage. In this photo: the South Fox Island Light.*

*Photo Courtesy of Fox Island Lighthouse Association*

- Capitalize on the Township’s rich maritime heritage by encouraging development that integrates maritime history, architecture, activities and access.
- Preserve, restore, and enhance historic features of the Township.
- Enhance the opportunity for public enjoyment of the waterfront, including the improvement of existing public accesses and acquiring of additional land for new public access.

### Strategies

- Include provisions for bed and breakfast homes in appropriate areas.
- Develop special use standards for considering proposals for lodging and dining facilities which, by their size, character, architectural design, location, and established need are appropriate for the area and are compatible with adjacent properties.
- Ensure that land development codes allow for activities that might reduce costs or provide supplementary income for local farmers, such as wineries, farm stands and agri-tourism activities, consistent with community character.

## Recreation

### Goal

Provide a variety of recreation facilities and areas that adequately serve the needs of the Township’s present and anticipated population.

### Objectives

- Encourage public recreation in the Township, with emphasis on the maintenance and enhancement of existing recreational facilities.
- Recognize the importance of the Leelanau State Park to the Township’s recreation planning.
- Facilitate programs developed by the Township Recreation Plan Committee for improving and expanding recreational areas and opportunities in the Township.
- Enhance the opportunity for public enjoyment of the waterfront, including the improvement of existing public access and acquiring of additional land for new public access.



*Picnic area at Peterson Park.*

## Transportation

### Goal

Support the development and continued maintenance of an area-wide multi-modal transportation system reflective of current and future Township access needs.

### Objectives

- Cooperate with the County Road Commission, the Michigan Department of Transportation, and the Leelanau County Planning & Community Development Department in preserving and improving the ability of the road system to carry traffic and safely provide access to commercial, office, industrial and residential areas.
- Facilitate, insofar as practical, access to public transportation.
- Encourage the paving of highway shoulders for bicycle traffic.
- Support the designation of natural beauty roads to preserve scenic vistas and support rural character.
- Accept limited congestion and travel delays on major roadways, as identified on the Future Land Use Map, to minimize paving of secondary gravel roads, road widening and other similar road construction projects.

### Strategies

- Act to preserve the rural appearance of the major traffic corridors and other roads within the Township by supporting the Michigan

Heritage Route and Natural Beauty Road programs.

- Develop a plan for enhancements to the non-motorized transportation system, such as “park and ride” locations, bike racks, signage, shelters and informational materials.
- Establish access management provisions within the Zoning Ordinance such as shared driveway standards.

## Physical Services

### Goal

Continue to offer efficient services and facilities to residents and businesses to preserve the Township’s high quality of life.

### Objectives

- For Township provided facilities, plan, locate, and provide public areas based on a long-range general plan, short range project plans, and capital improvement programming.
- Continue the cooperative relationship between the Village and Township for the shared provision of public services and facilities, like police, fire, library, senior services, and public utilities.
- Facilitate, insofar as possible by zoning means, the delivery of health, emergency and safety services.
- Study the development of a regional sewerage system to serve appropriate portions of the Township.

- Support the provision of governmental facilities adequate to meet public needs.
- Include readily available high-speed internet connectivity in the infrastructure plans.

### Strategies

- Investigate the practicality of a single location for Northport Village/Leelanau Township governmental buildings.
- Annually develop a Capital Improvements Plan consistent with State Law.

[This page intentionally left blank]



## Future Land Use Plan

### Introduction

The Future Land Use Plan is the physical result of the Master Plan development process. The Future Land Use Plan equips Leelanau Township Planning Commissioners and elected officials with a literal depiction of the desired land uses throughout the community. Rooted in the foundation provided by the Planning Goals, Objectives and Strategies, and created through public participation, the Plan represents the vision Leelanau Township has established for the next 15 years (however, State Public Act 33 of 2008 requires that the Planning Commission review the Plan at least every 5 years). The Plan will be a useful tool on which to base zoning and capital improvements decisions, and will allow for consistent and sound planning in the community.

### Evaluation of Future Land Use Alternatives

In order to assist Planning Commissioners, Township officials and citizens in making an informed decision about the desired future land uses within the Township, several alternative future land use plans were prepared and presented for evaluation. This evaluation was aided through a build-out analysis conducted for each alternative.

First, the Township's currently adopted Future Land Use Plan (adopted in 1999 and amended in 2000)

was presented as an alternative. In addition to the currently adopted plan, two additional alternatives were prepared for evaluation: a conservation-based alternative and a growth-based alternative. The intent of the conservation-based alternative was to preserve the Township's abundant natural resources and productive agricultural lands, while also identifying limited locations for future growth (primarily low-density residential development). The intent of the growth-based alternative was to capitalize on the Township's desirable setting and natural amenities by targeting strategic areas for future residential and mixed use development, while protecting the most critical habitats and productive agricultural lands from urban encroachment.

To assess the merits and impacts of each alternative, a build-out analysis was conducted. A build-out analysis is an assessment of the carrying capacity or "build-out" of Leelanau Township based upon the future land use designations for each alternative. The analysis was prepared with the assistance of Community Viz Scenario 360, a Geographic Information System (GIS) software tool that models future growth based on a variety of inputs and parameters, such as permitted densities within a future land use category and constraints to development such as wetlands. A build-out analysis operates under the assumption that an area will become fully developed, even though it is unlikely that any community would ever reach its maximum development potential.

The build-out analysis for the three future land use alternatives focused on residential growth potential by projecting the total number of new dwelling units that could be accommodated at full build-out. These dwelling unit estimates provided a sound basis for the Planning Commission's assessment of each alternative future land use scenario.

After consideration of the build-out results, as well as careful evaluation of the alternatives based on community values and desires, a preferred future land use plan was developed that incorporated various concepts and ideals from each of the three alternatives.

## Future Land Use Categories

A total of nine future land use categories have been established in the Future Land Use Plan and Map (**Map 4**). **Table 18** summarizes the distribution of the various future land use categories within the Township. A detailed description of each category is provided below.

### Agricultural

The intent of the Agricultural future land use category is to conserve those lands most capable of sustained agricultural production for the foreseeable future and to encourage and facilitate land conservation efforts. This category is predominantly composed of areas of the Township that are currently dominated by agricultural use and identified as being within prime agricultural zones.

Sustaining agriculture and horticulture will depend on a number of land use factors. Principal among these are: low residential densities in neighboring properties; the separation and buffering of non-agricultural uses from farming operations; and the use of various methods that accomplish the outright preservation of farmland or that allow the development of certain portions of agricultural parcels in a manner that preserves productive farmland.

Land uses that place people adjacent to farming operations should provide adequate separation and buffering from the spraying activities, noise, and dust associated with agricultural operations. Examples of such land uses include residences,



*The Agricultural future land use district seeks to protect productive farmlands and promote the Township's thriving fruit industry.*

manufacturing operations, commercial businesses and resorts, parks, schools and churches.

To minimize the division of farms into parcels of the minimum acreage, the Township should consider employing such methods as the purchase, lease, and/or transfer of development rights. The use of conservation easements should also be encouraged. In addition, the Township zoning ordinance should contain language allowing for a lot size reduction option contingent upon the maintenance of an overall density equivalent to that allowed within the agricultural district.

Normal agricultural activities such as field crops, horticulture, forestry, beekeeping, the breeding and/or keeping of domestic animals, milk production, and similar uses and the associated storage relating to the uses are allowed in designated agricultural areas. Intensive agricultural operations shall conform to the generally accepted agricultural management practices (GAAMPs) as established by the Michigan Department of Agriculture. Low density residential dwellings, consistent with the agricultural character of the category and at densities no higher than one dwelling unit per ten acres, would also be allowed.

## Island Conservation

The Plan for the Township’s two largest offshore islands, North Fox Island and South Fox Island, is independent of the ownership pattern, that is, State of Michigan, Leelanau Conservancy, or private interests. It is expected that State-owned lands will only be developed as a special State park operation, possibly involving limited camping and recreational facilities. It is the intent of the Plan to support low density residential and low impact recreational development on the privately held lands. It is further intended that no development be permitted that will require public funding from Leelanau Township for its construction or operation.

Because mainland and island development patterns may be significantly different, a special category has been established for island uses.

## Residential Conservation

The intent of the Residential Conservation future land use category is to provide for the low density residential development (one dwelling unit per ten acres) of rural lands that are not suitable for agricultural or horticultural production on a large scale because they include large areas of environmentally sensitive lands or are comprised of soils that limit agricultural production. Additionally, they may be problematic to develop in conventional patterns because of the location of the environmentally sensitive features or because the landowner desires to maintain large portions free from development.

**Table 18: Future Land Use Distribution**

Category	Acres	Percent of Sub-Total
Agricultural	12,452	42.8%
Island Conservation	3,972	13.7%
Residential Conservation	9,122	31.4%
Low Density Residential	2,427	8.4%
Medium Density Residential	415	1.4%
High Density Residential	234	0.8%
Commercial Resort	278	1.0%
Historic Maritime Village	44	0.2%
Industrial	121	0.4%
<b>SUB-TOTALS</b>	<b>29,065</b>	<b>100.0%</b>
<i>Rights-of-Way/Other</i>	1,595	
<b>TOTALS</b>	<b>30,660</b>	

The uses in this category may include wildlife sanctuaries and limited small scale farming uses such as the raising of small numbers of domesticated animals, vegetable and specialty crops, beekeeping, and garden plots. The Zoning Ordinance should appropriately limit such uses depending on the size of the parcel, particularly those lots that are reduced in size through the exercise of the Planned Site Option. Public and private outdoor recreation uses such as golf courses may be considered under special conditions to ensure that such developments would be appropriate. Regulations shall ensure that any of the foregoing uses in this category that tend to conflict with residential uses provide separation and/or buffering from those residential areas.

## Residential Areas

The Plan establishes three residential future land use categories in order to provide for a variety of residential uses and housing types. The categories vary in the density of development, but have a number of common characteristics. The intent of each category is to provide areas for residential development that will have a stable, healthy living

environment and that will be protected against the encroachment of land uses that would adversely affect the intended residential character of the category. In the absence of community water supply and sewage treatment systems, lot sizes shall be large enough to provide adequate space for an individual well and an approved sanitary system. Standards for driveways and private access roads should consider both emergency vehicle movement and traffic safety.

#### Low Density Residential

This future land use category is designated for low density residential development at densities no higher than one dwelling unit per two acres. The Low Density Residential category is, in general, located remotely from urban and other intense uses. Most of the mainland shoreline perimeter area is included in this category. Uses are limited to single family residences and appropriate accessory uses.

#### Medium Density Residential

The Medium Density Residential future land use category includes those areas where single unit detached dwellings, as well as attached two, three and four unit structures are found. Single-family detached structures would be located at densities no higher than one dwelling unit per two acres, while attached two, three and four unit structures would be located at densities no higher than one dwelling unit per one acre. These areas may be used as transitions between low density residential and more intense land uses. Special uses in the category may include retirement communities, assisted living and nursing homes, libraries, schools, churches, and other uses that do not detract from the residential character of the area. Two medium density residential areas have been designated within the Township: west of the Village of Northport; and west of the community of Omena.

#### High Density Residential

This category provides for a variety of high density residential developments including small lot subdivisions, apartments, multiple dwellings, and mobile home parks at densities no higher than eight dwelling units per acre. Higher densities should be permitted only when approved common sanitary and water systems are available. In the absence of an approved common sanitary and water system, densities should be no higher than one dwelling unit per one acre.

### **Commercial Resort**

Commercial resorts are comprised of certain types of residential housing developed in conjunction with low impact recreational facilities. They are designed to attract vacationers, those attending business meetings or conferences, and those wishing to own homes that are part of a coordinated development.

The resort uses, architecture, and activities should be in keeping with the natural surroundings and the rural character of the area. Commercial resorts are also to be sited so that they are compatible with neighboring properties and will have minimal visual impact when viewed from the main traffic corridors in the Township.

Lands included in the Commercial Resort future land use category should be limited to those having certain combinations of characteristics that make them particularly suited for resort purposes. These include: large parcel size; proximity to and/or access to shoreline; good vehicular access; proximity to other resort activities; appropriate soil and slope conditions; and other characteristics that would make commercial resort uses economically feasible.

Permitted uses may include single family housing, limited multiple family dwellings, hotels, motels and rental cottages, and low impact recreational facilities. Special use regulations may permit restaurants and retail stores, provided they are intended to serve principally the resort development. Recreational vehicle parks, campgrounds, and marinas may also be permitted subject to review as special uses.

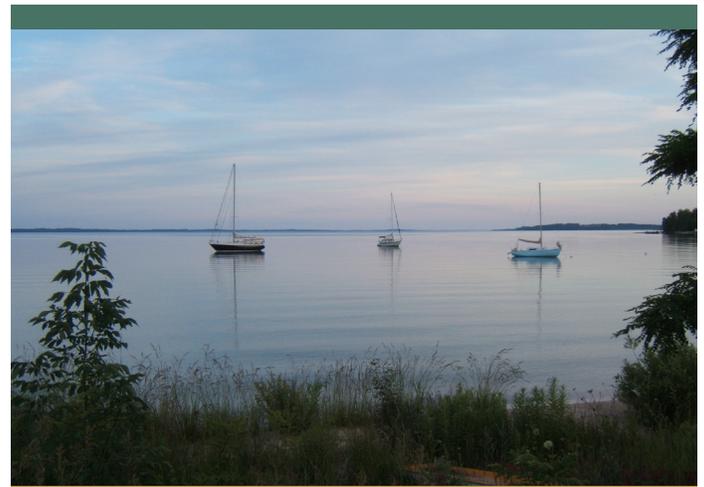
## Historic Maritime Village

The village of Omena is an unincorporated community within Leelanau Township situated on Omena Bay. Founded in the 1850's, Omena has a long history as a summer resort area. A variety of land uses are currently found within Omena, many of which have incorporated Omena's maritime character in their design. Such uses include the Omena Presbyterian Church, Tamarack Gallery, U.S. Post Office, Omena Historical Society, and the Omena Country Store.

The intent of the Historic Maritime Village future land use category is to protect and enhance the charm and character of Omena, allowing for a mixture of complementary uses in a well-planned setting. Permitted uses may include single family dwellings, limited multiple family dwellings, rental cottages, churches, schools, galleries, museums, restaurants, retail stores, and limited recreational uses such as parks and marinas. Design guidelines should be established for the category as a means to promote a unified development pattern complementary to Omena's historic maritime heritage.

## Industrial

The intent of the Industrial category is to provide for light industrial/manufacturing operations that can benefit the citizens of the Township and to establish regulations and conditions that will en-



*The historic maritime village future land use category seeks to protect and enhance the character and charm of Omena, located on Omena Bay.*

sure that such businesses are compatible with the character of the Township.

Industrial uses are to be located on arterial roads where large parcels of land are undeveloped and are not expected to be needed for residential or agricultural purposes. The adequacy of access routes to accommodate the kind and amount of anticipated traffic should be considered in the selection of any site. Light Industrial lots should have sufficient area to permit large setbacks from highways, environmentally sensitive features, and adjacent non-industrial uses. Outside storage is not allowed except where such storage is screened from view of roads and adjacent lots. In order to maintain the rural appearance of the Township and its traffic corridors, special landscaping or other screening may be specified as a requirement for site plan approval.

The uses in this category will be limited to those having no waste products that cannot be disposed of in a health department approved waste disposal system or by means of available recycling or solid waste disposal services. Reasonable limits may also be established for light, odor, noise, and other objectionable emissions.

Examples of permitted uses in the Industrial category include research and development laboratories, warehouses, lumberyards, food and fruit processing plants, and various light manufacturing operations. Wholesale and retail sale of products manufactured or processed on the premises are allowed on a limited basis as an ancillary part of the manufacturing operation. Special land uses in the category may include self storage facilities, public utility facilities, the bulk storage of petroleum products, vehicle and boat repair shops, contractors' yards, and other uses of like nature.

## Other Recommendations

### Natural Beauty Roads

Four segments of road within Leelanau Township are shown on the future land use map as natural beauty roads. These roadways have been identified as such because of their unusual or outstanding natural beauty by virtue of native vegetation, other natural features, cultural and historic qualities, and/or scenic vistas within or along the right-of-way.

The natural beauty road designation is not meant to restrict the activities of frontage property owners or restrict additional development on property adjacent to the road. However, it is the intent of this designation to preserve the road rights-of-way in a natural, essentially undisturbed condition for the use and enjoyment of local residents and the public in general. Maintenance activities within these rights-of-way, such as the clearing of vegetation, should be restricted and any road improvements must be sensitive to the natural character of the roadway.

The natural beauty roads within Leelanau Township include: the unpaved portion of Gills Pier Road, between M-22 and Onomonee Road; Putnam Road;

and the portion of North Shore Road outside of the Village of Northport.

M-22 has been officially designated as a Scenic Heritage Route by the Michigan Department of Transportation; therefore, it is also shown as a natural beauty road on the future land use map. By virtue of the Scenic Heritage Route designation, permits must be obtained from MDOT for any activities in the road right-of-way such as road improvements, tree trimming, utility activities, grading, and construction of new driveways.

### Home Based Businesses

With the continuing improvements in communications and transportation, there are a number of occupations and businesses that do not need to be located exclusively in commercial districts. The intent of this specific land use is to permit Township residents to conduct certain of these occupations and businesses in their homes or on site accessory buildings as a secondary use as long as the operation of the business has no demonstrably adverse effect on neighboring properties.

Home occupations and businesses should be limited to those having low impact such as the legal, engineering, and accounting professions; computer uses; software development; consulting; insurance; design; artistic endeavors; sewing; woodworking; tutoring; and similar occupations. The existence of a home business shall not be considered an adequate reason for rezoning either the property on which it is based or neighboring properties to commercial or industrial zoning districts.

To ensure that home businesses have negligible impact on neighboring properties, permits may be required and limitations placed on the number of employees, the amount of floor area used for the business, the amount of business traffic, the hours

of operation, and such other restrictions as may be necessary.

## Zoning Plan

The Leelanau Township Zoning Ordinance, first adopted in 1976, is a regulatory tool that guides land use and development within Leelanau Township. The Zoning Ordinance has established a total of thirteen Zoning Districts. As required by Public Act 33 of 2008, the following is an explanation of the relationship between the future land use categories presented above and the zoning districts established in the Zoning Ordinance.

## Future Land Use Categories

As described in the foregoing, this Master Plan has established nine future land use categories. Agricultural, Residential Conservation and Island Conservation comprise a group of future land use categories intended to preserve those resources of the Township that contribute to its attractiveness and economic well-being.

Provision is made for residential uses through the Low, Medium and High Density Residential categories. The Plan has also established two mixed use categories that would allow residential uses in combination with non-residential uses, the Commercial Resort and Historic Maritime Village.

Finally, the plan has established an Industrial category.

## Zoning Districts

Based on the Master Plan, the Leelanau Township Zoning Ordinance has established one zoning district that is primarily designed to allow agricultural use, but which would also allow low-density residential use. The Agricultural future land use

category is accomplished through the existing Agricultural Zoning District.

The Zoning Ordinance contains two conservation-based zoning districts that seek to protect important environmental features while allowing low-density residential uses. The RC Residential Conservation District and Island Conservation District correspond to those identically named future land use categories.

The Leelanau Township Zoning Ordinance has established six zoning districts that are designed to accommodate residential uses as follows:

- R1 Low Density District
- R2 Medium Density District
- R3A High Density District
- R3M High Density District
- R3S High Density District
- R4 District

These existing zoning districts meet the Master Plan requirements for low, medium and high density residential uses.

The Commercial Resort future land use category, as outlined in the Master Plan, is intended to be accomplished in the Zoning Ordinance through the Commercial Resort District. The Historic Maritime Village mixed-use category may be accomplished in the Zoning Ordinance through an assortment of residential and commercial districts, or potentially through a new Historic Maritime Village District.

The intended uses prescribed in the Industrial future land use category would be effectively accomplished in the Zoning Ordinance through the Industrial District.

## Implementation

Leelanau Township has an outstanding history in implementing land use planning and zoning procedures. The recognition of Leelanau Township as a leader in land use matters in Leelanau County has been attributable to the backing of the Leelanau Township Board, to the responsible actions of the Township Planning Commission, the Zoning Board of Appeals, a number of supportive residents and landowners, as well as the cooperation of regional entities such as the Leelanau County Planning & Community Development Department.

The following outlines the essential roles of each of these groups in implementing this Master Land Use Plan.

### Leelanau Township Board

- Appoint qualified persons from various areas of the Township to serve as members of the Planning Commission and Zoning Board of Appeals.
- Provide funding for the training programs described above or for other appropriate training.
- Endorse the Master Plan by passing a resolution of support.
- Adopt new or modified ordinances as required to accomplish the goals and objectives of the Master Plan.
- Plan for and secure funding for capital improvements that will further the health, safety and welfare of the citizenry of the Township and environs.

- Actively enforce the zoning ordinance and related Township ordinances.

### Township Planning Commission

- Propose new or modified ordinances as required to accomplish the goals and objectives of the Master Plan.
- Advise the Township Board on proposed rezonings, text amendments, and related planning and zoning matters.
- At least once every five years, review the Master Plan and recommend necessary revisions and changes for adoption.
- In accordance with the Michigan Planning Enabling Act, prepare a capital improvement program that, in the judgment of the Commission, will serve to implement the Plan.
- Participate in training sessions that include the fundamentals of planning and zoning, present guidelines for meeting procedures and record keeping, discuss conflicts of interest, and emphasize objectivity in decision making.
- Educate Township citizens on the fundamentals and benefits of planning.
- Establish a lending library of land use information.

### Township Zoning Board of Appeals

- Act on requests for variances from prescribed standards and requests for interpretation of ordinance language or administrative decisions in keeping with the intent of the Master Plan.

- Attend training sessions specifically designed for Zoning Board of Appeals members.

## Township Zoning Administrator

- Administer the ordinance in a uniform, consistent, and reasonable manner.
- Review and investigate permit applications to ensure compliance with all provisions of the zoning ordinance, and issue appropriate permits when those provisions have been met.
- If proposed use is not in compliance with the ordinance, assist applicant with an appropriate alternative procedure or appeal procedure.
- Perform inspections to ensure proposed land use changes are and will remain in compliance with the ordinance.
- Investigate alleged violations and consistently enforce corrective measures.
- Propose solutions to any problem encountered in administering the ordinance.
- Help develop and conduct, in conjunction with the Planning Commission, a continuing program of public education on zoning matters.
- Conduct site plan reviews, prepare staff reports in relation to zoning procedure applications.

## The Private Sector

Individuals, businesses, conservancy groups, and others can implement many aspects of the Plan that cannot be achieved by ordinances and regulations alone. Conservation easements, homeowner association regulations, enforceable deed restrictions and other tools can be employed by those separate from government to preserve and protect scenic views, farmland, open spaces, and environmentally important lands.

Township citizens can and should present proposals for implementing or improving the Master Plan to the Planning Commission. Citizens should also review and present input on proposals made by the Planning Commission to implement or improve the Master Plan.

[This page intentionally left blank]

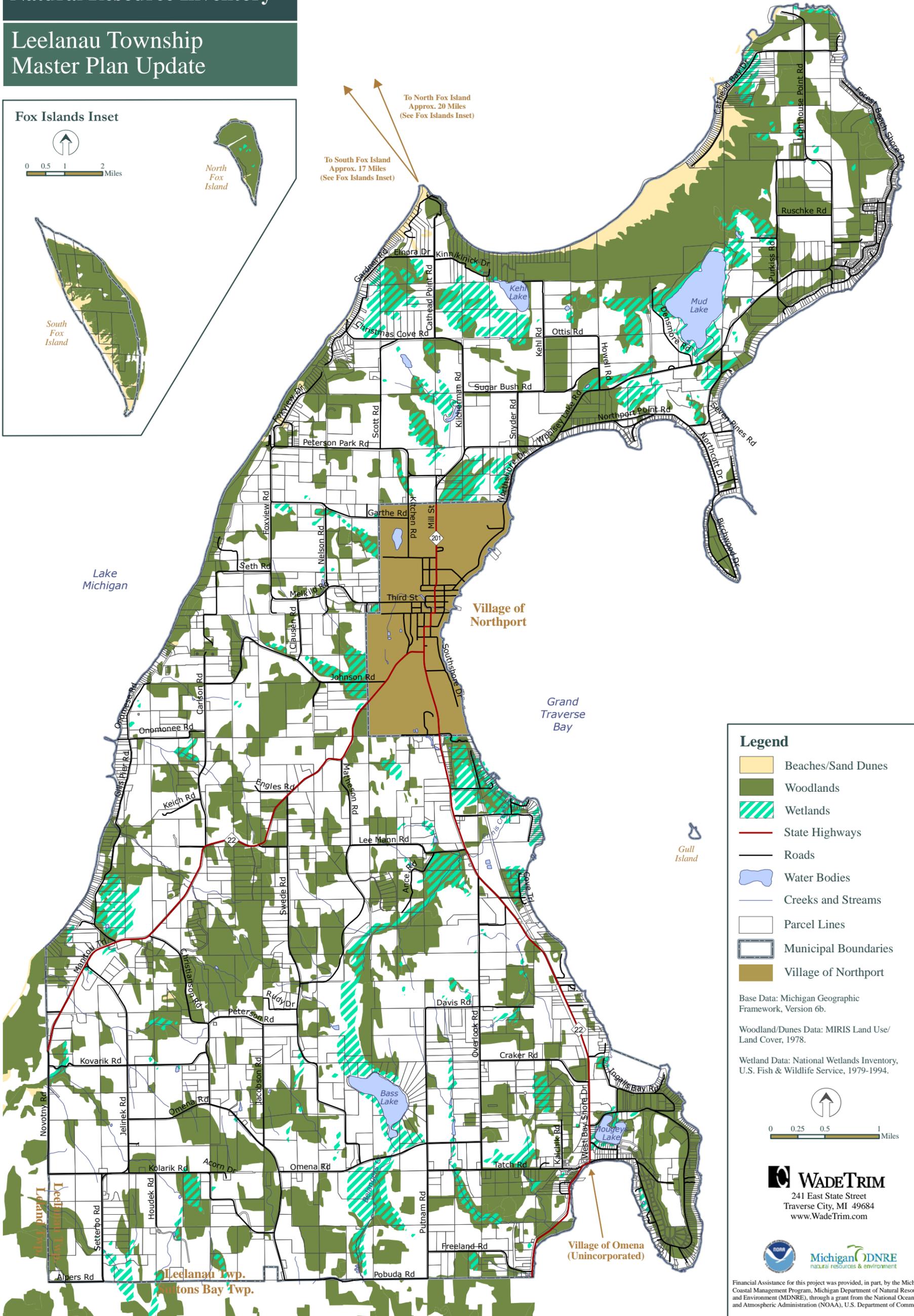


## Appendix: Mapping

- 1. Natural Resource Inventory**
- 2. Maritime Structures and Community Facilities**
- 3. Existing Land Use**
- 4. Future Land Use**

# Natural Resource Inventory

## Leelanau Township Master Plan Update



**Legend**

- Beaches/Sand Dunes
- Woodlands
- Wetlands
- State Highways
- Roads
- Water Bodies
- Creeks and Streams
- Parcel Lines
- Municipal Boundaries
- Village of Northport

Base Data: Michigan Geographic Framework, Version 6b.

Woodland/Dunes Data: MIRIS Land Use/Land Cover, 1978.

Wetland Data: National Wetlands Inventory, U.S. Fish & Wildlife Service, 1979-1994.

0 0.25 0.5 1 Miles

**WADETRIM**  
241 East State Street  
Traverse City, MI 49684  
www.WadeTrim.com

**Michigan DNR**  
natural resources & environment

Financial Assistance for this project was provided, in part, by the Michigan Coastal Management Program, Michigan Department of Natural Resources and Environment (MDNRE), through a grant from the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.

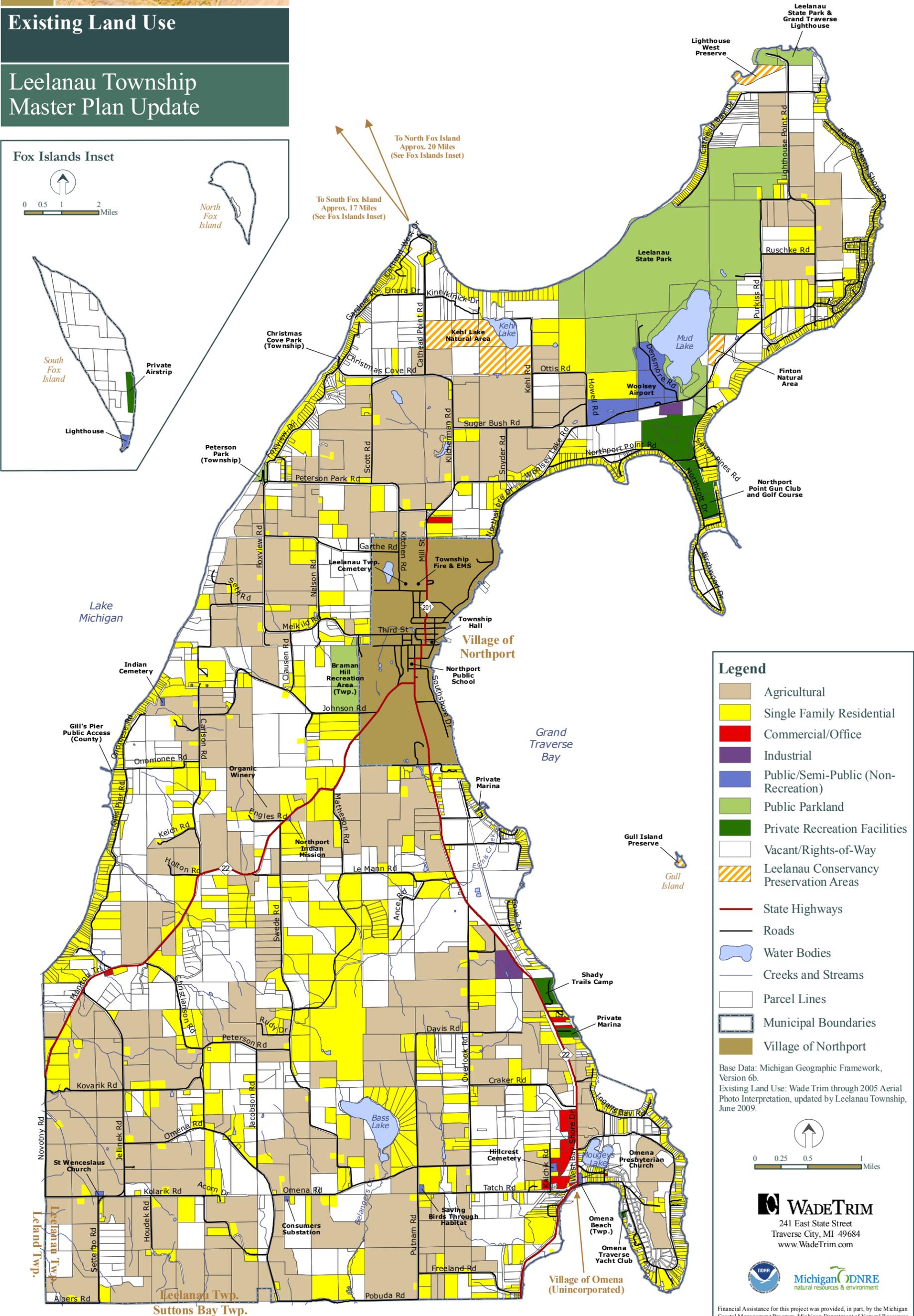
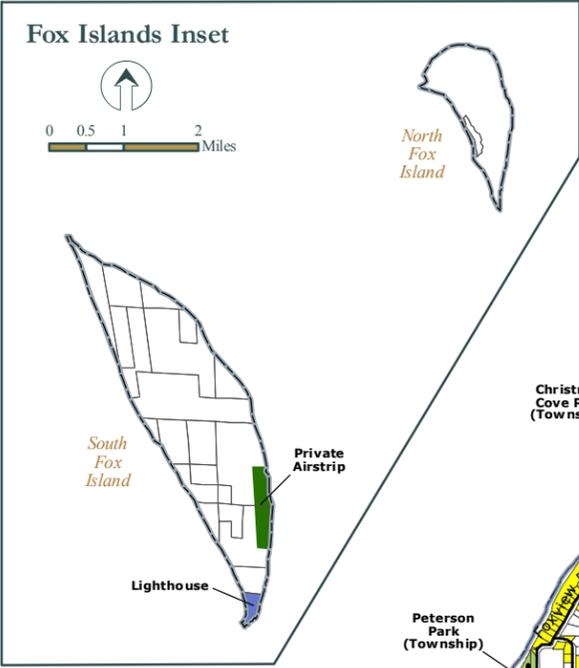
\\Tydata\Projects\LLN6103\01\GIS-Data\Projects\1 Natural Resource Inventory.mxd





# Existing Land Use

## Leelanau Township Master Plan Update



**Legend**

- Agricultural
- Single Family Residential
- Commercial/Office
- Industrial
- Public/Semi-Public (Non-Recreation)
- Public Parkland
- Private Recreation Facilities
- Vacant/Rights-of-Way
- Leelanau Conservancy Preservation Areas
- State Highways
- Roads
- Water Bodies
- Creeks and Streams
- Parcel Lines
- Municipal Boundaries
- Village of Northport

Base Data: Michigan Geographic Framework, Version 6b.  
Existing Land Use: Wade Trim through 2005 Aerial Photo Interpretation, updated by Leelanau Township, June 2009.

0 0.25 0.5 1 Miles

**WADETRIM**  
241 East State Street  
Traverse City, MI 49684  
www.WadeTrim.com

**Michigan DNR**  
natural resources & environment

Financial Assistance for this project was provided, in part, by the Michigan Coastal Management Program, Michigan Department of Natural Resources and Environment (MDNRE), through a grant from the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.

\\Ydata\Projects\LLN610301\GIS-Data\Project3 Existing Land Use.mxd

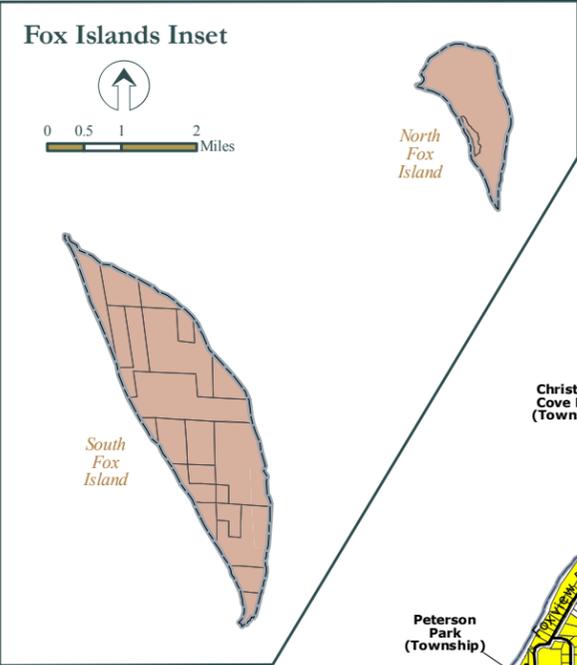


# Future Land Use

## Leelanau Township Master Plan Update

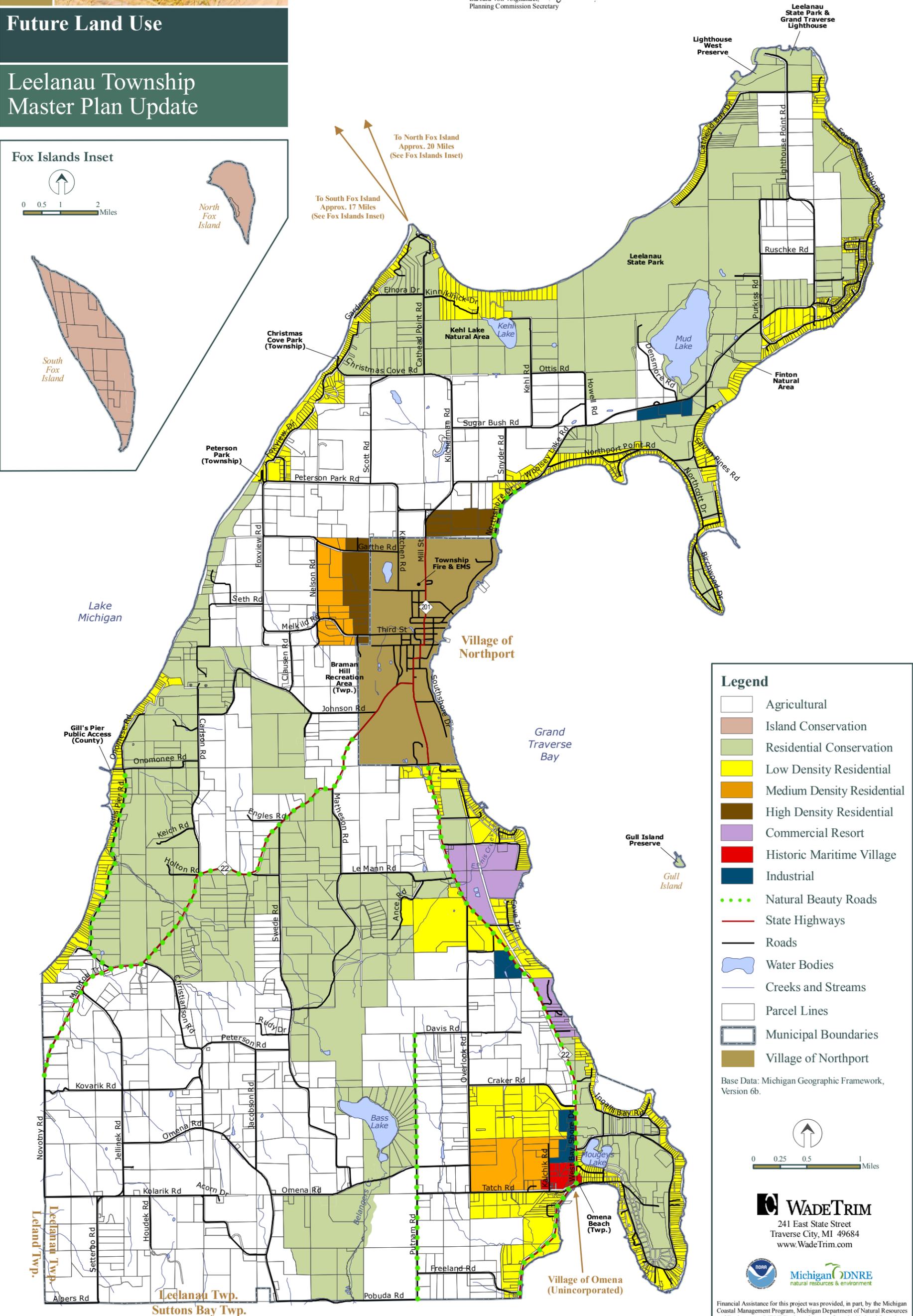
This is to certify that this is the official Future Land Use Map of Leelanau Township, Adopted by the Leelanau Township Planning Commission on August 26, 2010.

*Barbara Von Voigtlander*  
Barbara Von Voigtlander,  
Planning Commission Secretary



To North Fox Island  
Approx. 20 Miles  
(See Fox Islands Inset)

To South Fox Island  
Approx. 17 Miles  
(See Fox Islands Inset)



**Legend**

- Agricultural
- Island Conservation
- Residential Conservation
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial Resort
- Historic Maritime Village
- Industrial
- Natural Beauty Roads
- State Highways
- Roads
- Water Bodies
- Creeks and Streams
- Parcel Lines
- Municipal Boundaries
- Village of Northport

Base Data: Michigan Geographic Framework, Version 6b.



**WADETRIM**  
241 East State Street  
Traverse City, MI 49684  
www.WadeTrim.com



Financial Assistance for this project was provided, in part, by the Michigan Coastal Management Program, Michigan Department of Natural Resources and Environment (MDNRE), through a grant from the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.



## Leelanau Township

P.O. Box 338  
119 E. Nagonaba Street  
Northport, MI 49670



241 East State Street  
Traverse City, MI 49684  
[www.WadeTrim.com](http://www.WadeTrim.com)

Financial Assistance for this project was provided, in part, by the Michigan Coastal Management Program, Michigan Department of Natural Resources & Environment (MDNRE), through a grant from the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce.

