

Village of Mackinaw City Master Plan – Approved August 25, 2011

Cheboygan and Emmet Counties
Michigan



Planning Commission

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Chapter 1 Location and History

Location

The Village of Mackinaw City is at the extreme tip of Michigan's Lower Peninsula. The Village encompasses 3.2 square miles, and the land area is divided between two geographic townships. The eastern portion is 0.6 square miles in size and consists of Sections 7 and 18 of T39N-R3W (Mackinaw Township in Cheboygan County). The western portion is 2.6 square miles in size and is made up of Sections 11, 12, 13 and 14 of T39N-R4W (Wawatam Township in Emmet County).

The northern and eastern Village boundaries extend to an imaginary line half the width of the Straits of Mackinac, where Lake Michigan and Lake Huron meet. Wilderness Park Drive is the Village's western boundary. Trail's End Road generally defines the southern Village limits, with the exception of two annexed areas which are south of that line. Figure 1-1 illustrates the location of Mackinaw City in relation to the State of Michigan, and Figure 1-2 shows a base map of the Village.

History

The Village of Mackinaw City is a resort community whose rich historical past enlivens the present. The business of Mackinaw City is tourism. And some of the foremost tourist attractions in the Mackinaw City area are historical.

Founded by the French in 1714 and called Fort Michilimackinac, a Native American word for "Land of the Great Turtle", the area served as a center for developing trade with the Ottawa, Chippewa, Sauk, Fox, Menominee and Huron Tribes. In the late 1600s, Frenchmen arrived in the Straits area. The first white man settled on what would become Mackinaw City in 1714. The site of Fort Michilimackinac was established as a mission and small fur-trading compound by the French at this time. For most of the 17th century, Mackinaw was a military trading post.

At the end of the French and Indian War in 1761, the British took control of Fort Michilimackinac. Native Tribes resented the strict British regulations and behaviors and plotted to capture the fort. In 1763 a tribe of Ojibways played a game of lacrosse in front of the fort and surprised the British when the ball went over the wall. The Indians rushed into the fort to retrieve the ball, killed many of the British troops and claimed the fort. However, the British reclaimed the fort the following year.

The British abandoned and burned the fort and Village in 1781 and relocated on Mackinac Island. Two years later under the Treaty of Paris, Michilimackinac, part of the Northwest Territory, became part of the United States. However, it wasn't until 1796 that American troops occupied the Straits of Mackinac.

Modern Mackinaw City dates from the mid-1800s, when Edgar Conkling purchased the land in 1854 and platted the Village in 1857. The first permanent white settlers, George Stimpson and his family, arrived in Mackinaw City in 1870. A public school system commenced in 1871, followed shortly thereafter by organized church services. Lumbering was important to the development of the Mackinaw City area, with the first large lumber operation beginning in 1878. Lumbering came to an end in the region when a large forest fire burned most of the remaining forest land in 1919.

Figure 1-1 Location Map, Mackinaw City

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750 Pavilion Way
Lansing, MI 48206-3737
122 West Main Street, Suite 202
Detroit, MI 48226-3203
888 North Zeeb Road, Suite 210
Westland, MI 48186-3100
4771 Telegraph Road
Livonia, MI 48150-3300
c2ae |
www.c2ae.com

VILLAGE LOCATION

VILLAGE OF MACKINAW CITY
CHEBOYGAN COUNTY, EMMET COUNTY, MICHIGAN

SCALE: AS SHOWN
PROJ. #: 100036
DATE: 2/7/2011
SHEET
1

Figure 1-2 Ownership Base Map, Mackinaw City

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VILLAGE PARCEL MAP

VILLAGE OF MACKINAW CITY

CHEBOYGAN COUNTY, EMMET COUNTY, MICHIGAN

SCALE: AS SHOWN
PROJ #: 100006
DATE: 2/7/2011
SHEET
1

McGulpin Point Light, located at the extreme northwest corner of the Village, was completed in 1869. Because this light could not be seen from all points in the Straits, Old Mackinac Point Light was constructed in 1892. This beacon was visible for 16 miles. When the Mackinac Bridge opened in 1957, the bridge lights guided mariners, making the old lighthouse obsolete. Charles T. Dagwell established a weather reporting station in 1893 and later established the Marine Reporting Service. The station furnished reports (vessel name, direction of passage and weather conditions) of vessel passages through the Straits of Mackinac to newspapers and vessel agents. The station remained in operation for 62 years, closing in 1960. The Marine Station and the railroad helped establish the Western Union business in the area.

The New York Central and Pennsylvania Railroads arrived in the early 1880s, transported across the Straits of Mackinac first by barge and later by ferry. The ship, *Algolah*, was built with a pointed bow which flattened near the water line and enabled her to ride on the ice and break it up with her weight. This ship is the first known ice breaker of its kind. The railroads brought in new families, and new stores and businesses opened up. The ferry boats also boosted the area's economy. Mackinaw City was incorporated as a village in 1882. Two disastrous fires, one in 1900 and the other in 1916, destroyed many businesses in Mackinaw City.

The Fort Michilimackinac site became a State Park in 1902, but until automobile travel developed and good roads were established, the site was little more than a campground of minimum significance and had relatively small tourism impact. In 1913, state trunk lines were mapped out by the newly created Michigan Highway Department. Two of these roads, one from the east side of the state, East Michigan Pike (US 23), and one from the west side of the state (West Michigan Pike) terminated at Mackinaw City where a monument was erected. Dixie Highway (US 27), running through the center of the state and tying into the East Michigan Pike at Cheboygan, was also part of the early state highway system.

Auto travel was given a boost in 1923 with the creation of the Michigan Department of Transportation ferry service across the Straits. The State built a ferry dock in Mackinaw City at that time and later expanded and improved it several times.

With the opening of the Mackinac Bridge in 1957, the State Ferry System closed, tourism greatly increased, and restoration of Fort Michilimackinac State Park began. Around the same time, the Old Mackinac Point Lighthouse ceased operation after 65 years of service, and was converted into a marine museum.

While the area primarily served as a fur trading and lumbering center in its early days, its recreation potential was quickly realized. Tourism has grown steadily over the past several decades with significant increase in the number of motel rooms, gift shops and restaurants.

Besides the restoration of historic Fort Michilimackinac, the Village is surrounded with countless recreational opportunities: miles of broad, clean, sand beaches; fishing; boating; camping; hike and bike trails, hunting; sailing; swimming; skiing; and touring the unsurpassed scenery of the area. A visit to Mackinaw City is often included when visitors tour Mackinac Island and nearby Old Mill Creek, both of which are Michigan State Historic Parks. Finally, Mackinaw City serves as a gateway to the many scenic wonders of Michigan's Upper Peninsula, via the mighty, majestic Mackinac Bridge. Said to be the world's most beautiful bridge, the "Big Mac" is approximately five miles long.

Important Historic Sites

Fort Michilimackinac

This site was established around 1714 by French-Canadians as a mission and small fur-trading compound. British forces occupied Michilimackinac in 1761 after the French and Indian War ended. By 1765 many fur-trading activities were moved outside the fort which created a new village around the fort. The new settlement contained over 100 houses by the late 1770s. This site is currently located within the Michilimackinac State Park and is listed on both the State and National Registers of Historic Places.

Mackinac Bridge

This five mile long bridge connects the Upper and Lower peninsulas of Michigan. It is one of the longest suspension bridges in the world. Depending on the method of measurement, some say it is the longest bridge of its type. The Mackinac Bridge Authority, established in 1950, retained David B. Steinman to design the Mackinac Bridge. This four-lane bridge cost nearly \$100 million and was built over a four-year time span. It opened to traffic in November of 1957. There is over 150 feet of clearance at the center of the bridge to allow for safe passage of all the ships that sail the Great Lakes.

Old Mackinac Point Light

In 1890 a fog signal was built at Mackinaw Point and in October of 1892 the present lighthouse was completed. The light was visible for 16 miles. This was valuable to car ferries shuttling between Mackinaw City and St. Ignace. When the Mackinac Bridge opened in 1957, the bridge lights guided the water traffic and made the lighthouse obsolete. The Mackinac Island State Park Commission acquired the property in 1960. Still existing is the round light tower which is 13' 4" feet in diameter and 45 feet in height and the attached two-story rectangular brick keeper's dwelling. It is listed on both the State and National Registers. The Mackinac Island State Park Commission renovated the lighthouse and Park grounds. The facility is now a premier attraction drawing over 50,000 visitors per season.

McGulpin Point Light

In 1854, Congress approved money "for a lighthouse and fog bell at the south point of the harbor of Michilimackinac". Nothing was done until 1866 when Congress approved more money to build a new lighthouse. It was completed in 1869 and is still intact at the present time. The station was taken out of service in 1906. It was a private residence for many decades until purchased by Emmet County in 2008. The facility has been renovated and is open to the public drawing over 25,000 visitors per year.

Railroad Depot

The first railroad came to Mackinaw City in 1881 when construction of the Michigan Central Railroad line was completed providing service from Detroit, Jackson, Owosso and Saginaw. The line was later absorbed by the New York Central system. In 1882, the Grand Rapids and Indiana became the second railroad into Mackinaw City, transporting passengers and freight from Fort Wayne, Indiana through Grand Rapids, Traverse City and Petoskey. The line later became part of the Pennsylvania Railroad system. The railroad depot built to service these lines is still in existence and has been preserved in conjunction with the "Crossings" development. Michigan State Historic Preservation Office (SHPO) has identified the railroad depot as potentially eligible for the National Register of Historic Places.

Residential Sites

In the late 1970s, SHPO conducted a survey for potential historic sites in Mackinaw City. The following residential sites were identified as "properties appearing to have historical significance". SHPO staff indicated that the survey data is incomplete and has not been updated to consider the current condition of these building.

516 N. Huron	212 E. Etherington	181 E. Jamet
308 E. Sinclair	301 E. Etherington	212 E. Jamet
208 Langlade	316 E. Etherington	316 E. Jamet
211 Langlade	317 E. Etherington	317 E. Jamet
SE corner of Henry & Jamet		

Archaeological Sites

According to SHPO, four archaeological sites have been recorded for Mackinaw City. However, all areas of the Village near the fort and adjacent shoreline should be considered highly sensitive for archaeological resources.

Chapter 2 Social and Economic Characteristics

Year-Round Population

The Village of Mackinaw City's year-round population has changed little over the past several decades. U.S. Census figures for 2010 indicate a population of 806 persons (364 male - 442 female), broken down to include 319 in the Mackinaw Township sector and 540 in the Wawatam Township sector. Table 2-1 below demonstrates population trends from 1970 to 2010. Over that period, the year-round population has remained relatively steady.

Table 2-1 Population Trends Village of Mackinaw City, 1960 –2010

1970	% Change	1980	% Change	1990	% Change	2000	% Change	2010	% Change
810	N/A	820	+1.2%	875	+6.7%	859	-1.8%	806	-6.2%

Source: U.S. Bureau of the Census

Seasonal Population

For most communities, a discussion of the year-round population would be sufficient when planning for community needs. The Village of Mackinaw City, however, is different from most communities in that respect. Because of the nature of the Village's major industry, tourism, and because of the attractiveness of the natural surroundings, the community experiences a large influx of visitors during the summer months.

Without an actual census count, it is difficult to calculate persons residing or lodging in the Village per night between June and September. The population during the “shoulder” months of May and October has notably increased over the past 10 years. Modest estimates suggest anywhere from 7,000 to 10,000 persons. Some factors to consider when trying to determine the seasonal population are: vacation homes, available motel rooms, Mackinac Bridge crossings, local State Park attendance, and ferry service to Mackinac Island.

For some visitors, the Straits area provides the perfect setting for a seasonal or vacation home. At the time of the 2000 Census, 230 or 28.3% housing units were listed as seasonal, recreational or occasional use dwellings. Visitors in this category may stay for as long as the entire summer, while others may only stay for a few weeks.

The Village of Mackinaw City experienced a boom in the motel industry during the 1990s. The Mackinaw Area Tourist Bureau was organized in 1981 to promote and advertise the Mackinaw City area to potential tourists. The Bureau is partially funded by the local motel industry. Each lodging facility within a four mile radius of the Village is assessed a fee of two percent on room charges. The Bureau's revenues derived from hotels and motels have risen steadily since 1981. Much of this increase can be attributed to the increase in the number of rooms, currently at approximately 2,800 rooms. In addition to lodging facilities, there are five campgrounds in or within close proximity to the Village, providing more than 1,000 campsites.

Another indicator when estimating the number of summer visitors is the analysis of traffic over the Mackinac Bridge. Just to use one example, in 1983, the Mackinac Bridge Authority recorded 1,671,180 in automobile traffic. The number of visitors per day in the Village during the summer months and select holidays can exceed 50,000 persons per day. The Bridge Authority recorded 3,948,079 trips in 2010. The significance of these numbers is the amount of

tourism business which the Village realizes. Bridge traffic helps local motels, restaurants, gift shops and gas stations.

Another determinant in estimating the summer population is to review attendance figures from the Mackinac Island State Park Commission's major attractions, Fort Michilimackinac, Fort Mackinac, Mill Creek, and Old Mackinac Point Lighthouse. Total attendance over the past several years has remained steady at around 400,000 visitors per season. These attractions play an important role in the attraction of visitors to the region.

Finally, it is important to look at the number of tourists who use the ferry service to visit Mackinac Island. Mackinaw City is happy to serve as one of the spring boards to the Island. Combined, the three Island ferry boat services handle more than 850,000 passengers per year. Approximately 55 to 60 percent of the passengers travel from the Mackinaw City docks. While all of these factors still cannot accurately calculate the Village's exact seasonal population, it is important to remember that the figure increases many times over the year-round population. Mackinaw City must consider this special population, in addition to year-round population, during the process of planning for the community.

Age Distribution and Racial Make-Up

Information on age distribution within a population can assist the community in matching public services to community characteristics and in determining what, if any, special needs specific resident groups might have.

Age distribution of the Village of Mackinaw City's year-round residents is presented in table form below, with comparisons being made to Wawatam and Mackinaw Townships, Emmet and Cheboygan Counties, and the State as a whole. As Table 2-2 demonstrates, residents of Mackinaw City, the two Townships and two Counties are older than the State and are part of a regional trend toward "the graying of the North" caused by an influx of retired persons.

At the time of the 2010 Census, median age for residents of the Village of Mackinaw City was 49.5. This median age is similar to Wawatam Township as a whole at 49.3, but Mackinaw Township was somewhat higher at 52.8. Emmet County's median age was somewhat younger at 43.1 years, but Cheboygan County was similar to Mackinaw City with a median age of 47.1 years. The median age of the State is younger than all these at 35.5 years.

Table 2-2 Age Distribution Village of Mackinaw City, Townships, Counties, State - 2010

Age Range	Mackinaw City	%	Wawatam Twp.	%	Mackinaw Twp.	%	Emmet County	%	Cheboygan County	%	State %
Under 5	34	4.2	32	4.8	17	3.2	1705	5.2	1229	5.0	6.0
5-19	117	14.5	111	16.8	64	11.9	6446	19.7	4640	17.7	20.6
20-24	15	1.8	13	2.0	11	2.0	1680	5.1	1082	4.1	6.7
25-44	190	23.6	134	20.3	122	22.6	7296	22.3	5378	20.6	24.5
45-54	110	13.6	98	14.8	72	13.4	5180	15.8	4012	15.3	15.1
55-59	74	9.2	57	8.6	50	9.3	2685	8.2	2147	8.2	6.8
60-64	66	8.9	52	7.9	56	10.4	2265	6.9	2043	7.8	5.7
65 +	200	24.8	164	24.8	147	27.3	5437	16.6	5621	21.5	13.6
TOTAL	806	100	661	100	539	100	32694	100	26152	100	100

Social and Economic Characteristics

Age Range	Mackinaw City	%	Wawatam Twp.	%	Mackinaw Twp.	%	Emmet County	%	Cheboygan County	%	State	%
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Note: Due to rounding, percent totals may not equal 100%

Source: American Fact Finder, U.S. Bureau of the Census

Mackinaw City's year-round population is relatively homogeneous. Of the 806 residents in 2010, 708 were white. Native Americans are an important resident minority group numbering 35 persons or 4.3 percent of the Village population. The Native American percentage is slightly higher than Cheboygan County, and slightly lower than Emmet County as a whole.

Households and Disability Status

U.S. Census data for 2010 shows a total of 413 households in the Village of Mackinaw City, of which 206 are family households, and 207 are non-family households (one person living alone or two or more unrelated persons who share living arrangements). Thirty of the family households are headed by females with no husband present. There are no persons in the Village of Mackinaw City that live in group quarters. There are 1.95 persons per household in the Village compared with 2.14 persons per household in 2000. The 2010 numbers are lower than those of Emmet and Cheboygan Counties and the State; 2.31 persons per household in Cheboygan County and 2.37 in Emmet County and 2.49 persons for the State.

Income, Education and Employment

Income statistics from the 2009 American Community Survey, which has taken the place of the decennial for much of the detailed social economic and housing data concerning communities, reflect the average of data gathered in 2005 through 2009. Generally speaking, household income levels for the Northeast Michigan Region were below those found in the State as a whole, but per capita income was higher, which reflects the larger number of non-family households. Table 2-3 compares income statistics for the Village of Mackinaw City, Mackinaw and Wawatam Townships, Cheboygan and Emmet Counties, and State of Michigan.

Education is one important factor in analyzing the capabilities of the local work force. Educational attainment is tracked by the U.S. Census Bureau. Statistics from the 2005-2009 American Community Survey indicate that a higher number of residents of the Village of Mackinaw, Mackinaw Township and Wawatam Township hold bachelor's degrees or higher as compared to Cheboygan County, Emmet County, or the State of Michigan. This is shown in Table 2-4.

Table 2-3 Household (HH) and Per Capita (PC) Income Village, Townships, Counties, and State – 2009

Age Range	Mackinaw City	Wawatam Twp.	Mackinaw Twp.	Emmet County	Cheboygan County	State
Median House-hold Income	\$37,105	\$34,167	\$41,167	\$48,773	\$38,189	\$48,700
Per Capita Income	\$24,942	\$25,331	\$26,707	\$28,047	\$22,540	\$25,172

Source: American Fact Finder, U.S. Bureau of the Census

Table 2-4 Educational Attainment Mackinaw/Wawatam Townships, Cheboygan/Emmet Counties, State - 2009

	High School Graduate or Higher	Bachelor's Degree or Higher
Mackinaw City	87.9%	31.6%
Mackinaw Township	91.0%	32.1%
Wawatam Township	90.3%	31.0%
Cheboygan County	86.7%	17.9%
Emmet County	92.3%	28.5%
State of MI	87.4%	24.5%

Source: American Fact Finder, U.S. Bureau of the Census

The Michigan Employment Security Commission (MESC) publishes monthly and annual employment data. The unemployment rate for Cheboygan and Emmet Counties has traditionally been somewhat higher than that of the State. Table 2-4 compares the unemployment rates for Cheboygan and Emmet Counties, and the State for the past thirteen years.

Table 2-5 Unemployment Rate Comparisons Townships, Counties, State -- 1997-2009

	Cheboygan County	Emmet County	State of Michigan
1997	10.0	7.7	4.3
1998	9.8	7.0	4.0
1999	9.5	6.3	3.8
2000	8.1	5.5	3.7
2001	9.4	6.1	5.2
2002	10.3	7.1	6.2
2003	10.1	7.7	7.1
2004	9.5	8.0	7.1
2005	9.0	7.8	6.8
2006	9.7	8.4	6.9
2007	10.0	8.8	7.1
2008	11.2	9.8	8.3
2009	14.0	14.3	13.6

As can be noted on Table 2-5, unemployment in Northern Michigan has been a severe problem. It is also important to remember that the unemployment rates are higher during the winter months and lower during the summer months, reflecting the nature of tourism's seasonal work. Because of the area's tourism character, the majority of employment is in service producing industries rather than in goods producing industries.

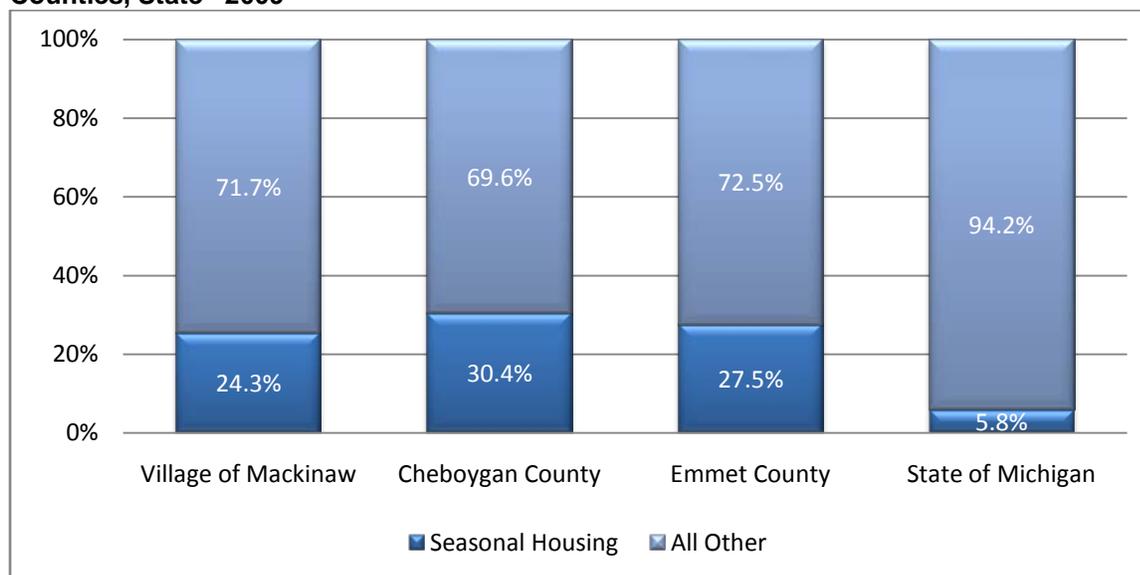
Housing Stock and Property Values

It should be noted that discussion on housing stock in this section is derived from Census Bureau information. Thorough field work conducted as part of the Existing Land Use section

(Chapter 5) included a housing inventory and is detailed in that chapter. Therefore, 2005-2009 American Community Survey data may not be the same as 2010 field work information. Data from the ACS shows a total of 586 housing units in the Village of Mackinaw City: 501 single-family units, 70 multiple-family units, and 15 mobile homes. The Census Bureau's measure of possible overcrowding is more than 1.01 persons per room. None of the Village housing units fall into the overcrowding category.

As mentioned in the discussion on population, housing characteristics for the Village of Mackinaw City suggest an increased summer population. The lure of waterfront living, along with the abundant recreation opportunities, has attracted people to the area, many of whom reside in the Village only during the summer months. The Village's percentage of seasonal housing is similar to that of Cheboygan and Emmet Counties, but significantly greater than the State. Figure 2-1 compares the Village of Mackinaw City, Cheboygan County, Emmet County, and the State, contrasting the total housing units with those designated as seasonal units.

Figure 2-1 Seasonal Housing Characteristics Village of Mackinaw City, Cheboygan and Emmet Counties, State –2009



Source: American Fact Finder, U.S. Bureau of the Census

Renter-occupied housing makes up 40.9 percent of the total housing units in Mackinaw City. In 2005-2009, median monthly in the Village was \$442 per dwelling unit. This compares with \$579 in Cheboygan County, \$709 in Emmet County and \$709 in the State as a whole. Comments received from the business community indicate that there is a shortage of rental units for the large influx of summer employees.

One comparative measure of the local housing stock is housing value. During the period 2005-2009 the median value of owner-occupied year-round housing units in the Village was \$157,400 compared with the median housing value for the State as a whole at \$147,500.

Other characteristics of property value can be obtained by analysis of State Equalized Value (SEV) figures. By law, the SEV, which constitutes a community's tax base, is equal to approximately one-half of the true market value of real property and certain taxable personal properties. SEV information obtained from Equalization Departments in Cheboygan and Emmet Counties include Village SEV figures (by property class) with the adjacent townships.

Social and Economic Characteristics

Tables 2-6 and 2-7 illustrate SEV by property class for Mackinaw and Wawatam Townships for the past four years. The tables show a very obvious pattern of commercial development for the Mackinaw Township portion (east) of the Village, while residential development is prevalent in the Wawatam Township (west) sector. It is also important to note how much of the Townships combined SEV is made up of property within the Village limits. Data from the past four years shows that Village SEV amounts to roughly two-thirds of the total SEV for the two townships combined. Those comparisons are demonstrated in Table 2-8.

Table 2-6 Mackinaw Township State Equalized Valuation by Property Class

Property Class	2006 SEV	%	2007 SEV	%	2008 SEV	%	2009 SEV	%	2010 SEV	%
Real Property:										
Agriculture	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Commercial	90,931,900	65.5	90,963,200	65.5	90,293,648	63.3	82,434,200	63.5	71,493,500	62.0
Industrial	24,800	0.0	25,800	0.0	25,800	0.0	25,100	0.0	25,100	0.0
Residential	43,834,650	31.6	43,747,500	31.5	48,223,150	33.8	43,437,400	32.7	39,277,200	34.1
Timber Cutover	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Developmental	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Real	134,791,350	97.1	134,736,500	97.0	138,542,598	97.2	124,896,700	96.2	110,795,800	96.1
Personal	3,965,600	2.9	4,212,850	3.0	4,017,200	2.8	4,905,950	3.8	4,500,450	3.9
TOTAL SEV	138,756,950	100.0	138,949,350	100.0	142,559,798	100.0	129,802,650	100.0	115,296,250	100.0

Source: Cheboygan County Equalization Department

Table 2-7 Wawatam Township State Equalized Valuation by Property Class

Property Class	2006 SEV	%	2007 SEV	%	2008 SEV	%	2009 SEV	%	2010 SEV	%
Real Property:										
Agriculture	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Commercial	13,822,500	.3	14,418,900	16.3	14,307,800	16.1	13,806,700	15.6	13,035,100	15.8
Industrial	467,300	0.6	710,908	0.8	545,205	0.6	618,100	0.7	592,200	0.7
Residential	59,924,800	70.7	62,764,450	71.2	65,299,400	73.3	62,692,100	70.6	57,478,850	69.8
Timber Cutover	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Developmental	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Real	74,214,600	87.6	77,894,258	88.3	80,152,405	90.0	77,116,900	86.9	71,106,150	86.4
Personal	10,540,450	12.4	10,316,900	11.7	8,932,137	10.0	11,670,150	13.1	11,226,500	13.6
TOTAL SEV	84,755,050	100.0	88,211,158	100.0	89,084,542	100.0	88,787,050	100.0	82,332,650	100.0

Source: Emmet County Equalization Department

Table 2-8 Total State Equalized Valuation Comparisons Village of Mackinaw City and Combined Township Totals

	2006 SEV	2007 SEV	2008 SEV	2009 SEV	2010 SEV
Village	153,089,137	153,437,461	156,296,626	144,836,877	131,196,350
Townships	223,512,000	227,160,508	231,644,340	218,589,700	197,628,900

Source: Village of Mackinaw City, Cheboygan and Emmet County Equalization Departments

Chapter 3 Natural Resources

An analysis of the Village of Mackinaw City's physical environment can assist government officials in planning for future use. This chapter includes resource discussions of climate, geology, topography, soils, water, wetlands, and wildlife.

Climate

The Village's climatic conditions are similar to those across northern Lower Michigan: cold winters, and moderate warm summers. However, the proximity to Lake Michigan and Lake Huron serves to moderate temperature extremes as compared to inland communities of northern Michigan. Due to the prevailing westerly winds coming across Lake Michigan, the spring is late in coming, and likewise the first fall freeze delayed. The average date when the temperature drops to freezing in the fall is typically several weeks later than areas further inland, with the average first frost in the Village occurring in mid-October. Table 3-1 illustrates some important weather statistics for Emmet and Cheboygan Counties including the Village of Mackinaw City as available from the Natural Resources Conservation Service.

Table 3-1 Average Annual Weather Statistics Cheboygan and Emmet Counties

	Cheboygan*	Emmet
January average minimum temperature	11.3° F	13.6° F
January average maximum temperature	26.7° F	28° F
July average minimum temperature	57° F	57° F
July average maximum temperature	79° F	76.5° F
Days below 0 degrees F	NA	14
Days above 90 degrees F	NA	2
Average annual rainfall	27.99 inches	27.99 inches
Average annual snowfall	77.8 inches	66.3 inches

Source: Cheboygan County Soil Survey, Emmet County Soil Survey

* Data recorded at City of Cheboygan

Geology

The bedrock underlying the Village of Mackinaw City was laid down during the Devonian age of the Paleozoic Era. The bedrock in the Village consists of the Bois Blanc Formation, which is made up of dolomite and cherty limestone deposited in a marine environment. Bedrock outcrops occur at two locations within the Village along Lake Michigan in the northern tip of the Village in Emmet County.

The surface geology of the Village was formed 10,000 to 12,000 years ago by glacial activity. The surface geology for the Village can be separated into two categories, *Lacustrine sand and gravel*, and *Dune sand*. The Lacustrine sand and gravel is described by DNR Geological Survey Division as "pale brown to pale reddish brown, fine to medium sand, commonly including beds or lenses of small gravel, chiefly quartz sand, but the gravel is rich in igneous and metamorphic rocks". It occurs chiefly as former beach and near-offshore deposits of glacial Great Lakes. Dune sand consists of "pale brown, well-sorted, fine to medium sand, chiefly

quartz with some heavy minerals". This type of sand occurs parallel to the present leeward shoreline, along Lake Huron.

Topography

The topography of Mackinaw City is gently rolling. According to the United States Geological Survey (USGS) topographic maps, the datum of low water level is 578.5 feet. The elevations within the Village range from the low lake level to a high point in the southwest portion of the Village at an elevation of between 660 feet and 670 feet. A ridge representing a previous lakeshore extends from the northwest to the southeast in the central area of the Village.

Soils

When planning for types and intensity of future land uses, soil types and slopes are two important factors that determine the carrying capacity of land. Soils most suitable for development purposes are well drained and are not subject to a high water table. Adequate drainage is important to minimizing stormwater impacts and the efficient operation of septic drain fields. Adequate depth to the water table is necessary to prevent groundwater contamination from septic systems or other non-point source runoff. The construction of roads, buildings and septic systems on steeply sloped areas or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

The Natural Resource Conservation Service completed detailed soil surveys of Cheboygan and Emmet Counties. Digital or computerized versions of the soil survey maps were acquired from the Michigan Center for Geographic Information's web site. Using information contained within the published soil survey book, a series of maps will be presented that depict hydric soils, slopes 15 percent and greater and building constraints. While soil constraints discussed in this section can be used as general guides for the planning process, it should not be used for development of specific sites. Detailed, on-site investigations should be conducted prior to development.

Hydric Soils

Figure 3-1 is a color thematic map that classifies hydric soils and soils on steep slopes. Lower density and less intensive development should be directed to these areas with severe building constraints. Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. Hydric soils have poor potential for building site development and sanitary facilities. Wetness and frequent ponding are severe problems that are difficult and costly to overcome. Sites with high water tables may be classified as wetlands and a wetlands permit would be required to develop these areas. An examination of the map shows extensive areas of hydric soils in the eastern portions of the Village. Much of this land classified as hydric soils have not yet been developed. These undeveloped areas provide important wildlife habitat and function as natural stormwater retention areas.

Septic Systems

Figure 3-2 is a septic system limitations map. The map shows limitations due to high water table, depth to bedrock, and poor perc of water; Of particular interest are undeveloped parts of the Village that have severe limitations due to bedrock being close to the surface and high water table. Areas with high water tables often have other development constraints such as

regulated wetlands, organic soils, flooding, and road construction. Potential environmental impacts can be minimized in these areas by constructing engineered mounded septic systems or providing public water and sewer. However, given the multitude of other potential impacts to the environment, it is best to limit development density in areas to hydric soils and high water tables. Areas with the bedrock close to the surface also have severe septic system limitations. While mounded septic systems are one solution, to accommodate higher density development and protect groundwater resources, the best long term solution is to provide public water and sewer.

Water Resources

One of the most valuable natural resources of the Village of Mackinaw City is water. The Village is located within the Great Lakes watershed. The major surface water resources in Mackinaw City are Lake Michigan and Lake Huron. Within the Village there are 2.3 miles of Lake Michigan shoreline, and 1.8 miles of Lake Huron shoreline. There are no inland lakes or rivers within the Village limits, however there are three ponds in the east and central portion of the Village. Lake Michigan and Huron offer outstanding scenic and recreational amenities to Village residents and visitors. It is extremely important that the quality of these surface waters be protected from the negative impacts of development, such as pollution and loss of scenic views to open water.

Both groundwater and surface water are vital resources within the Village of Mackinaw City. Because the entire Village is not currently served by a central distribution system, some residents must rely on individual wells for drinking water. The 'Aquifer Vulnerability to Surface Contamination in Michigan' map, prepared by the Center for Remote Sensing and Department of Geography at Michigan State University, reveals the Village is located in an area where the vulnerability of drinking water aquifers to surface contamination is high, due to highly permeable soils over highly sensitive drift lithology (permeable sands and gravels).

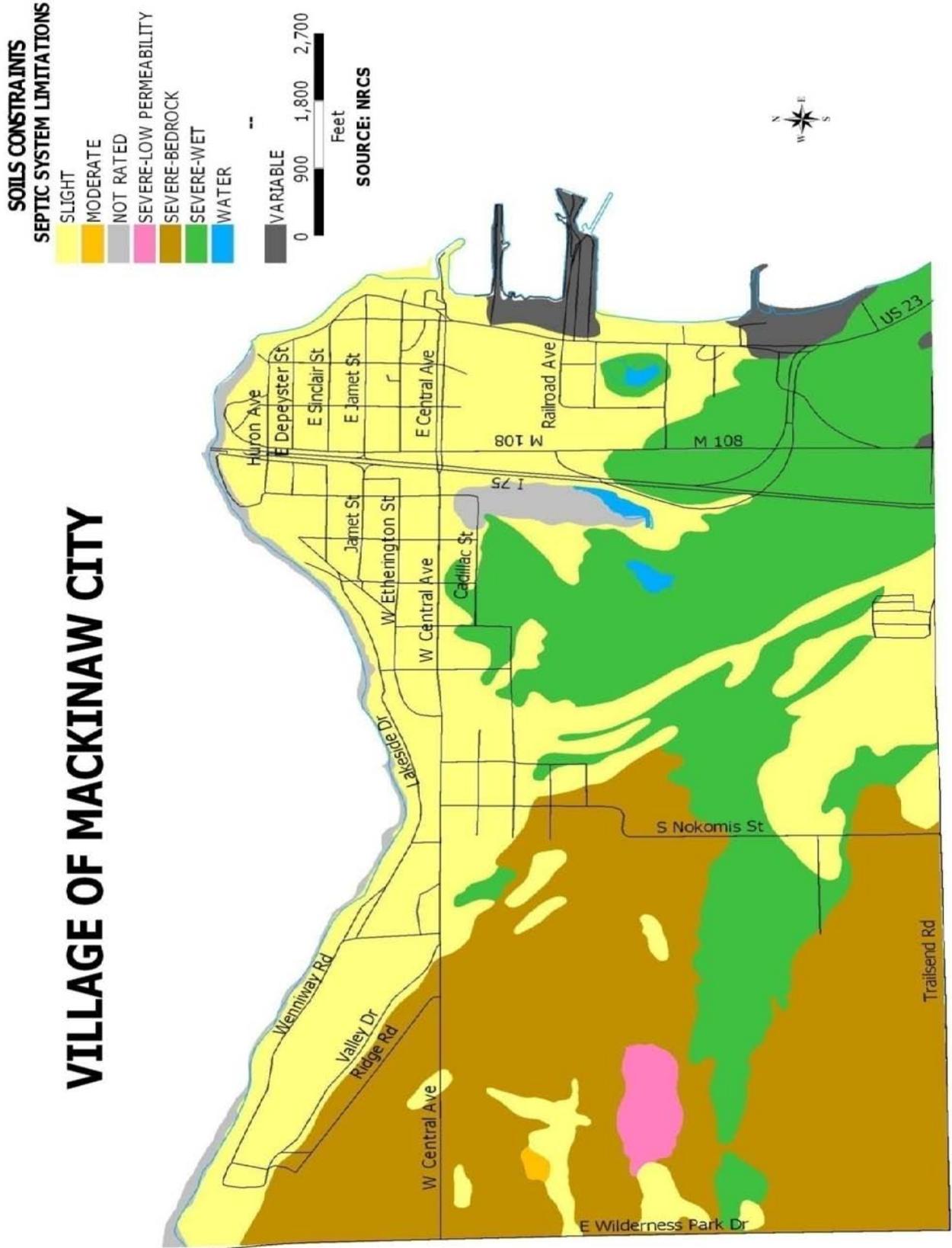
Important factors in the evaluation of groundwater are the quantity and quality of the water. The geologic and hydrologic features of the Village provide residents with sufficient water quantities. Water availability will not likely be a factor in limiting growth. However, water quality should be considered and protected. Where public water is available (see Chapter 4, Community Services and Facilities), drinking water is provided by four groundwater wells. The wells are all approximately 200 feet deep. Two wells are located at the Village's Department of Public Works property on the northwest corner of Perrot and Pond in an undeveloped area, one well is located South of W. Central Avenue and west of Nokomis Street and the fourth is located on the west side of U.S. 23 at the southeast corner of the Village. Additionally, a water storage tank is situated at Wawatam Park on North Huron Avenue.

Protection of groundwater resources is paramount to supporting the long term investment of the Village's water supply and delivery system and protection the health and safety of community's residents and visitors. In conjunction with the Michigan Department of Environmental Quality (MDEQ), the Village of Mackinaw City initiated the development of a Wellhead Protection Program (WHPP) to identify the sources of its public groundwater supply, to increase public awareness of the importance of this critical resource, and to implement management strategies for its long-term protection from contamination. The Wellhead Protection Program consists of eleven elements such as: delineation of the Wellhead Protection Area, identification of potential sources of contamination, protection of the public drinking water supply by preventing the pollution of surface and groundwater within the Wellhead Protection Area (WHPA), modification of existing zoning and planning regulations to prevent contamination of the public water supply

system through appropriate land use planning and management mechanisms and implementation of a public awareness program.

One of the key elements of the Wellhead Protection Program is the regulation of land uses in the Wellhead Protection Area (WHPA). One approach is planning for the location of future development in the master plan. Another approach that encompasses the entire community, both developed and areas slated for future development, falls under the regulatory capacity of the Community's zoning ordinance. Since the WHPA covers portions of Village of Mackinaw City and Mackinaw and Wawatam Townships, all communities should adopt zoning changes to manage/ certain uses and conditional uses, and to require more up front information during the Site Plan Review/Land Development process.

Figure 3-2 Village of Mackinaw City Soils Constraints Map



Wetlands and Woodlands

Wetlands are often referred to as marshes, swamps or bogs. The U.S. Army Corps of Engineers defines wetlands as, "Wetlands are those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions." Residents of Michigan are becoming more aware of the value of wetlands. Beyond their aesthetic value, wetlands improve water quality of lakes and streams by filtering polluting nutrients, organic chemicals and toxic heavy metals. Wetlands are closely related to high groundwater tables and serve to discharge or recharge aquifers. Additionally, wetlands support wildlife, and wetland vegetation protects shorelines from erosion. Existing wetlands areas are found primarily in the undeveloped portions of the Village, most notably in areas immediately west of I-75. Wetlands which meet statute criteria under Michigan's Wetland Protection Act are regulated by the State and require a permit before draining, filling, dredging or construction.

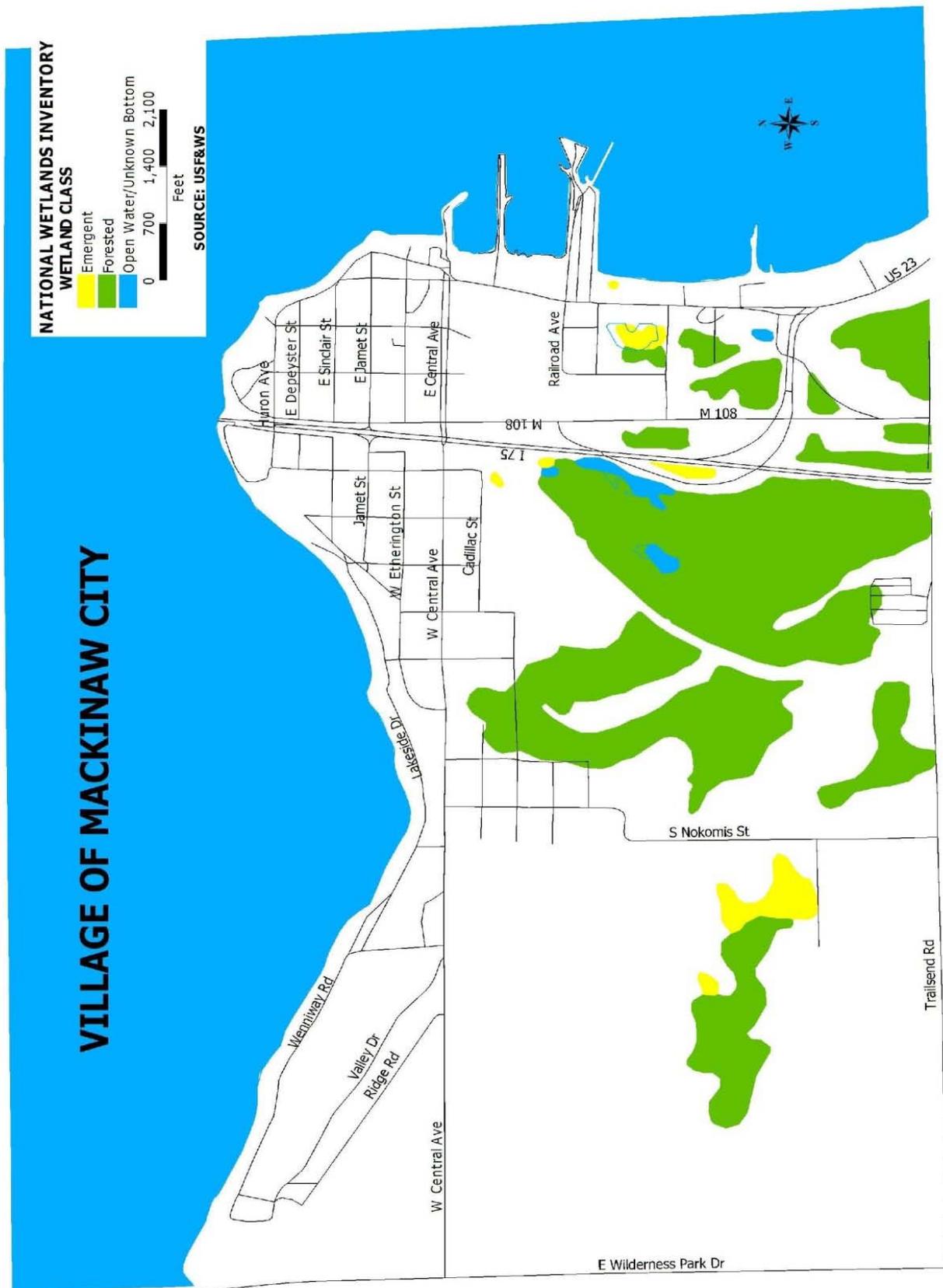
There are several sources that depict the presence of wetlands in the Village of Mackinaw City. These include the MIRIS Land Cover Inventory (see Chapter 5), National Wetlands Inventory County Soil Surveys. Each source was developed independently, with different criteria and therefore depicts the location and types of wetlands somewhat differently. **Figure 3-3** is a color thematic map prepared from the US Fish and Wildlife Service National Wetlands Inventory. National Wetlands Inventory (NWI) maps were compiled by the US Fish and Wildlife Service using color infrared aerial photography and ancillary data. This inventory classified more areas as wetlands than did the Michigan Resource Inventory System (MIRIS) land cover inventory. The NWI project found forested wetlands to be the most prevalent wetland type.

The Existing Land Use Map, Figure 7-1 found forested wetlands to be the dominant wetland type in Mackinaw City. Wetland forest species include lowland conifers such as northern white cedar, black spruce, white spruce, and eastern tamarack and lowland hardwoods such as black ash, elm, balsam poplar, aspen and red maple. Northern white cedar dominates the wetland areas where there is good lateral water movement and the soils are high in organic content. These lowland forests are typically located adjacent to water features and function as riparian forests and water quality buffers. The network of lowland forests, associated with rivers and creeks, also function as wildlife corridors and are the backbone of large regional ecological corridors. Non-forested wetland types include lowland brush, marshes and bogs. Land use planning activities should focus on protecting and preserving these limited and critical resources.

Another approach to estimating wetland areas in the Village is to examine the previous **Figure 3-1** which is a map of hydric soils. These soils typically support wetland vegetation.

The distribution of forested land within the Village is shown on the Existing Land Use Map, Figure 7-1. The Village owns several parcels of forested land in the central portion of the community. In addition to the scenic characteristics of woodlands, forested areas provide habitat for wildlife, protect the soil from erosion, and act as a buffer from noise on heavily traveled highways. The dominant forest associations in the Village of Mackinaw City are northern hardwoods (maple, beech and basswood), aspen and pine in the upland areas. In the lowland or wetland areas, common hardwood species include ash, elm and red maple. The common coniferous associations are cedar and tamarack in the wetlands.

Figure 3-3 Village of Mackinaw City Wetlands Inventory



Fish and Wildlife

Brown trout, steelhead, and various species of salmon are found in Lake Michigan and Lake Huron, although sport fishing is not a significant industry for the Village, due to shipping, ferry and recreational boating activities.

Habitat for populations of shorebirds, songbirds, waterfowl, muskrat, mink and raccoon are provided by the lakeshore and wetlands within the Village. Predominant mammal species found in the Village of Mackinaw City are squirrel, grouse, rabbit and deer.

Scenic Features

The most picturesque scenic views in Mackinaw City are of the Mackinac Bridge, Mackinac Island, Lake Michigan and Lake Huron. Protection of these lake views is a major goal of Mackinaw City decision makers. Future development which may obstruct these views should be carefully reviewed. Creative site planning and view-related land use regulations are possible tools available to address view preservation and enhancement.

Surface Water Discharge Permits

All point source discharges into surface waters are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit which is issued by the Michigan Water Resources Commission upon recommendation by Michigan Department of Environmental Quality (MDEQ), Surface Water Quality Division. Permit requirements generally address discharge limitations, effluent characteristics, monitoring and reporting requirements, along with facility management requirements. Currently there is one point source discharge permit holder located in Mackinaw City: the sewage treatment plant.

Sites of Environmental Contamination

The Natural Resources and Environmental Protection Act (P.A. 451 of 1994), as amended, provides for the identification, evaluation and risk assessment of sites of environmental contamination in the State. The Environmental Response Division (ERD) of the DEQ is charged with administrative responsibility.

Part 201 of the Act 451 address sites of environmental contamination. "A Part 201 Listed site is a location that has been evaluated and scored by the MDEQ using the Part 201 scoring model. The location is or includes a "facility" as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use."

Below is a list of sites in Mackinaw City obtained from the MDEQ web site on 11/8/10. Further information on Part 201 can be obtained from the web address:

<http://www.deq.state.mi.us/part201ss/>

Site ID: 16000007
Site Name: Marathon Pet Oil Co Terminal
Site Address: 307 South Huron Street
City: Mackinaw City
Zip Code: 49701
County: Cheboygan
Source: Petroleum Bulk Stations & Term

Site ID: 16000109
Site Name: Traverse Bay Woolen
Site Address: 122 & 312 South Huron Street
City: Mackinaw City
Zip Code: 49701
County: Cheboygan
Source: Railroad Transportation

Pollutant(s): 1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Xylenes
Score: 30 out of 48
Score Date: 2005-05-13
Township: 39N **Range:** 03W **Section:** 20
Quarter: SW **Quarter/Quarter:** NE
Status: Interim Response in progress

Pollutant(s): Benzene; Methylene chloride; PCE; TCE; trans-1,2 DCE
Score: 23 out of 48
Score Date: 2004-10-19
Township: 39N **Range:** 03W **Section:** 18
Quarter: N/A **Quarter/Quarter:** N/A
Status: Inactive - no actions taken to address contamination

Site ID: 16000106
Site Name: Super 8 Motel
Site Address: 601 North Huron St
City: Mackinaw City
Zip Code: 49701
County: Cheboygan
Source: Hotels & Other Lodging Places
Pollutant(s): Fluoranthene; Naphthalene
Score: 25 out of 48
Score Date: 2004-07-26
Township: 39N **Range:** 03W **Section:** 07
Quarter: N/A **Quarter/Quarter:** N/A
Status: Inactive - no actions taken to address contamination

Under Part 213 of Act 451, the MDEQ addresses Leaking Underground Storage Tanks (LUST). An Open LUST site means a location where a release has occurred from an underground storage tank system, and where corrective actions have not been completed to meet the appropriate land use criteria. An open LUST site may have more than one confirmed release. A closed LUST site means a location where a release has occurred from an underground storage tank system, and where corrective actions have been completed to meet the appropriate land use criteria. The MDEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. Table 3.2 is derived from the MDEQ web site for Open Leaking Underground Storage Tanks (LUST) in the Village of Mackinaw City.

Table 3-2 Leaking Underground Storage Tanks (LUST), Part 213 of P.A. 451

Site ID	Site Name	Site Address
00002720	Crisp's Self Serve	618 S Huron St Mackinaw City
50005095	Former Zephyr Oil Station	
00013363	Imperial Oil Co.	308 S Nicolet St Mackinaw City
00013363	Imperial Store # 17 (Next Door Store #17)	308 S Nicolet St Mackinaw City
00037331	Kruegers Inc	101 Louvigny Mackinaw City
00006558	Mackinaw City Public Schools	609 W Central Mackinaw City
00036957	Perry Oil Co.	102 N Nicolet Mackinaw City
00036935	Traverse Bay Woolen Co	312 S Huron Mackinaw City
00037319	Valot's Citgo	M-108 Mackinaw City

Air Quality

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

Air discharge permits are required for businesses discharging more than the acceptable level of any of the regulated air pollutants. Previously discharge permits had been issued to the fuel terminals in Mackinaw City. Currently no air discharge permits are issued to businesses located in the Village of Mackinaw City.

Summary

The review of the natural resources in Mackinaw City indicates the natural features are currently relatively unimpaired; however some resources are extremely vulnerable to change. Residents highly value the natural resources and scenic features. The environmental features of the Village are an important asset to the community, and need continued protection.

Chapter 4 Community Services, Facilities, and Organizations

Municipal Government

Mackinaw City is governed by a seven-member elected Village Council. The Village Council is the legislative body of the Village, made up of six trustees and the Village President. The Village Council represents the interest of the Citizenry, approves the annual budget, approves expenditures, establishes service and operating policies, enacts local laws, makes appointments to community boards, awards contracts, and serves as the Zoning Board of Appeals. Village Council meetings are held on the first and third Thursdays of each month.

A seven-member appointed Planning Commission oversees physical development of the Village and is guided by the Village's Master Plan. The implementation of the Master Plan is undertaken through the Village's Zoning Ordinance, the authority by which private use of land is regulated. The Planning Commission reviews development proposals for compliance with the Zoning Ordinance in order to allow Village development to proceed in a manner which is suitable to all citizens. The Planning Commission meets twice monthly. The Planning Commission functions as an advisory board to the Village Council on all site development matters.

The Economic Development Corporation (EDC) is a nine-member appointed body. The EDC focuses on strategically improving the Village's economic structure to create year-round job growth. The EDC adopted an Economic Restructuring Plan in May 2006 which serves as a blueprint for the EDC to guide the Village's economic growth.

The Downtown Development Authority (DDA) is a nine-member appointed body. The mission of the DDA is to promote the economic viability of the downtown by providing physical improvements that enhance the quality of life for residents, visitors and businesses. The DDA meets quarterly.

Two other elected officials, the Village Clerk and Village Treasurer, are full-time employees of the Village. The Village clerk is responsible for keeping the official records of the Village, records all proceedings resolutions and ordinances of the Council, signs all licenses, administers oaths of offices, general accountant, reports tax and money levied to treasurer, collects claims against the Village, provides financial reports to Council and manages Village elections. The Village treasurer receives and maintains all financial accounts including bonds, mortgages, notes and leases. The Treasurer also keeps a record of all receipts and expenditures, collects and keeps an account of all taxes and money appropriations, performs duties relating to assessing property and levying taxes and makes periodic reports as required by law.

Administration

The Village has 21 full-time and approximately 27 part-time employees. The Village Manager is appointed by the Village Council and is the Chief Administrative Officer responsible for implementing the policy directives and programs of the Village Council, directs the daily operations of Village departments, prepares the annual budget, develops staff goals and objectives based on Council objectives, conducts human resource management and has supervisory responsibility over accounting and purchasing. The Village manager is also responsible for planning and zoning administration and is the superintendent of streets.

Police, Fire, Ambulance

Twenty-four hour police protection is provided by the Village. The Police Department is managed by the Chief of Police. The department is staffed by 5 full-time officers, and 4 part-time officers. Police protection is also provided by Cheboygan and Emmet County Sheriff's Departments, as well as the Michigan State Police from Cheboygan and St. Ignace. Fire protection services are provided by the Mackinaw City Fire Department. The Fire Department is directed by the Fire Chief and has 24 volunteer members. The Fire Department also provides contractual service to Mackinaw and Wawatam Townships. The department is equipped with 3 pumpers, a rescue vehicle, a tanker and an aerial ladder. Ambulance service is provided by Mackinaw City EMS Service. The service is directed by the Ambulance Director and has 3 full-time paramedics and 11 volunteers who serve as Emergency Medical Technicians (EMT) or ambulance attendants. The Mackinaw City Ambulance Service also provides coverage to a portion of northern Cheboygan and Emmet Counties. The ambulance service is equipped with an advanced life support vehicle and basic ambulance. Village residents have access to 911 emergency service as part of a three-county effort (Cheboygan, Emmet and Charlevoix). The dispatch is located in Petoskey and Village police and ambulance vehicles have computers onboard for prompt response.

Marina

The Village operates a 104 slip municipal marina that provides 50 seasonal and 54 transient slips. The facility provides a comfort station which contains a harbor office, chart room, recreation area, laundry room and shower/ restroom facilities. The marina also provides water hook-up for each slip, up to 100 amp power for selected slips, cable TV and wireless internet service for each slip and two sewer pump stations. The marina also sells high grade marine unleaded fuel and provides access to diesel fuel sold by Shepler's Marine Service. The Marina is managed by the Village's Recreation Director and staffed by approximately 13 part-time employees.

Department of Public Works

The Department of Public Works (DPW) is directed by a Superintendent and has five full-time employees. The Maintenance crew consists of one full-time and five part-time employees. The DPW is assigned to maintenance, repair and construction activities associated with streets, sewers, water system, sidewalks, municipal facilities, parks and the Village's vehicle fleet.

Water and Sewer Department

The Village's Water and Sewer Department is managed by the Water Superintendent and is staffed by 3 full-time employees. The Water and Sewer Department is responsible for the Operation of the Village's four municipal water wells, 200,000 gallon elevated storage tank, eight sewage lift stations and the waste water treatment plant.

Water and Sewer System

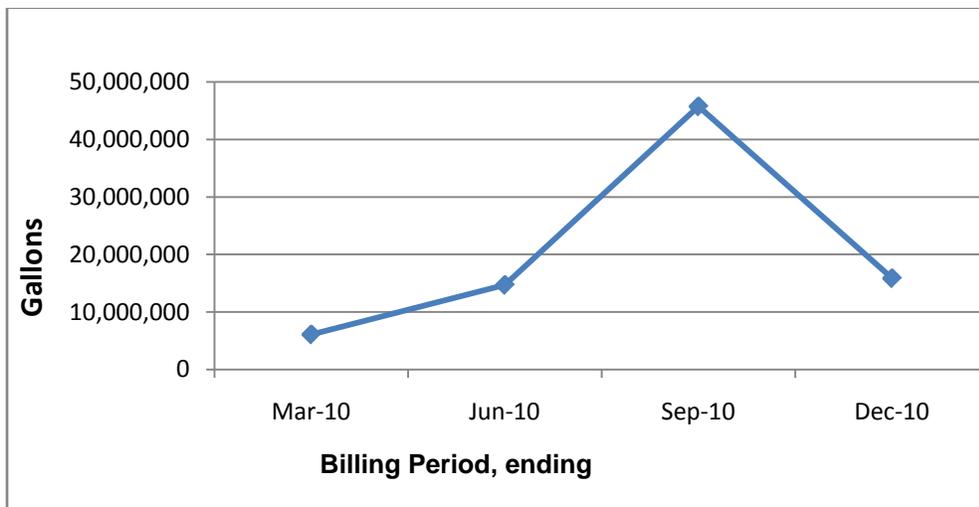
A large majority of the developed portion of the Village of Mackinaw City is served by a municipal water and sewer system. Mackinaw City has the unique challenge of providing water and sewer services for a varied mix of customers. Since the Village enjoys many visitors in the summer, the capacity of the systems must be much greater than would normally be required to serve the less than 1,000 year-round residents of the Village. There can be an estimated 10,000 visitors who stay overnight in the many hotel rooms and campground facilities in the Village.

The water and sewer systems have 638 customers. Customers can range from a 200 room hotel resort to a single family home. Over 72% of the Village's water and sewage usage is consumed by commercial customers. Many customers are seasonal users of the system. Many commercial entities close their buildings for the winter and have their water system drained and shut down.

Total production of the Mackinaw City water system for the year between March, 2010 and December, 2010 totaled 82,386,757 gallons. This is a great deal more than would normally be produced for a village with 586 households (2010 US Census). How many households would this serve? This same amount of annual water consumption would serve over 647 average households. In this case, we use an average household's yearly water consumption of 127,400 gallons of water as estimated by the American Water Works Association Research Foundation (1999).

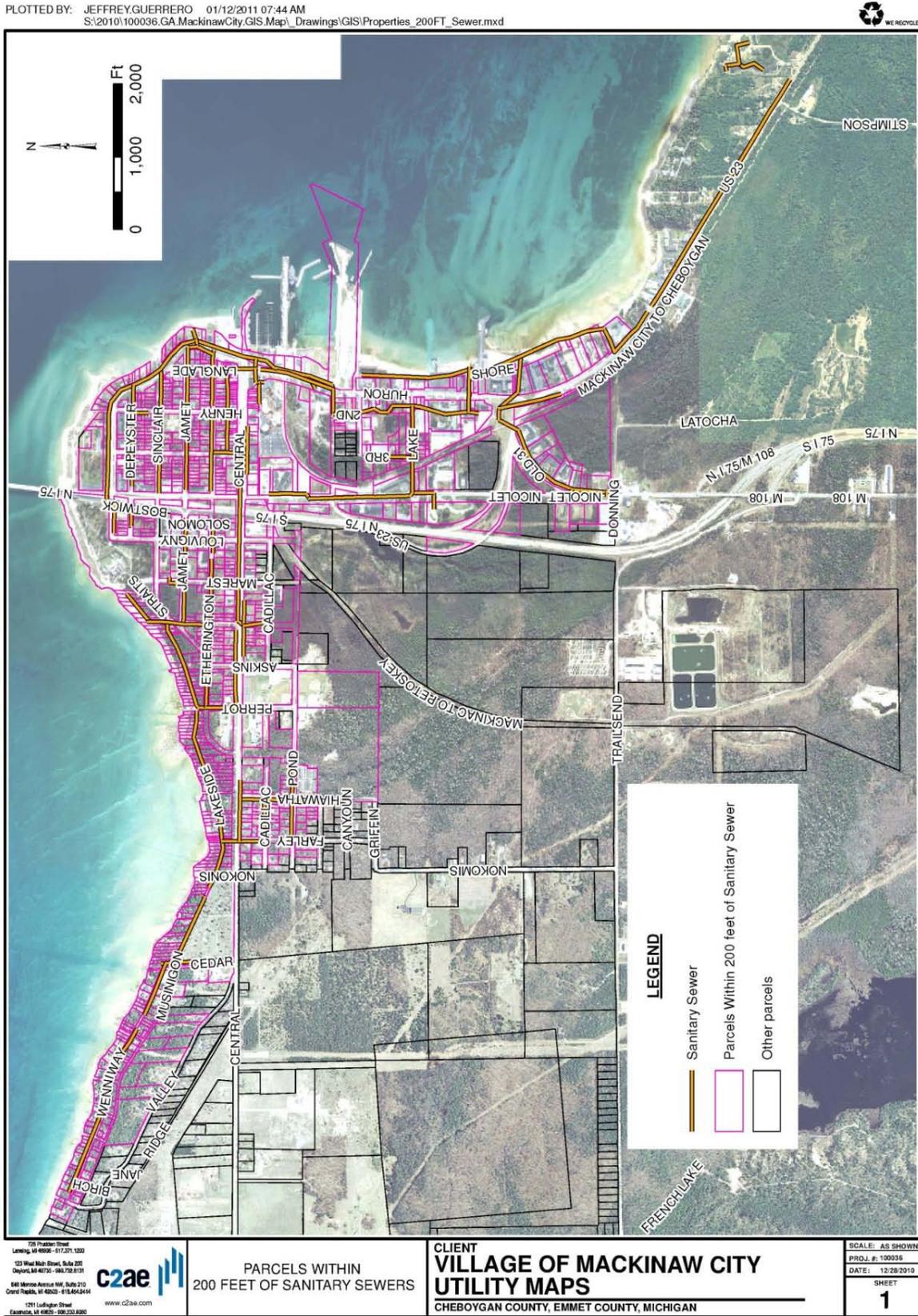
Seasonal changes in water consumption are the most important factor in determining our peak capacity needs. The summer season water consumption increases approximately 211% over the previous spring billing period. Compared to the winter billing quarter, our lowest for the year, the increase in summer water consumption is 651%. Figure 4-1 shows this seasonal fluctuation.

Figure 4-1 Water Consumption, measured quarterly



The existing water and sewer distribution system is mapped in Figure 4-2 and 4-3, respectively. Currently outlying areas not served by the existing municipal water and sewer systems must rely on individual wells and private on-site septic systems. Two important factors in determining location of a septic system and well are soil suitability and depth to bedrock. Appropriate location and permitting of these systems is handled by the appropriate District Health Department. Figure 4-2 shows properties within 100 feet of water lines. Figure 4-3 shows properties within 200' of sewer lines. Most properties in this area are connected to their utility lines.

Figure 4-3 Properties within 200' of sewer lines



The municipal water system distributes drinking water along approximately 11 miles of water pipelines with water from four wells. Well #4, the most recent well installed, is located on the west side of town at the west end of Pond Street. It has a capacity of 400 gallons per minute (GPM). Well #3 is located at the southeast corner of the Village on the west side of South Huron Avenue and has a capacity of 480 GPM. Well #2 is located at the DPW property on Perrot Street adjacent to the school with a capacity of 360 GPM. Well #1 is just off Pond Street near well #2 and has a capacity of 820 GPM. The “firm capacity” of the system is the total capacity with the largest well out of service; as such, the Village has a “firm capacity” of 1240 GPM.

Water storage is provided by a 200,000 gallon capacity elevated water storage tank sited at Wawatam Park on North Huron Avenue. Additional land is owned on the west side of the Village for a future elevated water storage tank. The Village well water is treated with chlorine and polyphosphate for disinfection and iron sequestering. The water distribution system consists of 4" - 12" diameter lines.

The Village’s wastewater is transferred through approximately 12.5 miles of gravity sanitary sewer lines to eight sewage lift stations located at Wawatam Park, North DuJaunay Street, Barbara Street, Lakeside Drive, US 23, the Shores of Mackinaw condominium development, Cedar Street and Wenniway Drive.

Stormwater and Drainage Network

The Village has a stormwater collection and drainage system for many of the Village streets as shown in Figure 4-4. There are 16 outfall points, with four to Lake Michigan and 12 to Lake Huron. The outfall sizes range from 12" diameter to 30" diameter, and there are also two box culverts that empty to Lake Huron. The Village has also utilized leaching basins in lieu of storm sewer for portions of the northeast residential streets.

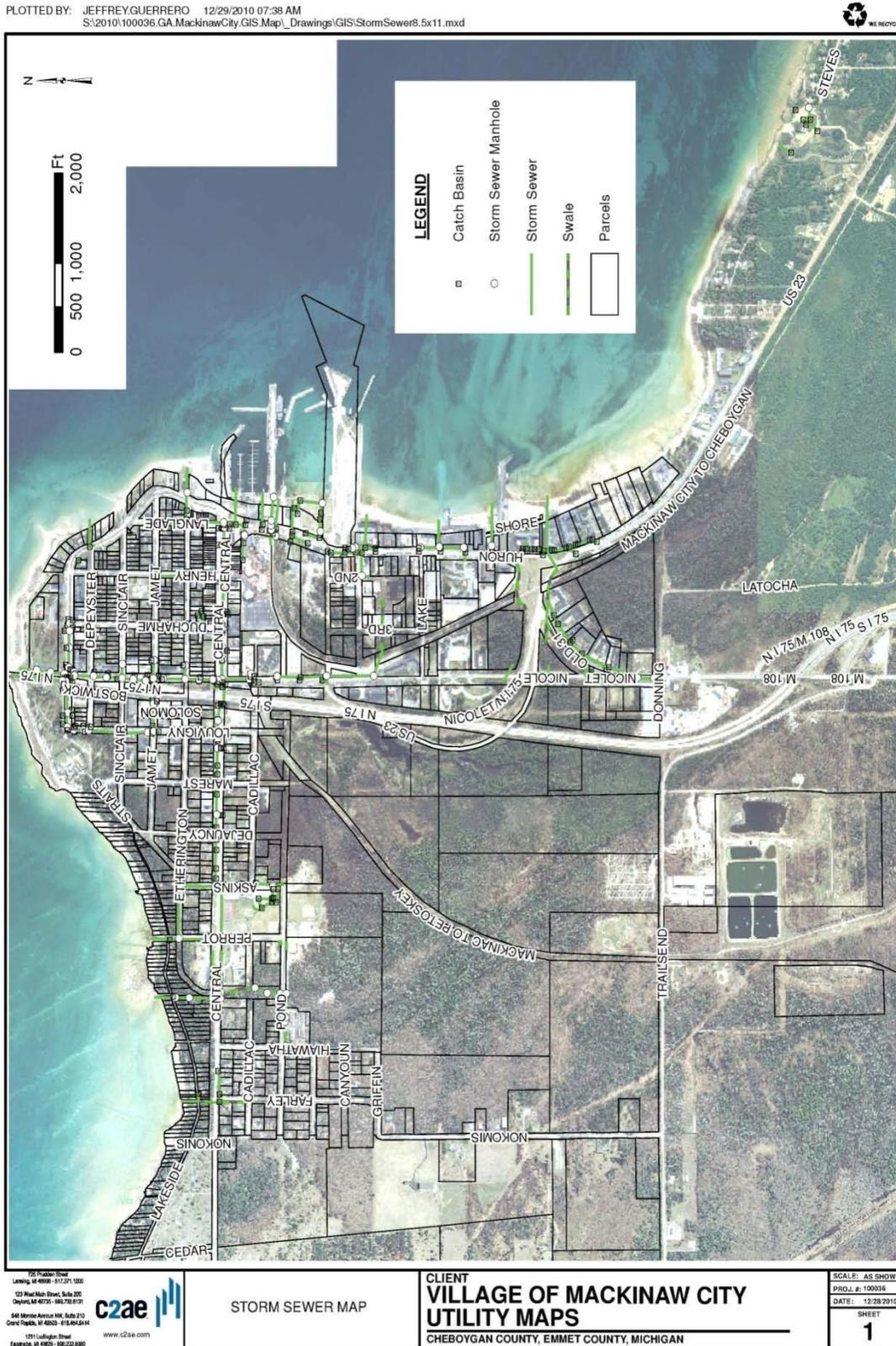
The majority of the storm drainage system is controlled by the Village, however, Michigan Department of Transportation (MDOT) has jurisdiction on I-75 drainage and a portion of the most recently constructed discharge point is private, serving the Mackinaw Crossings. One discharge point handles the overflow from Dry-dock Lake.

Solid Waste

Residential and commercial solid waste pick-up is offered within the Village by several private waste haulers. Waste is carried to the appropriate landfill, as indicated in the Cheboygan County and Emmet County solid waste management plans.

Recycling is currently provided by Emmet County at a drop-off site located on Perrot Street behind the Mackinaw City High School. The site accepts newspaper, office paper, card board, #1 and #2 plastics, tin cans, clear and colored glass. Used batteries are accepted within the Village Hall in Mackinaw City as well as at local hardware stores in Alanson, Harbor Springs, Pellston and Petoskey. In addition, the transfer station located in Little Traverse Township accepts glossy paper, office paper, corrugated cardboard, motor oil and certain scrap metals, plus the items accepted at the outlying drop-off centers. Mackinaw City residents may also drop recyclables in Cheboygan at the following locations: Glen's Market (plastic bags and Styrofoam), Wal-Mart (used motor oil and automotive batteries).

Figure 4-4 Village of Mackinaw City Stormwater Collection Map



Public Utilities

Village of Mackinaw City receives electric power from Consumers Energy. Natural gas is provided by Michigan Consolidated Gas Company. Ameritech Telephone Company provides local phone service, while long distance service may be selected from numerous carriers. Cable television service is provided by Charter Communications. Broadband internet services are provided by AT&T, Charter Communications, and Cherry Capital Connection. Cellular phone service is provided by AT&T, Verizon, and Nextel.

Municipal, State and Federal Facilities

The Village Municipal Complex is located at 102 South Huron and houses Village staff, council chambers, police and fire departments. Due to the extent of activities being operated from this facility, the structure is somewhat undersized. The Martin Building located at the corner of West Central Avenue and Cedar Street is the main office and storage facility for the DPW. The DPW also stores equipment and salt at a public works facility located on Perrot Street. The wastewater treatment plant is located on Trails End Road and is the primary office for the Village's Water and Sewer Department. The Village maintains 14 municipal parks, including the Mackinaw City Recreation Center which is a 35,000 sq ft complex that provides a skating rink, walking/running track, weight room, locker rooms and meeting rooms. The facility is also used in the summer for basketball and multiple large events hosting 400-600 people. Additionally, the Village owns several large parcels of undeveloped and mostly wooded property. Wawatam Township Hall is located inside the Village limits on the southeast corner of Etherington and Louvigny Streets. Mackinaw Township Hall is located on US-23 just outside the Village limits. The United States Post Office is located on Central Avenue.

The State of Michigan owns and/or operates Old Mackinac Point Lighthouse, Colonial Michilimackinac and adjacent large undeveloped parcels. The Mackinac Island State Park Commission, manager of these facilities, has offices on West Central Avenue and West Sinclair. Michigan Department of Transportation (MDOT) operates a welcome center, accessible from I-75, US 23 and US 31. The State Dock within Mackinaw City is owned by the State of Michigan and is the location of a 136 slip harbor of refuge.

Emmet County owns and operates the Headlands, a 625 acre park, and the McGulpin Point Lighthouse, which provides the public with beautiful views of Lake Michigan, as well as cultural and historical experiences.

Schools and Library

Covering 22 square miles, Mackinaw City Public School serves Village children as well as those residing in adjacent outlying areas. Historically, the school's K-12 enrollment has remained relatively constant. The school also operates two pre-school programs for four- and five-year old children.

Post high school education is available locally at North Central Michigan College (NCMC) in Petoskey, offering two-year associates and one-year certificate programs. NCMC also offers bachelors and masters programs in business administration and human services through a joint agreement with Lake Superior State University (LSSU). For those interested in other four-year degree programs, LSSU is located in Sault Ste. Marie, and is within an easy one-hour commute.

Mackinaw Area Public Library is conveniently located across from the school on West Central Avenue. Part of the Northland Library System, the library is funded by the Village and

participating Townships. Branch locations are found in Pellston, Levering and Bliss Township. In addition to the Village, the library's service area includes Carp Lake, Bliss, Mackinaw, McKinley, Wawatam and Hebron Townships, Levering, and Pellston. The full-service library is staffed by a librarian, an assistant librarian and five other staff members.

Social Services

Mackinaw City is served by an endless list of social service organizations. Social service organizations provide assistance in many ways to the residents of Mackinaw City. The following is a list of selected local and regional social service organizations which serve the residents of Mackinaw City:

- ◇ Alcoholics Anonymous has local branches which seek to help those recovering from alcohol or drug abuse.
- ◇ Bay Area Substance Education Services is a local organization providing drug and substance abuse prevention services for teens in northern Michigan.
- ◇ Catholic Human Services provides mental health, substance abuse, prevention, pregnancy counseling, open adoption, social services and senior services.
- ◇ Wawatam Area Senior Citizens, Inc., which operates the Mackinaw City Senior Center and provides meals on wheels, health care, transportation, classes, clubs, and organized activities for area senior citizens.
- ◇ Cheboygan County and Emmet County Departments of Human Services provide a variety of social services which include adoption and foster care, adult and child abuse protective services, and services to the elderly.
- ◇ Cheboygan and Emmet County Emergency Management Departments provide disaster response services.
- ◇ Child and Family Services of Michigan offers individual, family and pregnancy counseling as well as domestic violence, substance abuse, juvenile delinquency, foster care, adoption and elderly assistance programs.
- ◇ The Domestic Violence Shelter provides counseling and other services to those seeking assistance with issues of domestic violence.
- ◇ Friendship Center of Petoskey and Emmet County provides food and nutrition programs.
- ◇ Food banks are provided by the following organizations:
 - ▶ Bethel Baptist Church Food Pantry
 - ▶ Brother Dan's Food Pantry
 - ▶ East Jordan Family Health Center
 - ▶ Manna Food Project
 - ▶ Northwest Michigan Human Services
 - ▶ Rainbow Shoppe
 - ▶ Salvation Army
 - ▶ Church of the Straits
- ◇ Habitat for Humanity constructs homes for families unable to afford decent housing, with offices in Petoskey and Cheboygan.
- ◇ The Living Room provides senior day-care services at Northern Michigan Hospital.
- ◇ Meals on Wheels provide hot, nutritious meals to homebound seniors in the region.
- ◇ North Country Community Mental Health Services (Cheboygan and Emmet Counties) provides mental health services to the region.
- ◇ Northern Community Mediation provides mediation services in Petoskey.
- ◇ Northwest Michigan Health Agency provides food and nutrition programs for area residents.
- ◇ Northwest Michigan Human Services and Northeast Michigan Community Service Agency are community action agencies providing grant funding information and programs to the poor and disadvantaged of northern Michigan.

- ◇ Women’s Resource Center of Northern Michigan serves women and families to protect health and well-being, eliminate crises, encourage positive choices, and facilitate growth and education.
- ◇ Northern Michigan Disability Network helps individuals and their families with disabilities to lead more active lives

Health Care

Mackinac Straits Hospital operates a medical clinic in Mackinaw City providing citizens and visitors general medical care. The nearest hospital is located in St. Ignace, approximately five miles away. Other, hospitals providing a range of services can be found in Cheboygan, Petoskey, and Sault Ste. Marie.

Mackinac Straits Hospital and Health Center, located in St. Ignace has 48 long-term care beds. Mackinac Straits Hospital provides access to various health care physicians, nurses, and health care staff. The hospital and its branch locations provide access to the following services:

- | | |
|-------------------------|----------------------|
| ◇ Cardiology | ◇ Ophthalmology |
| ◇ Dermatology | ◇ Otolaryngology |
| ◇ Emergency medicine | ◇ Pathology |
| ◇ Family practice | ◇ Pediatrics |
| ◇ Obstetrics/gynecology | ◇ Physical medicine |
| ◇ Hematology | ◇ Podiatry |
| ◇ Internal medicine | ◇ General surgery |
| ◇ Nephrology | ◇ Orthopedic surgery |
| ◇ Oncology | ◇ Urology |

Cheboygan Memorial Hospital is located approximately 16 miles away in Cheboygan. The general hospital features 46 beds. The long-term care facility has approximately 50 beds. The Intensive Care Unit has 4 beds. The hospital provides access to various health care physicians, nurses, and healthcare staff. The hospital and associated practices provide access to the following services:

- | | |
|-------------------------|----------------------|
| ◇ Cardiology | ◇ Ophthalmology |
| ◇ Dermatology | ◇ Orthopedic surgery |
| ◇ Emergency medicine | ◇ Otolaryngology |
| ◇ Family practice | ◇ Pathology |
| ◇ General surgery | ◇ Pediatrics |
| ◇ Internal medicine | ◇ Physical medicine |
| ◇ Obstetrics/gynecology | ◇ Radiology |
| ◇ Oncology | ◇ Urology |

In addition to medical services, Cheboygan Memorial Hospital also provides various community health services, which include the following:

- | | |
|----------------------------------|--|
| ◇ Healthy Heart Program | ◇ Health speaker’s bureau |
| ◇ Health education | ◇ <i>Good Health Gazette</i> local health magazine |
| ◇ Home health services | ◇ Physician referral services |
| ◇ Diabetes education and support | ◇ Parental consent forms |
| ◇ Childbirth preparation classes | ◇ College tuition scholarships |
| ◇ Cancer Support Group | |

- ◇ Career shadowing for interested high school students
- ◇ Pulmonary Rehabilitation Support Group
- ◇ Welcome program serving newcomers to the region

Northern Michigan Hospital in Petoskey is approximately 36 miles from Mackinaw City. The Hospital offers 243 beds and is the largest medical employer in the Straits area. The hospital provides access to various health care physicians, nurses and health care professionals in over 36 specialty areas. The hospital and its associated practices provided access to the following services:

- ◇ Geriatrics
- ◇ Allergy/asthma
- ◇ Anesthesia
- ◇ Cardiology
- ◇ Cardiovascular surgery
- ◇ Dental
- ◇ Oral surgery
- ◇ Dermatology
- ◇ Emergency medicine
- ◇ Endocrinology
- ◇ Gastroenterology
- ◇ General surgery
- ◇ Infectious diseases
- ◇ Internal medicine
- ◇ Nephrology
- ◇ Neurology
- ◇ Neurosurgery
- ◇ Obstetrics/gynecology
- ◇ Midwives
- ◇ Oncology
- ◇ Ophthalmology
- ◇ Orthopedics
- ◇ Otolaryngology
- ◇ Pain management
- ◇ Pathology
- ◇ Pediatrics
- ◇ Physical medicine
- ◇ Plastic and reconstructive surgery
- ◇ Podiatry
- ◇ Psychiatry
- ◇ Pulmonary medicine
- ◇ Radiation oncology
- ◇ Radiology
- ◇ Rheumatology
- ◇ Urology

Northern Michigan Hospital offers additional community health and wellness services, which include the following:

- ◇ Community Health Education Center (includes School Health Education)
- ◇ Community Free Clinic
- ◇ Hospice care
- ◇ Boulder Park Terrace assisted living
- ◇ Adult day care services
- ◇ Home health care
- ◇ Wellness classes and events
- ◇ Senior Advantage wellness program
- ◇ Diabetes Center
- ◇ Various support groups

The Village of Mackinaw City provides 24-hour ambulance service. The Village ambulance service can be reached by Village residents dialing 911.

Shopping, Dining, Entertainment and Lodging

The Village of Mackinaw City prides itself as one of Michigan's top tourist destinations providing a variety of entertainment options which include over 100 unique and quaint shops, the Mackinaw Outfitters which features Bass Pro merchandise and contains a marine tank

displaying Northern Michigan fish species. The Crossings also hosts a free laser light show during summer evenings. The Village is also home to over 20 restaurants providing fast food, casual and fine dining opportunities, over 1,500 hotel rooms provided by chain and local hotel operators as well as quaint bed and breakfast inns, over 500 camp sites located in the area as well as three indoor and one outdoor 12 acre water park.. The Village provides some of the most scenic waterfront views in the U.S. as well as hiking, biking, running, boating, kayaking, fishing, snowmobiling and cross country skiing opportunities.

Mackinaw City is home to four museums. Colonial Michilimackinac and Old Mackinac Point Lighthouse are part of the Mackinac State Historic Parks system operated by the State of Michigan. Colonial Michilimackinac is a replica of the original Fort Michilimackinac, a French fur-trading village and military outpost. The site, which is a National Historic Landmark and accredited by the American Association of Museums, allows visitors to experience life in Mackinaw City during the 18th century. Estimates of visitors to Colonial Michilimackinac range near 110,000 per year. Old Mackinac Point Lighthouse has undergone restoration in order to permit visitors to experience and access the original lighthouse structure. Approximately 30,000 people visit Old Mackinac Point Lighthouse per year. The Mackinac Bridge Museum, located above Mama Mia's Pizzeria at 231 East Central, features a film and artifacts related to the construction of the Mackinac Bridge. The retired Coast Guard Icebreaker Mackinaw is open to the public as a maritime museum with guided tours of the vessel between the months of June to October. The Museum is operated by a non-profit organization and is located at the Wawatam Railroad Dock on South Huron.

Religious Institutions

Three religious institutions are located within the Village. Mackinaw City Bible Church, an independent Christian church, is located at 308 West Central, and has approximately 50 members. Church of the Straits, located at 307 North Huron, is a Protestant Christian and Methodist community with approximately 225 members. St. Anthony of Padua Catholic Church is located at 600 West Central and has approximately 120 families as registered parish members.

Civic Organizations

Mackinaw City residents actively participate in a number of civic organizations. Civic organizations strengthen the community by offering opportunities for social interaction among members and performing community service activities.

Civic and quasi-governmental organizations include:

- ◇ Mackinaw Area Chamber of Commerce
- ◇ Mackinaw City American Legion
- ◇ Mackinaw Area Visitors Bureau
- ◇ Mackinaw City Motel Association
- ◇ Mackinaw City Parent teacher Organization
- ◇ Mackinaw City Skating Association
- ◇ Mackinaw Band Boosters
- ◇ Straits Area Concert Band
- ◇ Mackinaw Area Historical Society
- ◇ Mackinaw City Lions Club
- ◇ Mackinaw City Senior Center
- ◇ Mackinaw City Woman's Club
- ◇ Wawatam Beach Association
- ◇ Mackinaw City Boosters

Chapter 5 Transportation

Transportation opportunities are a critical element in creating a viable and livable community. Transportation opportunities within the Village consists of roads, sidewalks, trails, bike lanes (non-motorized) transit services, marine and air. These opportunities must be designed and operated to meet the needs of all users.

The Village maintains over 19 miles of streets. Paved streets account for 18 miles of Village roadway, while 1 mile of streets are unpaved. Additionally, there are 6.3 miles of public roadway within the Village which are maintained by non-Village government entities. These government entities include Emmet and Cheboygan Counties as well as the Michigan Department of Transportation.

The Michigan Department of Transportation (MDOT) is responsible for maintenance of state roadways within the Village limits. These include Interstate I-75 and corresponding interchange ramps and US-23. MDOT maintains one traffic signal, located at the intersection of US-23 and Nicolet Street.

The Village maintains all of the arterial street corridors in Mackinaw City as well as all local designated streets. Arterial corridors include Huron Avenue, Central Avenue, and Nicolet Street. Of the Village-maintained public streets, most are two-lane or residential streets. Only portions of West Central Avenue, South Huron Avenue and Nicolet Street are three lanes, and East Central Avenue is the only four-lane Village street. Additionally, all of North Huron Avenue and Straits Avenue are divided boulevards. The Village maintains one traffic signal, located at the intersection of Central Avenue and Nicolet Street.

Public Road Functional Classification Designation

Streets, roads and highways within Michigan have a National Functional Classification (NFC) designation. This system is designated and utilized by the Federal Highway Administration (FHWA) to classify roads according to their function. The system can be used to compare and study roads across Michigan and the US and is used as a criterion to determine grant eligibility.

The NFC system has a five-tiered hierarchy system. The definition of the classification system is as follows:

Eisenhower Interstates/Freeway System

These roads are designated at the top of the NFC system serving as the important corridors for the long distant travel of people and goods throughout the U.S. The Village is accessed by I-75 which is a primary North/South interstate beginning in Sault Saint Marie MI and ending just North of Miami FL. I-75 also provides connection to East/West interstates along the corridor providing access to all parts of the U.S.

Principle Arterial

Principle arterials generally carry long distant through-travel movements. They also provide access to important traffic generators, such as airports regional attractions and service centers. U.S.-23 is a principle arterial connecting the Village to Cheboygan, Alpena and all communities along the Lake Huron shoreline to Bay City MI.

Minor Arterial

Minor Arterials primarily move traffic between principle arterial routes, between different portions of the community and provide access to the local street network. The Village's Minor Arterial roads are East and West Central Avenues, South Huron Avenue, Nicolet Street, Straits Avenue, and a portion of Louvigny Street, Jamet Street, and Straits Avenue. These corridors are eligible for Federal Aid Grant Funding.

Collector Streets

These streets serve as a link between local streets and arterial streets. Collectors within the Village are Old 31 and a portion of East Jamet Street and North Huron Avenue.

Local Streets

Local streets provide access to individual properties and homes. The Village contains 12.89 miles of local designated streets.

Complete Streets

The State of Michigan approved Public Acts 134 and 135 of 2010, which requires the Michigan Department of Transportation and local governments to consider automobiles, foot traffic, bicycle travel, and transit options for ages and abilities when designing a transportation corridor. The Village of Mackinaw City adopted a complete streets resolution in 2010 to take into consideration, when designing transportation projects in the future, features such as sidewalks, crosswalks, shared use paths, bicycle lanes, signage, and accessible curb ramps. The Village has incorporated these features into many existing road projects. The Village has also adopted a Hike and Bike Plan to implement these features in future projects.

Asset Management Plan

The Village implements an asset management plan in accordance with Public Acts 499,199 and 338 as amended. Asset Management is defined under state law as “an ongoing process of maintaining, upgrading and operating physical inventory and condition assessment”. The Village is responsible for the development and implementation of a pavement management system for federal-aid eligible routes, development of an asset management process for federal-aid system, annually reporting to the Transportation Asset Management Council mileage and condition of road system and receipt and disbursements of street funds.

Asset management plans are based on the following five core principles:

1. The plan is performance based, developing policy objectives and translating them into system performance.
2. Decisions are based on research information consisting of a road inventory, condition of road and funding availability
3. The plan identifies system goals and objectives based on the desired system condition, desired levels of service, safety objectives, economic factors and overall community and environmental goals.
4. Plan develops an analysis of the “Mix-of-Fixes” that are possible to meet the identified goals.
5. During plan implementation feedback is sought from the public and stakeholders.

The Master Plan helps to develop the policy objectives that the asset management plan is based on. The Village has completed the road inventory of the system and continuously updates the condition of roadways based on the “PASER” system (Pavement Surface Evaluation Rating). PASER was developed by the University of Wisconsin-Madison Transportation Information Center to be used as a road rating system that classifies the condition of roads. A road rated a 1 is considered a failed road and a road rated as a 10 represents a new road. The system establishes rating ranges that help identify the type of construction or maintenance necessary to improve rating conditions. The Village then establishes a Capital Improvement Schedule to implement the identified construction or repairs to meet the identified transportation objectives.

The Village has utilized the core principles of asset management for many years. This has resulted in the undertaking of major streetscape improvements to foster better traffic flow and to construct aesthetically attractive corridors. Streetscape improvements have taken place in the following areas:

Table 5-1 Streetscape Improvements

Street Name	Limits of Improvements
East Central Avenue	I-75 overpass to Huron Avenue
West Central Avenue	DuJaunay Street to I-75 overpass
South Huron Avenue	US-23 to East Central Avenue
West Jamet Street	Louvigny Street to I-75
M-108 (Nicolet Street)	Entire Length
Old 31	US 23 to Nicolet Street
Straits Avenue	Louvigny Street to Nicolet Street
North Huron Avenue	Ducharme Street to Nicolet Street
Louvigny Street	Straits Avenue to West Central Avenue

Non-motorized Transportation

The Village and the State of Michigan maintain a network of non-motorized transportation facilities, which include sidewalks, trails, and the Village’s Historic Pathway.

In 2009 the Village in conjunction with a citizens trail committee developed the *Mackinaw City Hike and Bike 2015*, a plan designed to create a vision, principles and goals for an integrated transportation system that provides opportunities for pedestrians, bicyclist, skiers and snowmobilers to implement complete street designs throughout the Village. The plan gives primary focus to Village owned trail assets and their interconnection with State owned trails. This plan identifies routes for various non-motorized and snowmobile use and establishes a capital improvement schedule to complete trail projects.

Mackinaw City has 3.1 miles of Michigan Department of Natural Resources (MDNR) Multi-Use Trails. These trails, which are located on former railroad right-of-way (ROW), provide year-round opportunities for recreation. Hiking and biking along the trails are common summer activities, while snowmobiling and skiing are prevalent during the winter.

The Village in conjunction with the State of Michigan has developed the Mackinaw City Trailhead near the central business district. The \$600,000 Trailhead facility is the Northern

terminus of the North Central State Trail and provides 20 parking spaces as well as restroom facilities and a covered pavilion. The trail within the Village is a paved asphalt surface designed for multiple uses including snowmobiles. The Village is working with the State of Michigan and local organizations to improve signage along the trail system.

The MDNR Multi-Use Trails connect Mackinaw City with a larger network of recreation trails. Trails depart from the Mackinaw City Trailhead to the north, southeast, and southwest. The Northern trail requires a shuttle across the Mackinac Bridge by the Mackinac Bridge Authority. A call station is located at the entrance of exit 339 which allows trail users to request a shuttle. The trail to the Southeast is part of the North Central State Trail that provides access to Cheboygan, Indian River, Wolverine, Vanderbilt and Gaylord. The Hawk Trail continues east out of the City of Cheboygan along the Lake Huron shoreline turning south toward Onaway and continuing to Alpena. The trail to the southwest provides access to Pellston, Alanson, Petoskey and westward.

Sidewalks

The Village of Mackinaw City is a very *Walkable Community*. The Village was selected by the Michigan Department of Transportation (MDOT) in 2008 to have Dan Burden of Walkable Communities Inc., an internationally recognized authority on bicycle and pedestrian facilities and programs, livability, sustainability and Smart Growth to conduct a Walkability Audit to identify the strengths and weakness of the Village's sidewalk system. The audit identified that the Village is a pedestrian friendly community providing a solid foundation to accommodate pedestrian movement and provides a unique walking experience with the Village's outstanding natural scenery, historic character, and unique streetscape features. Mr. Burden also identified the need to expand pedestrian access throughout the Village and improve on the existing system.

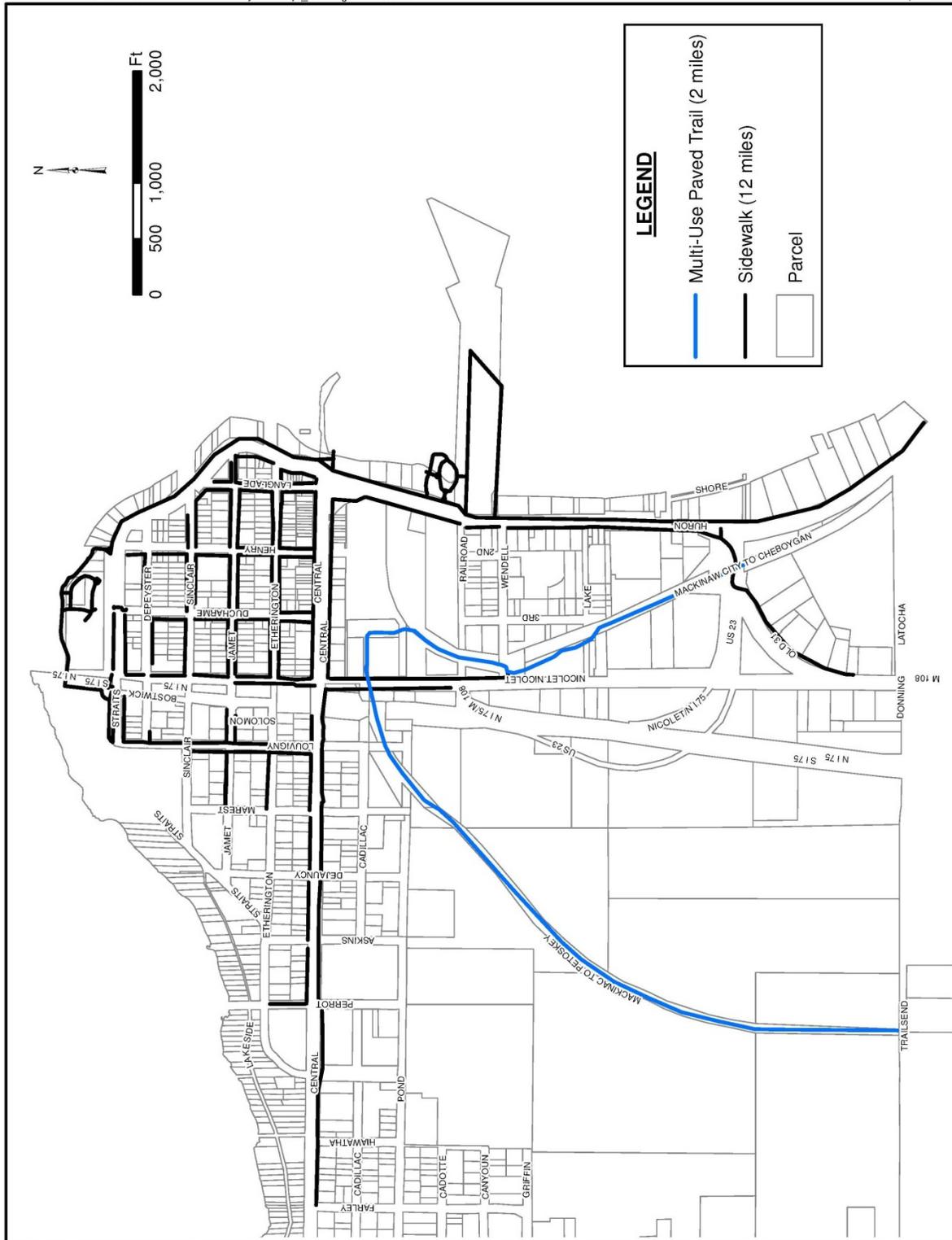
The Village maintains sidewalks along most of the major streets as well as along many residential streets. Village sidewalks total 14 miles. Figure 5-1 identifies the Village sidewalk system and multi-use paved trail system. The residential district immediately north of the central business district contains many blocks of sidewalk. However, the residential district west of Interstate 75 lacks sidewalk along most of the streets.

As of 2010, more than 90 percent of the Village's sidewalks were determined to be in good or very good condition. Village sidewalks consist of decorative concrete pavers or poured concrete. Paved sidewalks are adequate for all nonmotorized uses.

As part of the sidewalk system, the Village provides various pedestrian amenities. In the areas where streetscape enhancements have been completed, traffic calming features, crosswalks at intersections, landscaping, park benches, decorative garbage disposal cans, and historic lighting are provided. In most of the residential areas with sidewalks, street lighting is provided consistently at street intersections. Along the Village's Historic Pathway, informational markers and carved statues are provided detailing the history of Mackinaw City and the Straits of Mackinac. The Historic Pathway provides signage directing pedestrians along the route. Landscaping and park benches generally improve the aesthetic appeal of sidewalks and the resident and visitor experience.

Figure 5-1 Sidewalk Map

PLOTTED BY: JEFFREY GUERRERO 02/07/2011 03:40 PM
 S:\2010\100036.GA.MackinawCity.GIS.Map\Drawings\GIS\Sidewalks.mxd



725 Prudden Street
 Lansing, MI 48906-5173, 731, 1200
 123 West Main Street, Suite 200
 Cheboygan, MI 49722-1887, 732, 8731
 645 Monroe Avenue NW, Suite 210
 Grand Rapids, MI 49503-4115, 602, 2414
 1211 Ludington Street
 Eastman, MI 49822-909, 233, 0300
c2ae
 www.c2ae.com

PUBLIC SIDEWALK & PAVED
 MULTI-USE TRAIL MAP

VILLAGE OF MACKINAW CITY
 CHEBOYGAN COUNTY, EMMET COUNTY, MICHIGAN

SCALE: AS SHOWN
 PROJ #: 100036
 DATE: 2/8/2011
 FIGURE
5-1

Transit Services

The Village is served by an intercity bus, a regional transit service, and ferry services.

An intercity bus is provided by Indian Trails, Inc. The Village bus stop is currently located at the Village Hall, 102 South Huron. Indian Trails provides two bus routes serving Mackinaw City. The Chicago-Flint-St. Ignace line connects Mackinaw City and points along the eastern side of Michigan's Lower Peninsula. Passengers can find connecting service to Greyhound buses in St. Ignace and Flint. The Chicago-Kalamazoo-St. Ignace line connects Mackinaw City and points along the western side of Michigan's Lower Peninsula.

Regional transit service is provided by Straits Area Regional Ride. The service provides its passengers with commuter service from Mackinaw City to Cheboygan and Petoskey. The system has frequent trips in the summer and operates on a reduced schedule in the winter.

The Village is no longer served by rail carriers.

Marine Transportation

The Village's setting along the Straits of Mackinac makes it a hub for marine transportation.

The Village operates a Municipal Marina, located at 107 South Huron, which is primarily used for pleasure watercraft. The Marina has 104 slips; 50 slips are reserved for seasonal boat docking and 54 are slips for transient boaters. The Marina can accommodate boats of up to 100 feet in length. The Marina offers a variety of services to boaters, which include:

- ▶ Restrooms, showers, laundry, and picnic facilities
- ▶ Water, electric, cable, and phone
- ▶ Chart Room and Lounge Area
- ▶ Internet access, including a Marina-wide Wi-Fi wireless network
- ▶ Marine supply store
- ▶ Gas dock and pump-out station
- ▶ Boat launch and retrieval ramp
- ▶ Playground
- ▶ On-site mechanic service
- ▶ Shuttle Service

The State of Michigan's Waterways Commission operates the Straits State Harbor which opened in 2009. The harbor is a 126 slip transient facility offering boaters the following amenities:

- ▶ Restrooms, showers, laundry and picnic facilities
- ▶ Water, electric, cable, and phone
- ▶ Boat launch and retrieval ramp
- ▶ Gas dock and Pump-out stations
- ▶ Cruise ship docking slips
- ▶ Chart room and counter area
- ▶ Internet access including Marina

Three ferry lines serve Mackinaw City with frequent seasonal service to Mackinac Island. Shepler's Mackinac Island Ferry service departs from 556 East Central, Arnold Transit Co. catamaran ferry service departs from 801 South Huron, and Star Line Mackinac Island Ferry service departs from 711 South Huron.

Airport

Mackinaw City is served by the Pellston Regional Airport, located approximately 15 miles south of Mackinaw City along US-31. The Airport recorded 46,310 total commercial passengers in 2009. The Airport has two runways, both 150 feet wide. The longest runway is 6,512 feet and the second runway is 5,395 feet. The Airport is served by one commercial airline, Northwest Airlines, with direct nonstop regional jet service to Detroit year-round and seasonal summer service to Minneapolis. The Airport completed a new 38,000 square foot terminal building in 2003 which features a restaurant, gift shop, internet access and conference center. Shuttle service is provided to Mackinaw City from the Airport, and two rental car services are located in the Airport.

Parking

Vehicle parking is available throughout the Village. Commercial establishments outside of the central business district are required to provide on-site parking. The Village provides free public parking in the central business district as well as in other areas along major street corridors. The Village estimates that there are more than 8,800 total public and private parking spaces located within the Village limits.

Free public parking maintained by the Village accommodates approximately 1,250 vehicles. Public parking in the Village is located in the following areas:

Table 5-2 Public Parking

Location	Number of Spaces
Central Avenue between Nicolet and Huron	472
Mackinaw City Trailhead	20
Nicolet Street between Central and Depeyster	58
West Straits and Louvigny Streets west of I-75 and north of Depeyster	93
Various parking areas along North Huron between Etherington and Nicolet	27
North Huron between East Central and Etherington	31
Langlade between East Central and Etherington	32
Employee parking on Etherington between Henry and Langlade	10
Henry between East Central and Etherington	12
Public lot at southeast corner of Henry and Etherington	16
Public lot at southeast corner of Ducharme and Etherington	42
South Huron between Wendell and Central	51
Conkling Heritage Park lot	60
Municipal Marina lot	70
Village Hall lot	21
Wendell west of Huron	24
Public School lot	63
Recreation Center lot	127
East Jamet at Old School Park	15
TOTAL	1250

The most recent parking study for Village public parking in the central business district was conducted in 2002. During the 2002 parking study, the municipal parking along Central Avenue and other streets in the immediate vicinity was counted during the months of May, June, July and August. The seasonal nature of Mackinaw City's economy negated the need for conducting parking counts during the fall, winter, and spring months. Results of that parking study appear as follows:

Table 5-3 Parking Counts

Month	Average Percent Full
May (28-31)	26.6
June	41.9
July	64.1
August (1-18)	69.9

Despite the monthly averages, some weekends (especially holiday weekends) result in higher occupancy of municipal parking spaces. Peak occupancy was 93.6 percent on July 5, 2002, which was part of the Independence Day holiday weekend.

In addition to public parking, most commercial and institutional establishments are required to provide on-site parking. Privately owned and maintained parking lots cover approximately 3.82 million square feet of land in the Village, which is the equivalent of about 4.3 percent of the Village's land area. Private parking lots cover approximately 2.6 times the land area that commercial and institutional buildings cover in the Village. These figures were arrived at by using digitized footprints of buildings and parking lots of buildings in commercial zones and are approximations.

Traffic Safety

The Mackinaw City Police Department is responsible for maintaining public safety both on and off of public roadways. Mackinaw City has a strong reputation for a high level of traffic safety.

The number of reported traffic crashes occurring on public roadways averages 49.5 per year between 2004 and 2009. Of the traffic accidents occurring between 2004 and 2009, the following intersections had the most crashes (in order of most crashes):

- ▶ Nicolet Street and North Huron Avenue
- ▶ US-23 and M-108 (Nicolet Street)
- ▶ East Central Avenue, Huron Avenue, and Langlade Street
- ▶ East Central Avenue and Henry Street
- ▶ I-75 approaching the Mackinac Bridge

The streets with the most number of traffic accidents are the following:

- ▶ East Central Avenue between Nicolet Street and Huron Avenue
- ▶ Nicolet Street between Central Avenue and North Huron Avenue
- ▶ West Straits Avenue between Nicolet and Louvigny Streets

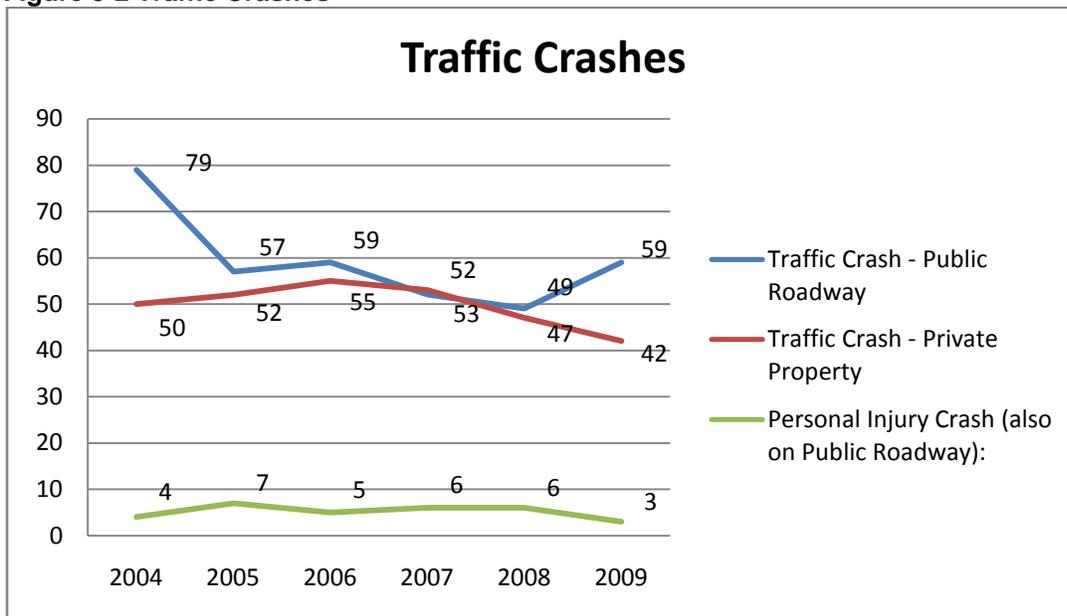
The accidents which occurred along East Central Avenue occurred mostly at intersections or occurred due to vehicles backing out of the diagonal parking spots along the street into oncoming traffic. The majority of crashes that occurred on Nicolet and Straits Avenues occurred at intersections.

Most of the Village's residential intersections reported one or less traffic crashes between 2004 and 2009.

The Village has very few reported crashes which result in personal injury. The number of reported personal injury crashes has varied between 4 and 7 in the five-year period ending in 2009.

Reports of crashes occurring on private property averaged 49.8 between 2004 and 2009. The following chart shows the number of public roadway, private property, and personal injury crashes in the five-year period between 2004 and 2009:

Figure 5-2 Traffic Crashes



Chapter 6 Parks, Recreation and Greenways

Parks and recreational facilities are an important element of the Village Master Plan. Mackinaw City believes its greatest assets are its people and its natural resources. A good parks, recreation and greenways system directly serves both of these assets by creating ideal places for people to enjoy the great outdoors and improve their health and wellbeing. In Mackinaw City, the parks are a place to exercise, enjoy valuable natural resources, and relive the history of the area. Unique features of the Village's park system include hand-carved statues of historical figures and are located on or near significant historical sites. Our recreational activities include baseball, softball, basketball, ice skating, hockey, hiking, biking, cross country skiing, fishing, boating, kayaking, snowmobiling, nature observation, social gatherings and vintage baseball games at our Heritage Village.

The Village has a five year parks and recreation plan, last updated in 2008 that serves as the primary plan for recreation in the Village. In 2010 a "hike and bike" plan was adopted that added more detail to the non-motorized elements of the recreation facilities. The plans provide goals and objectives for recreation development and coordinates with the Village's recreation partners including the Mackinac State Historic Parks, Emmet and Cheboygan Counties, Wawatam and Mackinaw Townships, the State of Michigan Department of Natural Resources, Mackinaw City Public Schools, the Mackinaw Area Historical Society, Mackinaw City Skating Association, Icebreaker Mackinaw Maritime Museum and many more. It is anticipated that these partners all contribute and will continue to be consulted in future parks, recreation, and greenways planning efforts.

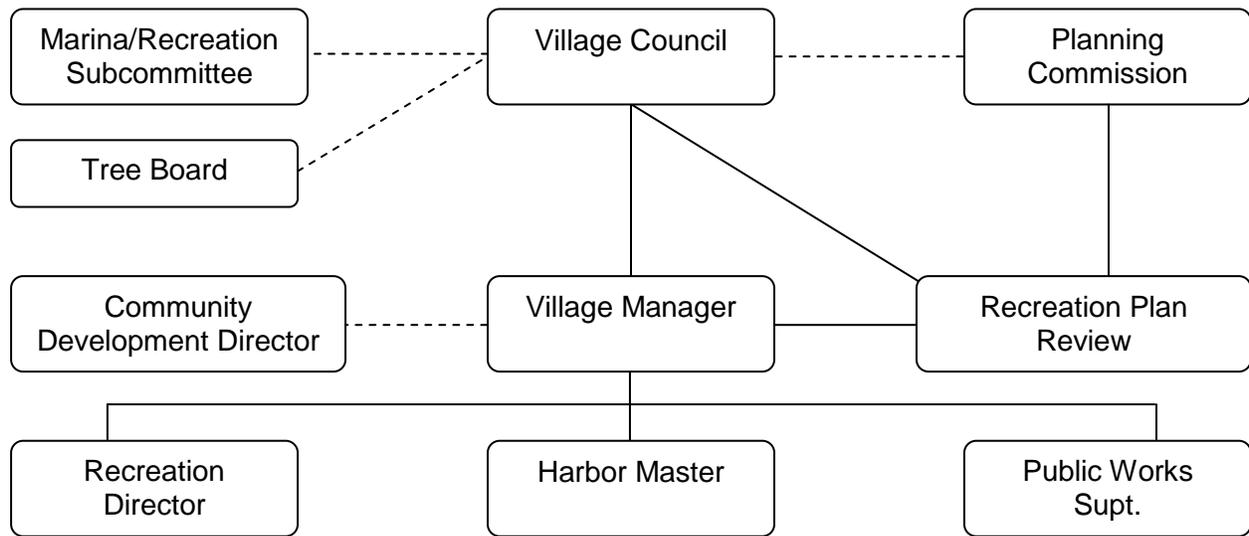
Administrative Structure

Policy direction for the Recreation Department is directed by the Marina/Recreation Subcommittee with Council approval. Their primary responsibility is to formulate new goals and policies for Village recreational facilities. The Village Planning Commission participates in the development and review of the Parks, Recreation, Open Space and Greenway Plan.

The Village's Parks and Recreation System are supported by two positions on the Village Staff. These positions are Recreation Director/Harbormaster, and Department of Public Works (DPW) Superintendent. Currently one person fills the Recreation Director and Harbormaster roles. This person takes care of the Recreation Complex and organizes community recreational programs. The Harbor Master controls the activities at the Village's Municipal Marina along with a seasonal staff of approximately 13 part-time employees.

The DPW Superintendent oversees maintenance of all parks outside of the Recreational Complex, and oversees construction and refurbishment of all parks and recreation facilities when directed. Village maintenance employees, under direction of the DPW Superintendent, do the maintenance work at the parks.

Below is an organizational chart of the recreation administration within the Village of Mackinaw City.



For Fiscal year 2007-2008, the total proposed budget for the Village of Mackinaw City was \$4,656,579. The total proposed parks and recreation general fund budget was \$107,030, with an additional \$85,500 for the Recreation Center fund, \$28,960 for the Recreation Complex fund, \$5,820 for the Conkling Heritage Park Performance Shell, and \$525,100 for the Municipal Marina. The source of funding for the general parks and recreation budget is the Village's general fund, which comes from tax revenues.

Recreation Facilities Inventory

Figure 6-1 identifies the location of Mackinaw City's public parks, including park type, park name, the size of the park, and the park's service area. Because of the tourism-oriented nature of Mackinaw City's economic structure, our parks' service areas are not easily defined. Many of our parks are used by visitors to the community on a more frequent basis than community members use them.

Figure 6-1 Mackinaw City's Public Parks



Table 6-2 Recreation Administration

Map #	Park Name	Park Type	Park Size (acres)	Service Area
1	Alexander Henry Park	Community Park	2.1	Village, visitors
2	Arnold Transit Co. Park	Private Park	0.4	Visitors
3	Conkling Heritage Park	Community Park	4.5	Village, visitors, region
4	Depeyster Park	Mini-park	0.2	Village, visitors
5	Fishing and Observation Pier	Special Use	N/A	Village, visitors, region
6	Gary Williams Park	Mini-park	0.4	Village, visitors
7	Heritage Village	Community Park	44.0	Village, visitors, region
8	Indian Pathways Park	Street side Park	1.8	Village, visitors
9	McRae Nature Park	Natural Resource Area	3.9	Village, visitors
10	Municipal Marina	Marina	3.2	Village, visitors, region
11	Old School Park	Community Park	2.3	Village, visitors
12	Recreation Complex	Sports Complex	13.1	Village, visitors, region
13	Nancy Dagwell Campbell Park	Mini-park	0.3	Village, visitors
14	Village Beaches	Community Park	3.9	Village, visitors, region
15	Wawatam Park	Community Park	2.5	Village, visitors

Parks Not Administered by the Village of Mackinaw City

Map #	Park Name	Park Owned By	Park Size	Service Area
16	Fort Michilimackinac	Michigan State Historic Parks	27.9 acres	Village, visitors, region, state
17	Trailhead	Michigan Department of Natural Resources	2.9 acres	Visitors, region
18	Multi-purpose recreational trail	Michigan Department of Natural Resources	2.5 miles	Village, visitors, region
19	McGulpin Point Lighthouse	Emmet County	10 acres	Village, visitors, region

Figure 6-3 Conkling Heritage Park Performance Shell



Five Year Goal Summary

The following are the goals of the 2008 – 2012 Parks, Recreation and Greenway Plan

1. Promote Village recreation programs and facilities.
 - a. Develop a recreational map that shows all available public and private recreational opportunities for residents and visitors. Promote and market these maps to all available user groups.
 - b. Expand the parks system concept to include blueways, or bodies of water and water trails. Develop blueways and water trails with maps. Market these blueways and implement water trails planning with neighboring jurisdictions.

Figure 6-4 Parkland Acquisition Priorities



Red Hatched Area = Preferred Park Acquisition Area
 Green Hatched Area = Existing Parks
 Blue Hatched Area = Possible Future Park Areas

2. Ensure adequate maintenance and barrier-free access to all parks, both existing and future.

3. Enhance facilities and aesthetics of existing waterfront parks.
4. Develop policies that preserve valuable natural and historical assets that are either already in our parks system or in need of acquisition as a park.
5. Improve “connections” to the parks.
6. Establish additional parks that serve west-side residential areas.
7. Ensure that new and existing parks preserve open space and protect natural state of the park’s features.
8. Continue to seek waterfront land for additions to the public park system.
9. Construct restrooms at Conkling Heritage Park and the Heritage Village/Nature Park.
10. Expand the amenities at the Recreation Complex.
11. Establish dog-friendly parks that improve compatibility of residents’ and visitors’ dogs with the intended users.
12. Continue with tree inventory updates and utilize designation as a Tree City to raise awareness of their importance in beautification of the Village and long-term health of our environment.
13. Add family-oriented youth and senior citizen activities and amenities to the parks and recreation system.
14. Establish and communicate clear guidelines for beach cleaning so that they are enjoyable and protect the natural features as required by environmental laws.
15. Continue development of the Heritage Village/Nature Park by constructing a picnic pavilion, parking lot, restroom facility and nature trail system to accommodate and promote the use of the park for cultural and nature education as well as promote access to natural resources such as wildlife viewing, night sky observation and rare plant observation.

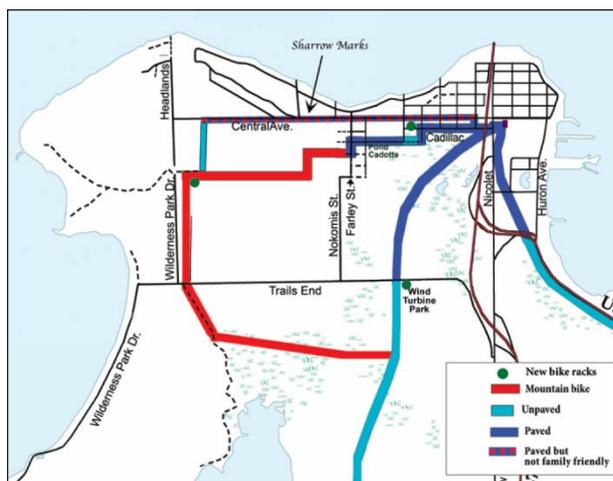
Hike and Bike Plan 2015

In 2010 the Village adopted the goal of creating a community where residents and visitors are able to walk and to bicycle with confidence, safety, and joy with paths that are scenic, educational and restful. Proposed facilities were designed to eliminate conflict with motorized vehicles and make trips more pleasant and convenient, eliminating barriers to the mobility impaired. The intent of the plan is to make bicycling and walking an integral part of the recreation and transportation systems of Mackinaw City.

Major proposals included:

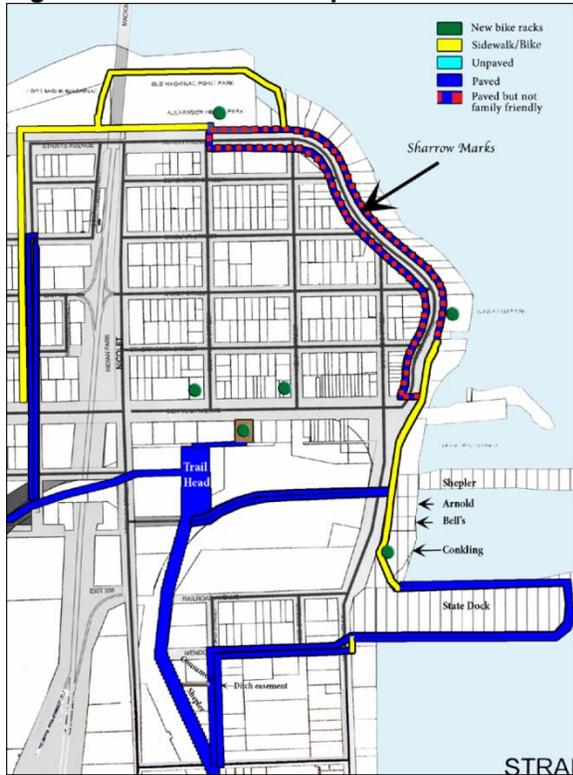
1. Design a cross-town separated, multi-use loop to take riders from the Department of Natural Resources (MDNR) Trailhead to the Heritage Village, Headlands, and McGulpin Point with a return leg by an alternate route. This path would be designed to be suitable for beginning bicyclists, Figure 6-5.
2. Design a downtown recreational loop will circle the downtown providing rides along the waterfront, as much as possible, based at the MDNR Trailhead and designed with feeder radii leading to Central Avenue, Figure 6-6.

Figure 6-5 Cross Town Loop



3. Add extensions to the downtown loop to encourage motel visitors and campground users to bicycle to the ferry docks and other tourist destinations and develop a plan for bicyclers and snowmobilers to get from the Michigan Department of Natural Resources (MDNR) Trailhead to the Mackinac Bridge transport vehicles.
4. Analyze the residential centroids and residential services in town and develop connector routes.
5. Meet with Mackinaw's Chamber and Visitor's Bureau about the possibility of packaging a week-long family bicycling vacation.

Figure 6-6 Downtown Loop



Chapter 7 Existing Land Use

Pattern of Land Divisions

As development occurs, larger tracts of land are generally broken down into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Land division patterns for the Village of Mackinaw City are discussed below and can be seen on the Existing Land Use Map, Figure 7-1.

Larger undivided parcels are primarily located in the southwest and south central portions of the Village, which are not currently served by municipal water and sewer. The remaining large tracts of undivided land in the Village are typically nonforested open fields, forests, or wetlands with septic and construction limitations. Slightly more than one-half of the Village's land area remains undeveloped as these large parcels. An area at the southwest corner of the Village, along Trails End Road and Wilderness Park Road, has been subdivided into 49 large lots suitable for residential development. These lots currently are not developed, perhaps because municipal services are not available.

Large lot commercial areas can be noted on South Huron, Nicolet, and North Huron just east of the Mackinac Bridge. Small lot commercial uses are found on East Central. Large residential lots, some as large as ten acres, are found in the northwest portion of the community on West Central, Valley and Ridge. Small lot residential properties in the Village are found in the older plats in the northeast and north central areas, and subdivided properties along the Lake Michigan shoreline.

Existing Land Use Statistics and Characteristics

According to the 2000 Census, Village of Mackinaw City's land area is 3.36 square miles, or 2,177 acres.

Existing land use conditions in the Village were mapped in October of 2010. The Existing Land Use Map, shown as Figure 7-1, illustrates the distribution of land uses within the Village. Michigan Resource Information Systems (MIRIS) land cover/use classification categories were used to map the existing land use in the undeveloped areas of the Village, while the developed areas were categorized based on the current use. Using a current parcel map as the basis, the existing land use was mapped by extensive field checking. The updated information was then computerized to produce the existing land use map and statistics.

Figure 7-2 graphically represents the percent of the Village in each land use category. Table 7-1 presents the land use in current rank order, showing the number of acres and percent of the Village in each of the land use categories. Each land use category is discussed in detail in this chapter, not in rank order, but rather by the intensity of development.

Figure 7-1 Existing Land Use Map Mackinaw City, 2010

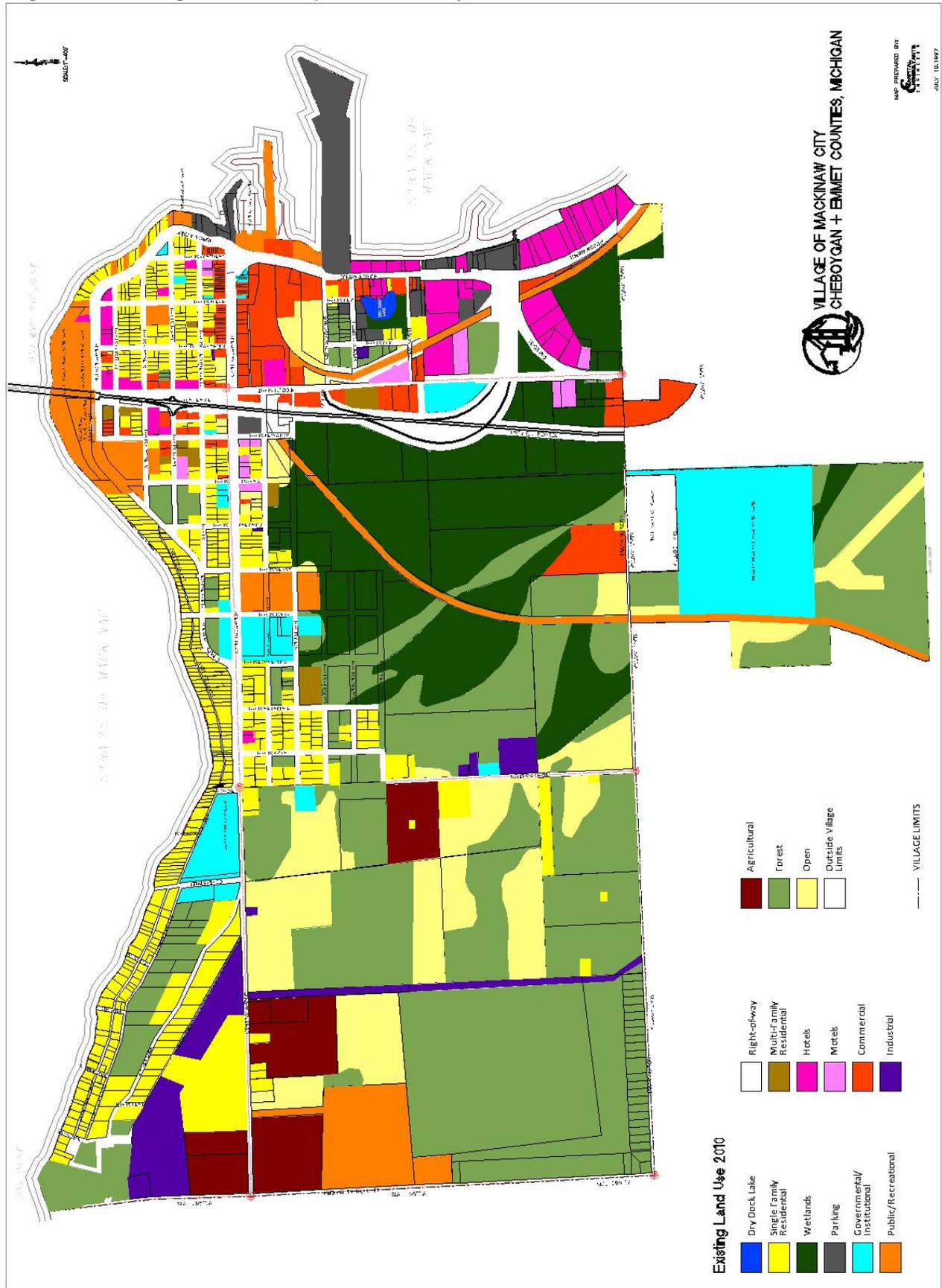
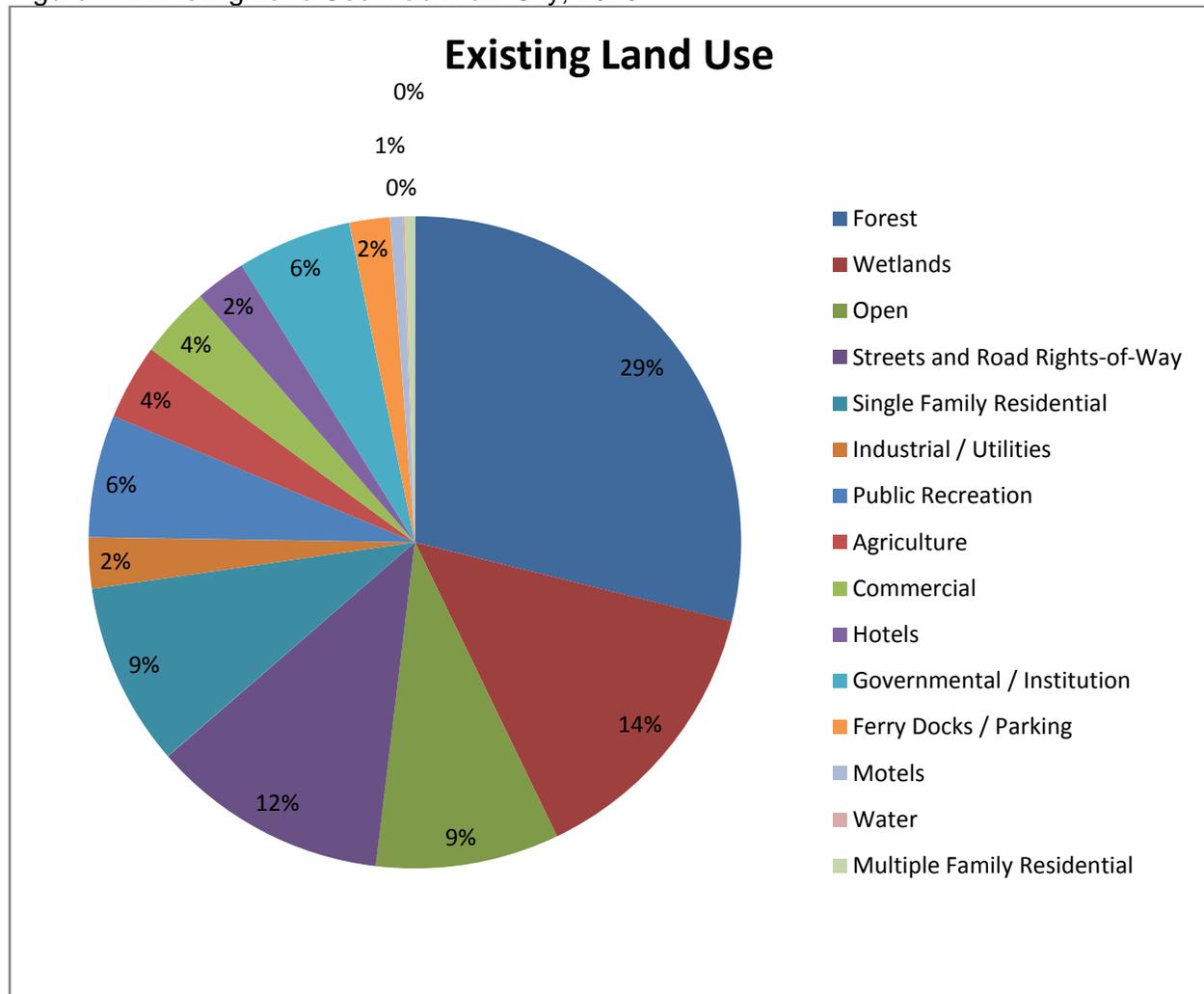


Figure 7-2 Existing Land Use Mackinaw City, 2010



Source: ROWE Professional Services Co, 2010

Streets/Rights of Way

Public streets and road rights-of-way were separated from the adjacent land uses, because they occupy such a large percent of the land area, more than 12 percent of the Village. It is important to note that a large portion of this category includes I-75 and U.S. 23 corridors, intersections, ramps and the bridge. Private roads are not shown on the existing land use map, nor are their associated land area included the streets/road rights-of-way land area acreage.

Table 7-1 Existing Land Use Statistics Village of Mackinaw City

Land Use Category	Number of Acres	Percent of Village
Forest	627.6	28.6
Wetlands	302.6	13.8
Open	196.6	9.0
Streets and Road Rights-of-Way	254.1	11.6
Single Family Residential	219.9	9.0
Industrial / Utilities	55.2	2.5

Existing Land Use

Land Use Category	Number of Acres	Percent of Village
Public Recreation	132.0	6.0
Agriculture	81.2	3.7
Commercial	75.9	3.5
Hotels	54.8	2.5
Governmental / Institution	123.6	5.6
Ferry Docks / Parking	44.2	2.0
Motels	12.2	0.6
Water	2.9	0.1
Multiple Family Residential	10.6	0.5
TOTAL	2,193.4	100.00

Source: Michigan Resource Inventory System and ROWE photo interpretation, field verification and map updating.

Residential

As can be seen on the existing land use map, the statistics table and the bar graph, single family residential land use occupies ten percent of the land (approximately 220 acres) in the Village, while multiple family dwelling units make up only five-tenths of one percent. Where living quarters or apartments may be attached to a commercial use, the land use category is shown as commercial, the primary use.

Commercial

Because of the importance of lodging facilities to a resort community like Mackinaw City, hotels and motels are shown as separate land use categories, while all other commercial uses are grouped together. For the purpose of this study, hotels and motels are distinguished by the number of rooms; more than 25 rooms is classified as a hotel, and 25 or less is classified as a motel. Hotels and motels make up 2.5 and 0.5 percent of the Village's land, respectively.

Lands used for other commercial purposes (restaurants, gift shops, private recreation, gas stations, banks, hardware store, etc.) comprise 3.5 percent or 58 acres of the Village area. Major commercial districts are noted on South Huron, North Huron east of the bridge, East Central and Nicolet

Public Recreation

Because public recreational land uses are so important to Mackinaw City, a land use category separate from governmental and institutional use is discussed in this chapter. Public recreational land uses include both those owned/operated by the State of Michigan, such as Colonial Fort Michilimackinac and snowmobile trails, and those Village facilities, such as the recreation complex on West Central and other Village parks. A significant addition to the stock of recreational land in the past few years has been the former railroad right-of-way for use as non-motorized trails. Recreational land use covers 132 acres of land, or six percent of the Village land area.

Ferry Docks and Associated Parking

Mackinaw City, as well as neighboring St. Ignace, serves as locations for ferry service to Mackinac Island. Three privately operated ferry services operate out of Mackinaw City, and use nearly 44 acres for ferry docks and associated parking, making up just over two percent of the Village's land area. While recreational in nature, this land use activity is identified independent of other recreational uses, because it is privately operated and is unique to Mackinaw City and her neighbor to the north.

Governmental / Institutional

Institutional uses in the community make up only 5.6 percent (23.6 acres) of the land area. However, these facilities are important to the community and include three churches, Mackinaw City School, Cemetery, Library, Post Office, Senior Citizen Center, Chamber of Commerce, Tourist Bureau, State Park offices and Women's Club.

Industrial / Utilities

Mackinaw City is home to only a few private industrial enterprises. Commercial storage facilities associated with the ferry services and a sign shop are located inside the Village boundaries. Public utilities are also counted in this category, including Consumers Energy power substation and associated lines in the northwest sector of the Village and the municipal wastewater treatment facility. A detailed discussion of the Village utilities is provided in Chapter 4, Community Services and Facilities. Additionally, the wellheads and lift stations are considered utilities, but due to the physical size in any one location they do not show on the land use map. For location information on these facilities, see the Municipal Water System (Figure 4-2) and Municipal Sanitary Sewer System (Figure 4-3). Industrial uses and utilities make up 8.24 percent of the land area.

Open

The nonforested land category consists of undeveloped herbaceous open and shrub land or lots. As shown in Figure 7-1, over 9 percent or approximately 197 acres of the Village is in the open category. Open lands are found generally on the west side of the community.

Wetlands

Wetlands include land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes and bogs. The identified wetland areas also include areas which support lowland hardwoods and conifers, such as northern white cedar, willow and aspen species, as well as lowland brush and grasses. Wetlands are generally located in the south central portion of the Village, just west of I-75. The wetlands category is the second largest land use category and comprises nearly 14 percent of the Village area. The importance of wetlands is discussed in Chapter 3, Natural Resources.

Forest

The forest is the single largest land use category, accounting for nearly 30 percent (628 acres) of the Village, predominantly located in the southwest regions of the Village. These forests include upland hardwoods and conifers, such as beech, maple, white pine and red pine.

Agriculture

Agricultural land uses represent 3.7 % of land in the Village and consist of a few uses located on the western end of the Village.

Water

Dry Dock Lake is a small body of water (2.9 acres) located west of Huron Avenue.

Chapter 8 Economic Development

In 2005 an Economic Assessment & Restructuring Program was developed for the Village of Mackinaw City. The study was prepared by The Chesapeake Group, Inc. under contract to the Village, under the direction of the Economic Development Commission.

The plan identified the major areas of existing and future economic development in the Village:

- ◇ Tourism
- ◇ Attraction of multi-county/"regional" serving retail activity
- ◇ Research and development and related light manufacturing, utilizing the area's natural resources, including but not limited to the creation of a potential "incubator", with a higher education component.
- ◇ Energy development, including bio-mass, wind and other environmentally sensitive alternatives.
- ◇ Home based business activity, including crafts and those employing technology.

The specific recommendations of the study are:

1. An entrepreneurial/apprenticeship program
 - a. Recruitment of "new ownership" can be effectuated through community's colleges, vocational and technical schools, and other colleges throughout Michigan or even a larger multi-state area.
 - b. Current owners can also identify current employees with potential
 - c. The "training" process
 - ▶ Certain required business curricula courses
 - ▶ An internship with introduction and at least part-time work while attending school or training
 - ▶ An apprenticeship of 1 to 3 years working and learning in the business
 - ▶ Purchase, with previous ownership staying on for 1 to 2 years
2. Facilitation of sale from willing property to willing business owner
 - a. The interaction should be coordinated by the Chamber of Commerce
 - b. The activity involves
 - ▶ Contacting both parties
 - ▶ Coordinating an initial discussion or meeting
 - ▶ Expressing interest
 - ▶ Follow up with assistance as needed, but at least maintaining contact with both parties
 - ▶ "Trouble shooting" as needed
3. Facilitation of the expansion of existing businesses
 - a. Facilitating the expansion of existing businesses differs little from the above
 - b. The Chamber of Commerce should coordinate with the Village to assist with attempts to keep businesses within the Village boundaries
4. Expansion of the season
 - a. Expanded marketing
 - b. The process could and should be facilitated through the Visitors' Bureau and staff support should be sought from that entity as well

- c. Enhanced linkages to winter activity
 - d. Bus trips could be organized and initiated to strategic activities during the day in much the same manner that in-season visitors leave Mackinaw City and return to stay overnight at present
 - e. Promotional packages could be designed to target a range of activities and lengths of stay
 - f. Promotional packages could largely be promoted via the internet
 - g. Creation of additional anchor activity
 - h. A resort
 - ▶ The resort concept could take time and potentially morph from a “condo/hotel” facility.
 - i. A family entertainment center, focused on youth, education and fun experience. One such opportunity would be to recruit an institution like “WannadoCity”.
 - j. Expanded residential development
 - k. Exploring alternative energy sources and use in facilitating favorable winter environmental conditions downtown
 - l. Enhancing pedestrian activity could come from landscaping improvements that provide better protection from wind
 - m. Mackinaw City seek a pilot effort to determine feasibility and costs for installation of a system that would be linked to on-site alternative energy production, utilizing either wind, fuel cell, or both technologies
5. Expansion of the range of housing for senior citizens
- a. Zoning bonuses and waivers should be explored to foster such activity.
6. Pursuit of compatible housing
- a. This should focus more on assuring that ordinances do not create hardship
 - b. The development process is smooth
 - c. Attitudes of boards, etc. indicate the desire to grow, welcoming complementary housing, and facilitating not hindering the review process
7. Positioning the Village as the hub of the tri-county region
- a. The identification of appropriate sites
 - b. The recruitment of quality development interests to facilitate development
8. Pursuit of six defined R & D broad areas of research
- a. Pursuit of six broad areas
 - ▶ Invasive species
 - ▶ Natural resources
 - ▶ Biomass
 - ▶ PCB and other clean-up
 - ▶ Animal cognition
 - ▶ Other alternative energy
 - b. Two tools for expanding research and development
 - ▶ Directly recruit individual companies through a coordinated, continual process
 - ▶ Form a partnership or consortium that has economic development implications to Mackinaw City beyond R & D because of the incorporation of higher education institutions. One or more of the colleges or universities associated with research already in the upper part of Michigan could be the catalytic entity in partnership with the Village.

9. The development of a consistent business recruitment process
 - a. The establishment of a recruitment process has broader purposes including the recruitment of:
 - ▶ Research entities
 - ▶ Commercial entities
 - ▶ Housing developers
 - ▶ Commercial developers
 - ▶ Artisans and craftspeople.
 - ▶ New year-round anchor activity.
 - b. Decide who will administer and provide staff support for the recruitment effort in general
 - c. Develop marketing materials oriented toward the types of entities to be solicited
 - d. Obtain the ability to reproduce the materials on demand internally
 - e. Develop lists of those to be solicited
 - f. Develop a set schedule for phasing of the recruitment process so that the work load is distributed over time
 - g. Establish a funding mechanism to ensure that the effort is continual
 - h. The marketing activity associated with recruitment would include:
 - ▶ Distribution of developed materials
 - ▶ Follow-up contact
 - ▶ Establish relationship with landlord, or property owner, or other appropriate party
 - ▶ Preparation of Request for Qualifications and Proposals, review and evaluation of the responses, and establishment of the relationship (such as between the development interest and the Village, or the developer and private property owner)
 - ▶ Continue follow-up, acting as an “ombudsman” for the process
 - i. The formation of an Economic Development Capital Fund be explored for this use as well as other economic development activity
10. Creation of incubator space
 - a. The needs for the incubator space are defined as including:
 - ▶ 10 spaces for labs or related activity with direct linkage to additional office spaces of about 1,500 square feet
 - ▶ Have a shared conference room and reception area, consisting of about 1,250 square feet
 - ▶ Outdoor areas that can be isolated from each other
 - b. The incubator could be limited to R & D activity or include other professional activity as well
11. Establishment of home-based business activity
 - a. The Village must ensure that its development regulations and zoning not just allow but support and facilitate appropriate home-based activity
 - b. Each of the businesses should or are likely to be required to obtain an occupational license and pay business taxes
 - c. An aggressive marketing campaign should occur to announce and educate potential home-business owners of the advantages to living and working in Mackinaw City. This can be a managed campaign, structured over time to include, but not be limited to
 - ▶ Partnering with realtor groups
 - ▶ Attendance at Michigan franchise shows
 - ▶ Awareness advertising throughout the State of Michigan
 - ▶ Public relations news releases

- d. One unique niche within the home-based context that can effectively be promoted through cooperative marketing efforts is in the artist and crafts arena. Pursuit of this niche would flourish if:
 - ▶ Marketing were cooperative and collective among the artisans, with and through one entity(existing or to be established)
 - ▶ Marketed via the internet and catalogue(the latter existing or formed)
 - ▶ Item not mass marketed, but limited in numbers as a “collectible”
 - ▶ Signed and numbered by the artisan when and if appropriate
12. Other critical suggestions
- a. Technology availability; free WiFi throughout downtown and potentially the entire Village should be pursued
 - b. Focus on positives
 - c. Increased promotion of non-water outdoor activity
 - d. Enhanced dialogue, communication and avoid duplication of efforts between Village, Tourism Board, and Chamber of Commerce should be sought

Chapter 9 Community Sustainability

The concept of sustainable development arose out of the knowledge that the economic growth throughout the world over the past 100 years has been based on the consumption of natural resources that were not renewable, or at least not renewable at the increasing rate the world's population was consuming them. Sustainable development became a movement to encourage individual communities to recognize their role in this process and to adjust their plans to reduce their impact on these resources.

The United Nations defines sustainability as:

“A sustainable society meets the needs of the present without sacrificing the ability of future generations to meet their own needs”.

The American Planning Association (APA) report “A Planners Guide to Sustainable Development” lists four key characteristics of sustainability

1. Inter and intra-generational equity
2. Protecting and living within the natural carrying capacity of the natural environment
3. Minimization of natural resource use
4. Satisfaction of basic human needs

The purpose of this chapter is to review the current characteristics of the Village of Mackinaw City's development and identify policies and practices that could make future development more sustainable.

The presidential report “Sustainable America” recommends the following strategies for local communities to promote sustainability:

1. **COMMUNITY-DRIVEN STRATEGIC PLANNING** - Create a community-driven, strategic planning process that brings people together to identify key issues, develop a vision, set goals and benchmarks, and determine actions to improve their community.
2. **COLLABORATIVE REGIONAL PLANNING** - Encourage communities in a region to work together to deal with issues that transcend jurisdictional and other boundaries.
3. **BUILDING DESIGN AND REHABILITATION** - Design and rehabilitate buildings to use energy and natural resources efficiently, enhance public health and the environment, preserve historic and natural settings, and contribute to a sense of community identity
4. **COMMUNITY DESIGN** - Design new communities and improve existing ones to use land efficiently, promote mixed-use and mixed-income development, retain public open space, and provide diverse transportation options
5. **COMMUNITY GROWTH MANAGEMENT** - Manage the geographical growth of existing communities and siting of new ones to decrease sprawl, conserve open space, respect nature's carrying capacity, and provide protection from natural hazards
6. **CREATION OF STRONG, DIVERSIFIED LOCAL ECONOMIES** - Apply economic development strategies that create diversified local economies built on unique local advantages to tap expanding markets and technological innovation
7. **TRAINING AND LIFELONG LEARNING** - Expand and coordinate public and private training programs to enable all people to improve their skills to match future job requirements in communities on a continuing basis

8. ENVIRONMENTAL ECONOMIC DEVELOPMENT - Capitalize upon economic development opportunities from businesses and industries that target environmental technologies, recycling, and pollution prevention to create jobs.
9. REDEVELOPMENT OF BROWNFIELD SITES - Revitalize brownfields -- which are contaminated, abandoned, or underused land -- by making them more attractive for redevelopment by providing regulatory flexibility, reducing process barriers, and assessing greenfield development to reflect necessary infrastructure costs.

This chapter shall review current planning and development systems of the Village of Mackinaw City for consistency with these recommendations.

Community Driven Strategic Planning

The Village of Mackinaw City's governmental structure places a premium on citizen participation. The planning process has been supported by a series of specialized reports on the economic development, recreation and walkability among other topics. In turn, these reports were the result of committees composed of Village residents and property owners. Continued involvement of citizens through these committees and through a transparent planning process should be supported.

Collaborative Regional Planning

The Village of Mackinaw City is unusual in the fact that it is split between two counties (and two townships), making intergovernmental cooperation even more challenging than in other communities. The Village works cooperatively with the townships as well as the counties. This plan includes proposals to increase the cooperation between the Village and surrounding jurisdictions, including procedures for notification of future rezonings and other significant developments.

Building Design and Rehabilitation

This plan recognizes the importance of the Village of Mackinaw City's historical and natural resources. Goals and objectives have been established to preserve those resources in the development of new buildings and the rehabilitation of existing buildings.

Under Michigan Law, the Village of Mackinaw City is restricted from requiring building codes different from that established by the state. However, it may provide incentives for developments that exceed those standards. Leadership in Energy and Environmental Design (LEED) is an internationally recognized green building certification system established in 1998, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. The Village may wish to incorporate development bonuses into the zoning ordinance for buildings or overall developments that achieve LEED certification. In addition, the Village may incorporate LEED recommended site improvement standards such as pervious surfaces and other low-impact design features to reduce stormwater run-off.

Community Design

The value of access to the lake shore has promoted a very dense land use pattern along that portion of the Village fronting the lake and the commercial property immediately adjacent to it. Parts of the Village further from the shoreline have been developed at lower densities. In some

areas this has been due to a lack of sanitary sewer, requiring densities low enough to support on-site septic systems. Promotion of future development of these areas at higher densities will be dependent on the availability of the necessary infrastructure.

The Village's existing land use patterns are generally characterized by a separation of land uses. Some mixed use development has occurred and local zoning regulations allow for some types of mixed use developments, but incentives to encourage future mixed use projects, including retrofitting of existing development may be appropriate

When seasonal residents are included, the income mix of individuals and households in the Village is quite large. These include those working in the hotels and other seasonal businesses as well as households that are owned by summer residences in the Village. A key element of the plan is to ensure adequate housing for all residents, both year-round and seasonal.

The Village includes many open spaces. These include the existing network of parks as well as open space in private and government hands. This plan promotes developments that incorporate open space, particularly environmentally sensitive areas within the community.

Although residents and visitors to the Village rely primarily on private automobiles for travel around the community, recent efforts have been made and continue to expand non-motorized trails and complete street concepts within the Village. Expansion of this system will reduce dependence on automobiles and improve the health of residents and visitors by providing opportunities for exercise.

The community currently relies on a mix of renewable and non-renewable energy sources. These include electricity generated by wind energy. Taking advantage of the traditionally strong winds coming off the lake, in 2001 two wind turbine generators were installed in the Village at the Wastewater Treatment Plant. Together they generate enough electricity to power about 600 homes for a year. The turbines are privately owned and power is sold from the generators to Consumers Power Company and distributed to customers throughout Michigan.

Community Growth Management

As noted previously, the majority of current development in the Village is clustered along the lakeshore and the Village downtown. Development outside of these areas is less dense and interspersed with large tracts of undeveloped land, including areas of wetlands and woodlots. Future development in these areas are currently planned to provide primarily for low density residential and industrial development. Extension of utilities is anticipated to occur only as needed. This is an area where the Village can encourage cluster development to increase density while conserving open space.

Creation of Strong, Diverse Economies

The Village and its Economic Development Corporation and Downtown Development Authority are working on efforts to expand the area economy beyond seasonal tourism, which currently dominates economic activity. An Economic Assessment and Restructuring Program study was prepared for the EDC in 2005 which recommended efforts to diversify the economy. Recommendations included efforts to grow and recruit businesses involved in a range of research and development activities related to invasive species, natural resources, biomass and other alternative energy, environmental cleanup and animal cognition.

Training and Lifelong Learning

Current educational opportunities in the Village are limited to the Mackinaw City Public Schools. North Central Michigan College is a community college in Cheboygan and Petoskey. Lake Superior State University is the closest four year university located in Sault Sainte Marie, Michigan. The Economic Assessment and Restructuring Program study referenced above recommends investment in programs to promote entrepreneurship and increase business skills as well as potential partnerships between regional colleges and research facilities. Additional training and lifelong learning opportunities are also available to residents “on-line”. This concept has been pursued by forming a partnership with Kalamazoo Community College’s Wind Turbine program to work on the turbines and receive classroom instruction both in Kalamazoo and in Mackinaw City.

Environmental Economic Development

As mentioned previously, the Economic Assessment and Restructuring Program study recommends efforts to grow and recruit businesses involved in research and development of biomass and other alternative energy sources. The report notes the Village’s location as a benefit in developing work on forest floor and blue green algae derived biomass and its involvement in wind energy as an advantage in attracting businesses involved in that industry.

Redevelopment of Brownfields

The Village established a Brownfield Authority to assist in the redevelopment of potential brownfield sites in the community. The authority will assist in the redevelopment of sites by allowing for the capture of tax revenue through tax increment financing that can be used to “write-down” the cost of environmental remediation of sites and make them competitive with “greenfield” sites

Chapter 10 Community Character / Sense of Place

Introduction

The assets that make a community feel like home; that make it a unique place to explore and that make it a vibrant destination help to define its community character and unique sense of place.

Community character and a unique sense of place are essential elements of the “Tenets of Smart Growth”.

Community surveys and visioning workshops conducted as part of the master plan process identify that the Village’s community character and its unique sense of place are valued highly by residents, visitors and business owners.

The following is a list of assets that help define Mackinaw City’s character and sense of place:

- ◇ Beautiful waterfront views of the Mackinac Bridge, Straits of Mackinac, Lake Michigan, Lake Huron, Mackinac Island, Round Island, Bois Blanc Island, and Upper Peninsula shore line.
- ◇ Safe Community- According to the FBI Crime Database Mackinaw City has one of the lowest crime rates not only in MI but for the entire United States.
- ◇ Michigan Department of Education school system report card grade of “A”
- ◇ Vibrant Business Districts with over 120 unique shops, restaurants, eating establishments, 2000 hotel rooms, 50 Waterfront Condo units, over 300 campsites and 2 distinctive B&Bs
- ◇ “Walkability features”- 4 miles of concrete paver sidewalks, dozens of flower planting areas, over 200 decorative streetlights, unique street furniture and distinctive places for people to enjoy the community
- ◇ Award winning Streetscape Corridors
- ◇ Major Historic and Cultural Attractions
- ◇ Community festivals and special events
- ◇ Community and State Marinas
- ◇ Pristine natural environment
- ◇ Cleanliness
- ◇ Community art
- ◇ 14 public parks, recreation center, beaches and recreation programs
- ◇ Hiking and biking
- ◇ Water access
- ◇ Quaint residential neighborhoods
- ◇ Community Volunteerism
- ◇ Architecture and design elements
- ◇ Alternative energy and sustainability
- ◇ High quality of life
- ◇ Year round activities
- ◇ Native American culture
- ◇ Locally owned and operated businesses
- ◇ Complete business service
- ◇ Dark skies

The Village acknowledges the importance of community character and a unique sense of place in maintaining a vibrant community. The challenge moving forward will be to protect the assets that make the Village a wonderful place to live, visit and conduct business while establishing goals and objectives that will allow for continued improvements to physical design and walkability, support economic growth, spur entrepreneurship, encourage diversity, utilize technology, develop transportation opportunities and continue with green initiatives and sustainability efforts.

Chapter 11 Community Goals and Policies

The purpose of this chapter is to set forth Mackinaw City's goals and policies to guide future development. In developing community goals and objectives, it is important to analyze existing community characteristics, such as: social and economic features, environmental resources, available services and facilities, and existing land use. In addition to examining existing characteristics, several important tools in the development of community goals and objectives were utilized during the planning process, including: identifying community assets and problem areas, reviewing the goals of existing community plans, and seeking public input from the community.

Preserve Village Character

Goal 1: Maintain and enhance the Village's distinctive character and sense of place

Objectives

- ▶ Develop design standards that promote development that is consistent with the style, bulk and setback of existing buildings
- ▶ Establish regulations to permit development of private property while protecting important viewsheds of the water front and other identified areas
- ▶ Review buffering requirements to shield incompatible uses from the Village's main thoroughfares and adjacent land uses
- ▶ Promote development that respects the scale and pedestrian orientation of the Village
- ▶ Develop a comprehensive "way finding" signage program to direct motorists, pedestrians, cyclists, and snowmobilers to major areas of interest within the Village
- ▶ Continue the development and maintenance of streetscape corridors within the Village that improve landscaping, provide community art opportunities, provide places for people to sit and enjoy the community and meet with visitors and neighbors
- ▶ Continue to support the concepts outlined in the Village's Hike and Bike Plan to provide biking and walking opportunities within the Village and surrounding areas; complete research and development of complete street concepts within plans
- ▶ Continue landscape and signage improvements that improve the appearance of community gateways; discuss with Michigan Department of Transportation (MDOT) the ability to complete landscaping improvements along I-75 exit points

Goal 2: Strengthen the social and civic characteristics that make the Village an attractive community in which to work, live and visit

Objectives

- ▶ Continue partnerships with nonprofit community organizations to plan, promote, and implement community events and festivals
- ▶ Promote opportunities for volunteerism within the community
- ▶ Provide appropriate locations for semi-public facilities such as churches and civic organizations to support civic life in the Village
- ▶ Promote public participation in the preparation and review of Village plans

Goal 3: Promote the historic character of the Village

Objectives

- ▶ Identify areas of the Village to determine historic importance
- ▶ Support private efforts at preservation of historical structures and sites

- ▶ Evaluate public improvements for their impact on adjacent historical areas

Residential Development

Goal 1: Create a range of housing opportunities and choices for residents of the Village

Objectives

- ▶ Ensure an adequate supply of property that is properly zoned for various densities and types of residential development
- ▶ Promote integration of residential use into multi-use developments through Planned Unit Developments
- ▶ Review standards for employee dormitories/housing
- ▶ Provide housing opportunities for all economic income levels

Goal 2: Preserve the structural integrity and appearance of existing homes

Objectives

- ▶ Maintain proper code enforcement and continual review of property maintenance codes to address issues as they arise
- ▶ Provide funding for improvements to homes through involvement in federal and state housing rehabilitation programs

Goal 3: Ensure that all new development is of a high quality in design, materials and construction

Objectives

- ▶ Promote development that reflects the Village's small town character
- ▶ Require preservation of open space where appropriate to preserve natural features including wetlands, floodplains and scenic views
- ▶ Establish appropriate architectural and landscape standards for new development and redevelopment projects

Goal 4: Provide adequate infrastructure to support a high quality of residential life

Objectives

- ▶ Incorporate pedestrian infrastructure that links residential areas with the downtown, parks and adjacent neighborhoods
- ▶ Promote appropriate infill of vacant areas within residential neighborhoods

Goal 5: Protect single family residential uses from off-site impacts of surrounding uses

Objectives:

- ▶ Establish requirements for adequate buffering of non-residential uses in residential areas.
- ▶ Provide for adequate buffering of, or transition between, commercial and industrial areas and residential neighborhoods
- ▶ Prohibit incompatible uses from residential areas, while allowing for a mixture of uses in appropriate areas that supports economic vitality

Goal 6: Protect the residential character of neighborhoods

Objectives:

- ▶ Review setback and height standards to determine that standards reflect and protect the character of neighborhoods

Commercial Development

Goal 1: Promote a mix of commercial uses that provide greater year round economic activity

Objectives

- ▶ Review zoning regulations to ensure that provisions to promote mixed use are appropriate.
- ▶ Evaluate parking limitations to residential development within the commercial areas.
- ▶ Consider development bonuses as a strategy to encourage commercial uses with a lower lease rate threshold for housing.
- ▶ Evaluate parking standards to determine parking ratio needed for various commercial uses recognizing the availability of existing on-street parking and shared parking.
- ▶ Review the use of Planned Unit Developments (PUD's), overlay zones, and/or formed based codes to protect and enhance existing commercial areas.
- ▶ Protect existing commercial areas by discouraging unnecessary sprawl in the Village and surrounding townships.

Goal 2: Continue to emphasize the pedestrian and bicycle orientation of the Village commercial areas

Objectives

- ▶ Limit auto oriented businesses to commercial districts near I-75.
- ▶ Evaluate future development proposals for their connection to the existing pedestrian and trail network.
- ▶ Continue investment in sidewalk, trailway, and streetscape improvements that enhance the pedestrian and bicycle experience.
- ▶ Promote the development of businesses in the downtown area close to the sidewalk to support the standards of a "Walkable Community".

Goal 3: Continue to reinforce the Village's sense of place

Objectives

- ▶ Coordinate planning for unified parking walkways signage and streetscape design and location
- ▶ Evaluate development based on impacts to community character and viewsheds.

Goal 4: Provide opportunities for new commercial development in a manner that recognizes the overall character of the area

Objectives

- ▶ Support development that promotes the use of quality materials and promotes the community's character as a pristine waterfront community.
- ▶ Support development of businesses that build on the area's natural features, summer and winter opportunities.

- ▶ Support development that promotes economic sustainability, environmental sustainability, economic diversity, acknowledges the Village's community character and creates opportunities for the citizens and visitors of the Village.

Goal 5: Protect and enhance the Village's existing commercial development

Objectives

- ▶ Review zoning requirements to assure uniform quality of development/ redevelopment and promote an efficient and streamlined review process.
- ▶ Review existing zoning standards to determine the tools available to encourage improvement and redevelopment of existing commercial areas within the Village.

Industrial/Business Park Development

Goal 1: Expand the industrial and business tax base of the Village with development and activities that are diverse, clean and are complementary to the Village's cultural, historic, and natural character.

Objectives

- ▶ Rezone and market Village owned property for complementary industrial and business park development.
- ▶ Prepare plans for development and funding of site improvements through Community Development Block Grant (CDBG) provisions.
- ▶ Leverage the Village quality of life to attract industries and businesses.
- ▶ Pursue the recruitment of industry and businesses that complement the Village's existing visitor economy and protect the Village's character and sense of place.

Goal 2: Protect industrial development from encroachment of incompatible land uses

Objectives

- ▶ Provide adequate setbacks from industrial uses based on the uses off-site impacts.
- ▶ Identify potential industrial sites and zone them for industrial uses
- ▶ Coordinate future capital improvement planning to provide necessary infrastructure to future industrial sites.

Recreation

Goal 1: Provide recreational opportunities for residents of all ages and abilities

Objectives

- ▶ Ensure adequate barrier-free access to all parks
- ▶ Improve non-motorized connections to the parks
- ▶ Establish dog-friendly parks
- ▶ Expand family-oriented youth and senior citizen activities and amenities to the parks and recreation system

Goal 2: Incorporate natural features into recreational facilities

Objectives

- ▶ Identify and protect open space and natural features in existing parks
- ▶ Identify open space and natural feature for possible incorporation into the park system

- ▶ Provide opportunities for future developments to connect natural features to the Village's "green infrastructure" through a village greenway

Goal 3: Provide access to the lake

Objectives

- ▶ Continue to seek waterfront land for additions to the public park system
- ▶ Establish and communicate clear guidelines for beach cleaning so that they are enjoyable and protect the natural features as required by environmental laws.

Goal 4: Use Village park facilities as a method of enhancing community character

Objectives

- ▶ Enhance facilities and aesthetics of existing parks
- ▶ Continue to integrate Arbor Day celebrations into enhancement of trees plantings within the Village parks

Natural Resources

Goal 1: Protect sensitive natural resources from inappropriate development

Objectives

- ▶ Require natural feature inventories for new developments near sensitive natural resource areas
- ▶ Establish setbacks from natural features including wetlands
- ▶ Limit density of development permitted with environmentally sensitive areas
- ▶ Consider potential for groundwater contamination as part of rezoning and special use decisions

Goal 2: Enhance future development through incorporation of natural features.

Objectives

- ▶ Link natural features and open spaces to create a greenway system
- ▶ Encourage development that preserves open space and lake views
- ▶ Establish landscape standards that encourage the use of vegetation that compliments existing natural areas

Goal 3: Preserve open spaces, viewshed, natural beauty and critical environmental areas

Objectives

- ▶ Identify sensitive environmental areas and viewsheds and target them for public purchase or establishment of private conservation easements
- ▶ Establish standards that minimize disruption of natural site topography and drainage
- ▶ Incorporate incentives for open space and viewshed preservation into zoning and subdivision control requirements

Goal 4: Increase public awareness of environmental impacts of development

Objectives

- ▶ Educate landowners on techniques for reducing nutrient run-off and erosion from everyday activities

- ▶ Educate landowners on appropriate landscaping in areas adjacent to the lakeshore and other environmentally sensitive areas

Public Utilities and Services

Goal 1: Maximize the Village's current investment in the municipal infrastructure

Objectives

- ▶ Direct future development to areas with existing adequate infrastructure
- ▶ Loop existing water mains to improve pressure and water quality

Goal 2: Coordinate future expansion of utilities

Objectives

- ▶ Develop long range plans for extension of water and sewer into unserved areas and integrate into the Village capital improvement plan
- ▶ Evaluate future development plans for conformance with long range utility plans
- ▶ Identify future funding options, including future economic development projects, for expansion of water and sewer facilities

Goal 3: Provide the level of community services necessary to support a high quality of life for residents

Objectives

- ▶ Identify opportunities for sharing community services with adjacent municipalities, the county, state and non-profit organizations.
- ▶ Evaluate future development proposals for impact on the capability of existing services to meet the increase in demand

Intergovernmental and Public/Private Collaboration

Goal 1: Promote cooperation with adjacent municipalities and the county to promote regional development

Objectives

- ▶ Actively participate in review of master plans of adjacent municipalities and the county
- ▶ Promote policies that direct development to those jurisdictions with the capability to provide the necessary infrastructure support and minimize duplication of services
- ▶ Promote joint training with adjacent municipalities and the county on issues such as growth management and resource protection

Goal 2: Coordinate review of proposed development with adjacent municipalities

Objectives

- ▶ Establish formal process to submit proposed rezonings, site plans and other appropriate review for comments by nearby governmental units
- ▶ Cooperate with adjacent municipalities to review development requirements and capital improvement plans and eliminate unnecessary conflicts or differences in requirements

Goal 3: Encourage community and stakeholder collaboration

Objectives

- ▶ Provide opportunities for stakeholders and developers to collaborate in development of master plan updates
- ▶ Provide for opportunities for informal discussions by developers and stakeholders during development review through a citizen participation ordinance

Transportation

Goal 1: Maintain an effective street system

Objectives

- ▶ Plan for future expansion with adequate right-of-way and setbacks
- ▶ Establish access management standards to maintain street capacity and minimize traffic conflicts
- ▶ Maintain street inventory and asset management program
- ▶ Evaluate the traffic impact of future large projects as part of site plan review process

Goal 2: A non-motorized and recreation trail network linked to a regional trail system

Objectives

- ▶ Continue to implement the Village's Hike and Bike plan and integrate complete street concepts into transportation projects
- ▶ Develop links between schools and residential areas to promote safe routes to school and between neighborhoods
- ▶ Continue efforts to connect Village trails to regional networks
- ▶ Implement recommendations from Walkability Audit
- ▶ Require sidewalks and/or trails to be incorporated into projects where appropriate and maintain residential and commercial districts

Goal 3: Maintain inter-city transportation connections

Objectives

- ▶ Promote convenient access to existing bus and regional transit service
- ▶ Continue to integrate ferry service facilities into the commercial shoreline development.

Goal 4: Adequate parking facilities

Objectives

- ▶ Review existing parking standards to determine proper parking ratios for districts and development uses
- ▶ Encourage use of shared parking for new uses and redevelopment of existing sites
- ▶ Continue to evaluate development to ensure adequate off-street and/or on-street parking is available
- ▶ Identify opportunities for Village and private partnerships in providing necessary parking

Chapter 12 Future Land Use Recommendations

Introduction

One of the most important parts of a Master Plan are the future land use goals. This discussion includes a review of current ways land is being used, goals for how land should be used in 20 years with graphic representation of these future land uses in the future land use map. These goals should be adhered to when changes in local ordinances are contemplated. These goals are not laws, but they guide the creation of those laws. The most direct relationship this Master Plan has in determining local laws is between this chapter, Future Land Use, with the zoning ordinance, which is the law that most directly impacts land use. State laws require that municipalities with a zoning ordinance have a Master Plan in place to guide the implementation of a zoning ordinance.

Obviously nobody can predict what will happen in the next 20 years. This vision and, hence, this Master Plan should be amended as changes occur in the Village that significantly alter the availability of services, traffic patterns, surrounding land uses, regional and national market changes, or shifts in community goals.

The future land use map was developed with consideration for community goals, as developed during a variety of public input processes. This map and future land use goals reflect current land use patterns and good planning principles. The following are a summary of factors considered in developing the future land use map and goals:

Existing Land Use

Most communities have somewhat distinct land use areas that can be divided into, at least, commercial and residential uses. These are often incompatible uses in such a way that some separation is desired. However, in most communities the people who live in the residential areas are the same people who visit the commercial areas, since these residents are the clients of the commercial businesses. In Mackinaw City, commercial corridors are not only designed to accommodate the local population, but are designed to accommodate the Village's large tourist population which can exceed 1.5 million visitors each year. Clearly there is a unique relationship between land uses in Mackinaw City which requires special consideration.

Fewer commercial land uses exist in residential neighborhoods than they did 20 years ago. As these uses have been abandoned the structures have been converted back to residential uses. In one area, along Lake Street, more uses are changing to commercial and office space. This is an area where some retail expansion could be both affordable and lucrative.

The west side of town includes many undeveloped parcels. The middle of the Village, south of Central Avenue includes many areas of wetlands and other types of soils that are less than desirable for construction. In fact, many of these areas are important natural resources because they support a healthy ecosystem.

Natural and Historic Resources

These two resources are perhaps Mackinaw City's most valuable assets. Both attract residents, business owners, and visitors alike. The most difficult task for Mackinaw City in the coming years will be balancing the desire for growth of residential and commercial uses and the absolutely essential need to preserve the natural and historic resources. Both resources are protected to some extent by state and national laws, but there are a surprising number of

historic buildings and natural resources that are not protected as well as would be expected. More local ordinances can be established to protect these resources.

Existing Zoning

Zoning in Mackinaw City meets many of the goals of the Village. The zoning is thorough for a small town, but is necessary due to the intense commercial development. The relatively new concept of form-based codes should be considered for the downtown to protect the character of the building aesthetics and allow for some flexibility in design.

Existing zoning laws require commercial development proposals to be well documented and include a thorough process of review. However, more local awareness of environmental assets in the Village is needed. Local review of more environmental aspects of commercial and residential development would ensure long-term protection of these resources.

For the most part, the zoning laws are meeting most land use goals but they should be modified to protect natural resources more, protect residential neighborhoods, allow appropriate home based businesses, allow appropriate improvements in the downtown, and protect lakefront natural resources and viewsheds in commercial and residential areas.

Existing Incompatible Uses

With so many visitors coming to Mackinaw City it is a challenge to retain a sense of community. The community has consistently supported insulation of residential uses from commercial. The homes of the northeast neighborhoods are the closest to the summer tourism activity and deserve special attention. On the west side of town, there is a strong residential character and very little commercial conflict with these areas. The potential for commercial uses along West Central Avenue's first three blocks west of I-75 should be carefully zoned to protect the residential uses that are one block north and south of West Central.

Current Utility Availability

Water and sewer systems for Mackinaw City are not typical of a town of this size and population. The summer tourism industry puts great demand on the systems. The majority of homes on the east side of the Village are on the water and sewer system while approximately 55% of the homes are served on the west side.

To date, commercial development on the east side of the Village has not met with limitations on either the water or sewer systems. Some upgrades and enlarging of some utilities will happen in the near future to meet future demand.

There are some areas of town that need access to city water or sewer in order to be developed. In the southwest corner of the Village there are some residentially zoned properties that have not been able to be developed due to lack of water and sewer utilities and poorly draining soils which make septic systems difficult. Other areas in need of utility access include the areas currently zoned manufacturing. Distance to existing utilities is the biggest limiting factor in utility expansion to these areas. Only a dense development in these areas could spur the significant expansion that would be needed.

Goals of the Community

A very important goal expressed by the community is to maintain a beautiful small town atmosphere where visitors want to be, but also to preserve the local character and community feel of the Village. This is a great challenge. Land use separation of tourist-oriented retail and lodging from the local residential neighborhoods is very important.

The future land use goals reflect areas that should be protected from commercial development with strong zoning laws. These areas, however, should have clear guidelines for appropriate home-based businesses that support a strong economy and preserve quiet, healthy neighborhoods.

As a community with a very strong dependence on the tourism industry it is also important to ensure the economy can diversify and remain strong. A community goal is to protect the viability of existing businesses and support new initiatives such as home-based businesses.

Some areas should be set aside to accommodate high-tech research firms that depend not on transportation but broadband access and high quality of life for their success and ability to recruit employees. Business incubator space should be considered to promote development of this type. The Village owns land that could be used for this purpose. A marketing campaign should be implemented by the Economic Development Corporation (EDC) and targeted toward visitors to raise awareness of Mackinaw City as a destination for business.

Future Land Use

The following is a summary of future land use categories that reflect the goals of the community. The future land use maps and land use categories' descriptions portray the vision of Mackinaw City as it should grow through the next 20 years. Figure 12-1 depicts the Future Land Use Map.

There are 17 future land use categories. They are separated into primarily two categories, residential and commercial uses because these are often the most incompatible. However, there are situations where mixed uses are encouraged, such as housing above businesses in areas where increased human activity is desired.

1 Residential Protection Area

Residential uses must be protected from tourism commercial demands on land use. Commercial demands on land in Mackinaw City create escalating property values in a few areas that have the potential to push growth beyond the existing areas into or closer to the neighboring residential areas. However, these residential areas provide crucial housing to year-round residents who have lived here a long time or move here because of their memorable summer visits. Some of the success of the tourism industry in Mackinaw City is the strength of the feeling of community that exists in the Village, providing an important sense of place. The residential neighborhoods are desirable places to live because of the protection they have had from encroachment of the tourism demands.

To adequately protect the residential neighborhoods, the plan must provide a clear commercial growth boundary restricting even mixed commercial use. Home occupations should still be allowed in all residential neighborhoods provided that uses that might impact the residential character of the area through off-site impacts such as noise, odors or customer traffic beyond normal residential levels should be controlled with strict enforcement of the special use permit requirements of such businesses.

On the map, this area is clearly defined and the boundaries should be strictly enforced. The areas inside these boundaries shall not be rezoned to non-residential districts, including mixed commercial/residential districts. From time to time, this boundary should be reviewed with careful consideration of the conflicting demands of residents and business owners in the area.

The locational criteria for this land use classification includes:

- ▶ Areas currently zoned for single family residential uses, and
- ▶ These areas, due to their location adjacent to existing commercial areas and/or along the lakeshore are under pressure for commercial development, and
- ▶ These areas currently retain their residential character with few non-commercial uses

2 Lakefront Residential

Views of the Mackinac Bridge and the Straits of Mackinac make Mackinaw City's lakefront some of the most unique in the United States. The residential use of this lakefront has been highly valued for a long time. The community consistently expresses a desire to protect the residential needs and natural resources of this area. Only residential uses should be allowed in this district. Waterfront property, because of its relatively high costs can create demand for alternate uses of the property in order to help finance the property. Such uses that occur in many lakefront communities are seasonal rentals such as tourist homes. These can help make a future retirement home more affordable for a buyer, but they do not support residential neighborhoods. Visitors who stay nightly or even by the week often have very different needs and behaviors than a long-term resident. These can conflict.

Home occupations that do not create off-site impacts such as noise, odors or customer traffic beyond normal residential levels are the only acceptable commercial activity in this area. This allows flexibility to residents that would like to locate in Mackinaw City by providing them with the opportunity to operate a business with less startup capital thus increasing economic activity in the Village.

Natural resource protection will be very important as more lakefront parcels are divided and more homes built. Future goals of this area should include larger lakefront setbacks that include specific controls on appropriate vegetation. Lawns along the lakeshore are often causes of water pollution from fertilizer and soil erosion. Natural vegetative buffer zones along lakefront can preserve water quality and be an attractive landscaping method.

The locational criteria for this land use classification includes

- ▶ Areas adjacent to the lake shore, and
- ▶ These areas' existing uses are primarily single-family residential

3 Residential - Large Lot

Large lot, low density residential uses are very important to protect in Mackinaw City. This area should be limited to larger lots of 15,000 square feet or more and primarily residential uses. Some institutional uses can be appropriate in this area. This area can accommodate private septic systems, but where the soil types are not appropriate, sewer system expansion should be considered to protect ground water.

There are some properties which border this land use area which, with proper planning, could be developed as larger lot residential uses. Clustering of homes leaving larger open

spaces should be strongly encouraged as a method of environmental protection and preservation of open space.

The locational criteria for this land use classification includes

- ▶ Areas not adjacent to the lake shore, and
- ▶ These areas existing use are primarily single-family residential or vacant
- ▶ The existing lots are generally 15,000 sq. ft. or larger

4 Residential – Neighborhood

Two distinct areas of the Village should be preserved as neighborhood residential use. In these areas, churches and other smaller, neighborhood scale institutional uses can be compatible. These neighborhoods help define Mackinaw City as a small town and provide a strong sense of place regardless of the influx of tourists. Single and two-family dwellings exist in these areas and should be encouraged.

The borders of these land use areas include some mix of land uses including some non-conforming commercial uses. Consistent comments from the public indicate that these areas should be protected from further intrusion of these neighborhoods by commercial activity. However, home occupations which are compatible with residential uses should be encouraged.

The locational criteria for this land use classification includes

- ▶ Areas not adjacent to the lake shore, and
- ▶ These areas' existing use are primarily single-family residential or compatible uses, and
- ▶ The existing lots are generally 7,500 sq. ft. in size

5 Residential Buffer

The R-4 district within the protection area should be retained to provide a residential buffer area between the core commercial areas and the traditional residential areas of the Village. Uses in this area shall be residential in nature with single and two family residences, bed and breakfasts, and home occupations. The extension of commercial activities in this district should be prohibited to retain the residential character of the neighborhood and protect the Village's unique sense of place.

6 Residential – Multi-family

Only a few small areas are set aside for multi-family residential uses. Multi-family residential plays an important role in providing affordable housing opportunities to promote housing within the Village. A unique multi-family residential need occurs seasonally when employees arrive from out of town and often other countries to assist with summer retail and hotel work. Old hotels are most often used to house these seasonal workers in commercial districts. Consideration should be given to define this type of dormitory housing need, which is different from year around multi-family use.

The multi-family future land use areas include the few existing apartment buildings and some surrounding areas that could serve as apartments to serve future demand. Housing for older people should be especially encouraged with special accommodations for transit pick up areas, sheltered entrances, and reduced parking requirements. Seasonal rental of residential structures in this area is very appropriate.

The locational criteria for this land use classification includes

- ▶ Areas not adjacent to the lake shore, and
- ▶ These areas are already used for multi-family purposes or are in an area of mixed residential and non-residential uses, and
- ▶ Are lots that are large enough to provide adequate parking

7 Residential – Open Space/Clustering/Agriculture

Clustering of homes allows for preservation of open space and natural resources. Clustering also creates a community of homes that share parks, walking trails, or small gardens. These types of developments encourage healthier lifestyles and natural preservation. Such communities should encourage walking and cycling on pathways and community gathering places.

Active adult communities is an increasingly popular term to describe residential developments for people over 55 years of age who are looking for a simple, low maintenance lifestyle with many opportunities for exercise and outdoor activities. This type of community is always commonly planned, usually with community buildings where planned activities are provided. Greenways often connect the communities with other natural areas such as parks and downtowns.

This area in the Village can include existing agricultural uses, encouraging niche businesses on these existing parcels such as wagon rides, bed and breakfasts, equestrian farm, and similar agriculture-oriented commercial activity.

Also desired for this part of the Village is consideration of renewable energy systems. Wind turbines and solar panels are two examples of such systems that would be an integral part of creating an environmentally sustainable residential or agricultural development. The homes should be energy efficient and linked by non-motorized trails both within the development and with downtown Mackinaw City for better opportunities for non-motorized transportation throughout the Village.

The locational criteria for this land use classification includes

- ▶ Areas not adjacent to the lake shore, and
- ▶ These areas are currently used primarily for residential or agricultural purposes, and
- ▶ Are located on the outer edges of the Village

8 Mixed Commercial Residential

For the most part, commercial and residential uses are less compatible. However, in the right mix and location, these can be complimentary. This particular area should encourage this mix. Residential uses in this area are already located very close to commercial activity and, in fact, share the same block with these uses. An ideal use for this area is work/live artisan shops where the artist works and lives in the same place.

Commercial uses appropriate for this area include small retail, small office space. Residential uses should be single and two family dwellings. Building heights in this area should be kept to two stories. Pedestrian movement should be encouraged with links to South Huron Avenue. Public access, if designed appropriately could begin with the Village-owned parcel on the west edge of the lake.

Development that should not be permitted in this area is hotel/motel use. Also, ferry boat parking should be limited to the current locations and vacant or non-residential lots.

The locational criteria for this land use classification includes

- ▶ The area of existing mixed use between Railroad Street and the former railroad right-of-way, and
- ▶ Areas not fronting on Huron Avenue

9 General Commercial

This area includes a wide mix of commercial activity including some employee and elderly housing. There are regional retail stores serving regional residents mixed in with tourism retail and some small lodging establishments. There are also office spaces and small medical offices appropriately located in this area. Hotels are also very appropriate in this area.

Height limitations similar to those proposed as part of the Lakefront Commercial Viewshed Protection area that are necessary to protect the view from I-75 towards the lake are appropriate as an essential element of the Village's sense of place.

Single family homes and larger scale manufacturing are not appropriate in this area. More appropriate are pedestrian scale shopping, banks and other similar institutional uses. These areas are also a gateway for the tourists so the aesthetics are very important. Additional requirements for sidewalks and pedestrian access provided by the developers in areas where streetscape improvements are not already provided are very appropriate.

The locational criteria for this land use classification includes

- ▶ The area south of Central Avenue and east of I-75 not adjacent to the lake, and
- ▶ not set aside for tourism/lodging or mixed commercial/residential zoning

10 Commercial – Tourism Lodging

This land use area includes both sides of Huron Avenue between Shepler's Ferry Boat property to the north and the Village limits to the south. This area has historically seen very dense development where hotels and parking lots for these hotels and ferry boats have dominated the land uses. Some retail is mixed in with the lodging along with small office spaces along Lake Street in first block west of Huron Avenue.

Pedestrian-oriented development is very appropriate for this area and should be encouraged. Existing streetscapes should be enhanced with pedestrian scale development along the street, with benches, entrances directly to the public sidewalks and a mix of uses along the west side of South Huron Avenue. Building height should be lower along the sidewalk. Form-based codes should be considered as a means of creating pedestrian scaled environments along the sidewalk and allowing buildings to reach their maximum height gradually away from the right of way. Building height and placement for parcels along the lake should be regulated per the Lakefront Commercial Viewshed Protection sub-area.

Uses desirable in this area serve primarily visitors while providing parkland which serves both visitors and residents alike. Appropriate uses include fish market, public parks, hotels, and restaurants. Other tourist-oriented uses can include vacation real estate sales, visitor information offices, small convenience stores, and ferry boat docks and parking.

The locational criteria for this land use classification includes

- ▶ The area on both sides of Huron Avenue between Shepler's Ferry Boat property to the north and the Village limits to the south, and
- ▶ not set aside for mixed commercial/residential zoning

11 Commercial – Downtown Tourism

The heart of the tourism activity in Mackinaw City is in the eastern most two blocks of East Central Avenue, Mackinaw Crossings pedestrian mall, and the first block of Langlade. This area has a variety of uses that are appropriate and compatible, but most are retail. Other compatible uses are office space for businesses that support tourism, restaurants, taverns, arts and crafts galleries, museums, and amusement attractions. Also, outdoor cafes and work/live combination uses should be strongly encouraged. Candy stores and unique food item stores should be encouraged especially where the customer experiences the making of the item.

Parking in the downtown should be reviewed often for supply and demand. Pavement for parking would be a poor use of land in this densely developed area. Public parking areas should be preserved and expanded as appropriate. Private parking should be kept to a minimum while meeting the expected growth. Existing required ratios of parking spaces and customer floor space in the zoning ordinance should be reviewed

Pedestrian access to the stores should be considered the primary mode of transportation in the downtown. Additional but minimal signs should be permitted to accommodate both cars and pedestrians.

The locational criteria for this land use classification includes

- ▶ The area on both sides of East Central Avenue from Huron Street to Nicolet Street and both sides of Langlade from East Central Avenue to Etherington Street, and
- ▶ not set aside for tourism/lodging zoning

12 Lakefront Commercial Viewshed Protection

This is a sub-area of the Commercial Tourism Lodging and Public Recreation land use areas which requires extra attention to preserve the views of Lake Huron and Mackinac Island. Included in this sub-area are the properties between the Lake Huron and the Huron Avenue right of way. This includes Shepler's Ferry Service property at the east end of East Central Avenue.

One of the primary reasons for visitors to come to Mackinaw City is the view of the lake. It is one of our greatest natural resources. Retaining views of the lake from public areas is very important to keep the value of the visitors' experience. Viewshed protection can be implemented using a variety of land use controls. Larger setbacks that remain clear of all structures including taller plants can allow views of the lakes for pedestrians and even autos as they drive by.

The corridor of South Huron Avenue for its entire length within Mackinaw City is a gateway corridor, providing a first view of Mackinaw City for many visitors who have taken either the first exit from I-75 or US 23 from Cheboygan. The views of Lake Huron along this corridor more solidly place the lake in people's minds as they arrive in the Village. Building width, as measured parallel to South Huron Avenue and Lake Huron, can be limited so that these wider setbacks occur more often and prevent larger hotels from dominating the landscape.

It is also worth mentioning that hotels are a vital part of the Mackinaw City economy and should not be restricted from this area, simply controlled in their growth.

The locational criteria for this land use classification includes

- ▶ All non-residential parcels adjacent to the lake and
- ▶ Located from Shepler's Ferry Service property south to the Village boundary

13 Natural Resources Protection

Over half of the land use coverage in Mackinaw City includes forest, wetlands, or open space. A large proportion of these land uses that are also the most in need of protection are in the geographical middle of the Village. This area should allow only land use that is compatible with and respectful of natural resources. Most of the land in this area is not suitable for development due to soil types and existing wetlands. It is an important part of the area's ecosystem and requires strong limitations on development. Recreational uses such as campgrounds, parks, and very low density, clustered housing are appropriate uses here.

The locational criteria for this land use classification includes

- ▶ Property that is undeveloped, and
- ▶ Includes a significant proportion of natural features such as wetlands, forest or open space

14 Commercial – Mixed Office/Tourism Service

The west side of Mackinaw City close to I-75 is a mix of commercial and residential uses. Land use trends over the last 10 years show a growth of commercial and multi-family residential and fewer single family residences. The commercial activity has consisted primarily of businesses serving both local residents and visitors.

Future land uses in the area immediately adjacent to Louvigny Street and nearest I-75 should focus on tourism and office businesses. The area has recently experienced a new streetscape improvement project. New businesses may include, but are not limited to hotels, restaurant, retail and office space. Multi-family apartment living would be a very appropriate use that is in high demand seasonally in Mackinaw City. Such apartments would be most appropriate on a second floor of a retail building.

Single family residential uses in this area should be encouraged mostly beginning nearest to West Central Avenue beginning on the third block and going further west. West Etherington Street should include multi-family up to the second block, with single family uses only from the third block farther west.

The locational criteria for this land use classification includes

- ▶ Areas with an existing mix of commercial and residential uses, and
- ▶ Located west of I-75 and east of DuJaunay Street.

15 Institutional/Business Incubation

This land use category is shown in the future land use map in two distinct areas. One area is a larger parcel of land owned by the Village along West Central Avenue across from the cemetery that can be developed as a mixed use development. Uses could include municipal offices, high tech offices, large lot residential, townhouses, and other residential

types. If developed, the parcel's layout should consider buffer areas between existing residential areas and new development.

Another area for future institutional and business incubation uses is located along Trailsend Road. There are some Village-owned properties in this area that are well-suited for a high-tech office development. Village ownership provides an opportunity to recruit new businesses and provide a business incubator form of lease arrangement.

The locational criteria for this land use classification includes

- ▶ Areas designated on the Future Land Use Map or
- ▶ Village owned property along Trailsend Road

16 Public/Recreation/Municipal Use

This land use area includes public lands owned by the Village, the State of Michigan, Emmet County, and the Mackinaw Area Public Schools. They are all lands that are used by the public in some way for recreation. This includes Department of Natural Resources land that is a multi-use recreational pathway and trailhead. This trail is used for non-motorized recreation in the summer and snowmobiling in the winter.

The locational criteria for this land use classification includes

- ▶ Areas designated on the Future Land Use Map or
- ▶ Other land acquired by the by the Village, the State of Michigan, the Mackinaw Area Public Schools, or Emmet County or Cheboygan County

17 High Tech Research/Very Light Industry

This area is very small and is reserved for very low impact industry such as high technology research offices with limited outdoor presence. Some well screened, solid fence enclosures would be required if the business had any outdoor testing facilities.

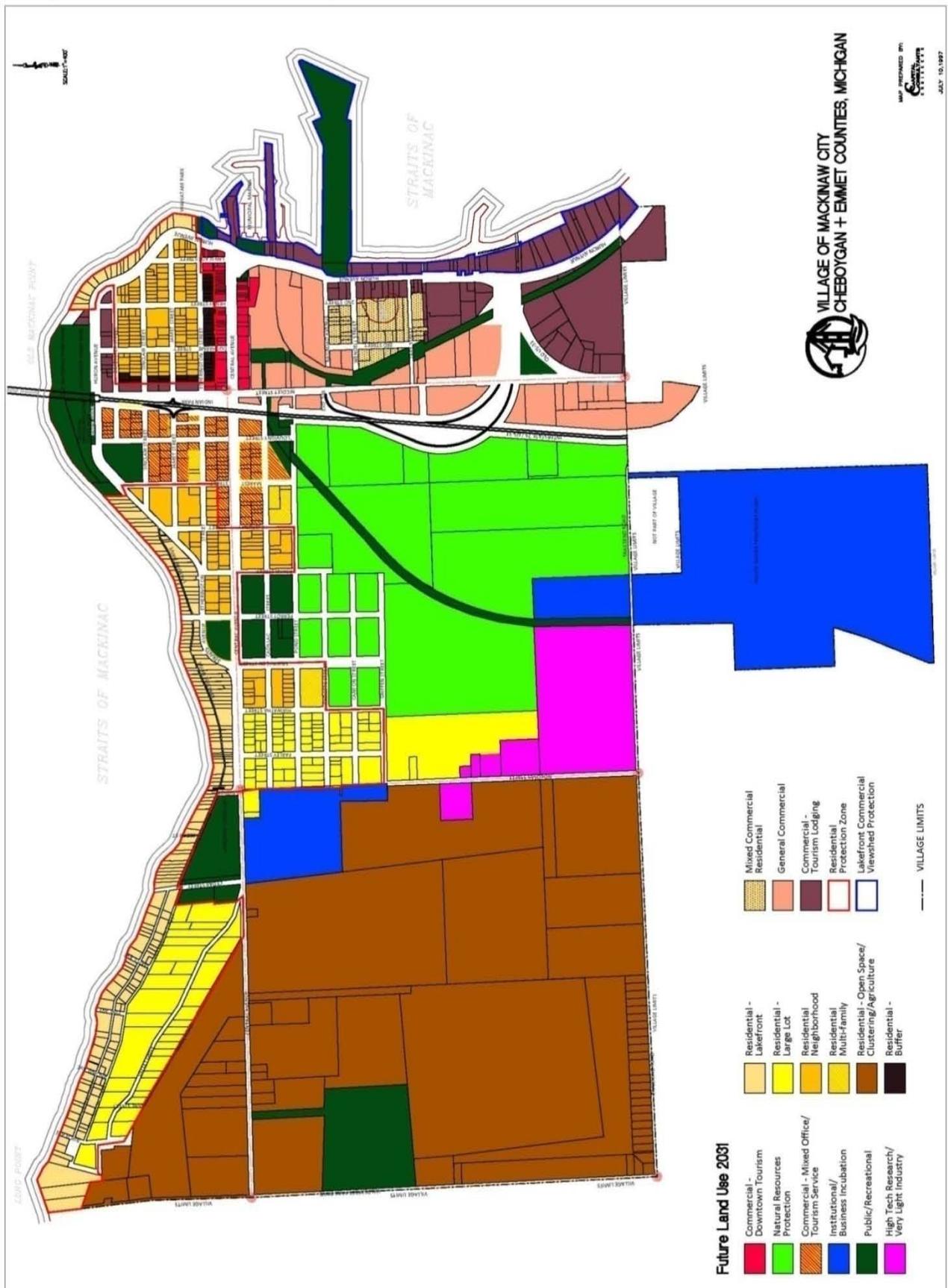
High technology research is a recognized high-growth, low impact industry that would be very compatible with Mackinaw City's goals as long as care is taken in design and placement of such facilities. Air quality and low noise impact should be requirements of such businesses.

This area should also be considered for sexually oriented businesses to provide for the needed buffer to reduce the impact these businesses have on residential and commercial districts.

The locational criteria for this land use classification includes

- ▶ Areas designated on the Future Land Use Map

Figure 12-1 Future Land Use Map



Chapter 13 Zoning Plan

Introduction

Section 33 (2) (d) of the Michigan Planning Enabling Act (PA 33 of 2008) requires the Master Plan for local units of government that have an adopted zoning ordinance to include a “zoning plan”. The purpose of the zoning plan is to “explain how the land use categories on the future land use map relate to the districts on the zoning map”. This zoning plan will focus on that correlation between the proposed future land use classifications and current or proposed zoning districts. Issues related to the other aspects of the zoning ordinance will be addressed in the zoning ordinance section of the implementation plan.

Overview of Future Land Use/Zoning District Changes

Below is a table that lists the future land use classifications. The first column lists the area use classification; the second column, Current Zoning, is listed for each classification; and, the third column identifies any recommended changes. Following the table is a narrative providing more detail on each of the recommendations.

Table 13-1 Future Land Use/Zoning Comparison Table

Future Land Use Classification	Current Zoning	Recommendation
Residential Protection Area	R1 Residential District R2 Residential District R3 Residential District R4 Residential District	Establish the Residential Protection Boundary on the Future Land Use Map.
Lakefront Residential	R1 Residential District	The Lakefront Residential Future Land Use Classification will correspond to the R1 Residential Zoning District.
Residential – Large Lot	R2 Residential District	The Residential – Large Lot Future Land Use Classification will correspond to the R2 Residential Zoning District.
Residential – Neighborhood	R3 Residential District	The Residential – Neighborhood Future Land Use Classification will correspond to the R3 Residential Zoning District.
Residential - Buffer	R4 Residential District	The Residential Neighborhood Buffer Future Land Use Classification will correspond to the R-4 Residential Zoning District.
Residential – Multi-family	RM Residential District	The Residential – Multi-family Future Land Use Classification will correspond to the RM Residential Zoning District.

Future Land Use Classification	Current Zoning	Recommendation
Residential – Open Space/Clustering/Agriculture	AG Agricultural District	Residential – Open Space/Clustering/Agriculture Future Land Use Classification will correspond to a new Open Space/Agriculture Zoning District which will take the place of the existing Agriculture Zoning District.
Mixed Commercial Residential	BC Business Central District	The Mixed Commercial Residential Future Land Use Classification will correspond to a new Mixed Commercial Residential Zoning District. The area designated on the Future Land Use Plan will be rezoned to this new district.
General Commercial	BC Business Central District B1 Business District	Combine the two zoning districts into one and rezone those areas designated on the Future Land Use Plan as General Commercial.
Commercial – Tourism Lodging	B2 Waterfront Business District B1 Business District	The Commercial – Tourism Lodging Future Land Use Classification will correspond to the Waterfront Business Zoning District. Those areas zoned B1 shall be rezoned to B2 if requested by the owner.
Commercial – Downtown Tourism	B3 General Commercial District B4 Historic Business District	The Commercial – Downtown Tourism Future Land Use Classification will correspond to the B3 General Commercial Zoning District and the B4 Historic Business Zoning District.
Lakefront Commercial Viewshed Protection	B2 Waterfront Business District MC Marina Commercial District	An overlay district boundary will be established following the boundaries outlined on the Future Land Use Map regulating building height and placement.
Natural Resources Protection	CR Conservation Recreation District MRS Manufacturing Research Signage District MR Manufacturing Research District	The Natural Resources Protection Future Land Use Classification will correspond to the CR Conservation Recreation Zoning District. The CR district uses should be reviewed.

Future Land Use Classification	Current Zoning	Recommendation
Commercial – Mixed Office/Tourism Service	B1 Business District	Create a Commercial – Mixed Office/Tourism Service Zoning District to correspond with the Commercial – Mixed Office/Tourism Service Future Land Use Classification and zone the area designated on the future land use plan.
Institutional/Business Incubation	M Municipal District MRS Manufacturing Research Signage District R2 Residential District	The city should rezone any particular property to a zoning district appropriate for the use being proposed.
Public/Recreation/Municipal Use	AG Agricultural R1 Residential District R2 Residential District R3 Residential District MC Marina Commercial District	Public and recreational uses are allowed in most zoning districts. A separate zoning district is not being proposed.
High Tech Research/Very Light Industry	MR Manufacturing Research District	Create a High Tech Research/Very Light Industry Zoning District to correspond with the High Tech Research/Very Light Industry Future Land Use Classification and zone the area designated on the future land use plan. Review uses permitted in district, including sexually oriented businesses.
	RMH Mobile Home Park District	The zoning district exists in the text of the zoning ordinance but is not shown on the zoning map. Review permitting mobile homes as a special use in the RM District.

Future Land Use Classifications/Zoning – Detailed Recommendations

1 Residential Protection Area

The purpose of this area is to draw a “line in the sand” with regards to residential areas adjacent to commercial uses. The area is currently zoned R-1 through R-4. The plan proposes that no new zoning district be established but that the line as shown on the Future Land Use Map serve as an objective boundary and that the plans recommendation is that no non-residential zoning be allowed within the area designated.

2 Lakefront Residential

The plan proposes that the Lakefront Residential Future Land Use Classification correspond to the current R1 Residential Zoning District. Any areas designated Lakefront Residential would be appropriate for zoning to R1 and all of the land so designated at the time of the plans adoption is in fact zoned R1.

The plan calls for modification of the home occupation provisions to prohibit those uses that create off-site impacts such as noise, odors or customer traffic beyond normal residential levels. The plan also calls for modifications to the dimensional requirements in the district to increase setbacks from the lake shore and regulate the type of vegetation allowed along the lake.

3 Residential – Large Lot

The plan proposes that the Residential – Large Lot Future Land Use Classification correspond to the R2 Residential Zoning District. Any areas designated Residential – Large Lot would be appropriate for rezoning to R2. The plan recommends that the lots currently zoned R3 but planned for R2 be rezoned to the R2 district following adoption of this plan to ensure that the parcels not be split into lots smaller than allowed in R2.

The plan recommends that provisions be included that encourage open space development as the preferred method of future improvement in the area.

4 Residential – Neighborhood

The plan proposes that the Residential – Neighborhood Land Use Classification correspond to the R3 Residential Zoning District. Any areas designated Residential – Large Lot would not be appropriate for rezoning to R3.

5 Residential – Buffer

Neighborhood Future Land Use Classification corresponds to the R4 Residential Zoning District. This district is designed to protect the residential character of the core R2 and R3 Districts and should remain R4.

The plan calls for modification of the home occupation provisions to prohibit those uses that create off-site impacts such as noise, odors or customer traffic beyond normal residential levels. All of the Residential – Neighborhood Land Use Classification is within the Residential Protection Zone. Single and two-family dwellings exist in these areas and should be encouraged, and churches and other smaller, neighborhood scale institutional uses allowed.

6 Residential – Multi-family

The plan proposes that the Residential – Multi-family Use Classification correspond to the current RM Residential Zoning District. The two parcels designated Residential – Large Lot are currently zoned RM. The third multi-family development is currently zoned R-3, but is covered by a PUD development approval.

The area is intended for multi-family residential development including senior housing and seasonal rentals. The placement of mobile homes by special use shall be reviewed.

7 Residential – Open Space/Clustering/Agriculture

The plan proposes that the Residential – Open Space/Clustering/Agriculture Land Use Classification correspond to the current AG Agricultural Zoning District. Most of the area designated Residential – Open Space/Clustering/Agriculture Land Use is already zoned AG. The area currently zoned R-3 is proposed to remain zoned as such until a property owner in that area request rezoning to AG.

The area is intended for clustered residential development with natural open space as well as agricultural uses, niche businesses, bed and breakfasts, equestrian farm, and similar agriculture-oriented commercial activity. The zoning ordinance does not currently allow for cluster development. It may also be appropriate to provide specifically for seasonal tourism related activities such as hay rides or corn mazes.

8 Mixed Commercial Residential

The plan proposes that the Mixed Commercial Residential Land Use Classification correspond to a proposed MCR Mixed Commercial Residential Zoning District. The plan proposes that the areas designated Mixed Commercial Residential should be rezoned to the new MCR zoning district in order to effectively implement the mixed use zoning concept.

To be consistent with the future land use plan, the new district should permit a range of commercial uses appropriate for this area including small retail, small office space, as well as single and two family dwellings but exclude hotel/motel use. Ferry boat parking should be allowed on vacant lots or lots with an existing non-residential use.

9 General Commercial

The plan proposes that the General Commercial Land Use Classification correspond to a new B1 Business Zoning District which would be a combination of the existing B-1 and BC Zoning Districts. The area currently zoned BC that is not part of the proposed MCR district would be rezoned to B1.

The existing B1 and BC districts are very similar. The primary difference is that B-C allows some recreational uses, boat storage and open air businesses while the B-1 district allows car washes and health spas. These differences can be accommodated in a single district by making these uses SUP's and incorporating locational criteria into the uses design standards so they are not located in inappropriate portions of the district. Single family detached residential uses should be eliminated from the district in compliance with the future land use plan. Height limitations should be incorporated into the district regulations. Design standards to ensure proper aesthetics, greenspace, landscaping, and pedestrian access should also be reviewed for possible modifications. The Plan also recommends the review of open air business requirements in this District.

10 Commercial – Tourism Lodging

The plan proposes that the Commercial – Tourism Lodging Land Use Classification correspond to the existing B2 Waterfront Business Zoning District. The area currently zoned B1 that is part of the Commercial – Tourism Lodging Land Use Classification would be appropriate to be rezoned to B2 at the request of the property owner.

The plan recommends the development of “form-based code” regulations in this district as a means of creating pedestrian scaled environments along the sidewalk and allowing buildings to reach their maximum height gradually away from the right of way. Building

height and placement for parcels along the lake should be regulated per the Lakefront Commercial Viewshed Protection sub-area.

11 Commercial – Downtown Tourism

The plan proposes that the Commercial – Downtown Tourism Land Use Classification correspond to both the existing B3 General Commercial Zoning District and the B4 Historic Business Zoning District. That portion of the area designated Commercial – Downtown Tourism that is appropriate for B-4 zoning is outlined in the future land use plan. The Plan recommends the review of language for form based codes to establish facade standards in the district. The Plan also recommends the review of customer service parking ratios in the district.

The B-3 and B-4 districts appear to generally correspond with the intent of the Commercial – Downtown Tourism Land Use Classification.

12 Lakefront Commercial Viewshed Protection

The plan proposes that the Lakefront Commercial Viewshed Protection Land Use Classification correspond to a proposed LVP Lakefront Viewshed Protection Overlay Zoning District. The overlay district would apply height and setback requirements in order to protect the view of the lake, as well as greenspace and landscaping requirements.

13 Natural Resources Protection

The plan proposes that the Natural Resources Protection Land Use Classification correspond to the CR Conservation Recreation District and that the uses allowed in the current MRS Manufacturing Research Signage District and the MR Manufacturing Research District that are appropriate be added to the CR district, those zoning districts be stricken and the property currently zoned MRS or MR be rezoned to CR or HT/VLIM.

14 Commercial – Mixed Office/Tourism Service

The plan proposes that the Commercial – Mixed Office/Tourism Service Land Use Classification correspond to a proposed CMOT Commercial – Mixed Office/Tourism Service Zoning District. The plan proposes that the areas designated Commercial – Mixed Office/Tourism Service should be rezoned to the new CMOT zoning district in order to effectively implement the mixed use zoning concept.

The new zoning district should allow tourism and office businesses, including but not limited to hotels, restaurant, retail and office space, multi-family apartment on the second floor of a retail building; with single family residences and related uses.

15 Institutional/Business Incubation

The plan does not propose any particular zoning classification for the property in the Institutional/Business Incubation Land Use Classification. This land use classification consists of land that the Village owns that it may wish to develop or sell for development for a range of potential uses. Once a specific use is proposed for a site, the Village should propose the appropriate rezoning and follow the process in the same manner as any other property owner.

16 Public/Recreation/Municipal Use

The plan does not propose any particular zoning classification for the property in the Public/Recreation Land Use Classification. Most public and recreational uses are allowed in most zoning districts and a separate zoning district is not necessary.

17 High Tech Research/Very Light Industry

The plan proposes that the High Tech Research/Very Light Industry Land Use Classification correspond to a proposed HT/VLIM High Tech Research/Very Light Industry Zoning District. The plan proposes that the areas designated High Tech Research/Very Light Industry should be rezoned to the new HT/VLIM zoning district.

The new zoning district should allow uses involving high tech research and other industrial uses with low impact on air quality and noise. Design standards should require well screened, solid fence enclosures for business and any outdoor testing facilities or similar outdoor uses. The district should be reviewed for development of sexually oriented businesses.

Chapter 14 Implementation and Plan Adoption

Zoning/Other Ordinances

The zoning plan in the previous section identified the changes in the number and character of zoning districts in the Village Zoning Ordinance recommended to implement the plan. Below are changes to other portions of the zoning text recommended based on the goals and objectives of this plan. The items below should serve as the beginning of a check list of ordinance updates to be performed as part of the plan's implementation.

Site Plan

In order to implement plan policies, the following revisions to the standards for approval of a site plan shall be incorporated into Section 4-117 E of the zoning ordinance:

- ▶ Require evaluation of the traffic impact of future large projects
- ▶ Require the project preserves open space where appropriate to preserve natural features including wetlands, floodplains and scenic views
- ▶ Require development plans be consistent with the Village's long range utility plans
- ▶ Require that existing utility infrastructure be capable of meeting the demands of the proposed development
- ▶ Require that a proposed development respects the scale and pedestrian orientation of the Village
- ▶ Require that the proposed development minimize the disruption of natural site topography and drainage
- ▶ Require that proposed developments connect to the existing pedestrian and trail network where appropriate
- ▶ Require development of a fire plan for a development

Parking

1. The existing parking standards shall be reviewed to determine proper parking ratios for districts and development uses including residential development within commercial areas, recognizing the availability of existing on-street parking and shared parking.
2. Potential incentives to encourage use of shared parking for new uses and redevelopment of existing sites shall be evaluated for incorporation into the zoning ordinance (Sec 4-109 D)

Planned Unit Development (PUD)

1. Revise Section 23-102 of the zoning ordinance to allow residential development as part of commercial Planned Unit Developments (PUDs) and evaluate potential incentives for mixed residential/commercial uses

Development Standards

1. Review standards for employee dormitories/housing (Sec 23-130) of the zoning ordinance
2. Develop architectural design standards for residential and non-residential uses or revise the standards for Planned Unit Developments (PUDs) in the ordinance to apply to other uses. The standards should reflect the Village's small town character, that is consistent with the style, bulk and setback of existing buildings, that promotes the use of quality materials and promotes the community's character as a pristine waterfront community and applies to new development and redevelopment projects
3. Establish setbacks from natural features including wetlands

4. Develop incentives for the preservation of open space
5. Develop development bonuses as a strategy to encourage commercial uses with a lower lease rate threshold for housing
6. Evaluate the development of form based codes to protect and enhance existing commercial areas.
7. Evaluate the screening requirements of Section 4-113 B to determine the extent to which they can be extended to require adequate buffering of non-residential uses in residential areas and their adequacy in providing buffering of, or transition between, commercial and industrial areas and residential neighborhoods

Conduct a general review of zoning requirements to assure uniform quality of development/redevelopment and promote an efficient and streamlined review process.

Continue to integrate ferry service facilities into the commercial shoreline development.

Zoning District Standards

1. Evaluate zoning district requirements to determine if changes are necessary to promote appropriate infill of vacant areas within residential neighborhoods
2. Evaluate the screening requirements of Section 4-113 B and 4-114 to determine the extent to which they can be extended to require adequate buffering of non-residential uses in residential areas, their adequacy in providing buffering of, or transition between, commercial and industrial areas and residential neighborhoods and their ability to shield incompatible uses from the Village's main thoroughfares and adjacent land uses
3. Review the uses allowed in districts intended principally for single-family residential use and identify uses permitted that are inconsistent with the district intent and other uses that are not currently permitted that should be considered.
4. Identify districts that allow single-family uses, but which are appropriate for a mixture of uses in that supports economic vitality
5. Review setback and height standards to determine that standards reflect and protect the character of neighborhoods
6. Consider overlay zone or other approaches to limiting density of development permitted with environmentally sensitive areas
7. Review uses allowed in commercial districts to ensure that auto oriented businesses are limited to commercial districts near I-75.
8. Review design standards for downtown commercial districts to ensure that business are close to the sidewalk to support the standards of a "Walkable Community".
9. Review the requirements in industrial districts and evaluate the use of setbacks that vary based on the uses off-site impacts.
10. Review regulations concerning sexually oriented business and district locations.
11. Consider establishing regulations concerning medical marihuana related to land use and districts.
12. Review existing zoning standards to determine the tools available to encourage improvement and redevelopment of existing commercial areas within the Village.
13. Establish regulations to permit development of private property while protecting important viewsheds of the water front and other identified areas

Administration

1. Establish formal process to submit proposed rezonings, site plans and other appropriate review for comments by nearby governmental units

2. Provide for opportunities for informal discussions by developers and stakeholders during development review through a citizen participation ordinance

Amendment

1. Consider potential for groundwater contamination as part of rezoning decisions

Special Use Permit (SUP)

1. Consider potential for groundwater contamination as part of special use decisions

Landscaping

1. Review the standards in Section 4-114 and incorporate landscape standards that encourage the use of vegetation that compliments existing natural areas

Other Ordinances

1. Incorporate incentives for open space and viewshed preservation into subdivision control requirements

Capital Improvement Planning

The Michigan Planning Enabling Act requires a municipality that has adopted a Master Plan to develop and adopt a six year capital improvement plan (CIP) and to update the plan every year. Below are items taken from this plan's goals and objectives that serve as the basis for the CIP.

Parks and Recreation

1. Ensure adequate barrier-free access to all parks
2. Improve non-motorized connections to the parks
3. Establish dog-friendly parks
4. Expand family-oriented youth and senior citizen activities and amenities to the parks and recreation system
5. Identify and protect open space and natural features in existing parks
6. Identify open space and natural feature for possible incorporation into the park system
7. Enhance facilities and aesthetics of existing parks
8. Continue investment in sidewalk, trailway, and streetscape improvements that enhance the pedestrian and bicycle experience.

Water and Sewer

1. Loop existing water mains to improve pressure and water quality
2. Develop long range plans for extension of water and sewer into unserved areas and integrate into the Village Capital Improvement Plan
3. Identify future funding options, including future economic development projects, for expansion of water and sewer facilities
4. Coordinate future capital improvement planning to provide necessary infrastructure to future industrial sites.

Transportation

1. Continue to implement the Village's Hike and Bike plan and integrate complete street concepts into transportation projects
2. Incorporate pedestrian infrastructure that links residential areas with the downtown, parks and adjacent neighborhoods

3. Develop a comprehensive “way finding” signage program to direct motorists, pedestrians, cyclists, and snowmobilers to major areas of interest within the Village
4. Continue the development and maintenance of streetscape corridors within the Village that improve landscaping, provide community art opportunities, provide places for people to sit and enjoy the community and meet with visitors and neighbors
5. Continue landscape and signage improvements that improve the appearance of community gateways; discuss with Michigan Department of Transportation (MDOT) the ability to complete landscaping improvements along I-75 Exit points
6. Coordinate planning for unified parking walkways signage and streetscape design and location

Other Policies

Below are policies that may translate into actions other than ordinance writing or development of the Capital Improvement Plan (CIP).

Transportation

1. Plan for future expansion with adequate right-of-way and setbacks
2. Establish access management standards to maintain street capacity and minimize traffic conflicts
3. Maintain street inventory and asset management program

Housing

1. Maintain proper code enforcement and continual review of property maintenance codes to address issues as they arise
2. Provide funding for improvements to homes through involvement in federal and state housing rehabilitation programs

Intergovernmental Cooperation

1. Identify opportunities for sharing community services with adjacent municipalities, the county, state and non-profit organizations.
2. Actively participate in review of master plans of adjacent municipalities and the county
3. Promote joint training with adjacent municipalities and the county on issues such as growth management and resource protection
4. Cooperate with adjacent municipalities to review development requirements and capital improvement plans and eliminate unnecessary conflicts or differences in requirements

Public Involvement

1. Provide opportunities for stakeholders and developers to collaborate in development of master plan updates
2. Promote public participation in the preparation and review of Village plans
3. Educate the public on the plan development process to encourage participation

Sense of Place

1. Continue to support the concepts outlined in the Village’s Hike and Bike Plan to provide biking and walking opportunities within the Village and surrounding areas; complete research and development of complete street concepts within plans
2. Continue partnerships with nonprofit community organizations to plan, promote, and implement community events and festivals
3. Promote opportunities for volunteerism within the community

4. Provide appropriate locations for semi-public facilities such as churches and civic organizations to support civic life in the Village
5. Identify areas of the Village to determine historic importance
6. Support private efforts at preservation of historical structures and sites
7. Evaluate public improvements for their impact on adjacent historical areas
8. Evaluate regulations to develop form based codes or other regulations to maintain community character

Environmental and Viewshed Protection

1. Identify sensitive environmental areas and viewsheds and target them for public purchase or establishment of private conservation easements
2. Educate landowners on techniques for reducing nutrient run-off and erosion from everyday activities
3. Educate landowners on appropriate landscaping in areas adjacent to the lakeshore and other environmentally sensitive areas
4. Provide opportunities for future developments to connect natural features to the Village’s “green infrastructure” through a Village greenway
5. Establish and communicate clear guidelines for beach cleaning so that they are enjoyable and protect the natural features as required by environmental laws.
6. Continue to integrate Arbor Day celebrations into enhancement of trees plantings within the Village parks
7. Protect and maintain the urban forest

Economic Development

1. Rezone and market Village owned property for complementary industrial and business park development.
2. Prepare plans for development and funding of site improvements through Community Development Block Grant (CDBG) provisions.
3. Leverage the Village quality of life to attract industries and businesses.
4. Pursue the recruitment of industry and businesses that complement the Village’s existing visitor economy and protect the Village’s character and sense of place.
5. Identify potential industrial sites and zone them for industrial uses

Strategic Plan

Although a Master Plan is intended to take a long range look at the changes that might occur in a community; this long range view can often interfere with attempts to identify short term actions to implement the plan. A strategic plan is a short range, action oriented plan. Below is a brief strategic plan that identifies actions to be taken over the next 3 years to implement the plan. The action is described, the time range it is intended to take to complete the task and the person or organization that will be responsible for the activity are identified.

Table 14-1 Strategic Plan Actions

Action	Responsible Person/ Organization	Timeframe for completion
Update Zoning Ordinance	Planning Commission	Start within 6 months of plan adoption, complete within 2 years
a. Site Plan Review Standards (Fire Plan)	Planning Commission	Immediate
b. Open Air Business Special Use Requirements	Planning Commission	3 months

Action	Responsible Person/ Organization	Timeframe for completion
c. B-4 Customer Service Floor area	Planning Commission	3 months
d. Sexually Oriented Business Regulations	Planning Commission	6 months
e. Medical Marihuana	Planning Commission	6 months
f. Continue with Zoning Ordinance review of remaining sections for possible amendments	Planning Commission	6 months to 2 years
Annual Review Capital Improvement Plan	Planning Commission	Yearly Review
Annual Review Master Plan for Possible Changes in Conditions or Policy	Planning Commission	Yearly Review

Master Plan Maintenance

A master plan is not a static document. It must continuously be maintained and updated if it is to remain valid. This plan calls for the Planning Commission to review it regularly, at least a minimum of every five years for an in depth review, as required by the Michigan Planning Enabling Act. Below are recommendations on key indicators that the Village of Mackinaw City Planning Commission can use to determine the need for a plan update.

Changes in Current and Projected Conditions

The master plan is based on certain assumptions concerning the growth of the Village. These assumptions are contained primarily in the plan’s database and future land use plan. It is important for the Village to regularly monitor these assumptions to determine if they are still valid. If they become invalid, the planning commission must determine what the changes in circumstances mean for the plan goals and policies.

1) Household Growth

The master plan is based on an assumed growth in households in the community contained in Chapter 2 of this plan. Growth occurring faster than projected may mean that expansion of supporting infrastructure may need to be accelerated and rezoning of land assumed to be developed outside the plan’s time period may need to be considered for re-evaluation. Growth occurring at a slower rate may call for slowing of infrastructure investment or consideration of reclassification of land originally proposed for residential development. Household growth can be tracked by looking at building and demolition permits to identify changes in total dwelling units, and looking at utility connections and disconnections to estimate vacancy rates.

2) Housing and Tenure Mix

Tenure Mix refers to the financial arrangement under which someone has the right to live in a housing unit either as an owner-occupied unit or tenant.

The master plan makes assumptions on the changes in housing and tenure mix. In fact, one of the goals of the plan is to promote an increase in the mix of housing types. If the change in housing mix is not meeting the goals of the plan, a change in policies may be needed to address the issue, depending on the reason for the difference. If housing type varies significantly from what was assumed, it may require changes in the future land use plan to provide an adequate supply of land to meet the difference in demand. Housing mix can be tracked by review of building permit data.

3) Housing Cost

Changes in housing cost in comparison with household income impacts housing affordability. Measuring changes in housing costs is tricky because it is not directly tied to changes in housing values and rents. It is also impacted by turnover rates for owner-occupied dwellings (not every property owner buys a new house every year) and other housing costs, such as energy, utilities, and insurance. The census provides a good consistent measure of the change in housing costs, but because it is only conducted once every ten years, new data may not be available when the five-year review comes around. In those cases, the Village can get a rough measure by comparing changes in property values provided by assessing and changes in rents based on a random sample of rental units. An increase in the housing affordability gap may justify consideration in changes to future land use plans or other housing policies to increase the supply of affordable housing, particularly if the gap is increasing at a rate greater than the county or state as a whole.

4) Adjacent Planning and Zoning

Changes in the Master Plans or zoning maps of Wawatam and Mackinaw Township should be reviewed to consider their impact on the Village's plan. Particular attention should be given to changes that increase the intensity of land uses adjacent to the Village. The Michigan Planning Enabling Act requires the township and the county to notify the Village whenever it is proposing to adopt changes to their plans. The Michigan Zoning Enabling Act does not contain similar coordination requirements, but as discussed above, the Village could enter into arrangements with Wawatam and Mackinaw Township to notify it of proposed rezonings within "500" feet of the Village boundary in return for the reciprocal notification by the Village.

5) Transportation

Changes in the traffic flow on the major streets in the Village could have significant impact, due to the limited number of alternatives to get from point "A" to point "B." The Village should continue to monitor traffic counts and accident rates at key intersections to identify potential congestion points.

6) Utilities

The master plan identifies portions of the Village that are not served by municipal water and sewer, but does not explicitly anticipate expansion to those areas. Any expansion of that service area could affect the proposed development of those areas. The Planning Commission should be kept abreast of the status of utility improvement plans.

Reviewing the Master Plan Goals and Policies

A master plan is based both on the facts that describe the conditions in a community and the municipality's vision of the future. That vision is outlined in the community's goals. For example, the current breakdown of various housing types is a fact. The plan's goals identify whether the community views that current ratio as a positive fact they want to see continue or as a condition they want to change. Community attitudes can change over time, which means that goals may change in time even though the facts have not.

The master plan's objectives describe how a community is proposing to reach its identified goals. Effective policies can also help a community reach the master plan's goals.

As part of review of a master plan, the Planning Commission should look at their plan's goals and objectives and ask the following:

1. Is there a need to modify the goals and/or objectives of the plan based on changes in conditions in the community?
2. Have there been changes in community attitude that require the plan goals to be reviewed?
3. Have the current plans policies been or not been effective in reaching the stated goals?
4. Incorporating Plan Review into Rezoning Request Review

Although a comprehensive review of the master plan is recommended every few years, many problems with a master plan will become obvious during consideration of a rezoning. It is important to incorporate review and amendment of the master plan as part of the planning commission's consideration of such requests. This is covered in more detail in the subsection on using the master plan for zoning reviews.

Five Year Review

Under the terms of the Michigan Planning Enabling Act, the Village Planning Commission must review the master plan at least every five years to determine if there is a need to update it. The procedures outlined above can be followed at that time to meet that requirement. The findings and determination should be recorded in the minutes and through a resolution attached to the appendix of the plan.

The review should be a formal process if the Village intends it to serve as compliance with the requirements of Section 45 (2) of the Michigan Planning Enabling Act. This means there should be a record of the factors outlined above (or others the Village might use) that were reviewed and the basis upon which the Planning Commission determined an update was or was not necessary. The findings should be set out in a resolution adopted by the Planning Commission.

It is recommended that the Planning Commission conduct a less formal review annually, based on those issues that have risen through use of the plan in making zoning decisions.

Using the Master Plan for Zoning Ordinance Amendment Review

In considering a rezoning request or a proposed text amendment, the primary question to ask is; "Does this zoning amendment conform to our master plan?" Subsidiary questions follow: "Was there an error in the plan that affects the appropriateness of the proposed amendment?;" "Have there been relevant changes in conditions since the plan was approved that affect the appropriateness of the proposed amendment?;" and "Have there been changes in the community's attitude that impacts the goals and objectives of the plan and affect the appropriateness of the proposed amendment?." Answering these questions should answer the question whether or not a zoning amendment is appropriate and that should frame the reason within the context of the plan.

This method of analyzing a request rests on the assumption that a request that complies with a valid plan should be approved and that one that does not comply with a valid plan should not be approved (the principal exception to this rule would be text amendments intended to improve administration of the ordinance). Further, it assumes that the three circumstances that would invalidate a plan are:

- an oversight in the plan;
- a change in condition that invalidates the assumptions that the plan was built on;
- or a change in the goals and objectives that the community set for itself.

Consistency with the Master Plan

The issue of consistency with the Master Plan can vary based on the master plan concerned. For the purposes of this plan, consistency with the Master Plan in the case of a rezoning means it is consistent with most of the relevant goals and polices, as well as the Future Land Use Map. In the case of a proposed text amendment, consistency means it is consistent with most of the relevant goals and polices.

Oversight

An oversight in a master plan can be an assumption made based on incorrect data, an area on a future land use map that is incorrectly labeled, or other factors, that if known at the time of the master plan adoption, would have been corrected.

Changes in Conditions

A plan is based on the assumption that certain conditions will exist during the planning period. If those conditions change, then goals, objectives, and land use decisions that made sense when the plan was adopted will no longer be valid and a zoning amendment that was not appropriate before may be appropriate now.

Change in Policy

In the end, a master plan is based on the planning commission's vision of what is the best future for their municipality. When that vision changes, the master plan should change. When a zoning issue results in a change in vision, a decision can be made that is contrary to the current master plan as long as that changed vision is explicitly incorporated into the master plan.

Additional Considerations Related to Text Amendments

Changes to the text of a zoning ordinance should be evaluated not only on the standards outlined above, but on other possible criteria that may not have any impact on the goals and objectives of the Master Plan. These "plan neutral" changes are appropriate when:

1. The text change is necessary to clarify a provision of the ordinance
2. The text change is necessary to correct a mistake in the ordinance
3. The text change is necessary to improve administration of the ordinance or to better serve the community
4. The text change is necessary to address a provision that is determined to be inconsistent with state or federal law

Two points should be made. First of all, the factors for consideration (oversight, change in condition, or change in goals or policy) can work in reverse; making a proposal that otherwise seems appropriate, inappropriate. Secondly, these factors should not be used to create excuses for justifying a decision to violate the master plan, or to change it so often that it loses its meaning.

The following figures illustrate the decision tree for reviewing a proposed rezoning or text amendment using this approach.

Figure 14-1 Decision Tree for Planning Commission Review of a Proposed Text Amendment

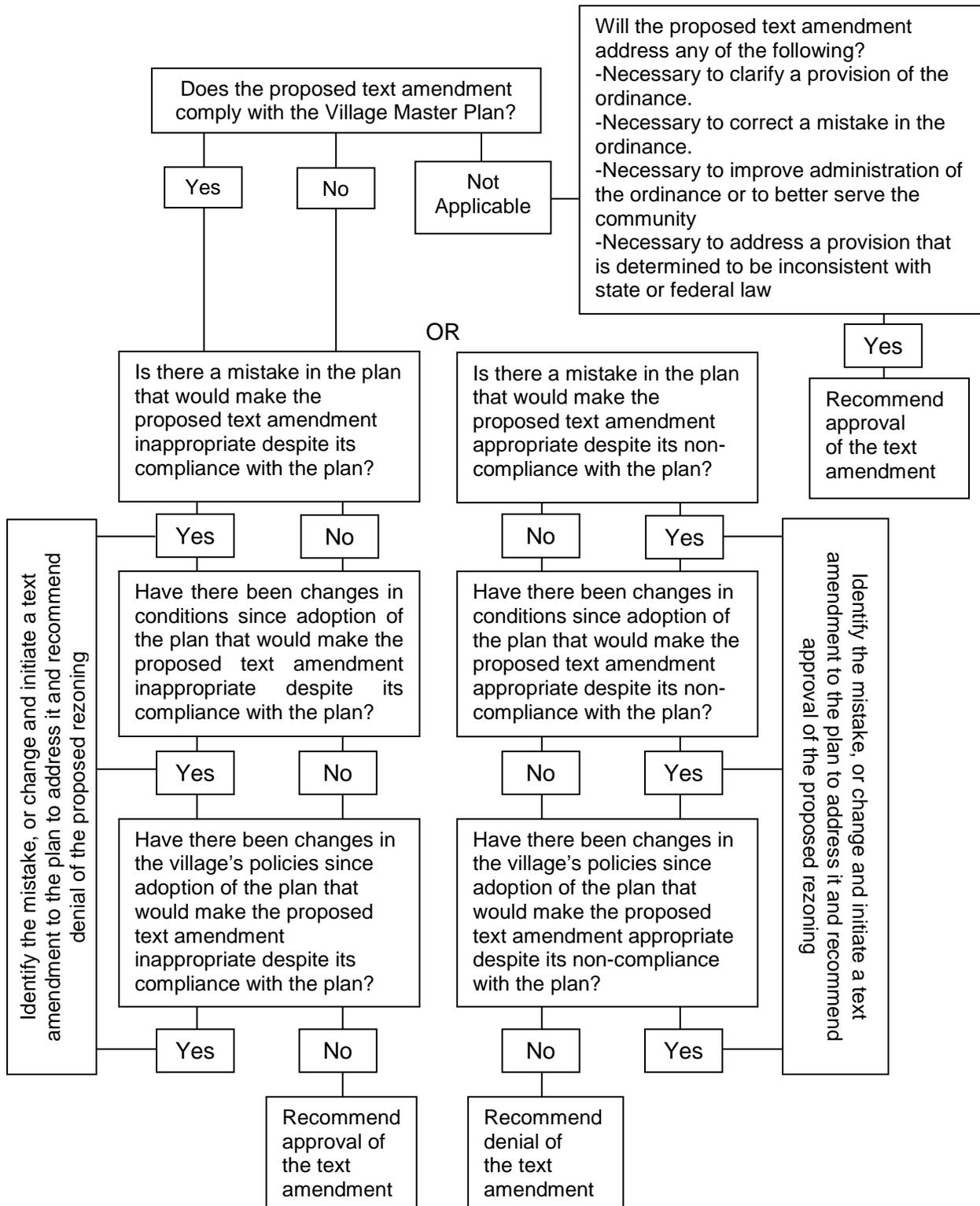
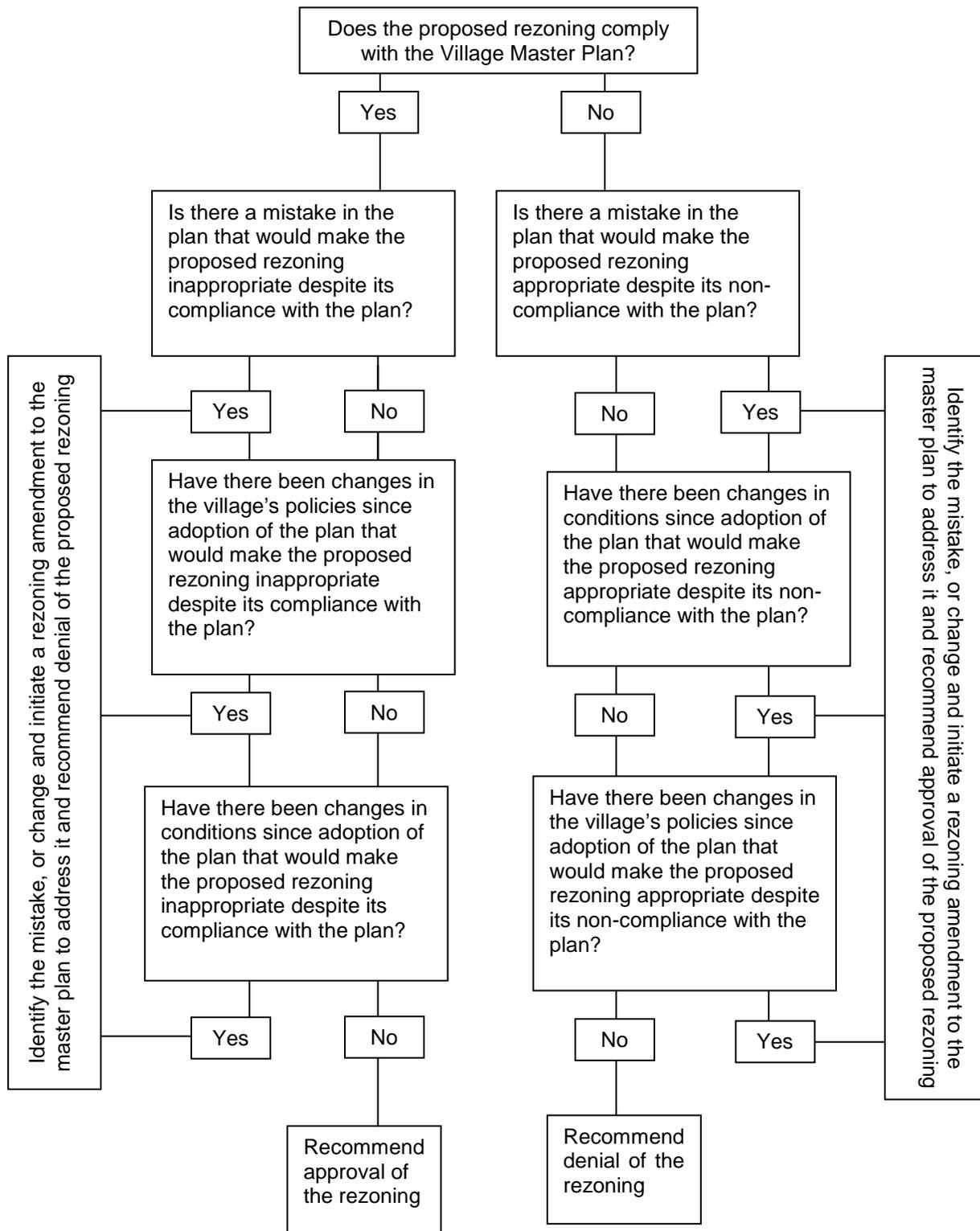


Figure 14-2 Decision Tree for Planning Commission Review of a Proposed Rezoning



Chapter 15 Appendix

Open Meetings

- June 1, 2005 – Youth Planning Workshop
- September 7, 2006 – Announcement sent to stakeholders for the Visioning Workshop
- September 20, 2006 – Town Meeting, Comprehensive Development Plan Public Input Session
- October, 2006 – Stakeholder Survey concerning overall satisfaction with the Village’s goals for Future Planning
- November 24, 2006 – Announcement for Future Land Use Planning Workshop and Notice of Intent to Update Master Plan
- December 8, 2006 – Announcement for Future Land Use Planning Workshop
- December 4, 2006 – Public Input Workshop
- December 14, 2006 – Future Land Use Workshop
- April 12, 2007, June 28, 2007, December 13, 2007 – Planning Commission Public Meetings
- February 8, 2007 – Future Commercial Land Use Workshop
- February 28, 2007 – Announcement sent to stakeholders for the Recreation Planning Workshop
- March 8, 2007 – Recreation Planning Workshop
- May 2, 2007 – Future Commercial Land Use Workshop
- June 14, 2007 – Natural Resources Workshop
- July 10, 2008, August 14, 2008, August 28, 2008, November 11, 2008, September 11, 2008, September 25, 2008, October 23, 2008 – Planning Commission Public Meetings
- February 12, 2009, February 26, 2009, February 25, 2009 – Planning Commission Public Meetings
- March 11, 2010, March 25, 2010, April 8, 2010, April 22, 2010, May 27, 2010, June 10, 2010, August 26, 2010, September 9, 2010, September 23, 2010, October 28, 2010, November 11, 2010, December 9, 2010 - Planning Commission Public Meetings
- June 24, 2010 – Master Plan Presentation
- March 3, 2011 – Village Council approval to distribute Master Plan and move forward to set the Public Hearing
- May 12, 2011 – Public Hearing Master Plan Presentation and Public Comments Period
- August 25, 2011 – Adoption of Master Plan by Planning Commission

Figures, Surveys, Diagrams and Charts

- Figure 1-1 Location Map, Mackinaw City, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 1-2 Ownership Base Map, Mackinaw City, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 2-1 Seasonal Housing Characteristics Village of Mackinaw City, Cheboygan and Emmet Counties, State–2000, Source: American Fact Finder, U.S. Bureau of the Census
- Figure 3-1 Village of Mackinaw City Soils Map, Source: Natural Resources Conservation Service
- Figure 3-2 Village of Mackinaw City Soils Constraints Map, Source: Natural Resources Conservation Service
- Figure 3-3 Village of Mackinaw City Wetlands Inventory, Source: US Fish and Wildlife Service National Wetlands Inventory and National Wetlands Inventory (NWI) Maps
- Figure 4-1 Water Consumption, measured quarterly, Source: Village of Mackinaw City

- Figure 4-2 Properties within 100' of water lines, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 4-3 Properties within 200' of sewer lines, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 4-4 Village of Mackinaw City Stormwater Collection Map, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 5-1 Sidewalk Map, Plotted and completed by Jeffrey Guerrero, C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 5-2 Traffic Crashes, Source: Village of Mackinaw City Police Department
- Figure 6-1 Mackinaw City's Public Parks, Source: Village of Mackinaw City
- Figure 6-2 Recreation Administration Parks
- Figure 6-3 Conkling Heritage Park Performance Shell, Source: Village of Mackinaw City
- Figure 6-4 Parkland Acquisition Priorities, Source: Village of Mackinaw City, Recreation Plan
- Figure 6-5 Cross Town Loop, Source: Sandy Planisek
- Figure 6-6 Downtown Loop, Source: Sandy Planisek
- Figure 7-1 Existing Land Use Map Mackinaw City, 2010, Source: C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 7-2 Existing Land Use Mackinaw City, 2010, Source: ROWE Professional Services Co., 2010
- Figure 12-1 Future Land Use Map, Source: C2ae, 123 W. Main Street, Suite 200, Gaylord, MI 49735; Telephone No. (989) 732-8131; Facsimile (989) 732-2714
- Figure 14-1 Decision Tree for Planning Commission Review of a Proposed Text Amendment, Source: Village of Mackinaw City
- Figure 14-2 Decision Tree for Planning Commission Review of a Proposed Rezoning, Source: Village of Mackinaw City

Tables

- Table 2-1 Population Trends Village of Mackinaw City, 1960–2010, Source: American Fact Finder U.S. Bureau of the Census
- Table 2-2 Age Distribution Village of Mackinaw City, Townships, Counties, State - 2000, Source: American Fact Finder U.S. Bureau of the Census
- Table 2-3 Household (HH) and Per Capita (PC) Income Village, Townships, Counties, and State – 2009, Source: American Fact Finder U.S. Bureau of the Census
- Table 2-4 Educational Attainment Mackinaw/Wawatam Townships, Cheboygan/Emmet Counties, State - 2009, Source: American Fact Finder U.S. Bureau of the Census
- Table 2-5 Unemployment Rate Comparisons Townships, Counties, State -- 1997-2009, Source: American Fact Finder U.S. Bureau of the Census
- Table 2-6 Mackinaw Township State Equalized Valuation by Property Class, Source: Cheboygan County Equalization Department
- Table 2-7 Wawatam Township State Equalized Valuation by Property Class, Source: Emmet County Equalization Department
- Table 2-8 Total State Equalized Valuation Comparisons Village of Mackinaw City and Combined Township Totals, Source: Village of Mackinaw City, Cheboygan and Emmet Counties, Source: Cheboygan County Soil Survey, Emmet County Soil Survey, data recorded in City of Cheboygan
- Table 3-1 Average Annual Weather Statistics Cheboygan and Emmet Counties, Source: Cheboygan County Soil Survey, Emmet County Soil Survey, data recorded at City of Cheboygan

- Table 3-2 Leaking Underground Storage Tanks (LUST), Part 213 of P.A. 451, Michigan Department of Environmental Quality website
- Table 5-1 Streetscape Improvements, Source: Village of Mackinaw City
- Table 5-2 Public Parking, Source: Village of Mackinaw City
- Table 5-3 Parking Counts, Source: Village of Mackinaw City
- Table 6-1 Recreation Administration, Source: Village of Mackinaw City
- Table 7-1 Existing Land Use Statistics Village of Mackinaw City, Source: Michigan Resource Inventory System and ROWE photo interpretation, field verification and map updating
- Table 13-1 Future Land Use/Zoning Comparison Table, Source: Village of Mackinaw City
- Table 14-1 Strategic Plan Actions, Source: Village of Mackinaw City

Research Information

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