Ford River Township Delta County Ford River Township **Master Plan**

Prepared By:

Ford River Township Planning Commission &

Ford River Township Board

Adopted: September 13, 2010





Resolution # <u>091310</u> Ford River Township Master Plan Adoption

Moved by: Board Member G. Boudreau Seconded by: L. Grimsby

WHEREAS, The Michigan Planning Enabling Act, PA 33 of 2008, provides that the Planning Commission make and approve a Master Plan for the physical development of the Township; and

WHEREAS, The Planning Commission notified each municipality contiguous to the Township, the County Planning Commission, each public utility company and railroad company owning or operating a public utility or railroad within the Township, for purposes of notification, of its intent to adopt a Master Plan; and

WHEREAS, The Planning Commission encouraged public participation through a Citizen Survey and regular Planning Commission meetings; and

WHEREAS, The proposed Master Plan was submitted to the Township Board, who authorized distribution of the proposed plan; and

WHEREAS, The proposed Master Plan was distributed to each municipality contiguous to the Township, the County Planning Commission, each public utility company and railroad company owning or operating a public utility or railroad within the Township, for purposes of notification, for review and comment; and

WHEREAS, On September 2, 2010, after proper public notice, the Planning Commission held a public hearing on the proposed Master Plan, during which members of the public were given the opportunity to comment on the proposed Plan; and

WHEREAS, The Planning Commission approved the Master Plan for adoption at a meeting held September 2, 2010; and

WHEREAS, The Township Board has determined that the draft of the Master Plan represents the long-range vision of the Township.

THEREFORE BE IT RESOLVED, The Township Board hereby approves and adopts the Ford River Township Master Plan, as per the requirements of the Michigan Planning Enabling Act, PA 33 of 2008; and

BE IT FINALLY RESOLVED, That within the next five years the Planning Commission shall review the Master Plan and determine whether or not to commence the procedure to amend the Plan or to adopt a new Plan.

Yes: G. Boudreau, D. Wellman, B. Charles, M. Wellman, and Grimsby

No: None

MOTION CARRIED.

I certify that the above is a true and complete copy of a resolution passed by the Ford River Township Board at a meeting on $\underline{September\ 13}$, 2010.

Bv:

Township Clerk

By:

Township Supervisor

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Chapter 1.0 Introduction and Brief History

1.1 Introduction to Planning

This Master Plan is the result of extensive data collection and analysis providing a method to address issues throughout Ford River Township. Master Plans are governed by the Michigan Planning Enabling Act (PA 33 of 2008). Community input has played a critical role in the formation of this plan to ensure that it represents the needs of the residents. Residents were given the opportunity to voice their opinions and concerns at regular Planning Commission meetings and many responded to a general survey and a recreation survey.

The initial sections of the plan present an analysis of the current conditions in the Township, including demographic statistics, economic climate and the existing land use. The remaining chapters of the plan are designed around the key issues highlighted by residents and community officials. Recommendations for Township officials addressing key issues are outlined in detail.

By analyzing the current conditions of the area and factoring in desired outcomes, the plan provides a clear view and direction toward achieving the proposed goals. A future land use chapter will present the "preferred future" of how the Township would like to grow and will include recommendations on how and where development will be carried out. The future land use discussion will also include a zoning plan, which will guide the implementation of future zoning ordinance revisions for the Township.

Ford River Township has been proactive in land use planning since the 1970s. In 1981, the Ford River Township Board passed a resolution recognizing that the Township had experienced significant growth and would undoubtedly continue to grow, particularly with the expansion of the former Mead Paper Company. The Board also realized that growth would place additional demands on land in the coastal zone area of the Township and resolved to plan and to minimize the impact of future development along the coastal zone areas. These basic principles guide land use planning today in the Township.

To summarize, this plan is intended for use as a guide by local officials when considering matters related to development and land use. Planning is a process that requires ongoing review and analysis. The Master Plan will be reviewed at least every five years as required by the Michigan Planning Enabling Act. This plan will remain a work-in-progress and will require timely and thoughtful revision to be of the greatest benefit.

1.2 Brief History

An early Native American village was founded at Misery Bay around 1780. Following the establishment of the early village, the Ford River Lumber Company moved into the Township in 1866, with its main offices in Chicago. The Ford River Lumber Company owned about 10,000 acres of dense forest lands along the river. Trees were cut into logs in the area during the winter and hauled to the river banks where, in spring, there were floated down the river to the mills. Here they were cut into lumber, ties, lathes and shingles, after which they were piled onto lumber schooners to be taken to Chicago and Milwaukee. In 1864, the output of the mills was 25,000,000 feet of lumber and by 1890, production amounted to 50,000,000 feet.

The Ford River was named for Thomas Ford, a governor of Illinois who in 1842-46 had explored a portion of the UP and had mentioned the river in his history of Illinois. The area was primeval wilderness at this time. Ford River Township was named after the river that flows through it. The community of Ford River was once a typical sawmill town and thriving lumber community of about 800 inhabitants. For the most part, everyone in the community worked in the lumber camps or the mills. The first water powered mill was built on the river in "Uppertown," about 1 ½ miles from the present town of Ford River. In 1856, the mill burned and was later sold and moved to the mouth of the river and operated by steam, and that company later built two more mills. At this time, Ford River Township boasted three sawmills operated by the Ford River Lumber Company; the Large Pine Mill, the Little Mill and the Shingle Mill. The capacity of these mills ran into millions of feet of lumber, shingles and ties. The Company also owned lands on the Bark River; the logs from this river were towed to the mill at Ford River.

White pine and cedar were used until the supply of pine was exhausted. In later years, other soft woods, such as hemlock and spruce were substituted. Before shipping the lumber, stock was stored on seven docks at the mouth of the Ford River. There were several large buildings in Ford River, including the store and office building, the boarding house, sleeping house, community privy, town hall, company barns, schoolhouse and a non-denominational church. These old buildings are now gone from Ford River Township.

Logs were floated down the Ford River and its branches for several miles to the mills. As they approached the "Old Bridge," or sorting gap, they were sorted and directed to the various slips which took them to one of the three mills. The Ford River Lumber Company owned and operated three large three-masted schooner to deliver the lumber to the Chicago market. There was never a rail connection at Ford River; the products were all shipped out by boat.

During the last few years, the company was owned and operated by the I. Stephenson Company trustees. When it became apparent that the company was no longer profitable, operations were suspended. In 1911, a transfer of the remaining holdings of the Ford River Lumber Company was made, consisting of 9,500 acres of virgin hardwood. The company suspended operations and closed the offices in the fall of 1912. By that time, most of the sawmill employees had migrated to Wells and Nahma. The store and the remaining company buildings were sold and remained open for several years; the large boarding house was sold and did not endure and the population of Ford River declined substantially over the years. Hyde, located between Escanaba and Bark River, was formerly called Ford River Switch, because the trains "switched" there. The village was a result of the outgrowth of the closing of the mills at Ford River. Residents were forced to seek other employment and many became farmers and settled in the area.

Source: The Story of Ford River Township, Jean Peterson Brayak.

Today, Ford River Township has become a rural bedroom community for the City of Escanaba. The Township has an abundance of outdoor recreational opportunities, including hunting, fishing, 4-wheeling and boating. The area supports a wide variety of wildlife and the Ford River is a designated trout stream. A great deal of the Township's residential development is concentrated near the first settlements in the area and development along the shorelines has increased in recent years. Logging and timber production are still common throughout the Township.

Chapter 2.0 Population

2.1 Introduction

Population change is a primary component in tracking a community's past growth as well as forecasting future population trends. Population characteristics relate directly to housing, educational, recreational, transportation, health care, and future economic development needs of a community. The growth and characteristics of an area population are subject to changes in prevailing economic conditions.

Because communities do not exist in a vacuum, it is important to examine trends in the surrounding areas as well. Residents of one community may work in another community, send their children to school in a different place and travel to additional areas to purchase goods and services.

Demographics -- age, income, gender, education, and occupation, among other related factors -- shape the development of a community as well as its growth. Analysis of these trends and patterns over the next several chapters is a useful tool to determine the needs and demands of the future population of Ford River Township. Included in this chapter is a thorough review of the current population, historic population trends, population projections, and age distribution.

2.2 Area Population Trends

Table 2-1 presents a comparison of historic population trends for all Delta County jurisdictions from 1960 to 2000. Ford River Township experienced a 34.7 percent population boom between 1960 and 1970. From 1970 to 1980, the Township's population grew considerably as well, by a total of 374 persons, or 21.2 percent. From 1980 to 1990, the population declined slightly (-6.3 percent).

The population recovered from 1990 to 2000, expanding by 239 persons, or 11.9 percent. During the forty year period from 1960 to 2000, Ford River Township's population increased by 933 persons, or 71.3 percent. Should the Township's population continue to increase, the lack of buildable land available may become a concern. Much of the Township is dominated by wetlands that cannot support development.

Table 2-1 Historic Population Trends 1960 1970 1980 1990 2000 % Change 1960-2000 **Ford River Township** 1,762 2,002 2,241 1,308 2,136 933 34.7 21.2 -6.3 71.3 % Change 11.9 **Baldwin Township** 647 610 769 726 748 101 % Change -5.7 26.1 -5.6 3.0 15.6 289 **Bark River Township** 1,299 1,571 1,548 1,650 1,361 % Change -4.6 20.9 -1.5 6.6 21.2 Bay de Noc Township 266 312 343 320 329 63 9.9 2.8 23.7 % Change 17.3 -6.7 **Brampton Township** 589 737 1,142 1.090 501 1,113 % Change --25.1 51.0 2.6 -4.6 85.1 **Cornell Township** 431 438 531 529 557 126 5.3 % Change 1.6 21.2 -0.4 29.2 **Ensign Township** 505 780 431 746 669 349 17.2 % Change 47.7 -10.3 16.6 81.0 Escanaba Township 1,485 1,948 3,229 3,340 3,587 2,102 7.4 % Change 31.1 65.8 3.4 141.5 Fairbanks Township 319 309 358 309 321 2 % Change 3.1 15.9 -13.7 3.9 0.6 **Garden Township** 771 713 812 783 817 46 4.3 % Change -7.5 13.9 -3.6 6.0 Village of Garden 380 336 296 268 240 -140 % Change -11.9 -9.5 -10.4 -36.8 -11.6 Maple Ridge Township -105 913 775 946 829 808 -2.5 % Change -15.1 22.1 -12.4 -11.5 Masonville Township 1,709 1,877 1,255 1,409 1,807 622 % Change -5.4 49.6 12.3 28.2 9.8 -70 Nahma Township 569 499 517 491 499 % Change -12.33.6 -5.0 1.6 -12.3 Wells Township 3,295 4,003 5,181 5,159 5,044 1,749 29.4 % Change 21.5 -0.4 -2.2 53.1 City of Escanaba 15,368 14,355 13,659 13,140 -2,791 15,391 % Change -0.1 -6.6 -4.8 -3.8 -17.5 4,533 City of Gladstone 5,267 5,237 4,565 5,032 -235 % Change -4.5 -0.6 -13.4 0.7 10.2 **Delta County** 34,298 35,924 38,947 37,780 38,520 4,222 % Change 4.7 8.4 -3.0 2.0 12.3 9,295,297 Michigan 7,824,965 8,875,083 9,262,078 9,938,444 2,113,479 % Change 13.4 4.4 0.4 6.9 27.0 **United States** 179,323,175 203,302,031 226,542,199 248,709,873 281,421,906 102,098,731 % Change 13.4 11.4 9.8 13.2 56.9

Source: U.S. Bureau of the Census for years cited.

Over the past forty years, many of the townships in Delta County have experienced population increases, Brampton, Escanaba, Ford River and Wells Townships in particular. The City of Escanaba, the City of Gladstone and the Village of Garden have experienced a perceptible decline in population since 1960. This demographic change has been common throughout small towns in Michigan, with many residents choosing to live in outlying townships.

The population of Delta County has increased 4,222 persons, or 12.3% from 1960 to 2000. Growth that has occurred during this time has occurred exclusively in the townships. The State of Michigan has experienced a population increase of 27.0 percent from 1960. The state has realized a small growth rate, as the upper Midwest has experienced large job losses and residents were being drawn to employment opportunities in the "Sunbelt." Predictions for the 2010 Census indicate that the state has experienced a significant population decline since 2000.

2.3 Population Estimates

The U.S. Bureau of the Census, in cooperation with the Michigan Department of Management and Budget, prepares population estimates for years between decennial censuses. These estimates are based on formulas which calculate for components of population change: births, deaths and migration. Local changes, such as major shifts in the employment market are also considered. County information is available for 2000-2008 population estimates (Table 2-2).

The Census Bureau released state population estimates as of July 1, 2008. The data show annual changes through births, deaths, and domestic and foreign migration. Estimates indicate that Michigan lost more than 46,000 residents from July 1, 2007 to July 1, 2008, while the state lost roughly 44,000 residents in the previous two years combined. The populations of the counties listed above have remained all declined since the 2000 Census, with the exception of Marquette County. Delta County experienced a decrease of 3.5 percent in population from 2000 to 2008.

Table 2-2										
Population Estimates, Selected Counties, 2000-2008										
County	2000	2001	2002	2003	2004	2005	2006	2007	2008	%
	Census	Estimate	Change							
Alger	9,862	9,849	9,809	9,747	9,724	9,647	9,665	9,588	9,438	-4.3
Delta	38,520	38,439	38,413	38,290	38,272	38,189	38,156	37,319	37,179	-3.5
Dickinson	27,472	27,274	27,258	27,253	27,266	27,589	27,447	26,936	26,812	-2.4
Marquette	64,634	64,615	64,672	64,445	64,846	64,677	64,675	65,317	65,492	1.3
Menominee	25,326	25,255	25,115	25,094	25,091	24,892	24,696	24,198	24,202	-4.4
Schoolcraft	8,903	8,779	8,759	8,873	8,779	8,744	8,779	8,505	8,220	-7.7
Michigan	9,938,444	10,004,341	10,037,303	10,065,881	10,090,280	10,093,266	10,083,878	10,049,790	10,003,422	-0.7

Source: U.S. Census Bureau, Estimated Population of Counties for April 2000 to July 2006.

Population change is the result of a combination of natural increase and migration. When births within a community exceed deaths within a period of time, a positive natural increase is the result. Communities with younger populations tend to have high natural increases since the birth rates are higher. Those communities with a large number of older people tend to have a small natural increase; a negative natural increase is uncommon.

Net migration is the difference between the number of people moving into a community and the number of people moving out. Net migration is positive when more people move into an area than move out. Economically depressed areas often experience a significant out-migration as residents leave in pursuit of employment opportunities elsewhere. If the availability of open parcels in surrounding cities and townships is limited, Ford River Township may benefit from an overflow of population into the area, or in other words, experience a localized in-migration. The Township may only experience a population increase if there is land available for development.

Delta County has experienced a slight natural increase in population from 2000 to 2008, but overall has seen a slight population decline due to a significant increase in outmigration as show in Table 2-3.

Table 2-3	Table 2-3										
Components of Population Change, Delta County, 2000 to 2008											
Component	2000-	2001-	2002-	2003-	2004-	2005-	2006-	2007-			
	2001	2002	2003	2004	2005	2006	2007	2008			
Live Births	453	427	387	400	405	421	411	418			
Deaths	413	417	420	402	415	428	357	402			
Natural Increase	40	10	-33	-2	-10	-7	54	16			
Net Migration	-241	-19	26	362	-55	-128	-95	-123			
Net Population Change	-201	-9	-7	360	-65	-135	-41	-107			

Source: Michigan History, Arts and Libraries, 2009.

Michigan's total net migration has declined considerably since 2000, with the state losing an estimated 92,636 persons in 2007-08. Thirteen of the fifteen counties in the Upper Peninsula lost population since the 2000 Census, Delta County being one of them.

Many counties in the Upper Peninsula tend to have high levels of domestic out migration. This largely reflects a movement of young adults to cities for education and employment that is only partially offset by in-migration of older adults and retirees. Delta County has experienced a minimal loss of population during the 2000-2008 time period.

2.4 Age and Gender

The age structure of a community's population as well as the trend of the population (i.e. whether overall the community is getting younger, older or remaining about the same) can be an indicator of the types of facilities and services a community may be in need of. If trends suggest a younger population, the community may need to focus on school facilities, child care centers, playgrounds and other services utilized by a younger population. An aging population may require additional health care facilities, community services such as meals or transportation and specialized housing.

Table 2-4 Median Age, Selected Areas, 1990-2000										
Area	1990	2000	Change	% Change						
			1990-2000	1990-2000						
Ford River Township	36.3	42.1	+5.8	16.0%						
Bark River Township	33.0	36.3	+3.3	10.0%						
Escanaba Township	32.2	38.8	+6.6	20.5%						
Wells Township	32.6	38.6	+6.0	18.4%						
City of Escanaba	35.6	40.1	+4.5	12.6%						
City of Gladstone	36.8	39.9	+3.1	8.4%						
Delta County	35.2	40.4	+5.2	14.8%						
State of Michigan	32.6	35.5	+2.9	8.9%						
United States	32.8	35.3	+2.5	7.6%						

Source: United States Bureau of the Census, Table DP-1, years cited.

The median age in Ford River Township increased 5.8 years from 36.3 years to 42.1 years from 1990 to 2000. This compares with a median age of 40.4 at the county level, 35.5 years at the state level and 35.3 years at the national level. Each of the communities listed in Table 2-4 experienced a dramatic increase in median age. The median age of 35.3 in 2000 was the highest ever reported for the United States; the increase is mainly attributed to aging baby-boomers.

According to federal data released in 2008, a record number of babies were born in 2007, indicating what some demographers refer to as a "baby boomlet." Approximately 4.3 million babies were born in 2007, the highest number since 1957, which was in the middle of the baby boom years. The average number of births per woman in 2006 was 2.1; considered the "magic number" required for a population to replace itself. Considering that the leading edge of the baby boomers is currently in their 60s, in twenty years the Township may be seeing a dramatic decrease in the median age should the birth rate continue to increase. If an increased birth rate is sustained, the amount and type of services needed in the area may need to be revamped. Schools will be greatly affected by a "baby boomlet;" in the early 1950s in many parts of the country

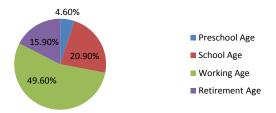
schools had to run double sessions due to the baby boom. The "baby boomlet" may be short-lived however; historically, birthrates fall when the economy is in a downturn.

Examination of a community's age structure is critical to a sound decision making process. This breakdown gives the Township a sense of how the population is distributed for comparative and planning purposes. A detailed breakdown of Ford River Township's age structure in 2000 as well as comparative data from the county, state and nation is presented in Table 2-5.

Table 2-5	Table 2-5										
Population by Age Group, Selected Areas, 2000											
		r Township	Delta (County	State of N	/lichigan	United States				
Age Group	Number	Percent	Number	Percent	Number	Percent	Percent				
Under 5 years	102	4.6	2,101	5.5	702,544	7.1	6.8				
Preschool Age	102	4.6	2,101	5.5	702,544	7.1	6.8				
5-9	122	5.4	2,376	6.2	692,247	7.0	7.3				
10-14	156	7.0	2,846	7.4	666,377	7.1	7.3				
15-19	172	7.7	2,950	7.7	696,803	7.0	7.2				
School Age	450	20.1	8,172	21.3	1,425,427	21.1	21.8				
20-24	96	4.3	1,930	5.0	705,318	7.1	6.7				
25-34	222	9.9	4,006	10.4	1,574,553	15.8	14.2				
35-44	347	15.5	5,996	15.6	1,406,149	14.1	16.0				
45-54	425	19.0	5,798	15.1	948,119	9.5	13.4				
55-59	125	5.6	2,080	5.4	392,787	4.0	4.8				
60-64	119	5.3	1,895	4.9	401,936	4.0	3.8				
Working Age	1,334	59.6	21,705	56.4	5,428,862	54.5	58.9				
65-74	204	9.1	3,374	8.8	655,838	6.6	6.5				
75-84	129	5.8	2,292	6.0	345,716	3.5	4.4				
85 years and over	22	1.0	876	2.3	106,907	1.1	1.5				
Retirement Age	355	15.9	6,542	17.1	1,108,461	11.2	12.4				

Source: United States Bureau of the Census, Table DP-1 Profile of General Demographic Characteristics, 2000.

Population by Age Group Ford River Township, 2000



The percentage of the population that is 65 years and over in Ford River Township (15.9 percent) is lower than the county (17.1 percent), higher than the state (11.2 percent) and the nation (12.4 percent). The percentage of the population that is from five to the age of 19, otherwise known as the school age population (20.1 percent), is about the same as the county (21.3 percent), the state (21.1 percent) and the nation (21.8 percent).

However, the group ages 20-24 is at a significantly lower level for Ford River Township (4.3 percent) and Delta County (5.0 percent) when compared to the State of Michigan (7.1 percent). This data supports the theory that college aged individuals are more likely to pursue careers outside of the Township and Delta County. Therefore, the Township may be experiencing an aging population due to the loss of younger residents combined with increases in middle and older age groups associated with an aging baby boomer population.

2.5 Racial Composition

Consistent with the entire Upper Peninsula, the racial composition of Ford River Township is overwhelmingly white as shown in Table 2-6. The largest nonwhite racial group identified was the American Indian, Eskimo or Aleut category.

Table 2-6										
Number of Persons by Race, Selected Areas, 1990-2000										
		Ford River	Delta C	County						
	19	90	20	00	1990	2000				
Race	Number	Percent	Number	Percent	Percent	Percent				
Identified as One Race	2,001	100.0	2,212	98.7	99.6	98.6				
White	1,983		2,163	96.5	97.4	95.8				
Black			3	0.1		0.1				
American Indian, Eskimo & Aleut	16	0.8	34	1.5	2.1	2.2				
Asian & Pacific Islander	3	0.1	8	0.4	0.3	0.3				
Other Races			4	0.2		0.1				

Source: United States Bureau of the Census, Table DP-1, General Population and Housing Characteristics, 1990-2000.

2.6 Educational Attainment

Educational and training requirements have been increasing for workforce entrants. Employers who previously required little in the ways of formal education are now looking for employees with post-high school education, primarily due to the complexity of the equipment and methods being utilized in the modern workplace. A highly trained, educated workforce is an asset in attracting employers to a community. Educational attainment levels of persons 25 years and older in Ford River Township, the county and state are presented in Table 2-7.

Table 2-7										
Educational Attainment of Persons 25 Years and Older, Selected Areas, 2000										
	Ford River T	ownship	Delta C	County	State of M	Iichigan				
Educational Level	Number	Percent	Number	Percent	Number	Percent				
Population 25+	1,634	100.0	26,362	100.0	6,415,941	100.0				
Less than 9 th Grade	94	5.8	1,271	4.8	299,014	4.7				
9 th -12 th Grade, No Diploma	155	9.5	2,388	9.1	765,119	11.9				
High School Graduate	605	37.0	9,444	35.8	2,010,861	31.3				
Some College, No Degree	336	20.6	6,178	23.4	1,496,576	23.3				
Associate Degree	149	9.1	2,578	9.8	448,112	7.0				
Bachelor Degree	180	11.0	3,070	11.6	878,680	13.7				
Graduate or Professional	115	7.0	1,433	5.4	517,579	8.1				
Degree										
High School Graduate or Higher		84.8		86.1	-	83.4				
Bachelor Degree or Higher		18.1		17.1	-	21.8				

Source: United States Bureau of the Census, Table DP-2, Profile of Selected Social Characteristics, Selected Areas, 2000.

Among Ford River Township residents who were 25 years or older at the time of the 2000 Census, 15.3 percent did not have high school diplomas. This is higher than that of Delta County (13.9 percent) but lower than the state (16.6 percent). A greater percentage of Ford River Township residents had earned a high school diploma than was reported for the state (83.4 percent) and slightly below the rate reported for the county (86.1 percent).

State populations reflected a higher percentage of persons possessing bachelors and graduate degrees, but the percentages of persons with at least high school diploma attainment were not appreciably different. Township residents reported having bachelor's degrees at a higher rate (18.1 percent) than at the county level (17.1 percent). These statistics likely reflect the educational requirements for the types of jobs available in the area.

2.7 Household Characteristics

Evaluation of the changes in household characteristics in a community can often provide valuable insight about population trends. Household relationships reflect changing social values, economic conditions and demographic changes such as increased life spans and the increasing mobility of our society.

The United States Bureau of the Census defines a household as all persons who occupy a housing unit, i.e., a single family, one person living alone, two or more families living together, or any groups of related or unrelated persons sharing the same living quarters. A family consists of a householder and one or more persons living in the same household who are related by birth, marriage or adoption. A non-family household can

be one person living alone, or any combination of people not related by blood, marriage or adoption.

Household characteristics for selected areas are presented in Table 2-8.

Table 2-8	Table 2-8											
Household Characteristics, Selected Areas, 1990 and 2000												
	Fo	rd River	Towns	ship		Delta (County		!	State of	Michigan	
	19	990	20	000	199	90	200	00	1990)	2000)
Household Type	#	%	#	%	#	%	#	%	#	%	#	%
Family Households	579	77.9	675	74.3	10,307	70.9	10,684	67.5	2,439,171	71.3	2,575,699	68.0
Married- Couple Family	532	71.6	591	65.0	8,652	59.5	8,834	55.8	1,883,143	55.1	1,947,710	51.4
Female Householder	37	5.0	49	5.4	1,293	8.9	1,317	8.3	442,239	12.9	473,802	12.5
Non-family Households	164	22.1	234	25.7	4,224	29.1	5,152	32.5	980,160	28.7	1,209,962	32.0
Householder Living Alone	140	18.8	191	21.0	3,734	25.7	4,440	28.0	809,449	23.7	993,607	26.2
Householder 65 or Over	48	6.5	71	7.8	1,898	13.1	2,066	13.0	317,659	9.3	355,414	9.4
Total Households	743	100.0	909	100.0	14,531	100.0	15,836	100.0	3,419,331	100.0	3,785,661	100.0
Average Household Size	2	.69	2	.47	2.5	57	2.4	10	2.66		2.54	

Source: United States Bureau of the Census, Table DP-1 General Population and Housing Characteristics, 1990-2000.

From 1990 to 2000, the number of households in Ford River Township increased by about 22.3 percent. By comparison, the number of households in Delta County increased by about 9.0 percent and the state of Michigan by about 10.7 percent. Ford River Township, as well as the county and the state, experienced a decrease in the average household size. The average household size in Ford River Township decreased from 2.69 persons per household in 1990 to 2.47 in 2000. A smaller average household size has been the trend in the state, as well as across the country, due to the increase in single parent families, families having fewer children and delaying having children.

The number of female lead households increased slightly (0.4 percent) from 1990 to 2000. The percentage of non-family households in the Township has increased 3.6 percent from 1990 to 2000. There was a significant increase in the number of householders living alone; many are householders that are 65 and older. Over one-quarter of Delta County households are made up of people living alone, consistent with the state rate. Just over 13 percent of Delta County households consist of householders over 65 that are living alone. Many communities across the country have experienced a

dramatic increase in the number of non-family households reported due to the increased number of single parent households as well as the number of elderly that live alone.

2.8 Population Projections

Population projections are useful for units of government for projecting future residential demands for public services. However, the major component of population change, in- and out-migration is very difficult to predict. This data depends heavily on future economic trends of the locality and other areas. The other components of population changes, fertility and mortality data, have less of an impact on population change, particularly for smaller jurisdictions.

The Michigan Department of Management and Budget most recently prepared baseline population projections to the year 2020 for counties in 1996. The projections are based on a formula that utilizes the three main components of population change; birth, death and migration.

The available population projections in Table 2-9 were prepared in 1996. Due to Michigan's continued population decline noted in Table 2-2, the projections may not reflect an accurate population estimate. If the state maintains its losses for another year, its population could fall below 10 million for the first time since 2000. According to the Census Bureau, Michigan currently has 10,003,422 people.

Table 2-9												
Historical Po	Historical Population Data and Projections, Selected Areas 1990-2020											
Area	1990	1995	2000	2005	2010	2015	2020					
Delta	37,780	35,582	38,520	38,189	39,004	39,244	39,400					
County												
Alger	8,972	9,847	9,862	9,647	10,114	10,192	10,205					
County												
Dickinson	26,831	27,161	27,472	27,589	27,746	27,942	28,096					
County												
Marquette	70,887	65,427	64,634	64,677	68,393	67,016	66,661					
County												
Menominee	24,920	24,537	25,326	24,892	21,497	20,565	19,581					
County												
Schoolcraft	8,302	8,706	8,903	8,779	8,926	8,970	8,929					
County												
State of	9,290,215	9,556,063	9,956,689	10,100,833	10,121,298	10,284,960	10,454,737					
Michigan												
United	248,709,873	262,073,000	281,421,906	287,082,000	299,194,000	311,833,000	324,668,000					
States												

Source: Department of Management and Budget, Population to Year 2020 in Michigan, 1996 and United States Bureau of the Census 1990, 2000.

The population forecast for Delta County projects a steady growth trend, with a 4.3 percent increase from 1990 to 2030. Delta County has experienced a loss in the industrial base, which may lead to a population decrease rather than increase as was predicted when the estimates were completed in 1996. Marquette and Menominee Counties are the only counties in the central Upper Peninsula predicted to experience a population decline.

Updated population projections recently released by the Census Bureau for each state, forecast that Michigan will only grow by 7.6 percent between 2000 and 2030, while the U.S. as a whole is projected to grow by 29 percent in the same period. Michigan's outmigration to other states has been considerably higher than the national average, leading to the lower predicted growth rate. These population projections do not take into account several factors that may contribute to a higher rate of growth for Michigan. In addition to making cities more attractive to residents, improvements to the economic climate in Michigan should decrease the rate of outmigration. Michigan may experience an increase in return-migration. Michigan could benefit from an influx of Michigan natives looking to return to the area. Congestion and high housing costs may slow growth for some of the states predicted to go through rapid growth, leading more people to Michigan.

2.9 Issues and Opportunities

- Over the past forty years, Ford River Township has experienced a population growth of 71.3 percent. Growth has diminished somewhat within the last twenty years.
- Ford River Township, like other townships in Delta County, has experienced population growth in recent years, while population numbers in the cities has declined. The population growth could be attributed to retirees coming from outside of the area and building on property that has remained with families for many years, particularly in the Ford River area.
- Ford River Township has many retirees and "snow birds" that live in the area for a portion of the year. This may lead to somewhat skewed Census data.
- According to population estimates, Delta County has experienced a 3.5 percent population decrease from 2000 to 2008. Many counties in the Upper Peninsula are experiencing domestic out migration.
- The Township may be experiencing an aging population due to the loss of younger residents pursuing careers outside of the County combined with

increases in middle and older age groups, often associated with an aging baby boomer population.

- Should the "baby boomlet" continue, the Township could experience a significant drop in the median age reported in for the 2010 Census.
- Consistent with the entire Upper Peninsula, the racial composition of the Township is overwhelmingly white.
- The Township reported education levels similar to that of the County and State.
 Township residents reported having bachelor's degrees at a higher rate than that of the County.
- The Township reported a decrease in household size, following national trends.
 This may be attributed to the increase in single parent families, families having fewer children and delaying having children as well as an increase in the number of elderly living alone.
- Updated population projections predict a small population increase for the State of Michigan from 2000 to 2030. Improvements to Michigan's economic climate could reverse that trend.

Chapter 3.0 Economic Base

3.1 Introduction

Central to a community's stability and growth is its economic base. Two major sectors make up an economy: a basic or export sector that provides goods and services for markets outside of the community, and a non-basic sector that provides goods and services for local consumption. Economic vitality and balance rely heavily on the creation and retention of local basic sector jobs.

The changes in population of an area are generally closely related to changes in the amount of economic activity in the area. The segment of the population that is most closely related to the economy is the labor force, which is defined as residents 16 years of age and older, that are either employed at one or more jobs or are actively seeking employment. The employed portion of the labor force provides the primary economic support of the total population.

The factors that influence the economic base in a community extend beyond its boundaries, increasingly so as the effects of the global economy are realized. Therefore, this chapter will not only include information that is specific to Ford River Township, but it will also include comparative data from the county, region, and state. Much of the economic information presented is available only at the county level.

Tourism is an important and growing industry throughout the Upper Peninsula. What was once a short business season has become year round due to the popularity of winter sports such as snowmobiling, downhill skiing, cross-country skiing, ice fishing and snowshoeing. The area is abundant with opportunities for hiking, kayaking, canoeing, bird watching and many other outdoor activities. Increasing tourism has resulted in the emergence of new businesses such as motels, campgrounds, restaurants and specialty shops and services. Today's tourists are more likely to travel frequently, take shorter trips and stay closer to home. Transportation accounts for the largest portion of the average budget for travel. Places that provide attractions with historic, cultural and environmental features have become increasingly popular.

3.2 Civilian Labor Force Characteristics

The civilian labor force consists of persons currently employed and those currently seeking employment, excluding persons in the armed forces and those under the age of 16 years. Shifts in the age and sex characteristics of residents, seasonal changes, and employment opportunities can all cause fluctuation in the number of persons in the labor force. Table 3-1 provides comparative labor force data.

Table 3-1										
Civilian Labor Force Employment Status, 2000										
	Ford River 1	Township	Delta (County	State of M	ichigan				
Characteristics	Number	Percent	Number	Percent	Number	Percent				
Population 16 Years and Over	1,845	100.0	30,628	100.0	7,630,645	100.0				
In Labor Force	1,111	60.2	18,872	61.6	4,926,463	64.6				
Civilian Labor Force	1,111	60.2	18,866	61.6	4,922,453	64.5				
Employed	1,048	56.8	17,453	57.0	4,637,461	60.8				
Unemployed	63	3.4	1,413	4.6	284,992	3.7				
% of Civilian Labor Force		5.7		7.5	-	5.8				
Armed Forces			6		4,010	0.1				
Not in Labor Force	734	39.8	11,756	38.4	2,704,182	35.4				

Source: United States Bureau of the Census, Table DP-3 Profile of Selected Economic Characteristics, 2000.

The Township exhibits a slightly lower labor force participation rate (60.2 percent) than the county (61.6 percent) and the state (64.6 percent). The unemployment rate among residents in the labor force is in the Township (3.4 percent) is lower than the county (4.6 percent) and the state (3.7 percent).

3.3 Employment by Industry Group

Table 3-2 provides comparative data derived from the 2000 Census using the Standard Industrial Classification (SIC) manual. This system allows for a classification of establishments by the type of industrial activity in which they were engaged. The census data used were collected from households rather than businesses, which may be less detailed in some categories.

The three leading employment sectors for Ford River Township were manufacturing; education, health and social services; and retail trade. Persons employed in manufacturing in the Township labor market were employed at similar rates to the County but at much higher rates than the state. Education levels of Township residents may be indicative of the types of employment available in the area. The three leading employment sectors for Delta County were education, health and social services; manufacturing; and retail trade as well. The state reported construction; education, health and social services; and transportation and public utilities.

Table 3-2								
Employment by Broad Economic Division, Selected Areas, 2000								
	Ford	River	Delta County	State of Michigan				
	Tow	nship						
Broad Economic Division	Number	Percent	Percent	Percent				
Agriculture, Forestry, Fisheries and Mining	27	2.6	3.0	7.1				
Construction	89	8.5	5.9	22.5				
Manufacturing	210	20.0	18.9	3.3				
Transportation and Public Utilities	83	7.9	6.1	11.9				
Wholesale Trade	26	2.5	2.5	4.1				
Retail Trade	120	11.5	13.2	2.1				
Information	10	1.0	1.7	2.0				
Finance, Insurance & Real Estate	55	5.2	3.9	5.3				
Professional & Management Service	52	5.0	4.3	8.0				
Educational, Health and Social Service	199	19.0	19.6	19.9				
Arts, Entertainment, Rec & Food Service	77	7.3	10.7	7.6				
Other Services	72	6.9	5.7	4.6				
Public Administration	28	2.7	4.1	3.6				

Source: United States Bureau of the Census, Table DP-3, Profile of Selected Economic Characteristics, 2000.

3.4 Employment by Place of Work

Census information indicating where Ford River Township residents are employed is presented in Table 3-3. The vast majority (87.3 percent) of the Township's working age population was employed in Delta County at the time of the 2000 Census. Of those working outside the county, the majority were employed within Michigan. Most Ford River residents do not work in the Township; many residents work in Escanaba and the surrounding areas. This further confirms that Ford River Township may be considered a "bedroom community" for the cities of Escanaba and Gladstone. Bedroom communities are residential communities, often located on the borders of larger employment areas, but offer few employment opportunities in their own right.

Table 3-3							
Workers Age16 and Over, Place of Work, Selected Areas, 2000							
	Ford River	Township					
Characteristics	Number	Percent					
Total Residents Employed	1,019	100.0					
Worked in Delta County	914	89.7					
Worked Outside Delta County	97	9.5					
Worked in Michigan	1,011	99.2					
Worked Outside Michigan	8	0.8					

Source: United States Bureau of the Census, Summary File 3 SF3, P 26, 2000.

The workplace as we have come to know it has been greatly influenced by technological advancement and economic globalization. It has been predicted that one-third of the 21st Century workforce will be independent regarding location; telephone and internet

services will be the only requirements. Due to the mobile workforce, areas that can offer quality living environments will be the locations of choice for these types of work arrangements. Commuting times for Ford River Township residents are presented in Table 3-4.

Table 3-4									
Travel Time to Work, Residents Age 16 and Older, Selected Areas, 2000									
	Ford	River	Delta (County	State of Michigan				
	Towr	nship							
Residence to Work Travel Time	Number	Percent	Number	Percent	Number	Percent			
Total Workers 16+	1,019	100.0	17,116	100.0	4,540,372	100.0			
Work Out of the Home	993	97.4	16,670	97.4	4,412,607	97.2			
Less than 5 Minutes	11	1.8	1,032	6.0	158,315	3.6			
5 to 9 Minutes	25	2.5	3,286	19.2	507,653	11.5			
10 to 14 Minutes	235	23.1	4,024	23.5	681,990	15.5			
15 to 19 Minutes	317	31.1	3,025	17.7	708,036	15.6			
20 to 24 Minutes	208	20.4	2,021	11.8	675,865	14.9			
25 to 29 Minutes	34	3.3	593	3.5	291,938	6.4			
30 to 34 Minutes	59	5.8	990	5.8	546,870	12.0			
35 to 39 Minutes	8	0.8	209	1.2	126,158	2.8			
40 to 44 Minutes	13	1.3	199	1.2	147,930	3.3			
45 to 59 Minutes	19	1.9	386	2.3	304,785	6.7			
60 to 89 Minutes	42	4.1	526	3.1	171,403	0.3			
90 Minutes or More	22	2.2	379	2.2	91,664	2.0			
Worked at Home	26	2.6	446	2.6	127,765	2.8			

Source: United States Bureau of the Census, Summary File 3 SF3, P31, 2000.

Over 97 percent of Ford River Township workers are employed outside of the home. More than 27 percent of residents with jobs outside of their home worked within 15 minutes of their residences in 2000. About 16 percent of Township residents reported a commute time of more than 30 minutes, nearly equal to Delta County workers. About 27 percent of Michigan workers report commutes of more than 30 minutes. About 2.6 percent of Ford River Township workers reported working at home, the same as Delta County workers and slightly lower than state levels. With the recent economic downturn in Michigan, and subsequent lack of employment opportunities, more residents may turn to home occupations for employment. The Township currently has regulations in the Zoning Ordinance regarding home occupations, specifically requiring a special use permit to operate in residential districts.

3.5 Unemployment

County unemployment and labor force data are collected and analyzed by the Michigan Department of Labor and Economic Growth. Unemployment data is not available at the

sub-county level. United States Bureau of the Census data was used prior to 1965 in the computation of unemployment figures.

Historical labor force and unemployment data is presented in Table 3-5 for selected areas. Delta County, has generally recorded lower unemployment rates than much of the remainder of the Upper Peninsula. However, local unemployment rates are frequently higher than those documented by the state overall.

Table 3-	5						
Labor Fo	orce and Unen	nployment, Sele	cted Areas,	1965-2009			
	Delta	County Labor Fo	orce	Unemp	loyment Rate	s (Percentage	e)
	Employed	Unemployed	Total	Delta County	Upper	State of	United
			Labor		Peninsula	Michigan	States
Year			Force				
1965	9,800	750	10,550	7.1	7.7	3.9	4.5
1970	12,235	1,150	13,475	8.5	9.3	7.0	4.9
1975	14,300	1,900	16,200	11.7	12.3	12.5	8.5
1980	15,200	1,975	17,175	11.5	12.2	12.4	7.1
1985	13,625	2,500	16,125	15.4	15.1	9.9	7.2
1990	15,275	1,575	16,825	9.3	9.2	7.5	5.3
1995	16,317	1,734	1,051	9.6	8.9	5.3	5.6
2000	18,762	1,044	19,806	5.3	5.8	3.6	4.0
2001	18,765	1,273	20,038	6.4	6.8	5.2	4.7
2002	18,269	1,451	19,720	7.4	7.7	6.2	5.8
2003	18,337	1,676	20,013	8.4	8.2	7.1	6.0
2004	18,712	1,612	20,324	7.9	8.3	7.1	5.5
2005	18,931	1,473	20,404	7.2	7.9	6.9	5.1
2006	19,183	1,476	20,659	7.1	7.9	6.9	4.6
2007	18,705	1,523	20,228	7.5	8.4	7.2	4.6
2008	18,165	1,713	19,878	8.6	8.5	8.4	5.8
2009	17,057	2,404	19,461	12.4	12.2	13.6	9.3

Source: Michigan Department of Labor and Economic Growth, for years cited.

Labor Force and Unemployment, Selected Areas, 1965-2009

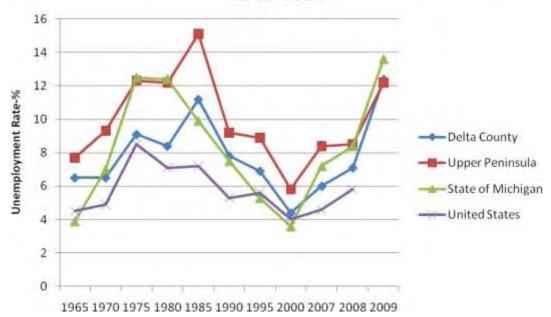
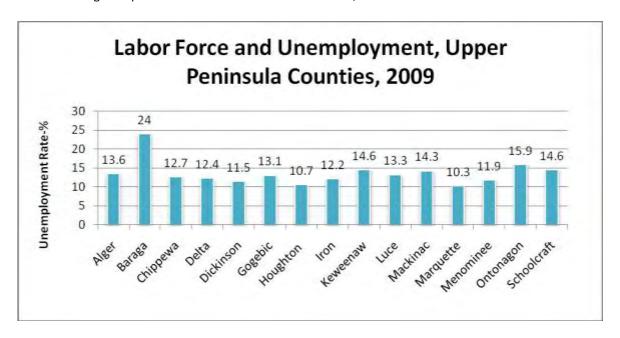


Table 3-6 provides labor force and unemployment data for all fifteen counties in the Upper Peninsula for 2009. Delta County has an unemployment rate of 12.4 percent for 2009. Delta County's unemployment rate remains slightly lower than the State of Michigan's rate of 13.6 percent. The civilian labor force in Delta County has decreased slightly from 2000 (19,806) to 2009 (19,461), suggesting a slight economic improvement. The unemployment rate in Delta County has averaged about 7.8 percent since 2000.

Table 3-6								
Labor Force and Unemployment, Upper Peninsula Counties, 2009								
County	Employed	Unemployed	Total Labor Force	Unemployment				
				Rates (Percentage)				
Alger	3,705	583	4,288	13.6				
Baraga	3,410	1,078	4,488	24.0				
Chippewa	14,971	2,181	17,152	12.7				
Delta	17,057	2,404	19,461	12.4				
Delta	12,649	1,644	14,293	11.5				
Gogebic	6,468	972	7,440	13.1				
Houghton	15,738	1,881	17,619	10.7				
Iron	5,061	702	5,763	12.2				
Keweenaw	929	159	1,088	14.6				
Luce	2,355	360	2,715	13.3				
Mackinac	5,240	875	6,115	14.3				
Marquette	32,483	3,723	36,206	10.3				
Menominee	11,541	1,559	13,100	11.9				
Ontonagon	2,709	513	3,222	15.9				
Schoolcraft	3,331	571	3,902	14.6				

Source: Michigan Department of Labor and Economic Growth, 2010.



3.6 Major Employers

Residents of Ford River Township are mainly employed in Escanaba and Wells Township at the New Page Paper Mill. Many Township residents are also employed at the Island Resort and Casino in Harris, OSF St. Francis Hospital and Bay de Noc Community College. There are businesses located along the M-35 corridor through Ford River as well as several scattered throughout the Township. As discussed in Chapter 2, Ford River

Township has established itself as a bedroom community for Escanaba and few residents are actually employed in the Township.

Businesses located within the Township include the Highland Golf Course, Breezy Point Bar, Ford River Pub, Ford River Lumber, Cedar Hill Medical Clinic, Port Dairy Farm, Lippen's potato farm, D and B Auto Transmission, Bittner's Excavating, Bob's Store, the Brandenburg horse business, HR Nelson Forest Products and Nelson well drilling. There is potential for compatible commercial development in "downtown" Ford River; vacant land is available. Future commercial development could be established along the US-2 corridor as well.

Being located in the "banana belt," areas of Delta County are shielded from the heavier snowfalls that often hit other Upper Peninsula locations. There are farming opportunities in the Township, especially in the northern end. Currently, there is one dairy farm in the Township. There are no manufacturing businesses or industrial activity currently located in Ford River Township. Drawing compatible light manufacturing operations to locate in the Township would increase the tax base and provide employment. The Township is dependent on the forest products industry; there is state land as well as corporate lands that are logged in Ford River Township.

3.7 Income Levels

Income analysis is provided in Table 3-7 using per capita, median household and median family incomes. Per capita income is derived from the total income reported in a given community divided by the total population. Household income is derived from all households including families. Family income includes that of married-couple families and other households made up of persons related by blood, marriage or adoption. It does not include persons living alone, unrelated persons sharing living quarters or other non-family households.

Income information from the 2000 Census was gathered in 1999. Using the U.S. Department of Commerce inflation rate of 1.8 for the period, an adjustment for inflation is shown in order to compare 1989 incomes with 1999 income data gathered during the 2000 Census. A 1989 income would have to increase by a factor of 1.8 by 1999 just to keep pace with inflation. Data contained in 2000 Census data reflects actual 1999 incomes.

Table 3-7									
Income Levels, Selected Areas,1989 and 1999									
Ford River Delta County State of Michigan									
	Township								
	1989	1999	1989	1999	1989	1999			
Per Capita Income	\$11,581	\$25,299	\$10,810	\$18,677	\$14,154	\$22,168			
Median Household Income	\$27,148	\$42,260	\$22,791	\$35,511	\$31,020	\$44,667			
Median Family Income	\$29,787	\$47,837	\$28,260	\$45,079	\$36,652	\$53,457			

Source: United States Bureau of the Census, Table DP-3 Profile of Selected Economic Characteristics, 1990 and 2000.

Using state incomes as a standard of comparison, both per capita, household incomes and family incomes increased at the Township level from 1989 to 1999. Per capita income rose from 81.8 percent of the statewide average in 1989 to 114.1 percent in 1999. Household income rose from 87.5 percent of the statewide average in 1989 to 94.6 percent in 1999. In general, incomes in Ford River Township are 87.5 to 94.6 percent of those for the state overall, and in the Township incomes are much higher than Delta County incomes.

3.8 Poverty Levels

Poverty levels are determined by the United States Bureau of the Census based on a complex formula that includes 48 different thresholds that vary by family size, number of children within the family and the age of the householder. The data provided in Table 3-8 is based on 1999 incomes as gathered for the 2000 Census. The annual income poverty level for a family of two was \$11,060; for a family of three, \$13,880. The average household size in 2000 was 2.47 for the Township.

Table 3-8									
Poverty Rates Percent Below Poverty Level, Selected Areas, 1999									
Poverty Rates by Group Ford River Delta County State of									
	Township		Michigan						
Individuals	5.2	9.5	10.5						
Female Householder Families	25.0	29.8	24.0						
Female Households w/Children Under 18	22.2	36.8	31.5						
Female Households w/Children Under 5		54.1	44.2						
Families w/Children Under 5	6.1	14.0	14.7						
Persons 18 and Older	5.3	8.9	9.3						
Persons 65 and Older	9.5	9.2	8.2						

Source: United States Bureau of the Census, Table DP-3 Profile of Selected Economic Characteristics, 2000.

Poverty rates for all individuals in the Township were 5.2 percent, much lower than rates recorded at the county and state level. Among older persons, poverty rates for the Township exceeded that of both the county and the state. Since the 1960s the

poverty rates for the elderly have fallen dramatically most likely due to assistance programs. About 22 percent of homes with a female head of household are below the poverty level. Rates for homes with a female head of household with children under five are even higher, at 25 percent. The rate is over 54 percent for Delta County.

Children represent a disproportionate share of the poor in the United States; they are about 25 percent of the total population, but 35 percent of the poor population. Female-headed households across the county and the state experienced high rates of poverty, especially those households with children under five. Poverty levels reported for the 65 and older group may be slightly skewed since many Township residents over 65 with relatively high income levels are "snow birds" and may not have been recorded for the Township's Census data.

A low/moderate income survey was completed for the Ford River Water Service Area in 2007 prior to the commencement of the Ford River Township water project. Based on the information submitted, it appears that 61.4 percent of the residents in the Ford River Water Service Area are in the low and moderate income range as defined by the US Department of Housing and Development.

3.9 Issues and Opportunities

- The Township exhibits a slightly lower labor force participation rate (60.2 percent) than the county (61.6 percent) and the state (64.6 percent).
- The unemployment rate among residents in the labor force is in the Township (3.4 percent) is lower than the county (4.6 percent) and the state (3.7 percent).
- A small number of Township residents work in the Township. Most residents are employed in the Escanaba-Gladstone-Wells Township area.
- Delta County generally reports lower unemployment rates than other Upper Peninsula counties, likely due to a diversified employment base.
- Income levels reported in the Township are generally higher than the County as a whole, possible due to the Township's place as a bedroom/retirement community.
- The three leading employment sectors for Ford River Township were manufacturing; education, health and social services; and retail trade. Education levels of Township residents may be indicative of the types of employment available in the area.

• A low-moderate income survey completed for the Ford River Township Water Service Area indicated that 61.4 percent of the residents in the service area were in the low-moderate income range.

Chapter 4.0 Housing

4.1 Introduction

Housing is one of the key factors to consider when planning for a community's future. The location and type of housing available establishes where public infrastructure must be provided. The placement of a community's housing also determines the costs associated with public services. Furthermore, the location of new housing can be settled on in part by the availability of public infrastructure and services. Housing characteristics can also reveal information about a community's history and its economic and social situation.

The cost of housing and the type of housing available are typically determined by market factors. Outside of operating a housing authority or possibly serving as the developer of residential property, local units of government do not usually become directly involved with providing housing. Through zoning and other land use controls, the provision of infrastructure and services and efforts to attract new residents to a community, local governments can have a powerful impact on housing in a community.

In addition to migration, commuter trends, the cost of land and construction, and other housing related elements, there are several key non-housing factors that can influence an area's housing market. Public safety, or a lack of, can influence where people choose to buy a home and raise a family. Quality education is one of the primary locational factors for families with school-age children. Area access to employment, shopping and other entertainment needs factor into the purchase of a home.

Nationwide trends in 2008 indicate a rapid decline in housing prices. Prices of single family homes have fallen 14.1% nationwide through the first quarter of 2008. New home sales in the United States may remain relatively weak for some time, as the housing industry struggles with falling prices and rising mortgage foreclosures. From 1960 to 2005, the rate of homeownership nationwide was on the rise. From 2005 to 2008, the rate of homeownership has been steadily decreasing, while the number of households renting has been steadily increasing nationwide. While personal income is a major factor for many when deciding to rent or own their home, other considerations make renting a preferred choice for many households.

Information presented in this chapter will provide area officials with the most recent housing data available, including structure and occupancy characteristics. This information will help assess housing needs and determine the appropriate course of action to address housing needs in Ford River Township.

4.2 Housing Characteristics

Trends

According to the 2000 Census, a total of 1,098 housing units were recorded in the Township (Table 4-1). In 1990, a total of 1,003 housing units were recorded in the Township. This represents a 9.5 percent increase in the number of housing units within the Township.

From 1990 to 2000, the number of housing units in Delta County increased from 17,928 to 19,223 units, representing a 7.2 percent increase. The State of Michigan experienced a 10.0 percent increase in the number of housing units during the same time period. Between 1990 and 2000, the housing stock nationwide was also growing at a rate of 10.0 percent.

Table 4-1									
Total Housing Units, Occupancy and Tenure, 2000									
	Ford River Township		Delta County		State of Michigar				
Housing Units	Number	Percent	Number	Percent	Number	Percent			
Total Units	1,098	100.0	19,223	100.0	4,234,279	100.0			
Occupied	909	82.8	15,836	82.4	3,785,661	89.4			
Owner	803	88.3	12,601	79.6	2,793,346	66.0			
Renter	106	11.7	3,235	20.4	992,315	23.4			
Vacant	189	17.2	3,387	17.6	448,618	10.6			
Seasonal, Recreational or Occasional Use	133	12.1	2,332	12.1	242,919	5.7			

Source: U. S. Census Bureau Table H8-Vacancy Status, 2000 Dataset SF 3, Table H7-Tenure, 2000 Dataset SF 3, Table DP-4 Profile of Selected Housing Characteristics, 2000 Dataset SF 3.

As referenced in Table 4-1, 82.8 percent of the total housing units in the Township are occupied; leaving 17.2 percent of the Township's housing units vacant. Many of the vacant units are used for seasonal, recreational or occasional use; 133 units or 12.1 percent. There are also fewer occupied rental units in the Township (106 or 11.7 percent) than in the county (20.4 percent) and the state (23.4 percent). Rental units are often concentrated in areas with a higher population density, Ford River Township is relatively low density and most of the rental units in Delta County are concentrated in the City of Escanaba and the City of Gladstone.

As presented in Table 4-2, the 2000 Census reports that within Ford River Township, 88.6 percent of the housing stock consisted of single family homes. This represents a 13.4 percent increase for the Township since 1990. Delta County exhibited similar statistics, with 77.5 percent of its housing stock being single family homes, a 3.1 percent increase since 1990. The Township reported a significant decrease (54.2 percent) in the number of mobile homes, boats and RV's, as did Delta County (19.7 percent).

Table 4-2									
Percent Historic and Current Housing Types by Unit, 1990-2000									
		% 1990			% 2000		% Cha	ange 1990	-2000
			Mobile			Mobile			Mobile
	Single	Multi-	Homes,	Single	Multi-	Homes,	Single	Multi-	Homes,
Unit of	Family	Family	Boat,	Family	Family	Boat,	Family	Family	Boat,
Government			RV, etc.			RV, etc.			RV, etc.
Ford River Township	78.1	2.7	19.2	88.6	2.7	8.8	+13.4	+/-0.0	-54.2
Delta									
County	75.2	13.1	11.7	77.5	13.0	9.4	+3.1	-0.8	-19.7
State of Michigan	72.8	19.8	7.5	74.5	18.8	6.7	+1.7	-1.0	-0.8

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3, Table H020 Units in Structure-1990 Dataset SF 3.

Age of Housing

As presented in Table 4-3, 37.2 percent of the Township's and 48.6 percent of the County's housing stock was built before 1960. About 16.6 percent of the Township's housing stock was built after 1990. The Township represents a mixture of older homes and many newly built homes. Many new homeowners are looking for larger homes on larger lots and oftentimes, surrounding townships have the space. There is often a concentration of older homes within cities, as the cities were established from the first concentrated areas of population within the County, therefore the homes are generally older.

While an older housing stock is not necessarily inadequate or of poorer quality than newer structures, it is more prone to deterioration if not properly maintained. Since a relatively large number of householders are over the age of 65, when maintenance may also become increasingly difficult, some of the Township's housing stock may be vulnerable. Older housing units often lack the amenities desired by more affluent, younger households, such as multiple bathrooms, large bedrooms, family rooms and large garages. These older units often have narrow doorways, steep stairs and other features which make them difficult for older residents to enjoy, and increased maintenance demands may also make these homes less desirable to an aging population.

Table 4-3 Housing Units by Year Structure Was Built								
Unit of Government	% 1999 to 2000*	% 1995 to 1998	% 1990 to 1994	% 1980 to 1989	% 1970 to 1979	% 1960 to 1969	% 1940 to 1959	% 1939 or earlier
Ford River Township	4.8	5.2	6.6	15.1	19.9	11.3	24.1	13.1
Delta County	1.9	5.2	5.0	11.0	18.2	10.1	19.7	28.9
State of Michigan	2.2	6.4	6.1	10.5	17.1	14.2	26.5	16.9

Source: U.S. Census Bureau Table H34-Year Structure Built, 2000 Dataset SF 3.

Housing Values and Rent

In 2000, the U.S. Bureau of the Census reported that the median housing value in the Township was \$97,300, a marked increase from the 1990 level of \$49,300 as shown in Table 4-4. The Township median housing value was also higher than Delta County (\$80,000) but below the state (\$115,600).

Table 4-4 Median Housing Values, 1990-2000							
Area	1990	2000					
Ford River Township	\$49,300	\$97,300					
Delta County	\$43,200	\$80,000					
State of Michigan	\$60,600	\$115,600					

Source: U.S. Census Bureau Table DP-1 General Population and Housing Characteristics: 1990 Dataset STF 1. Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3.

Gross rent refers to the total cost of rent plus basic utilities. This is differentiated from contract rent, which represents only the actual cash rent paid or (in the case of vacant units) the rent asked for a unit. Gross rent in the Township has increased 38.7 percent since 1990, from an average of \$349 in 1990 to an average of \$484, which is significantly higher than the county average of \$383, but remains lower than the statewide average of \$546.

Table 4-5 Median Gross Rent, 1990-2000		
Area	1990	2000
Ford River Township	\$349	\$484
Delta County	\$297	\$383
State of Michigan	\$423	\$546

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3. Table DP-5 Housing Characteristics: 1990 Dataset STF 3.

A common method used to gauge the affordability of a community's housing stock is the percentage of income spent on housing related expenses. Ideally, housing costs

^{*}To March 2000

(mortgage, taxes, etc.) should consume no more than 25 to 30 percent of gross household income. Income levels are presented in Table 3-7. Tables 4-6 and 4-7 below show percentages of income directed to the cost of housing. Although the Census data is limited, it does illustrate the greater impact housing costs have on lower income households. Only 15.2 percent of Township home owners spend more than 30 percent of their income on their mortgage, while 57.8 percent spend less than 15 percent of their income on their mortgage. Less than 18 percent of renters in the Township spend more than 30 percent of their income on rent, while 35.5 percent spend less than 15 percent on rent. Relatively high rates of renters' expenses were not computed (27.1 percent). Units for which no cash rent is paid and units occupied by households that reported no income or a net loss in 1999 comprise the category "Not computed."

Table 4-6							
Monthly Owner Costs as a Percentage of Household Income, 1999							
Monthly Owner Costs as a % of	onthly Owner Costs as a % of Ford River						
Household Income	Township	Delta County	State of Michigan				
Less than 15.0%	57.8	51.3	41.8				
15.0 to 19.9%	12.5	16.2	18.4				
20.0 to 24.9 %	9.4	11.8	13.1				
25.0 to 29.9 %	5.1	6.2	8.3				
30.0 to 34.9 %	5.3	3.5	5.0				
35.0% or more	9.9	10.0	12.7				
Not Computed		1.0	0.8				

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3.

Table 4-7							
Gross Rent as a Percentage of Household Income, 1999							
Gross Rent as a % of Household	Ford River	Delta County	State of Michigan				
Income	Township	Delta County	State of Michigan				
Less than 15.0%	35.5	18.9	20.9				
15.0 to 19.9%	11.2	14.9	14.9				
20.0 to 24.9 %	•	12.6	12.4				
25.0 to 29.9 %	8.4	14.2	10.0				
30.0 to 34.9 %	4.7	7.9	6.8				
35.0% or more	13.1	22.6	28.4				
Not Computed	27.1	8.8	6.7				

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3.

4.3 Selected Housing Characteristics

Substandard housing information is presented in Table 4-8. Housing units lacking complete plumbing (hot and cold piped water, flush toilet and bathtub or shower) or complete kitchen facilities (an installed sink, range or other cooking appliance and refrigerator) are considered substandard. The 2000 Census reported no units lacking complete plumbing or kitchens, while only 16 lacked telephone service. About 6

percent of Ford River Township's housing units were considered substandard in 1990; many of these units were likely used for seasonal or recreational use.

Table 4-8												
Conditions of Housing Units, 1990-2000												
Area	Lacking Complete Plumbing Lacking Complete Kitchens No Telephone Service											
	1990)	2000	0	1990 2000 1990		2000	2000				
	#	%	#	%	#	%	#	%	#	%	#	%
Ford River	64	6.4			66	6.6			9	0.9	16	1.7
Township	04	0.4	-		0	0.0			9	0.9	10	1.7
Delta	1,053	5.9	71	0.4	946	5.3	80	0.5	563	3.1	308	1.9
County	1,055	3.9	/1	0.4	340	٥.٥	80	0.5	303	3.1	308	1.9
State of	32,492	1.6	16,971	0.4	34,613	0.9	17,844	0.5	103,922	2.7	99,747	2.6
Michigan	32,492	1.0	10,971	0.4	34,013	0.9	17,044	0.5	103,922	2.7	33,/4/	2.0

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics, 2000 Dataset SF 3. Table DP-5 Housing Characteristics, 1990 Dataset STF 3.

The type of heating fuel utilized in occupied housing units is presented in Table 4-9 below. Bottled, tank or LP gas is the most popular fuel for heating in the Township. About 61 percent of Delta County uses utility gas for heating. This reflects the availability of gas throughout the county as well as its cost effectiveness. Bottled gas, fuel oil and wood were more commonly used in the Township than in the county as a whole, reflecting the rural nature of the area.

Table 4-9 Occupied Housing Unit Heating Fuel, Selected Areas, 2000								
Source	Ford River	Township	Delta (County	State of N	State of Michigan		
	Number	Percent	Number	Number Percent		Percent		
Utility Gas	271	29.4	9,694	61.2	2,961,242	78.2		
Bottled, Tank or LP Gas	342	37.1	3,177	33.1	357,502	9.4		
Electricity	47	5.1	695	4.4	251,208	6.6		
Fuel Oil, Kerosene, etc.	162	17.6	1,311	8.3	130,933	3.5		
Coal or Coke			2		659	0.0		
Wood	95	10.3	910	5.7	54,608	1.4		
Solar Energy			7		641	0.0		
Other Fuel	4	0.4	66	0.4	18,413	0.5		
No Fuel			34	0.2	10,455	0.3		
Total Units	1,098	100.0	17,928	100.0	3,785,661	100.0		

Source: U.S. Census Bureau Table DP-4 Profile of Selected Housing Characteristics: 2000 Dataset SF 3.

4.4 Public Housing Developments

Currently there are no public housing developments in the Township. The City of Escanaba and the City of Gladstone provide the nearest publicly subsidized housing.

4.5 Public and Private Housing Assistance Programs

The United States Department of Agriculture (USDA) provides housing assistance through its Rural Development Program. USDA provides homeownership opportunities to rural Americans, as well as programs for home renovation and repair. USDA also makes financing available to elderly, disabled, or low-income rural residents of multi-unit housing buildings to ensure they are able to make rent payments.

The Michigan State Housing Development Authority (MSHDA) provides financial and technical assistance through public and private partnerships to create and preserve safe and decent affordable housing, engage in community economic development activities, develop vibrant cities, towns and villages, and address homeless issues. MSHDA provides assistance with Neighborhood Preservation, Rental Rehab and Homeowner Rehab programs as well.

4.6 Private Housing Developments

New housing in the Township has been increasingly popular along the Lake Michigan shoreline as well as along the Ford River. These waterfront properties are highly desirable. Prices for these parcels have skyrocketed in recent years, bringing new residents into the Township. There are high end pieces of property available in the Township as well as affordable parcels.

Currently, there are an abundance of homes and seasonal properties for sale and available along the M-35 corridor. Much of the available waterfront property in the Township has already been developed or has been retained by families for generations. Many of the most desirable parcels are no longer available; buyers will now be looking at secondary waterfront properties.

4.7 Issues and Opportunities

- The Township has experienced a 9.5 percent increase in the number of housing units within the Township from 1990 to 2000.
- Nearly 83 percent of the total housing units in the Township are occupied; leaving approximately 17 percent of the Township's housing units vacant. Many of the vacant units are used for seasonal, recreational or occasional use.
- There are few rental units in Ford River Township. Ford River Township is relatively low density and most of the rental units in Delta County are concentrated in the City of Escanaba and the City of Gladstone.

• The Township reported a significant decrease (54.2 percent) in the number of mobile homes, boats and RV's used for housing.

- The Township represents a mixture of older homes and many newly built homes.
- The Township median housing value in 2000 (\$97,300) was higher than Delta County (\$80,000) but lower than the state (\$115,600).
- Gross rent in the Township is significantly higher than for Delta County; likely due to the small supply of rental units available.
- Only 15.2 percent of Township home owners spend more than 30 percent of their income on their mortgage, while 57.8 percent spend less than 15 percent of their income on their mortgage.
- Very few housing units in the Township are considered substandard; those units may have been developed for seasonal use.
- Bottled gas, fuel oil and wood are more commonly used in the Township compared to the county as a whole, reflecting the rural nature of the area.
- There are no public housing developments in the Township at this time.
- New housing in the Township has been increasingly popular along the Lake Michigan shoreline as well as along Ford River. Currently, there are an abundance of homes and seasonal properties available along the M-35 corridor.

Chapter 5.0 Community Facilities and Services

5.1 Introduction

Services and facilities provided by local government are vital elements of a community's progress and well-being. Services include police and fire protection, water and wastewater systems, street and park maintenance and operations, and solid waste disposal. Community facilities include government buildings, schools, hospitals, marinas, parks, and maintenance and storage facilities.

As a part of the land use planning effort, Ford River Township's services and facilities are described and evaluated as to their present condition and adequacy to meet present and future needs of the Township.

5.2 Township Facilities and Services

Ford River Township Hall Municipal Complex

The Ford River Township Hall is located at 3845 K Road, Bark River, Michigan. The Township Hall houses the offices of the Township Supervisor, Clerk, Treasurer and Assessor. The Hall is also the site of Township Board meetings as well as Planning Commission and Zoning Board of Appeals meetings. The Fire Department is also part of the Municipal Complex. Senior meetings and meals are held twice per month at the Hall. The Hall is available to rent for Township residents and/or property owners for activities such as birthdays, civic groups, community activities and weddings. A nominal fee is charged for rentals. Elections are also held at the Township Hall.

The Township Hall was constructed in 1964 and is equipped with a handicapped accessible ramp and accessible parking. In general, the building is in good condition. Future plans include an office space expansion. The Township Hall roof was replaced in 2009.

Fire Protection

All areas of Delta County are served by local fire departments. The Ford River Township Fire Department is located at the Ford River Township Hall Municipal Complex, 3845 K Road in Bark River. The Township is in need of general improvements to the existing fire hall, including but not limited to: expansion of the fire hall to include a meeting room, enlargement of the limited storage areas and bathroom upgrades to include emergency shower facilities. The Fire Department is also in need of an aerial ladder to fight potential fires that may occur at larger and taller homes built along the lakeshore in the Township.

The Fire Department is comprised of volunteer firefighters. Currently, the Township has 31 firefighters, including a chief, 1st assistant, 2nd assistant, 3rd assistant and one EMT. The Township maintains one 2001 pumper truck and two tanker trucks: a 1988 1,500 gallon and 1993 3,250 gallon tanker; a 1993 pickup brush rig and a 2005 trailer pump (800 gallons per minute). Fire hydrants are located in limited areas of the Township, but the Fire Department generally relies on the pumper and tanker trucks for water.

The Michigan Department of Natural Resources and the U.S. Forest Service are responsible for fighting wildfires that occur on state and national forest land. All fire departments in Delta County are covered by mutual aid agreements, under which local departments respond, when needed, to help fight fires in neighboring units. Local fire departments also assist the DNR with fighting wildfires in their areas if needed.

The adequacy of fire protection is evaluated by Insurance Service Office (ISO) Commercial Risk, Inc. through the use of the Grading Schedule for Municipal Fire Protection. The schedule provides criteria to be used by insurance grading engineers in classifying the fire defenses and physical conditions of municipalities. Grading obtained under the schedule is used throughout the United States in establishing base rates for fire insurance. While ISO does not presume to dictate the level of fire protection services that should be provided by a municipality, the findings of its Municipal Survey Office are frequently used by municipal officials in planning improvements to their fire fighting services. The grading is obtained by ISO based upon analysis of fire department equipment, alarm systems, water supply, fire prevention programs, building construction, and distance of potential hazard areas (such as the central business district) from fire station.

The Township's assigned fire insurance rating is a seven/nine (7/9) rating as determined by the ISO. In rating a community, total deficiency points in the areas of evaluation are used to assign a numerical rating of 1 to 10. The best protection is 1 and a rating of 10 would indicate a community that is essentially unprotected. Where a single number is assigned, all properties within the classified area receive that rating. Where more than one classification is indicated, the first number applies to properties located within five (5) road miles of the responding fire department and within 1,000 feet of a fire hydrant. Class 9 applies to properties located within 5 road miles of the responding fire department but over 1,000 feet from a fire hydrant. Class 10 applies to properties located more than five miles from the responding fire department.

In the future, should funding become available, the Township may consider development of two auxiliary fire halls, one in the northern end of the Township and one in the southern end of the Township. Volunteer fire fighters are distributed

throughout the entire Township; having two additional fire halls could help cut several minutes off of travel time. Reducing drive time to the fire hall would provide a great public benefit. The Township may wish to evaluate the feasibility of an auxiliary hall in the future, to potentially improve ISO ratings and reduce insurance rates for residents.

Public Works Department

The Township does not currently maintain a Public Works Department. The Township Supervisor handles many of the duties. Lawn maintenance and portions of the Township's road work are contracted out. The Township employs a part-time water operator.

Water/Wastewater Systems

The water supply system for Ford River Township may be described as a small distribution system serving mainly residential users. The system dates back to the early 1900s but has seen substantial upgrades post-1950. The water distribution system is currently in fair condition. STS Consultants developed a water system plan for the Township in 2007 to outline needs and concerns for the Township's water system.

The Ford River Township water plant is located at 3750 L.15 Lane and is served by one part-time water operator. The water system serves approximately 190 total customers, while the remainder of the Township is served by private wells. There is one 50,000 gallon storage tank, which is suitable for the current level of service. The Township currently utilizes two wells. The Number 1 well, located near the Township Hall on K Road, was closed due to higher than acceptable Radon levels and is no longer in service.

The Township completed a substantial water project in 2008, which provided metering of the system as well as a second river crossing. Residential metering of the system should deter excessive water usage. The Township submitted an application to the Michigan Economic Development Corporation (MEDC) for funding of water mains and additional upgrades that were cut from the 2008 project that included service line work. The Township was awarded a grant for the water main project in 2009; work is expected to begin in 2010. Additional necessary upgrades include improvements to the south water main located on M-35. Upgrades to the water system are ongoing, as funding is available. If possible, extensions to the water system should be pursued, particularly in the Breezy Point area, where there are concerns with groundwater quality.

The Township utilizes two pumps, with no upgrades necessary at this time. Variable frequency drives (VFDs), were installed on both wells which will reduce the potential risk of leaks and/or breaks on the portions of aged cast iron and galvanized water mains. The water comes up at a slower rate, so the work load on the pumps is not as difficult

and the pumps slow down when the pressure rises. Average water consumption varies greatly from winter to summer months, due to a significant number of seasonal users and possible excessive usage for water sprinklers, filling swimming pools, etc.

Current costs for the Ford River Township water system are a \$39.00 per month basic rate for 5,000 gallons. The commodity rate is \$4.00 per 1,000 gallons over the 5,000 gallon basic rate. The current water system is inadequate for fire protection; further upgrades are not planned at this time. Presently, the Fire Department relies on filling trucks from various water sources around the Township. The water system does not have the capacity to add a substantial number of new customers at this time.

The Township does not have a water treatment plant and residents employ private septic systems. The Township does not have a stormwater drainage system.

Township Cemeteries

The Township owns and maintains two cemeteries. The West Ford River Cemetery is located at 4400 block of K Road and the South Ford River Cemetery is located at 2144 H Road. Each cemetery employs a part-time cemetery sexton to maintain the grounds. A new road was developed in the South Ford River Cemetery in the summer of 2009 to improve access. Future plans involve the development of a capital improvement plan for each cemetery.

Building and Zoning

The Township's Zoning Ordinance is administered by the Township Zoning Administrator. Among its duties, the Planning Commission is responsible for issuance of Conditional Use Permits, review of Planned Unit Developments, and review/recommendation concerning amendments to the zoning ordinance. The Zoning Board of Appeals is the only body at the local level to hear appeals on administrative zoning matters.

Building permits are issued by the Delta County Building and Zoning Department.

5.3 County and Other Area Facilities and Services

Delta County Courthouse

The County Building/Courthouse is located at 310 Ludington Street in the downtown area of Escanaba. The building consists of administrative offices (Clerk, Register of Deeds, Administration and Finance, Board of Commissioners, Tax Equalization, Treasurer and Building and Zoning) and county judicial courts and offices. The facility was constructed in 1961. Public and employee parking are provided on all sides of the building. The building is handicapped accessible. In 1995, a second floor and small

additions to the front and back were constructed to alleviate an overcrowding problem. Modifications to the first floor of the facility also occurred to bring it up to code.

County Services Building

The County Services Building is located at 2920 College Avenue in the City of Escanaba. The facility was constructed in 1975 due to insufficient space in the County Building. The Service Center Building was expanded in 1988 to accommodate added staff and clientele. The building houses: the Cooperative Extension Service, Delta-Menominee District Health Department, Maintenance, Delta County Community Mental Health Services and the Michigan Department of Social Services. The building is fully accessible.

Law Enforcement

Law enforcement is provided by the Delta County Sheriff's Office. The County Sheriff and Jail facility is located just north of the County building at 111 North 3rd Street, in the City of Escanaba. The facility was constructed on land donated to the County by the City of Escanaba and the Delta County Building Authority. It was occupied in December 1964. The facility consists of a squad room, dispatch center, sheriff office, under sheriff office, lieutenant office, secretary office and detective office.

The Sheriff's Office is under contract with the Township to enforce the following:

- Ordinance No. 10, which is an Ordinance restricting the use of bridges in the Township and the public property twenty-five (25) feet adjacent thereto for purposes of public fishing, swimming, diving and providing penalties therefore.
- Ordinance No. 5, Noise and Nuisance.
- Patrol and investigate alcohol violations and enhance compliance of Michigan Liquor Control Laws.

The Office of the Delta County Sheriff currently employs twelve uniformed Road Patrol Deputies. The department Detective is in charge of criminal investigations. The department also employs a School Liaison Officer who works with Mid Pen, Big Bay and Rapid River Schools and coordinates with Escanaba and Gladstone. Additionally an undercover narcotics investigator from the department is assigned to the Upper Peninsula Substance Enforcement Team (U.P.S.E.T.), a conglomerate of Upper Peninsula Law Enforcement agencies. The Sheriff's Office Marine Patrol shares the responsibility with the Michigan Department of Natural Resources to patrol the waters of the County. Regular office hours are Monday through Friday 8am-6pm. The Delta County Correctional Facility currently employs twelve full-time correction officers. The facility maintains ninety beds.

Police protection is also provided by the Michigan State Police. A Michigan State Police Post is located in the City of Gladstone.

Delta County Airport

The Delta County Airport is located in the southern portion of the City of Escanaba, along M-35, adjacent to Ford River Township. The County took over the operation of the airport from the City of Escanaba in 1973. The airport is a Class E, Category 4 airport and offers commercial and general aviation services, two year-round all weather runways and convenient access to truck, rail and port connections. The airport is currently serviced by Northwest Airlines with flights to Iron Mountain, Detroit and Minneapolis.

The Delta County Industrial Airpark has been designated as a Renaissance Zone; the status is granted on a competitive basis by the State of Michigan. Taxes are abated in the Renaissance Zone for 15 years (until 2017). There are infrastructure improvements currently in progress at the airport, including municipal power, water and sewer as well as high-speed broadband internet access. Parcels from 1 to 40 acres are available.

Road Commission

The Delta County Road Commission provides road maintenance work for all of the Townships in Delta County. The Road Commission divides the County into two districts which have facilities for storing maintenance equipment and supplies. These facilities also have repair shops.

The main Road Commission facility is located in Wells Township, along County Road 517. This site houses the commission's administrative office and the central repair and storage facilities. The second facility is located in Rapid River. Road commission funding has been limited in recent years, leading the road commission to scale down to two facilities from four. Road projects are completed when funding is available.

Education

Escanaba Area Public Schools

Educational opportunities in Ford River Township are provide by the Escanaba Area Public Schools and the Bark River-Harris Schools. Escanaba Area Public Schools include Escanaba High School, Escanaba Middle School, Lemmer Elementary, Soo Hill Elementary and Webster Elementary. The school board voted to reconfigure the school district after the 2009-2010 school year. Full reconfiguration of the district is expected to be complete by the 2011-12 school year.

Under the reconfigured district, students in Kindergarten through third grade will attend Lemmer, Soo Hill or Webster Elementary Schools. Students in fourth through sixth grade will attend the current middle school, while seventh through 12th grade students will attend classes at the high school. The plan shows seventh through ninth grade students attending class in a separate wing apart from the 10th through 12th grade students. The former Franklin School building will be placed out for bids.

Escanaba Area Public Schools offer a wide range of performing arts as well as athletic opportunities. The Escanaba High School has approximately 930 students in grades 9 through 12. The Escanaba Middle School houses 520 students in grades 6, 7 and 8.

The total elementary school population for the area is approximately 1,400 students. John Lemmer Elementary School has a student population of approximately 470 in kindergarten through 5th grade. Soo Hill School has nearly 325 students with two sections of each grade (K-5). Webster School has approximately 290 students from Kindergarten through 5th grade. Schools throughout the area have experienced declining enrollments over the past decade.

• Holy Name Catholic School

Holy Name Catholic School is located at 409 South 22nd Street in Escanaba. Holy Name School was opened in 1971, upon the closing of Holy Name High School. Holy Name presently provides educational opportunities for children in preschool through eighth grade. Enrollment is approximately 250 students. Holy Name employs 18 teachers, a principal and an athletic director.

Bark River-Harris Schools

Bark River-Harris Schools is a K-12 district of 670 students. There are 370 Kindergarten - 6th grade students attending Bark River-Harris Elementary School. The average class size is 24 students. Currently each grade level is self contained and instruction is provided by highly qualified teachers. The staff includes 17 full time teachers and 4 instructional paraprofessionals. Ancillary staff includes 1 secretary, 6 bus drivers, 3 ½ food service personnel and 3 custodians. Bark River-Harris Jr. High and Senior High School is a larger class D school comprised of approximately 300 students in 7th-12th grades.

Delta-Schoolcraft Intermediate School District

Delta-Schoolcraft Intermediate School District's main office is located at 2525 3rd Avenue South in Escanaba. The ISD is comprised of seven public K-12 school districts and one public school academy. The ISD maintains the Bay Middle College/Fitzharris Alternative High School is located at 5775 Main Street in Wells Township. The Middle College has a close working relationship with Bay de Noc Community College. Students at Bay Middle College/Fitzharris High School are all in the middle college concept and environment. Some students can take college courses for credit; however, it is not required. Bay Middle College/Fitzharris High School enrolls students from these Delta-Schoolcraft county school districts: Bark River-Harris Schools, Big Bay de Noc Schools, Escanaba Area Public Schools, Gladstone Area Public Schools, Manistique Area Public Schools, Mid Peninsula School District, Nah Tah Wahsh PS Academy and Rapid River Public Schools.

The Delta-Schoolcraft I.S.D. has also ensured that quality and comprehensive Special Education programs and services are available to children with disabilities throughout Delta and Schoolcraft Counties since 1969. These programs and services are offered cooperatively with the local school districts within the two county area.

Bay de Noc Community College

Bay de Noc Community College is a two year public college offering certificates, associate degrees and university transfer programs ranging from business to manufacturing technology. The college, also known as Bay College, has an enrollment of about 2,300 students. Also located on the college's 150-acre campus is a Michigan Technical Education Center (M-TEC). Opened in 2000, the M-TEC provides workforce training programs designed to meet the specific needs of area businesses. Bay College also offers four year degrees through an articulation program with Lake Superior State University.

• Northern Michigan University

Northern Michigan University, located in the City of Marquette, offers more than 180 programs in 32 different departments with credentialing that ranges from certificates and associate degrees to masters degrees. The physical campus includes 56 buildings on a campus of 336 acres. A 350-member faculty teaches the enrollment of approximately 8,700 students.

Delta County Conservation District

The Delta County Conservation District office is located at 2003 Minneapolis Avenue in Gladstone. The Delta County Conservation District is a unique local unit of government

that was formed in 1951. The district is run by a five member board of local directors that are elected by county residents to four year terms. The mission of the Delta County Conservation District is to assist all county residents with information, education, and technical services in all aspects of natural resource and/or environmental issues, specializing in local assistance to non-industrial private landowners.

All Conservation Districts are stand-alone entities who work with many state and local agencies. There are 79 conservation districts statewide with diverse, ever-changing programs adapted to each county's needs. The Delta County Conservation District and the Natural Resources Conservation Service (NRCS) worked cooperatively with several local units of government on a much-needed stream bank stabilization project on the Ford River. Ford River Township consults with the Delta County Conservation District as needed.

United States Department of Agriculture

The United States Department of Agriculture (USDA) Service Center is located at 2003 Minneapolis Street in Gladstone. USDA provides leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management. USDA Rural Development runs programs designed to improve the quality of life in rural areas. Rural Development has an \$86 billion dollar loan portfolio, and administers nearly \$16 billion in program loans, loan guarantees, and grants through their programs.

Solid Waste Disposal and Recycling

Solid waste disposal is a private enterprise in the Township. Currently, solid waste is collected by Delta Disposal and Nickels Disposal. Pick-up varies by day, depending on the route and the service. Solid waste is transported to the Delta County Landfill located at 5701 19th Avenue North in Escanaba. There is no mandatory recycling in the Township. Recycling services are offered by the private disposal companies.

The Delta County Landfill is located on a 63-acre parcel of land in the northeastern corner of Escanaba. The Delta County Solid Waste Authority purchased 350 acres to develop a new site adjacent to the current site to meet the future solid waste needs of the county. The landfill began operations in December of 1985 and accepts both Type II waste (residential/household waste) and Type III waste (demolition debris).

The Delta County Solid Waste Authority, organized in 1985, owns and manages the landfill. The appointed seven member authority includes: three representatives at large; three members designated by the Escanaba City and Gladstone City Commissions; and one member elected by the Authority that serves as the chair person. According to

the annual report from 2008, the landfill receives about 81,607 cubic yards of municipal solid waste and 24,205 cubic yards of demolition debris per year. Waste arriving into the landfill comes from all units of government in the County. The waste collected from these entities either is directly hauled to the landfill or hauled to one of several transfer stations in the County and then brought to the landfill.

Electrical Service

Electrical service in Ford River Township is primarily supplied by Upper Peninsula Power Company (UPPCO). From the northeastern Township border to the Ford River border, electrical service is provided by the City of Escanaba. Residents granted the City Council the authority to sell the Escanaba Electrical Generating Plant in August 2009. Future plans for the plant and the area's electrical needs have not been finalized at this time.

Natural Gas

Ford River Township's residential units along M-35 on the north side of the Ford River Bridge receive natural gas service from Michcon. The main feed line runs through the north end of the Township. A goal for the Township would be to expand natural gas service to additional residents.

A number of residents throughout the township use propane gas. Propane service is provided by a variety of private companies throughout the area.

Telephone Service

Local telephone service in Ford River Township is provided by AT & T and Charter Communications in addition to other companies. Long distance service may be obtained from several carriers that serve the area. Verizon, AT&T and Cellcom provide cellular phone service. Cellular service within the Township is limited; additional cell towers may provide better service.

The Ford River Township Planning Commission approved a conditional use permit in January 2010 for a new cell tower to be constructed on leased property near No See-um Creek. The tower should help alleviate the "dead spots" of cellular service along the M-35 corridor in Ford River Township. Construction on the tower should begin when weather permits.

Cable Service

Cable service is limited in Ford River Township. Cable service is available along M-35, to a concentration of homes across M-35, to approximately ½ mile before the Township Hall. Cable service is also provided throughout the north end of the Township from 14th Road to Schaffer and Bark River.

Health Care

OSF St. Francis Hospital & Medical Group

Residents of Ford River Township must look outside the Township for some of their health care services. OSF ST. Francis Hospital, with 110 beds, is located in the City of Escanaba. A new Magnetic Resonance Imaging (MRI) unit and a new Cardiac Diagnostic Center, completed in 2006, provide enhanced cardiology and cardiovascular services as well as family health services. Home health care services are offered throughout the County and hospice care is also available. Other services include: Health and Wellness, Hospice, Laboratory, O.B./Nursery, and Rehabilitation Services.

The new John and Melissa Besse Emergency Department & Walk-In Center at OSF St. Francis Hospital & Medical Group was completed in the spring of 2009. The new center is twice the size of the former emergency center and offers many new features, including:

- additional treatment rooms
- larger waiting area
- chemical decontamination area
- single point of entry for both emergency and urgent care needs
- domestic violence and/or sexual abuse care, including a room equipment with a shower and bath, as well as gynecological equipment
- pediatric care, including child-friendly patient rooms
- consultation room for family members and patient advocates

The Emergency Department & Walk-In Center was made possible by a generous donation from Mr. and Mrs. Besse, along with federal funding that came with the aid of Senators Carl Levin and Debbie Stabenow, and Congressman Bart Stupak.

Cedar Hill Medical

Cedar Hill Medical is located at 2845 US-2/41 in Bark River. The medical clinic offers services in acupuncture, holistic medicine, annual physicals, sports physicals, family practice maintenance and urgent care issues. Services are also offered at the clinic by staff of Dickinson County Health System including: laboratory, mammography, radiology, X-ray, ultra sounds and bone density testing. The clinic is open Monday, Wednesday, Thursday and Friday from 8am to 5pm and Tuesday from 8 am to 7pm.

A sleep clinic and a day care are also located in the Cedar Hill Medical Building.

Marquette General Hospital

Marquette General Hospital, the Upper Peninsula's regional medical center, is located in the City of Marquette. The 352-bed specialty care hospital provides care in 54 specialties and subspecialties and 24-hour emergency services. Marquette General houses the Upper Michigan Heart Institute; the Upper Michigan Centers for Neuroscience, Rehabilitation and Cancer Treatment; and Upper Michigan Behavioral Health Service. The Family Practice Residency Program serves as a teaching facility affiliated with Michigan State University. The medical staff of more than 200 doctors work with the about 2,700 employees providing care to approximately 11,000 inpatients and 350,000 outpatients per year.

Emergency Medical Services

Within Ford River Township, primary emergency medical services are provided by RAMPART Emergency Medical Services located at 828 Sheridan Road in Escanaba. This emergency medical transporting service is staffed with 20 EMT-S (Specialist), EMT-B (Basic) and paramedics. RAMPART has six Type III Modular ambulances in its inventory. Four are located in Escanaba, one in Gladstone, and one is a first responder in Bark River. There is one 2006, three 1997, and two 1995 vehicles and they are all in satisfactory condition. Five out of the six ambulances offer Advanced Life Support and include one paramedic and one E.M.T. Specialist per vehicle. RAMPART services the rest of Delta County and covers part or all of Marquette, Schoolcraft, and Alger Counties. Mutual aid is offered to Marquette County.

911 Systems

Delta County has an "enhanced" 911-dispatch system in operation throughout the County. Emergency calls for fires, medical emergencies, crimes, and other emergencies are accomplished by dialing the number 9-1-1; these calls go to the central dispatch located at the Escanaba Public Safety building, where the location of the call is displayed. The appropriate responding unit is then dispatched. The Delta County Sheriffs Department Emergency Rescue Unit and other Emergency Medical Service units are dispatched through central dispatch.

Library

Library services are available through the Escanaba Public Library located at 400 East Ludington Street in Escanaba. The library is connected to City Hall and the municipal offices. The library is open Monday-Thursday from 10am to 8pm and on Friday from 10am to 5pm. The library is closed on Saturdays from Memorial Day to Labor Day. In addition to the extensive catalog, the library also has free computer access as well as wireless access, children's services, genealogy and special collections.

Animal Shelter

The Delta County Animal Shelter is located at 1639 17.4 Road in the City of Escanaba. Animals can be adopted at the Delta County Animal Shelter on Monday – Friday from 10am to 4pm and on Saturdays from 9am to 1pm. The Delta Area Animal Society supports the Delta County Animal Shelter in reducing the number of homeless animals in Delta County.

5.4 Issues and Opportunities

- The Township Hall is currently in good condition; the roof was replaced in 2009. An office space expansion would be favorable to alleviate overcrowding.
- The Township is served by 31 volunteer fire fighters. The Township may benefit
 from developing auxiliary halls in the northern and southern ends of the
 Township; cutting response time and potentially improving the ISO rating for
 many residents.
- The Township's water system has experienced several upgrades in recent years but does not have the capacity to add a substantial number of new customers at this time. Expansion options for the water system should be explored when funding is available.
- The Township owns and maintains two cemeteries. Future plans involve drafting a capital improvement plan for cemetery development.
- The Township's Zoning Ordinance is administered by the Ford River Township Zoning Administrator; building permits must be obtained from the Delta County Building and Zoning Department.
- Police protection is provided by the Delta County Sherriff's Office and the Michigan State Police.
- The Delta County Airport provides limited daily air service to Iron Mountain, Detroit and Minneapolis.
- Due to budget constraints, the Delta County Road Commission has reduced its number of service facilities from four to two. Funding is limited and road projects are completed when adequate funding is available.
- Ford River Township residents have a variety of educational opportunities to choose from, including higher education. School enrollments have been

declining in recent years; consolidation of districts may be necessary in the future.

- Solid waste disposal is a private enterprise in the Township, with no mandatory recycling. The Delta County Landfill has adequate space for expansion.
- Electrical service is offered in the Township by several providers, including the City of Escanaba. Residents granted the City Council the authority to sell the Escanaba Electrical Generating Plant in August 2009. Future plans for the plant and the area's electrical needs have not been finalized at this time.
- A main feed line for natural gas runs through the north end of the Township. Township residents would benefit from the expansion of natural gas service.
- Cellular service is limited within the Township; residents may benefit from construction of additional cellular towers. The planned construction of an additional tower near No See-Um Creek should improve service along the M-35 corridor.
- Cable service is limited within the Township; there are no plans for expansion of that service at this time.
- Township residents have several options for health care, including OSF St. Francis Hospital and Medical Group and the Cedar Hill Medical Center.
- Ford River Township residents may depend on the Delta County Conservation District and US Department of Agriculture offices in Gladstone for assistance with environmental issues and rural development.

Chapter 6.0 Transportation

6.1 Introduction

Transportation allows for the movement of people and goods within and outside an area. It is vital to the economy and development of an area and central to land use patterns. Roads and other transportation systems have been largely influenced by physical barriers present such as rivers, lakes, swamps and rugged terrain. Therefore, transportation routes generally were established where physical features offered the least resistance.

An inventory of existing transportation facilities in Ford River Township and surrounding areas is presented in this chapter. According to data from the Michigan Department of Transportation, there are 881.36 miles of public roadway in Delta County, not including the state public roadway.

6.2 Road System

Michigan Act 51 of 1951 requires that all counties and incorporated cities and villages establish and maintain road systems under their jurisdiction, as distinct from state jurisdictions. Roads within the Township, classified under Act 51, are identified on Map 6-1.

Counties, cities and villages receive approximately 61 percent of the funding allocated through Act 51 for local roads. State highways under the jurisdiction of the Michigan Department of Transportation receive the remaining 39 percent. Road funding allocations are determined by a formula that includes mileages.

The five road types categorized by Act 51 include, state trunkline, county primary, county local, city/village major, and city/village minor.

A description of the categories applicable to roads within Ford River Township follows.

State Trunkline Highway

Road prefixes "M" and "US" denote state and federal highways respectively and are included in this category. State trunklines provide the highest level of traffic mobility for the public. While the highway system carries more than half the total statewide traffic, it is only 9 percent of the Michigan roadway network length. State and federal highways are designed by the prefixes "M" and "US" respectively.

M-35 in Ford River Township extends from the City of Escanaba boundary/northern township boundary south along the eastern portion of the township along Lake

Michigan. M-35 is one of the two principal north-south routes across the Upper Peninsula. The Michigan Department of Transportation (MDOT) has designated 64 miles of M-35 between Gladstone and Menominee as the "U.P. Hidden Coast Recreation Heritage Route" to promote tourism and economic development in the area. The Heritage Route passes through both Delta and Menominee counties on the western shoreline of Lake Michigan and features parks, waterways, forests, trails, attractions, boat launches, harbors and campgrounds. Suggested stops range from cultural centers and modern entertainment, to historical sites and natural attractions. M-35 is also designated as a segment of the Lake Michigan Circle Tour. M-35 is also designated for bicycles from Escanaba to Fuller Park.

US-2, a major east-west corridor in the Upper Peninsula extends across the northeastern end of the Township near Hyde to the northwestern corner of the Township. State trunklines account for approximately 17.25 miles of Township roadways.

County Road System

County roads are classified as either primary or local. Primary roads facilitate the movement of traffic from areas of smaller population to larger population centers within a county not served by state trunklines. The primary system also serves as an important supportive road network to the state trunkline system.

Within Delta County there are 352.02 miles of county primary roads and 12.9 miles located within Ford River Township. Primary roads within the township are paved and include the portions of the following roads (See Map 6-1):

11th Road

• 14th Road

F Road

• G.5 Road

H Road

I Road

K Road

Roads not classified as primary are considered local. Local roads comprise the most miles in the county system, but have the lowest level of traffic. The roads in this system are often referred to as "township roads," though the county road commission maintains jurisdiction of those roads. There are a total of 529.34 miles of local roads within Delta County, with 31.08 miles being in Ford River Township.

It should also be noted that a portion of I Road (north of US-2 in the northern end of the Township) is part of the established commercial truck route for Delta County.

The Delta County Road Commission is currently researching at least one road in Ford River Township, A-5 Road. Controversy surrounding the half-mile road was first discussed at a DCRC meeting in the spring of 2010. Records on file with Ford River Township and Delta County Equalization indicate A-5 as a county road. According to research recently conducted by the DCRC, A-5 was listed as a county road up until 1980 when it was removed from the road commission's certification map. Research into when the former county road was abandoned is ongoing.

Federal Roads

There are no roads that are part of the Federal Forest Roads system in Ford River Township. Countywide, there are 115.86 miles of roads located within the Hiawatha National Forest.

6.3 Private Roads

Within Ford River Township, a number of private roads serve residential areas. Approximately 21.7 miles of private roads exist within the Township. The maintenance of these roads (snow plowing, grading, dust control, drainage ditch maintenance, etc.) becomes the responsibility of the residents living along these roads, who usually accomplish these tasks either on their own or through a contract agreement with a private entity.

The Road Commission will not provide any maintenance service to privately owned roads. The condition and location of private roads may affect some of the services provided to the residents such as fire protection, garbage collection, and emergency services. Access for fire and emergency vehicles on private roads can be difficult, especially if the roads are badly maintained, narrow, and/or lack enough space for turning around. As further development occurs along private roads, the possibility of conflicts between residents living along these roads with ongoing maintenance may occur. Often residents will attempt to request that the Township Board or the Road Commission to pay for maintenance of private roads.

Residents living on private roads need to be aware that school bus service may not be provided. Generally, school buses will pick-up students only on public roadways.

Ford River Township has included stipulations in its zoning ordinance that requires private roads serving more than one lot to conform to certain dimensional and maintenance standards. It is also possible to prohibit subdivision and development of property unless the resulting parcels have direct access to public roads. However, even if a road is constructed to county road commission standards, the Delta County Road

Commission may not accept it into the county road network.

Applicants for private road development must submit an application for a special use permit through the Zoning Administrator to the Planning Commission. In addition to the special use permit application, a typical cross-section of the private roadway, all existing and proposed grades and drainage patterns, the location, size and depth of any proposed drainage facilities or structures, the location of all lots and the situation of proposed buildings on said lots and at least two proposed names for the private road must also be provided. Naming of private roads is ultimately approved by the Delta County Building and Zoning Department.

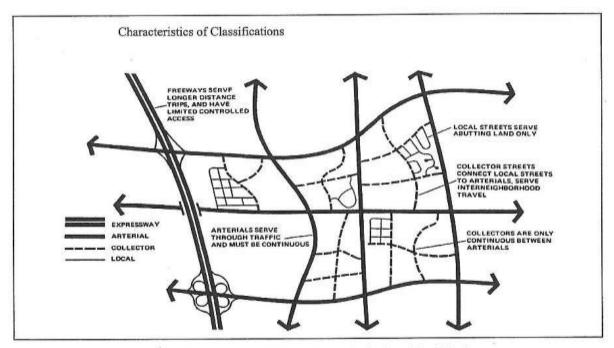
The applicant must also provide a set of deed restrictions which shall provide for the creation of a private road easement and the creation of a homeowners association whose members shall be the only property owners served by the private road. A document must be provided that the Township shall not be held liable for the cost of road signs, traffic control signals, maintenance, lighting or snow removal. Easements for construction and maintenance of various utilities must also be provided. A permit must be obtained from the Delta County Road Commission for construction within the right-of-way of county roads. Building permits will not be issued until all roadway, ditching and drainage improvements are installed.

6.4 National Classification of Roads

Federal, state and local transportation agencies use the National Functional Classification as a planning tool. Developed by the Federal Highway Administration, the system classifies roads according to their function as it relates to greatest mobility/greatest access. Principal arterials provide the greatest mobility. In order of functional importance; principal arterials are followed by minor arterials, major collectors, and then minor collectors. Local roads provide the greatest access to property. Map 6-2 illustrates the Township's roads as described by the National Functional Classification.

The functional system creates more categories than is provided under P.A. 51. All roads in the functional road classification system that are arterials and collectors are considered either state trunklines or primary roads in the county road system under P.A. 51.

The following graphic shows the characteristics of road classifications.



Source for Figure 2-2 and 2-3: Arterial Street Access Control Study, Tri County Regional Planning Commission, 1981, p.3.

Principal Arterial

Roads within this classification function mainly to move traffic over medium to longer distances quickly and safely and efficiently. Often the movement is between regions or major economic centers. In Ford River Township, the segment of M-35 along the eastern edge of the Township is classified as a principal arterial. The segment of US-2 across the northern end of the Township is also classified as a principal arterial. There are approximately 17 miles of principal arterial roads in the Township.

Minor Arterial

Roads within this classification function to move traffic over medium distances within a community or larger area at a moderate to a quick rate. There are 0 miles of roads within this classification in Ford River Township.

Collector Roads

A collector road provides access between residential neighborhood and commercial/industrial areas. Its function is to provide a more general service, e.g., area-to-area rather than point-to-point. A collector usually serves medium trip lengths between neighborhoods on moderate to low traffic routes at moderate speeds and distributes traffic between local and arterial roads. Usually, this involves trips from home to places of work, worship, education and where business and commerce are conducted.

Within Ford River Township, portions of 11th, 14th, F, H, I and K Roads are considered "major collector roads" and G.5 Road is considered a "minor collector road." Together these roads are a part of a network that encompasses 12.9 miles of collector roadways classified in the Township.

Local Roads

All roads not serving as arterials or collectors are classified as local. The predominant function of roads in this classification is to provide direct access to adjacent land uses. A local road serves as the end for most trips within a community. Local roads include all streets not classified as arterials or collectors. The Township's 31.1 miles of local roads provide direct access to adjacent land uses and should be designed to move traffic from an individual land parcel to places of business and employment via collector roads.

6.5 Road Condition Evaluation

Roads under the jurisdiction of the Michigan Department of Transportation are evaluated on the basis of pavement condition, ride quality, friction and rutting. Surface conditions are determined by the amount of deterioration such as cracking, faulting, wheel tracking, patching, etc. Determining ride quality is subjective, but is based on the degree of comfort experienced by drivers and passengers.

Roads within Ford River Township have been evaluated using the PASER (*Pavement Surface and Evaluation and Rating*) system. Each summer, a survey team consisting of road commission members, MDOT staff and CUPPAD staff drives 50 percent of the Township's roads and the PASER system is used to evaluate the pavement surface condition. A portion of the results is listed in Table 6-1 below.

Asphalt PASER descriptions range from 1-Failed to 10-Excellent. The scale is as follows:

- Asphalt 10-Excellent
- Asphalt 9-Excellent
- Asphalt 8-Very Good
- Asphalt 7-Good
- Asphalt 6-Good
- Asphalt 5-Fair
- Asphalt 4-Fair
- Asphalt 3-Poor
- Asphalt 2-Very Poor
- Asphalt 1-Failed

Table 6-1							
Ford River Township PASER Rating, Selected Roads, 2008							
Road Segment	From	То	PASER Rating				
US-2	County Park Road	Old M-35	6				
11 th Road	J.5 Road	K Road	2				
G.5 Road	14 th Road	15 th Lane	2				
K Road	10.75 Lane	11 th Road	3				
l Lane	M-35	H Road	2				
M Road	11 th Road	12 th Road	7				

Source: PASER Rating, CUPPAD, 2009.

There is a wide discrepancy between road conditions in the Township. Roads that are in the bottom tier of PASER descriptions should be repaired or reconstructed as soon as funding is available.

6.6 Road Improvements

The Ford River Township Board is in the process of compiling a priority listing of roads needing improvements. The Township Board serves as the Road Commission Board. Roads that serve the largest number of residents are generally given priority for repairs and reconstruction.

Recent road improvement projects in the Township include paving work on F Road.

6.7 Financing

Local Funding

The Township does not currently levy a millage for road improvement projects, but does budget general fund monies for roadwork every year. Levying a millage for road improvements may go to the Township voters in the future. Road commission budgets across the state are strained and future projects may necessitate maintaining roads rather than construction of new roads.

Michigan Transportation Fund

Revenues collected from fuel taxes and motor vehicle registration fees are distributed to county road commissions, cities, and villages by formula through the Michigan Transportation Fund, established under Public Act 51 of 1951. Road classification, road mileage, and population are factored into a formula to distribute funds to all the county road commissions. A percentage of the funding received by each road commission is also set aside for engineering, snow removal, and urban roads.

Michigan Transportation Economic Development Fund

The establishment of this fund in 1987 set forth a mission "to enhance the ability of the state to compete in an international economy, to serve as a catalyst for economic

state to compete in an international economy, to serve as a catalyst for economic growth of the state, and to improve the quality of life in the state." Investing in highway, road and street projects necessary to support economic expansion is the purpose of the TEDF. The six funding categories of the TEDF are as follows:

Category A - target industries

• Category B - state trunkline takeover

• Category C - urban congestion

Category D - rural primaryCategory E - forest road

• Category F - urban area

Other

Federal assistance for state highways is supported mainly through motor fuel taxes. Construction and repair costs associated with state trunkline systems are generated from these taxes. On August 10, 2005, President George W. Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. A brief extension of the Act has been filed to continue to fund programs while awaiting a new reauthorization bill.

SAFETEA-LU addresses the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

Ten percent of each state's Surface Transportation Program (STP) funding is set aside for transportation enhancement projects. Enhancement activities are meant to be such things as landscaping, bicycle paths, historic preservation, storm water runoff mitigation and other quality-of-life projects. A formal process of application has been established by the Michigan Department of Transportation to afford local and state jurisdictions an opportunity to pursue this funding.

SAFETEA-LU legislation expired in 2009. The federal government is in the process of

drafting new transportation legislation to replace SAFETEA-LU and has reauthorized SAFTEA-LU until new legislation is complete.

6.8 Traffic Flow and Volume

It is anticipated that travel demand will grow by 50 percent in the next decade. Each year sees more cars, more drivers and fewer carpoolers. Nationally, two car households increased from 10 million in 1960 to 40 million in 2000. The largest population growth is occurring in suburbs where dependence on private automobiles is greatest. New road construction is not keeping pace with this growth and roads are becoming increasingly crowded.

According to the Michigan Department of Transportation, highway travel in Michigan is increasing at a far greater rate than the state population. Michigan roads have experienced an increase in traffic volume. In 1940, travel logged on Michigan roads totaled 14.6 billion miles. The total travel volume in 2001 was 96.6 billion miles, an increase of more than six and one-half times more than 1940. Volumes are usually presented as an average daily traffic (ADT) figure, and are calculated for a particular intersection or section of roadway.

As the number of vehicles on a roadway increases, turning onto or off of the roadway becomes more difficult. At the same time, as the traffic level increases, frontage along the road becomes more desirable for development. Often, such development occurs with little, if any, attention to how entrances and exits will affect traffic movement and safety.

Congestion created by strips of roadside commercial land uses is one of the most objectionable impacts of development. Businesses naturally located on the most accessible land, but the many driveways they require, and the congested intersections they create, impede travel to all locations. Road users, landowners, and businesses then suffer from reduced accessibility.

Access management consolidates driveways, provides better vehicle and pedestrian circulation and otherwise reduces the impact of roadside land use on the efficiency of the road system. It requires a good relationship among road agencies, local, government and property owners to develop an access plan and possibly adopt an overlay zoning district. This approach has yielded successes for some communities. Such a strategy may be useful along M-35 and US-2 problems occur.

6.9 Public Transportation

The Delta Area Transit Authority (DATA) was formed in 1989 under the authority of P.A. 196. In fifteen years of operations, DATA Bus has provided over 1.5 million rides while traveling nearly 5 million miles. In 1997 DATA Bus moved Bus Maintenance and Customer Service Operations into a new 12,500 SF Inter-Modal Transportation Facility and was funded by Federal (80 percent) & State (20 percent) investments in the amount of \$850,000.

DATA offers services Monday through Friday from 6:00am to 6:00pm. DATA has a fleet of sixteen vehicles; fifteen vehicles are lift-equipped. Twenty-five people are currently employed by DATA. In 2008, DATA buses traveled 382,130 miles and completed over 25,000 vehicle hours, providing services to over 110,000 passengers. DATA Demand Response Service to Ford River Township residents. Demand Response Service is provided from 6:30am to 5:30pm Monday through Friday except on holidays. Service is dependant on availability of drivers and is a curb to curb pick-up/drop off service.

Commercial cab services are also offered by a number of private cab companies based in the City of Escanaba.

Indian Trails provides motor coach services throughout Michigan as well as to Green Bay, Milwaukee and Chicago. Various routes have stops at the Escanaba bus depot.

6.10 Rail Service

There is one rail line traversing through the north end of Ford River Township, the Canadian National (CN). The most important portion of the Canadian National rail line running through Delta County is the iron ore pellet line from the Marquette iron ore range to the ore docks in Escanaba. Since 1864, iron ore pellets from the mining operations in Marquette County have been transported to Escanaba by railroad, where they are loaded onto ships and transported to steel plants along the lower Great Lakes. The portion of the rail line that runs through the southwestern part of the County is an important line for transporting raw materials and supplies to paper making operations located in the U.P. and northeastern Wisconsin. Canadian National is expected to continue to maintain all its current lines in the U.P. Iron ore should remain the dominant commodity hauled by the railroad company to the County in the foreseeable future.

Canadian National (CN) has a major operating hub located in the City of Gladstone. Activities occurring at this terminal facility include: switching of freight cars, repairs to freight cars, and servicing of locomotives. In early 1996, a private developer

Mead paper mill in Wells Township. The developer plans to add intermodal capability in the future.

6.11 Air Transportation

Commercial passenger service is available from Delta County Airport (see Chapter 5, Section 5.3) in Delta County and Sawyer International Airport in Marquette County approximately 65 miles in distance from the Township.

6.12 Non-motorized Transportation Facilities

In recent years, the construction of non-motorized facilities has increased in response to public interest. Walking and bicycling are among the top five individual exercise activities according to a national survey (walking is number one). Alternate modes of transportation are encouraged and made safer by facilities such as bike lanes and walking paths. Residents have expressed an interest in developing nature trails and multi-use trails throughout the Township. There is a large amount of state land in the Township where trails could potentially be developed. Currently, the Township does not have an abundance of non-motorized transportation opportunities. Any work on non-motorized trails and facilities should be coordinated with the surrounding communities to establish links when possible.

Sidewalks have served to connect residents to their neighborhoods, schools, stores and workplaces for as long as they have been around. In the absence of sidewalks, people will either drive to where they need to go or use the street as they would a sidewalk. Sidewalks are pedestrian transportation corridors. The recommended standard for requiring sidewalks is where lot sizes are 10,000 square feet and smaller. Wider shoulders, for instance can provide an added measure of safety for bicyclists and pedestrians. The Township does not maintain sidewalks at this time.

6.13 Additional Transportation Facilities

The Township has an Off-Road Vehicle (ORV) trail passing through the northern end of the Township. The trail begins at I Road and ends on F Road and is part of a trail network maintained by the Normenco Sportsman's Club.

The Felch Grade Trail also passes through a portion of the Township. The Felch Grade Trail is a multi-use trail that winds through Delta, Menominee and Dickinson Counties, for 2/3 of its length, the trail parallels highway M-69. It is used by off-road vehicle enthusiasts, hikers, bikers and horseback riders in the summer months, and snowmobilers, skiers and snowshoers in the winter.

A trail has been proposed from Escanaba to Hermansville along the old Soo Line railroad grade. The trail has been proposed as a multi-use trail that could include horseback riding, walking and biking.

6.14 Issues and Opportunities

- The Township Board and the Planning Commission should continue to work with the Delta County Road Commission and MDOT to ensure that transportation deficiencies are not impediments to investment in the Township.
- Ford River Township should prioritize local road improvement projects and work with the Delta County Road Commission to schedule these projects as local and road commission funds become available.
- The Township currently funds road projects via the general fund. Levying a millage for road improvements may go to the Township voters in the future.
- The Township should continue to enforce Zoning Ordinance language regarding private roads, especially when it comes to maintaining these roads and providing certain community services to these residents.
- The opportunity may exist to work with MDOT to develop access management plans for areas along M-35 and US-2 in the Township, in order to reduce the potential for future safety hazards and to preserve the current road conditions while spending less money to do so.
- The aging of the local population could result in future needs for additional transportation services for the elderly and/or disabled.
- Limited public transportation is available locally on a demand-response basis. Daily bus transportation is available by DATA. Cab and motor coach services are also available.
- The Township does not currently maintain any walking, nature or multi-use trails.
 Residents have expressed an interest in developing these types of trails in the future.
- If non-motorized trails and facilities are pursued, the Township should attempt to coordinate with surrounding communities to provide trail linkages when possible.

Chapter 7.0 Recreation

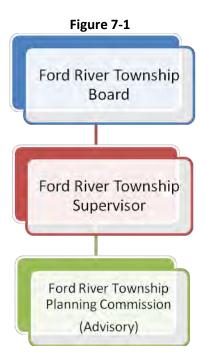
7.1 Introduction

Information provided in this chapter is intended to provide current and comprehensive data to guide Ford River Township decision makers regarding future park development and/or acquisition. Existing parks and other recreational facilities are discussed in the context of location, features and use. Requirements set forth under the Americans with Disabilities Act (ADA) of 1990 will also be presented.

Ford River Township has not yet adopted a five year Recreation Plan to provide for the development of recreational activities, programs and facilities. A five year Recreation Plan approved by the Michigan Department of Natural Resources (MDNR) is required to apply for MDNR Trust Fund grants for recreation development and property acquisition. The Township distributed a survey in December 2009 to gather public input for future recreation upgrades and projects. The Township Board will undertake the development of the five year Recreation Plan based on needs identified by the community.

There is a limited amount of both private and public recreational facilities within the Township. Recreation related to tourism is crucial to area economics and is an expanding industry nationwide. Attractions and facilities located in close proximity to the Township present many opportunities for active and passive recreation. Ford River Township is rich in natural resources, drawing a growing number of visitors each year. The Township has an abundance of outdoor recreational opportunities, including hunting, fishing and boating. Heritage based tourism and ecology based tourism are becoming increasingly popular. Having adequate recreational facilities to meet the needs of visitors and as well as residents is vital to the community.

Under Public Act 157 of 1905, the Ford River Township Board has assumed responsibility for parks and recreation development in the Township. The Township Board is a five-member board elected by the residents of Ford River Township. The Board meets on a monthly basis and recreation opportunities are discussed at regular meetings. Figure 7-1 below shows the Township's organizational chart for recreation.



7.2 Ford River Township Recreation Volunteer Organizations

The Township provides and maintains recreational facilities for users but does not provide programming. Township officials maintain an oversight role to guarantee that timely and necessary maintenance is completed.

The Township has had a successful, but informal relationship with community organizations. Community organizations involved with recreation include the Lions Club. The Lions Club previously installed benches at the MDNR Boat Launch Site. There is support from the community for the Township's parks and recreation facilities and volunteers are likely to be supportive of new recreation initiatives. There is also potential to develop a beautification committee to assist with future plans in the Township.

7.3 Ford River Township Recreation Inventory

Public recreational facilities owned by the Township are described below.

Table 7-1

Ford River Township Recreation Facilities

Ford River Township Municipal Complex

The Ford River Township Municipal complex is located at 3854 K Road, Bark River, MI. The Municipal Complex is comprised of the Ford River Township Hall, the Township Fire Hall and the Delor Wellman Recreational Facility. The Fire Hall hosts an annual breakfast and the Township Hall is available for rent

for special events.

Delor Wellman Recreational Facility

Size: Approximately 4 acres

Accessibility Assessment Rating: 4

The Delor Wellman Recreational Facility is located at 3854 K Road, Bark River, MI, adjacent to the Ford River Township Hall Municipal Complex.

- The facility consists of approximately 4 acres; 2 acres are developed and 2 acres are undeveloped.
- > The facility is fully accessible.
- The facility is maintained by the Township.
- > The Delor Wellman Recreational Facility provides various types of recreational activities.
- The pavilion is used for rentals and opens to the general public during the spring, summer and fall. The pavilion is the location for the Ford River Township ice cream social, held annually.

The recreational area experienced a major expansion in 2008. The Township does not have any current plans for upgrades of the facility.

Facilities at the park include:

- Pavilion
- Playground
- Parking Area

Playground Inventory

- Swing Sets
- Toddler Swings
- Slides for toddlers and older children
- Climbing bars

Table 7-2 identifies additional facilities located in Ford River Township that are not owned or maintained by the Township.

Table 7-2

Additional Ford River Township Recreation Facilities

1. MDNR Boat Launch-Ford River Mouth

The MDNR Boat Launch is located at the mouth of the Ford River.

- ➤ Hard surfaced ramp to accommodate most trailer-able boats
- Courtesy pier for loading and unloading passengers, etc. at the boat launch ramp
- Restrooms
- Maintained and operated by the Parks and Recreation division of the MDNR
- Picnic area
- > 52 parking spots
- Repairs were made to the Boat Launch in 2009. The launch ramp was replaced and there was a general overhaul of the site. Future dredging is necessary to further improve the launch.

2. No See-um Creek Scenic Overlook

The No See-um Creek Scenic Overlook is located adjacent to the No See-um Creek.

- Simple boat launch facility
- Site is in need of general repairs, including a launch ramp and additional parking

3. MDNR Portage Marsh Wildlife Area Boat Launch

The MDNR Portage Marsh Wildlife Area Boat Launch is located off of Portage Point 11.4 Lane.

> Carry in boat launch facility; primitive

4. MDOT Roadside Park

The MDNR Roadside park is located in Hyde, on US-2, approximately 8 miles west of Escanaba.

Parking facilities, picnic tables

7.4 Private Recreational Facilities

The following recreational facilities in Table 7-3 are privately owned facilities in Ford River Township that are for use by the general public:

Table 7-3

Ford River Township Private Recreation Facilities

1. Country Meadows Golf Club

The Country Meadows Golf Club is located 1.5 miles off of M-25 at 4688 12th Road in Ford River Township, south of the Delta County Airport.

- Open April through September
- > Cart rentals available
- Established in 1982-course was once a farm
- 9-hole course
- Open to the public

2. Highland Golf Club

The Highland Golf Club is located 7 miles west of Escanaba on US-2 in the Hyde area.

- > Founded in 1930
- Expanded to an 18-hole course in 1968
- ➤ Delta County's first 18-hole course
- Pro Shop and Clubhouse
- Highland Golf Club Restaurant offering full service banquet and dining facilities

3. R J F Indoor Outdoor Heated Memorial Driving Range

The RJF Indoor Outdoor Heated Memorial Driving Range is located at 4596 I Rd.

- Indoor/outdoor driving range
- Seasonal

4. Park Place of the North Campground

The Park Place of the North Campground is located at 4575 M-35.

- Located near the MDNR Boat Launch
- ➤ 20 camping sites w/fire pits and picnic tables
- 400 feet of sand beach on Green Bay
- > Showers, flush toilets and laundry on site
- Camping April through October

The Delta County Parks system is comprised of four parks identified in Table 7-4. Fuller Park, part of the Delta County Parks system, is located in Ford River Township.

Table 7-4

Delta County Recreation Facilities

1. Fuller Park Size: 82.46 acres

Fuller Park is in the south-eastern portion of Ford River Township along M-35.

- Located along the scenic shores of the Bay of Green Bay
- Used for day recreational activities and camping
- Picnic area includes:
 - o Tables
 - o Grills
 - Water frontage
 - o Restrooms
 - o A single boat launch (the site is in need of repair and dredging)
- Camping area includes:
 - o 25 sites w/electric and water
 - o Restroom/shower/laundry building
 - o Beach area
 - Ice/firewood/soda machine

2. Pioneer Trail Park Size: 73.57 acres

The Pioneer Trail Park is located in Wells Township, just north of the City of Escanaba, along the Escanaba River.

- Primary recreation site in the Delta County Park system
- Park is used for day activities and camping
- Picnic area includes:
 - o Pavilion
 - Picnic tables
 - o Refreshment stand
 - o Restrooms
 - Tot lot/playground area
 - o Grills
- Camping area includes:
 - o 17 tent/primitive sites w/fire pits and picnic tables
 - 58 RV/electrical sites (36 have water also)

Size: 80 acres

- Restrooms
- Showers
- Playground equipment
- Optional pay cable TV
- Approximately 2,500 feet of water frontage

3. Rapid River Falls Park

Rapid River Falls Park is located in the northern part of Masonville Township just off of US-41.

- Park used for day picnics and gatherings
- Used by travelers as a rest stop
- Picnic tables
- Cooking grills
- Some playground equipment
- One set of pit toilets

4. Sac Bay Park

Sac Bay Park is located in the southern portion of the Garden Peninsula, along Big Bay de Noc.

- > Park used primarily during summer months by local residents for day picnics and gatherings
- Picnic area includes:
 - o Tables
 - o Pit toilets
 - Some playground equipment
- ➤ Park has 1,000 feet of water frontage w/300 feet of swimming beach

A partial listing of recreational facilities located throughout Delta County is included in Table 7-5.

Table 7-5

Additional Delta County Recreation Facilities

City of Escanaba

- > Al Ness Field
 - o 4.7 acres
 - o Ball field, Dugouts, Fence, Bleachers, Drinking water, Restrooms, Concessions
- > Athletic Field
 - o 10.7 acres
 - o Football field, Bleachers, Scoreboard, Track, Field houses, Play field, Press box, Ball field
- Bay College Field
 - o 2.8 acres
 - o Ball field, Lights, Fence, Restrooms, Storage Shed
- YMCA of Delta County
 - o 2.8 acres
 - o Tennis courts, Fitness Trail, Gym, Indoor Pool
- Catherine Bonifas Civic Center
 - o 0.2 acres

 Gym, Parking, Showers, Locker rooms, Indoor Archery and Pistol Range, Game room, Meeting rooms, Kitchens

Cross Country Ski Pathway

- o 60 acres
- Cross country skiing, Parking, Three groomed loops

Ludington Park

- o 120 acres
- Playground, Boat launch, Marina, Fishing Pier, Parking, Picnic Area, Tables, Grills, Tennis courts, Basketball courts, Volleyball courts, Restrooms, Ball field, Pavilion, Play field, Showers, Cross country skiing, Fitness trail, Drinking water, Beach, Bath house, Band shell, Bicycle path, Historic museum/lighthouse

Municipal Recreation Complex

- o 5 acres
- o Ball field, Drinking water, Fence, Restrooms, Bleachers

Royce Park

- o 3.1 acres
- Ball field, Lights, Skating, Tennis Courts, Bleachers, Basketball standards, Playground, Shelter house

> UP State Fairgrounds

- o 90 acres
- o 30 Buildings, Grandstand/office complex, ½ mile Race track, Horse barn, Indoor riding area, Horse shows, Logging Congress, Gas and steam engine show, Banquets, Concerts

Veterans Park

- 4.8 acres
- Lights, Tennis courts, Playground and Play field

North Shore Boat Launch

- o 10 acres
- Large capacity launch site at the mouth of the Escanaba River; 5 launch ramps and service facility
- o 150-200 parking spaces

North Shore Fishing Pier

- o 1 acre
- Three handicap accessible fishing piers w/boardwalk

City of Gladstone

Cameron School

- o 40.0 acres
- o Playground, Parking, Ball Field, Gym, Bleachers, and Basketball Standards

> Central Playground

- o 2.5 acres
- Skating, Playground, Tennis Courts, Ball Field, Basketball Court, and Shelter House

City Park

- o 23.0 acres
- Pavilion, Basketball Standards, Lights, Ball Field, Rest Rooms, Picnic Area, Tables, Grills,
 Parking, 2,000 Feet of Water Frontage, and Picnic Area

> East Buckeye Playground

- o 5.2 acres
- o Rest Rooms, Parking, Playground, and Basketball Court

> 5th Street Playground

- o 2.7 acres
- o Ball Field, Playground, and Basketball Court

Gladstone Armory

- o 8.0 acres
- o Parking, Gym, and Basketball Court

> Gladstone Bay Campground

- 40.0 acres
- o Rest Rooms, Camping, Playground, Showers, 50 Sites, and 3,000 Feet of Water Frontage

➢ Gladstone Golf Course

o 18 Hole Golf Course and Clubhouse

➢ Gladstone Harbor

o Rest Rooms, Picnic Area, Boat Launch, Marina, and Picnic Area

Gladstone Sports Park

- o 40.0 acres
- Parking, Rest Rooms, Ball Fields, Cross Country Skiing, Downhill Skiing, Sledding, Tubing Run, Snowboarding Run, and Kitchen

➢ High School

- o 5.5 acres
- o Ball Field, Gym, and Multipurpose Room

Kipling Access Site (DNR)

o Boat Launch, Parking, Rest Rooms, and Boarding Pier

> Marble Athletic Field

- o 15.0 acres
- o Parking, Play Field, Bleachers, Football Field, Track, Field House, and Score Board

Middle School

- o 5.0 acres
- o Play Field, Gym, and Ball Field

Van Cleve Park

- o 62.0 acres
- Rest Rooms, Parking, Fence, Playground, Volleyball Court, Beach House, Log Rolling, Dock, Picnic Area, Tables, Benches, and Beach

West Buckeye Playground

- o 1.5 acres
- o Basketball Standards, Tennis Courts, and Playground

William Bullen Memorial Fishing Pier

Rest Rooms and Parking

Baldwin Township

- Baldwin Township Recreational Area
 - Playground and Ballfield

Bark River Township

Bark River-Harris School

o Tennis Court, Playground, and Ball Field

Durfee Park Roadside

- o Tables, Parking, and Rest Rooms
- Schaffer Ballfield (Gibault Field)

- o Little League Field
- > Bark River Recreation Area
 - o 140 acres

Senior Center, Ball Fields, Playground, Picnic Area, Tables, Rest Rooms, and senior citizens center with multipurpose room

Bay de Noc Township

- Bay de Noc Township Recreational Area
 - o Ball Field, Horseshoe Pits, Lights, Playground, Play Field, Pavilion, Picnic Area, and Parking
- Peninsula Point (U.S. Forest Service)
 - o 92.4 acres
 - o Parking, Picnic Area, Tables, Historic Lighthouse, Rest Rooms, and Interpretive Trail
- > Stonington Beach
 - Private Beach (50 Feet of Water Front)
- Squaw Creek (U.S. Forest Service)
 - o 2.0 acres
 - Boat Access
- Wilsey Bay (U.S. Forest Service)
 - o 8.0 acres
 - o Boat Access and 1,400 Feet of Water Frontage

Brampton Township

- Days River Access
- Days River Pathway (DNR)
 - Cross-country Skiing, Biking, and Hiking Trail
- Tot Lot at Township Hall in Kipling
 - Playground

Cornell Township

- Boney Falls Picnic Area
 - o Picnic Area

Ensign Township

- Ensign Snowmobile Trail
- > Ensign Township Recreation Area (Township Hall)
 - o 1.5 acres
 - Pavilion, Tot Lot, Picnic Area, Playground, Parking, Horseshoe Courts, Rest Rooms, and Outdoor Stoves
- Ogontz Bay Access
 - o 5.0 acres
 - Boat Launch and Parking
- > Little Bay de Noc Recreational Area
 - o 10.0 acres
 - Parking, Picnic Area, Tables, Picnic Area, Camping, Boat Launch, Rest Rooms, Beach, and Drinking Water

Fairbanks Township

> Fayette State Park

 Historic Townsite, Camping, Parking, Picnic Area, Tables, Rest Rooms, Beach, and Cross Country Skiing

Garden Township

➢ Big Bay de Noc School

o Play Field

Camp Seven Lake Campground (U.S. Forest Service)

- o 29.0 acres
- Picnic Area, Tables, Camping, Boat Launch, 200 Feet of Water Frontage, Fishing Pier,
 Drinking Water, and Rest Rooms

Central Park

- o 4.2 acres
- o Ball Field, Tennis Courts, Skating, and Play Field

Corner Lake Campground (U.S. Forest Service)

- 4.0 acres
- Camping, Boat Launch, and 100 Feet of Water Frontage, Picnic Area, and Rest Rooms

Fishdam River Access Site (DNR)

Parking, Rest Rooms, Boat Launch, and Pier

Garden Township Recreational Area

- o 17.6 acres
- o Tables, Restrooms, and Parking

Garden Bay Access Site (DNR)

o Boat Launch, Parking, Rest Rooms, and Boarding Pier

Portage Bay Access and Campground (DNR)

o Camping, Rest Rooms, and Carry-in Boat Launch

> Tri-Valley Golf Course (Private)

o 9-Hole Course

Van's Harbor Access Site (Private)

o Boat Launch, Parking and Rest Room

Maple Ridge Township

Lions Park (Rock)

o Picnic Area, Tables, Parking, Play Field, Pavilion, and Beach

Mid Peninsula High School

o Ball Field, Play Field, Tennis Courts, Basketball Court, and Skating

Masonville Township

Masonville Township Recreation Area

- o 25 acres
- 2 Ball Fields, Pavilion, 5 Pit Toilets, 35 Picnic Tables, Grills, Horseshoe Pits, Volleyball Area,
 Swings, Slide, Merry-go-Round
- Closed in the evening

> Basketball Court

- o 2 Basketball Hoops
- Doubles as an ice rink during the winter months

> Tot Lot

Tube Slide, Swing, Walking Bridge, 3-Spring Riding Apparatus, Merry-go-Round

> DNR Boat Launch

 Pit Toilets, Courtesy Pier, Accessible Wildlife Viewing And Fishing Area, Parking For 75 Vehicles

> Bay de Noc Elementary

- o Small Gymnasium, Fenced Playground
- > Tri-Township School
 - o Gymnasium and Auxiliary Gym, Tennis Courts, Athletic/Football Field, Unimproved Ballfield
- > Omni Center
 - o Converted former school gymnasium, serves a variety of purposes
- Haymeadow Creek Campground and Walking Trail (U.S. Forest Service)
 - o 15 Large Campsites, Toilet Facilities, Two Trailheads, Picnic Tables, Fire Rings
- Rapid River Cross Country Ski Area
 - 10 Mile Loop For Skiers, Groomed And Tracked, 5 Total Loops For Nordic Skiers, Snowshoeing, Toilet
- > Bay de Noc-Grand Island Trail
 - 3 Large Assembly Areas For Horses and Hikers, Parking Lot, Well, Tethering Area, Toilets, Areas For Camping
- Days River Trail
 - Several Loops, Groomed Ski Skating Track, Biking/Hiking In The Summer

Nahma Township

- Flowing Well Campground (U.S. Forest Service)
 - o Camping, Picnic Area, and Rest Rooms
- Nahma Access Site (DNR)
 - Boat Launch and Parking
- > Nahma Ballfield
 - o 3.0 acres
 - o Ball Field
- Nahma Golf Course (Private)
 - o 9-Hole Course and Clubhouse
- Ogontz Bay Access Site (DNR)
 - Boat Launch and Parking
- Rapid River-Nahma Grade Trail
 - o 18 Miles ORV/Snowmobile Trail
- Round Lake Access Site (DNR)
 - Parking and Boat Launch

Wells Township

- ➤ Soo Hill Park
 - o 10 acres
- > Wells Sports Complex
 - o 17.0 acres
 - Skating and indoor artificial ice rink, curling, concession stand, press box
- **➢** Wells Township Park
 - o 8.0 acres
 - Ball field, hockey rink, open skating rink, warming room for skaters, horseshoe court, tennis court, tot lot
- Escanaba River Boat Launch
 - Boat launch and parking

Other Locations of Recreational Opportunities in County

- Escanaba River and Lake Superior State Forests
 - o 68,000 acres
 - Public Lands Available for a Variety of Outdoor Recreational Opportunities
- Hiawatha National Forest
 - 241,640 acres
 - o Public Lands Available for a Variety of Outdoor Recreational Opportunities
- Commercial Forest Reserve (CFR) Lands
 - o 70,177 acres
 - o Privately-owned Forestlands which are Open to the Public for Fishing and Hunting

7.5 Park Accessibility

The Americans with Disabilities Act (ADA) identified specific standards that would insure that persons with disabilities have an equal opportunity to participate fully, live independently, and be economically self-sufficient within society. The ADA consists of five sections: Employment, Public Accommodations, Transportation, State and Local Government Operations and Telecommunications.

Title II of the ADA, Public Accommodations, is relevant to the level of accessibility and equal provisions of service at publicly owned outdoor recreation sites. This title states that discrimination against persons with disabilities is prohibited in all services, programs, or activities provided by public entities. The general requirements set forth under this section became effective January 26, 1992. Remodeling or new construction of facilities and buildings had the same deadline date to become accessible to disabled persons. In existing buildings and facilities, nonstructural changes to improve accessibility were required by January 26, 1992, while all structural improvements of the facilities and buildings were required by January 26, 1995.

The ADA of 1990 requires that "reasonable accommodation" be made to the needs of the estimated one in five people nationally who are disabled. That is, all public and private providers of goods and services, along with all employers, must remove all structural and communication barriers from facilities or provide alternative access where feasible.

Ford River Township will continue to develop recreational facilities that comply with ADA standards.

7.6 Priorities for Recreational Facilities

The Ford River Township Board distributed a questionnaire regarding recreation to residents and property owners in the Township in December of 2009. The following priorities were recommended by the Planning Commission after obtaining important public input:

Improve public access to the Lake Michigan and Ford River shorelines

- Establish multi-purpose trails (walking, biking, hiking, etc.) throughout the Township
- Establish a Township ice rink

7.7 Issues and Opportunities

- The Township does not have an approved 5-Year Recreation Plan at this time. In order to be eligible for MDNR Trust Fund grants, an approved plan must be on file with the MDNR.
- The Township has an abundance of outdoor recreational opportunities, including hunting, fishing and boating.
- The Township recently expanded and improved the Delor Wellman Recreational Facility to include a pavilion and playground equipment. The upgrades meet ADA standards.
- Township residents support recreation initiatives in the area.
- Ford River Township's natural features offer an abundance of passive and active recreational opportunities throughout the year. Expansion of recreational activities and facilities promoting the natural beauty of the surrounding area may be beneficial to residents and visitors.
- Improving public access to Lake Michigan and Ford River may improve recreational opportunities in the Township.
- Development of a multi-use trail system would provide a diverse range of residents and visitors a non-motorized way to safely access natural areas in Ford River Township.

Chapter 8.0 Land Use

8.1 Introduction

Patterns of land use evolved from economic necessity. The economy was firmly linked to trade routes that followed natural features such as lakes and streams. The general historic land use patterns which are common to the Upper Peninsula are reflected in the land use patterns that have developed in Delta County. Settlements were established at, or close by, active points of commercial activity.

The general historic land uses common to the Upper Peninsula are reflected in the land use patterns that have developed in Ford River Township. Logging and timber production were common throughout Ford River Township, and still are today. An abundance of inexpensive land became available following the removal of valuable timber resources during the lumbering boom. Families interested in farming were attracted by the affordable land. Where good soil conditions existed, agriculture was successful. Agriculture remains an important industry today only on a much more limited basis.

Railroads were constructed to transport iron ore to lake ports such as Escanaba for delivery to steel mills at the lower end of the Great Lakes. Completion of rail lines provided transportation for products other than iron ore such as lumber and the supplies necessary to sustain a community and its people. The importance of railroads is evident in the settlement patterns that followed their construction.

Natural features and cultural influences were also important determinants of how land was used. Rugged terrain and swampland, for instance, were not inviting for the establishment of settlements. Cultural influences are reflected in the types of buildings constructed, local commercial practices and community traditions and activities. It is important for communities to understand how past land uses and patterns have an effect on land use today.

8.2 Factors Affecting Land Use

Land use is never a static process; change is always occurring. Decisions affecting land use can come from a variety of sources. Changes in land use have been the result of various decisions made by individuals, families, businesses, or governmental/public agencies. It is important to note, however, that land use changes cannot be attributed to a single set of decisions made by one group or individual. Rather it is a combination of decisions made by a number of individuals, organizations, or public agencies.

Location tends to be the most important factor for home buyers and commercial interests. The availability of public and private services, accessibility, existing conditions of the area, and price are other important considerations. Speculators may purchase, hold or sell property based on an anticipated future profit. Land developers, too, attempt to anticipate market conditions, i.e., supply and demand for housing, goods and services, or industrial needs. They strive to accurately assess the type, scope, and optimum time of development that will produce a profitable outcome.

Owners of business and industrial concerns decide to start, expand, or close their operations based on economic probability. Many factors may be considered in determining economic feasibility including supply and demand for the goods or services produced, cost and quality of transportation, and site availability. Local decisions have a bearing on these factors.

Generally, the immediate self-interest of the individual or organization making a land use decision supersedes what impact the use may have on the surrounding lands. Decisions determined in this fashion can potentially result in incongruous or incompatible development since the community's overall pattern of development is not necessarily among the factors considered. Laws and regulations have been enacted giving local units of government the means to deal with land use issues. These legal tools allow federal, state and local governments to address the overall compatibility and appropriateness of development and land use.

Federal legislative actions have created a number of loans and grant programs for community facilities, water and wastewater systems, housing, economic development, and planning. Drinking water standards, air quality and many other environmental factors are addressed in federal regulations. Although these laws, regulations and programs do not usually directly affect land use and development, they have a major indirect effect. For example, a community that lacks sufficient sewage disposal capacity to serve industrial uses may be able to obtain federal funding to assist with expansion of its sewer treatment facility, which in turn, may lead to industrial development.

The traditional role of the state has been limited to providing the enabling legislation for local units of government to regulate growth and development through planning and zoning. The State of Michigan does, however, regulate land use and development in regions of environmental concern including wetlands, floodplains and coastal areas. This can have a direct effect on local land use. The state also enforces standards for municipal water systems and wastewater systems that are at least as strict as federal standards. A community's ability to provide water and wastewater treatment systems is directly affected by these regulatory standards.

Local governments can exert the most effective influence on land use changes through zoning ordinances, subdivision regulations, building codes, and public investment in roads, water and sewer systems, parks, etc. Local planning efforts that seek to define the most desirable and appropriate uses for the various parts of a community, and anticipate and prepare for growth, can serve to guide future land use decision-making. The Township utilizes a zoning ordinance to regulate land use.

Other factors affecting land use include the existing transportation system, taxation, land values, natural features, changing technology, and market conditions. Changes in lifestyles, family size, shopping preferences and customer attitudes also affect land use decisions. Mobility is greater than at any previous time, families are smaller and life expectancies have increased. These changes are reflected in employment patterns and housing and shopping preferences. From a land use standpoint, some pertinent issues are the preferences for larger homes situated on larger parcels, the apparent willingness to endure longer commuting distances to work and the growing market for housing specifically designed for elderly residents - particularly those residing for only part of the year.

The transportation system that serves a community determines how quickly and easily raw materials and finished goods can be received and shipped. It also is directly related to product cost, a crucial factor for business. The expanding network of roadways in the U.S., together with the proliferation of private automobiles, has enabled residents of rural areas to commute to larger communities for employment and shopping and has increased the accessibility of many areas to tourists. This increased mobility has, in many cases, facilitated development of strip commercial areas, large shopping malls, and suburban residential development. Referred to as "urban sprawl," such development frequently converts open space and agricultural land to more intensive uses.

Taxation and land values play a part in many land use decisions. Families may move from urban areas because they feel they are willing to trade off lower taxes and/or user fees for the lack of municipal services and increased distance from employment, shopping and schools. Land values in rural areas may also be lower, thus more attractive to residents. Commercial and industrial enterprises are generally less willing to forego municipal services such as water and sewer. They are also more likely to locate in areas of concentrations of population rather than in very rural areas. Tax rates and land values are important considerations for businesses as well.

Changing technology, including computer networking, cellular telephones, facsimile machines, voice mail, teleconferencing, video conferencing, and electronic mail provide

businesses with location options that were previously not practical. Often, the quality of life associated with these rural locations is an additional attraction.

8.3 Land Use Inventory

The categories of current land use in this section are taken from the Ford River Township Land Use Map, Map 8-1. This map is based on the interpretation of the current Ford River Township Zoning Map, using the six zoning districts represented in the Township.

Agricultural Production: The Agricultural Production District is intended to maintain for agricultural purposes those lands which because of their soil characteristics, drainage and other factors, are especially well suited for farming, dairying, forestry operations and other similar agricultural operations and to ensure that uses within this District are retained for agricultural purposes. Agricultural Production accounts for approximately 707 acres in the Township, or 9.7 percent of total land area.

Commercial: The Commercial District is established to preserve general commercial areas consisting of shopping centers and commercial areas where customers reach individual business establishments primarily by motor vehicle. Commercial land accounts for approximately 415 acres or 5.7 percent of the Township's land area.

Residential One: The Residential One District is intended for the establishment and preservation of single-family home neighborhoods as desired by large numbers of people, free from other uses except those which are both comparable with and convenient to the residents of such a district. Residential One land comprises approximately 364 acres or 5.0 percent of the Township's land area.

Residential Two: The Residential Two District is intended for the establishment and preservation of quiet neighborhoods for single-family dwellings, two-family dwellings, and mobile homes, free from other uses except those which are both comparable with and convenient to the residents in this District. Residential Two land covers approximately 995 acres or 13.7 percent of the Township's land area.

Resource Production: The Resource Production District, is established to maintain low density rural areas which because of their rural character and location, accessibility, natural characteristics and the potentially high cost of providing public services for intensive uses are suitable for a wide range of forestry, agricultural, natural resource and recreational uses. Resource Production accounts for approximately 1,810 acres or 24.9 percent of the Township's land area.

Rural Residential: The Rural Residential District is established to protect and generally preserve the existing character and use of those areas of Ford River Township which are presently rural or agricultural. Soil and natural conditions vary throughout this District, including substantial wood lots and some active farms. These areas are considered to be suitable for both rural (predominantly scattered-site) residential development and the perpetuation of existing farming or other low intensity uses. Rural Residential accounts for approximately 2,970 acres or 40.9 percent of the Township's land area.

8.4 Residential Land Use

Residential land use in Delta County occurs primarily in the western half of the County, near the Escanaba-Gladstone corridor, with other residential concentrations located in smaller communities throughout the County.

A great deal of the Township's residential development is concentrated on or around transportation corridors. Residential land use in Ford River Township occurs primarily on the eastern half of the Township, along the Lake Michigan Shoreline and the Ford River. Residences are also concentrated in the communities of Ford River and Hyde as well as between the two communities along K Road. Most of the homes are single-family residences.

A great deal of residential development has occurred along the Ford River. Waterfront development has become increasingly desirable. Zoning regulations such as setbacks and minimum lot size should be reviewed periodically to maintain balanced levels of waterfront development. Many subdivisions and housing units have been developed in recent decades. As the growth of Escanaba and Gladstone increases away from the city centers, the need for new housing grows and pushes living further into Ford River Township. Another factor in the development of residential housing has been the desire to develop larger homes on larger lots, which are often available in the Township. Taxes are generally lower in the outlying Townships as well, due to the lower amount of services provided.

8.5 High Risk Erosion Areas

Residential development along the lakeshore is somewhat limited due to much of the area being designated as high risk erosion areas (Map 8-1). High risk erosion areas are those shorelands of the Great Lakes and connecting waters where recession of the zone of active erosion has been occurring at a long-term average rate of one foot or more per year. The erosion can be caused from one of several factors. High water levels, storms, wind, ground water seepage, surface water runoff and frost are important factors causing erosion. The high risk erosion area regulations establish required setback distances to protect new structures from erosion for a period of 30 to 60 years,

depending on the size, number of living units and type of construction. Setback requirements are applicable for home restorations and additions to existing structures. The setbacks currently required in the Township's high risk erosion areas are very significant and seriously limits development. The purpose of the regulations is to provide consumer protection by reducing losses to property owners from erosion and flooding.

Any person or local government agency proposing to erect, install, move or enlarge a permanent structure on a parcel must obtain a permit prior to the commencement of construction. Local units of government may adopt a zoning ordinance for high risk erosion areas, which if approved by the Michigan Department Natural Resources and Environment (MDNRE, formerly the MDEQ), replaces the need for a state high risk erosion area permit. The department monitors the performance of the community and provides technical assistance. Ford River Township may wish to consider adopting high risk erosion area standards at the time of the next Zoning Ordinance revision.

8.6 Commercial Land Use

As with most of the residential development in the Township, the majority of commercial development is concentrated near transportation corridors. Land is designated for commercial use along M-35 in the northeast corner of the Township, just south of the Escanaba city limits. The uses mainly consist of rental cabins and associated businesses, which are mixed in amongst residential uses. There is another small concentration of businesses further south along M-35 in the community of Ford River, including a bar/restaurant and a local convenience store. There are commercial properties for sale along M-35, including the former Van's Marine building. An additional commercial district was established along US-2, concentrated in the Hyde area, including a medical office. Land use impacts from smaller commercial establishments are usually minimal. These businesses often require smaller lots to accommodate space for parking.

The former Central Ford River School building, located at 4341 K Road in the Township has been vacant for several years. The school was built in 1956 and underwent a major restoration in 2004. The building sits on property with a high water table. A potential developer could look to adaptive reuse strategies to update the building for a new purpose. The building was purchased in the spring of 2010 for development into an indoor storage facility.

8.7 Industrial Land Use

Industrial operations include paper mills, lumberyards, gravel/sand extraction areas and construction companies. Lands designated for industrial uses usually require extra land

use planning considerations, such as transportation needs, emergency services and sitespecific development standards.

Currently there are no industrial uses in Ford River Township. The Ford River Township Zoning Ordinance does provide for industrial uses and the district is designated as "reserved for future use." The most practical location for industrial development may be near or adjacent to the Delta County Renaissance Zone located at the Delta County Airport. Locating future industrial uses in this vicinity may prove beneficial to the Township due to the relative simplicity of extending utility services that are currently located at the County Airport and surrounding area.

8.8 Forestry, Wetland and Agricultural Uses

The majority of forested land in Ford River Township is designated as Resource Production. Resource production land is designated to maintain low density rural areas often suitable for forestry, agricultural, natural resource and recreational uses. Access by established roads is often limited. Primary land owners of the Resource Production district include the State of Michigan and Plum Creek Timber Co., Inc. Portions of the Resource Production district are commercial forest land. The commercial forest program provides a property tax reduction to private landowners as an incentive to retain and manage forestland for long-term timber production. Landowners participating in this program pay a reduced property tax. Additionally, the State of Michigan pays \$1.20 per acre annually to each county where land is listed in the program.

Lands listed in this program are open to the public for hunting, trapping and fishing only. Commercial forest lands are private lands under the control of private owners. Landowners include private individuals, clubs, forest industry, and other businesses. Not all public lands are available for commercial timber production; harvest in some areas is restricted or prohibited in order to protect wildlife, recreational, wilderness or research values. Commercial forest land is located in the south/central portion of the Township extending east to Lake Michigan. In recent years, some of the commercial forest land has been sold off.

A large amount of the Resource Production district is considered wetlands. Wetlands include land that has sufficient water at, or near, the surface. These areas are commonly referred to as swamps or marshes. Wetland areas may also include land which supports lowland hardwoods and conifers. Wetland areas are scattered throughout the Township and are often undevelopable.

Agricultural areas are located primarily in the northern portion of the Township; mainly north of US-2/41. The 2007 U.S. Census of Agriculture shows 290 farms in Delta County,

totaling 77,762 acres. Agricultural products from farms in Delta County include field crops such as hay, barley, and corn; dairy products; and livestock, such as beef cattle, hogs and pigs, and poultry. Farms in Ford River Township primarily produce potatoes; there is also limited cattle farming.

Unique and prime farmland is depicted on Map 8-3. The main farmland descriptions are as follows:

- Prime Farmland is land that has the best combination of physical and chemical characteristics
 for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum
 inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime
 farmland includes land that possesses the above characteristics but is being used currently to
 produce live stock and timber. It does not include land already in or committed to urban
 development or water storage.
- Prime Farmland, if drained, is land that meets the definition of prime farmland if drainage
 practices are installed to adequately remove surface water and lower the water table long
 enough during the growing season to produce and harvest food, feed, fiber, forage, oilseed, and
 other agricultural crops.
- Important Farmland is land, in addition to prime farmland that is state-wide or locally important
 for the production of food feed, fiber, forage, or oilseed crops, as determined by the
 appropriate state or unit of local government agency or agencies. Generally, important
 farmlands are nearly prime farmland and can economically produce high yields of crops when
 managed according to acceptable farming methods.

As mentioned above, the majority of the Township's prime farmland is located north of US-2/41. The vast majority of the Township is not considered to be prime farmland. There are farmlands of local importance dispersed throughout the Township.

8.9 Public and Quasi-Public Land Use

Public land uses include parks, public buildings, airports, schools, and publicly owned lands. Many of these uses are discussed in detail in other parts of this plan; the land use consideration of these uses will be discussed here.

Public buildings in the Township include the Ford River Township Municipal Complex. These buildings, located at 3845 K Road, in Bark River, Michigan, do not occupy large tracts of land. Their primary impact on land use is related to traffic and parking.

An area of land adjacent to the Municipal Complex is reserved for the Delor Wellman Recreation Area. The area currently has a playground and pavilion. Township goals include expanding the recreational opportunities in the Township.

Examples of quasi-public land uses include churches, golf courses and similar facilities that are owned by private enterprise, but are open to the public. These uses generate increased traffic on a seasonal, occasional or intermittent basis, and by providing facilities and services, which meet the needs of local residents, contribute to the quality of life of communities and neighborhoods. The presence of quasi-public facilities such as golf courses can also affect property values.

Currently, the Township contains several churches located throughout the area, and two privately owned golf courses; Highland Golf Club, located approximately 7 miles west of Escanaba on US-2, near the community of Hyde and Country Meadows Golf Course, located approximately 1.5 miles off of M-35, just south of the Delta County Airport.

8.10 Land Ownership

Land ownership in Delta County and Ford River Township has a significant effect on land use. Large tracts of land in public ownership mean that less land is available for private development. However, public lands often provide many of the amenities that attract residents to rural areas in the first place - wildlife habitats, green space, scenic beauty, etc. While public land is not available for private development, most of these lands are not suitable for development. Many areas contain wetlands, swamps, unsuitable soils, and other environmental limitations.

Of Ford River Township's 41,800 acres, roughly 7,100 acres are part of the Escanaba River State Forest, owned by the State of Michigan (Map 8-2). The forest is managed for active recreational purposes such as hiking, canoeing, fishing, hunting, recreational vehicles, ORV and snowmobile usage as well as the cutting of second-growth wood for paper pulp. These large tracts of land are open for public use; visitors are normally attracted to the area. This in turn provides potential customers for retail and service businesses and impacts transportation patterns. Therefore, even though the use of these lands does not include intensive development, development in other areas may be encouraged as a result of the presence of public lands.

Plum Creek Timber Co., Inc. also owns a considerable amount of commercial forest area in the Township. The majority of the northeast and north central portions of the Township are held in private ownership.

8.11 Contaminated Sites

The Michigan Department of Environmental Quality maintains a listing of contaminated sites in accordance with Part 201 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. These environmental contamination sites are locations at which contamination of soil, groundwater, surface water, air or other

environmental resources is confirmed, or where there is the potential for contamination of those resources due to site conditions, site use, or management practices. The most recent list of Michigan Sites of Environmental Contamination does not include any sites within Ford River Township.

From a land use standpoint, the presence of environmental contamination represents a constraint on future development, as well as a threat to human health and safety. In addition to affecting a specific site, some contaminants can enter groundwater and cause more widespread problems, such as water well contamination. It is desirable to identify and remediate contaminated sites in a timely manner, in order that potential hazards and land use constraints be removed.

In terms of future land use decisions, it is important that decision makers are aware of the potential for certain types of land use to cause environmental contamination. Most of the sites of environmental contamination identified in Delta County are the result of past land use practices and this illustrates that even when legal and accepted land uses are undertaken, the possibility of future impacts exists. Leaking underground fuel storage tanks have become a concern throughout the country in recent years. Many fuel tanks, which were in compliance with all installation guidelines at the time they were installed, have deteriorated and allowed fuel to contaminate the surrounding soil. New guidelines for installing underground fuel tanks have been implemented, and efforts are underway to identify and clean up leaking tanks. Although several leaking underground storage tanks have been found in Delta County, none are currently identified in Ford River Township.

8.12 Land Use Trends

Ford River Township appears to be absorbing some of the residential growth of the Escanaba area. New residential development has occurred in recent years along the lakeshore. The Township's proximity to Escanaba and Gladstone and the presence of the Ford River and Lake Michigan shoreline helps to make the area more desirable. Improving public access opportunities to Lake Michigan and along the Ford River will benefit residents and tourists in the Township.

Because of the presence of large tracts of undevelopable wetlands in the Township, new development will probably continue to be concentrated in the communities of Ford River and in Hyde.

8.13 Issues and Opportunities

 Changing lifestyles and family structure, residential development, commercial businesses and Township needs will all affect future land use patterns. The

desire for increased development of residential and commercial properties will further the growth of the Township.

- Zoning and supplementary ordinances can assist local units of government in guiding current and future development.
- The availability of public and private services, accessibility, existing conditions of the area and price are other important considerations for residential development.
- Areas along the Lake Michigan shoreline are included in the high risk erosion zone by the MNDRE. Setbacks currently required in high risk erosion areas are significant and may limit development.
- Commercial land use is concentrated along the M-35 corridor and along US-2 in Hyde.
- The former Ford River School is a large commercial property recently purchased for use as a commercial storage building.
- Agricultural land use has declined in the Township when compared to past usage. Primary crops include potatoes and cattle.
- Currently there are no industrial uses in the Township. Ideally, any future industrial development would be located adjacent to or near the Delta County Airport's Renaissance Zone to be in close proximity to existing utilities.
- Land ownership in Delta County and Ford River Township has a significant effect on land use. Large tracts of land in public ownership mean that less land is available for private development.
- The Township includes a significant amount of wetlands. The majority of the wetland areas is undevelopable and presents limited future usage opportunities.
- Ford River Township does not have any contaminated sites listed by the MDNRE.
- Ford River Township appears to be absorbing some of the residential growth from the City of Escanaba. This trend could continue in the future and adequate housing opportunities must be made available, especially for the elderly and for residents who may reside in the Township for part of the year.

• Improving public access opportunities to Lake Michigan and along the Ford River will benefit residents and tourists in the Township.

Chapter 9.0 Natural Features

9.1 Introduction

Natural features, including soils, geology, topography, water features and other natural resources, have an effect on a community's development. These physical features directly or indirectly limit or encourage growth. Soil types and geology may affect the availability, quality and quantity of underground water supplies. The natural resources, such as timber, prime agricultural lands and minerals, which occur in certain areas are often a primary factor in the establishment and growth (or decline) of communities. Communities not having wastewater treatment facilities must rely on on-site septic systems where soil types are of primary importance.

These natural features are often interrelated, and disturbance in one area can potentially affect other areas. From a planning standpoint, it is important to gain an understanding of these interrelationships to gauge potential development accurately.

9.2 Geology

Both bedrock and surface geology have an impact on community development. Bedrock geology consists of the solid rock formations found below the soil that were formed millions of years ago. These formations have since undergone extensive folding, uplifting, eroding, and weathering and are now overlain by surface geology and soil.

A primary factor making geology important to a community's development is its ability to supply groundwater. The types of bedrock through which water passes before extraction influence the quality and quantity of groundwater. Certain types of bedrock increase the potential for groundwater contamination, particularly when such bedrock is close to the surface. Surface runoff is filtered through the soil and other materials that overlays bedrock. When bedrock is close to the surface and the filtering layer is thin, the opportunity for polluted runoff to enter the groundwater table is increased. If the bedrock is highly permeable, contaminants can quickly enter the same layers of groundwater used for domestic purposes.

9.3 Bedrock Geology

The bedrock of Delta County is made up of sedimentary rocks that were formed during the Paleozoic Age, about 400 to 500 million years ago. The Paleozoic rocks that underlie the County consist of limestone, dolomite, shale, sandstone, and gypsum. These rocks were deposited in the shallow seas that covered the Michigan basin during a majority of the Paleozoic era. The wide diversity of the sediments deposited is evidence of fluctuating sea levels, oscillating shorelines, and a variety of sediment sources.

The entire Township is underlain by Black River and Trenton limestone (Map 9-1). This formation is found in the western and north-central portions of Delta County. It is composed of thin, irregular beds of gray to buff limestone and dolomite inter bedded with thin layers of shale. The thickness of the rock ranges from 150 to 300 feet. Black River and Trenton formation provides adequate groundwater capacity for most domestic needs; however, it would not provide sufficient water for large industrial use.

Underlying the beds of dense dolomite and shale of the Black River and Trenton limestone formation is the Prairie du Chien sandstone. This formation is a good source of ground water providing sufficient water quantity. The maximum thickness of the Prairie du Chien formation is about 300 feet.

Delta County has seen numerous problems with water/well contamination due to shallow bedrock depths (bedrock very close to soil surface). In areas where bedrock is close to the surface, water that percolates through the soil is not given enough time to be "cleaned" properly. This causes contaminated water to be sent back into the drinking supply. Areas of concern due to groundwater quality include the Breezy Point location (See Appendix C).

Another concern of the health department is high levels of radon water wells. Radon, which can cause lung cancer, is a radioactive, odorless and chemically inert gas that occurs naturally in the air, soil and ground water. Rocks break down mechanically and chemically to form sediments that contain various amounts of uranium, depending on the source rocks. Research suggests that ingestion of water with high radon concentrations may pose risks, although these risks are believed to be much lower than those from inhalation of radon (US Geological Survey-Circular 1156). There have been several areas throughout Delta County with high levels of radon. One of these areas was in Ford River Township. The Number 1 well, located near the Township Hall on K Road, was closed due to higher than acceptable Radon levels and is no longer in service. The radon levels reported for the two remaining deep wells serving Ford River Township residents was within safety levels set by the Michigan Department of Natural Resources and Environment (MDNRE, formerly the MDEQ).

9.4 Surface Geology

Surface geology deposits in Ford River Township are primarily the result of glacial action. The various categories of surface geology are based on the material content and the formation process. Glacial deposits occurred in one of three ways: materials (till) deposited directly by glaciers, with little or further movement as a result of surface water; materials deposited by moving streams, or outwash; and materials deposited by glacial lakes, known as lake deposits. End or recessional moraines are a type of till, deposited at the edge of a glacier, or left as the glacier melts and recedes.

Surface geology types found in Ford River Township include:

Wetlands: Wetland areas are located throughout much of Ford River Township, mainly occurring in inland areas. Wetland areas are thin deposits of muck and peat underlain by sand, silt, and clay lake deposits. The permeability of these areas is highly variable.

Dune Sand: This type of deposit is found along the Lake Michigan shoreline in the Township. Dune sand deposits have a very high permeability. This area is located above the water table necessitating drilling wells a considerable distance. Their high infiltration capacities mean they serve as an important avenue of groundwater recharge.

End or Recessional Moraine: Limited portions of the Township are an end or recessional moraine. The moraine deposit in the Township consists of numerous low hills and ridges composed of characteristically red till and are found mainly in the southern end of the Township, near the Lake Michigan shoreline. The till from these moraines contain a larger percentage of coarse materials by weight and is considerably more permeable than the adjacent till-plain deposits. The majority of the wells that are drilled in this area tap the underlying Trenton and Black River formation for water.

Glacial Till: A small deposit of glacial till is found in the far southern end of the Township. This deposit is composed of poorly sorted clay and boulder till of low permeability; generally a thin veneer over bedrock. These deposits will not yield supplies of water adequate for most uses. Many wells in the areas fail because of impermeable drift or bedrock at a shallow depth.

9.5 Soils

Soil formation is the result of glaciers moving over bedrock material, whose massive pressure and slow movement turns the solid rock into extremely fine-ground material. The different types of soil created from the contractions of these glacial sheets were deposited throughout the County in no particular order. The U.S. Department of Agriculture Soil Conservation Service has classified the soils of Delta County into 13 soil associations; within Ford River Township there are four generalized soil classifications.

Soils are grouped into associations based on common characteristics, such as drainage, slope, and texture. Development should be planned in such a way as to take into account the suitability of the soils for the type of development planned; for example, residential subdivisions should avoid areas of shallow and/or poorly drained soils or areas where the water table is close to the surface, since such soils are unsuitable for septic drain fields.

Engineering and construction techniques can be used to overcome soil limitations, often at a cost. The long-term implications of such techniques should be carefully considered, however, since development in areas of marginal suitability may lead to high costs to local governments, and hence to taxpayers, in order to provide services to these areas.

The major characteristics of the three soil associations found in Ford River Township are described below, along with suitable uses of these soils.

Soil Association 10: Charlevoix-Ensley-Angelica Association: Nearly level to gently sloping, somewhat poorly drained and poorly drained loamy soils that have moderately coarse textured and medium textured subsoils.

The soils in this association have medium to high fertility and moderate to high available water capacity. This soil association is rated fair for cropland and pasture because of wetness. In terms of forestry use, the Charlevoix soils are rated fair, while the Ensley and Angelica soils are poorly suited for this use. The limitation for recreation and residential uses for this soil association are severe, except for the Charlevoix soils, which have only moderate limitations for use as a picnic area or trail. The majority of this association is used as woodland. A finger like extension of this soil association is found in the southeast portion of the Township, along the Bay of Green Bay.

Soil Association 11: Dawson-Tawas-Rousseau Association: Nearly level, very poorly drained organic soils and gently sloping to very steep, well drained and moderately well drained sandy soils that have coarse textured subsoils.

This soil association has low fertility and available water capacity that is very high in the organic soils and very low to low in the sandy soils. Dawson and Tawas soils are poorly suited for forestry, cropland or pasture because of their wet organic nature. Rousseau soils are rated fair for these uses, except for areas where droughtiness is evident. The limitations in recreational or residential uses for this soil association are severe because of its wet organic nature, except for the Rousseau soils, where intensive uses requiring septic tanks could be accommodated except where the slopes are too great. This soil association is found in the far northern end of the Township, west of the City of Escanaba.

Soil Association 14: Roscommon-Tawas Association: Nearly level, poorly drained sandy soils that have coarse textured subsoils, and nearly level, very poorly drained organic soils.

This soil association has low fertility, and an available water capacity that is very high in the organic soils and very low to low in the sandy soils. It is very poorly suited for forestry, agricultural, recreational, or residential use because of its wet organic character. This association is mainly used as woodland and for recreation. The majority of Ford River Township is in this soil association, including the community of Ford River.

Soils are also grouped into hydrologic soil groups (Map 9-2). Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

- Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These
 consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils
 have a high rate of water transmission.
- Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of
 moderately deep or deep, moderately well drained or well drained soils that have moderately
 fine texture to moderately coarse texture. These soils have a moderate rate of water
 transmission.
- Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.
- Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.
 These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water
 table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow
 over nearly impervious material. These soils have a very slow rate of water transmission.
- If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

More detailed information on soil types within Delta County is contained in the <u>Soil Survey of Delta County and Hiawatha National Forest of Alger and Schoolcraft Counties, Michigan</u>, republished in 1994 by the U.S. Department of Agriculture Soil Conservation Service and Forest Service.

As shown on Map 9-3, portions of the Township contain soils which have severe limitation for dwellings with basements. The rating is based on soil properties, site features, and observed performance with the soils. Some soils provide good foundation

for houses, but others do not. A high water table, depth to bedrock, large stones, slopes and flooding affect the ease of excavation and construction. Limitations for building site development include the presence of shallow bedrock that can make the construction of basements difficult. If the rock is soft or fractured, excavations can be made with trenching machines or backhoes. If the rock is hard or massive, blasting or special equipment generally is needed for excavation.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected. The majority of land in Ford River Township is rated "very limited" for dwellings with basements.

Wastewater is treated by private, on-site septic systems throughout the majority of the Township. Septic tank absorptions fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. With very few exceptions, most of the Township is rated severe for septic tank absorption fields. The ratings are based on soil properties, site features and observed performance of the soils. Permeability, a high water table depth to bedrock and flooding can affect absorption of the effluent. Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluents and surfacing of the effluent can affect public health. Large stones and bedrock would interfere with installation. Shallow soil depths and permeable bedrock heighten potential for contamination of wells and river systems. On site soil evaluations are performed by the health department to determine soil suitability for on-site sewage disposal systems.

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be

overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected. The majority of the Township is rated as "Very limited" (Map 9-4) for septic systems.

9.6 Topography

Topography describes the unique character that an area's physical features provide expressed in terms of elevation above mean sea level. Steep topography or slopes of 10 percent of greater can be aesthetically attractive for residential or commercial development. However, a steep grade increases the likelihood of soil movement or slides, and the weight of structures is an added force which encourages this movement. In addition to these dangers, there is an added excavation expense if development occurs on the sloping surface itself. Measures to control potential erosion when steep grades are present must be considered and natural water courses should be maintained. Soil disturbance of one or more acres or within 500 feet of a lake or stream generally requires a permit as authorized under Part 91 (Soil Erosion and Sedimentation Control) of the Natural Resources Environmental Protection Act.

In Delta County, the land is level to rolling with a few isolated spots of steep terrain of ten percent or grater grade, none occurring in Ford River Township. The average elevation is 646 feet. The lowest elevation is found along the Bay of Green Bay.

9.7 Mineral Resources

Mineral resources that are extracted in Delta County are sand and gravel. These resources are not a high value or a large source of employment; they are crucial to construction and road building. Section 419 of the Ford River Township Zoning Ordinance provides regulations for mineral resources and extractions within the Township. Quarries are regulated as a conditional use by special permit in the Rural Residential, Agricultural Production and Resource Production districts.

There are several commercial gravel pits occurring in Ford River Township. There is an active gravel pit located on 14th Road, another active pit on County Road 535 in the southern end of the Township and a pit that is currently inactive located on G.5 Road. There are numerous smaller pits located throughout the Township.

9.8 Water Features

More than 70 percent of the earth's surface is water. Water features such as lakes and streams have very important functions as natural resources. They provide us with our domestic and commercial source of water. Secondly, recreational activities such as fishing, boating and swimming depend on water features. The quantity of available

water is important in both industrial and residential development. Since removal of impurities is extremely expensive, quality drinking water supplies are very important.

The coastal areas along the Great Lakes area are a valuable and sometimes fragile resource. These areas offer scenic beauty which attracts residents and visitors. They provide habitat for a variety of wildlife species and are also desirable locations for human habitation. Due to the many benefits they provide, these areas often suffer from development pressures. Waterfront property is very desirable for residential development and is vital for certain commercial and industrial uses. Much of the new construction over the past 20 years in the Upper Peninsula has been in waterfront areas, either along the Great Lakes or along inland lakes and rivers.

One of the most visible water features associated with Ford River Township is the Ford River (Map 9-5). Many Township residents live along the Ford River. The River is used for recreation by residents and tourists and empties into Lake Michigan near Ford River. The Ford River has been designated by the MDNR as a trout stream; the river has several cold water feeders. The MDNR dredged the mouth of the river on the north side within the last several years, improving the sandy beach area.

The Natural Resources Conservation Service (NRCS) and the Hannahville Indian Community (HIC) partnered with the Township, the Delta Conservation District, Michigan Wildlife Conservancy, Wildlife Unlimited, the Great Lakes Commission and the U.S. Fish and Wildlife Service to protect a rapidly eroding stream bank on the Ford River in 2007. The project area was about two miles from the river mouth on Lake Michigan. The HIC received financial assistance to address a number of concerns for the stream bank restoration. With technical assistance from NRCS, 1,380 feet of stream bank was stabilized using a rock-filled timber crib wall. Work was completed in the fall of 2007. The project will improve fish habitat in the river, which serves as a spawning ground for bass. A stand of old-growth hemlock tress was also threatened by the eroding stream bank.

The Township is bordered in the east by Lake Michigan, specifically the Bay of Green Bay. The bay provides residents and tourists a variety of recreational opportunities like beaches and prime fishing areas. Many small communities along M-35 in Michigan and communities in Northern Wisconsin are centered on a tourist base that takes advantage of the recreational opportunities presented by Lake Michigan. Many residences developed along the Lake Michigan shoreline are used seasonally.

The Bark River is approximately 17 miles long and flows into the Bay of Green Bay in Ford River Township. The Bark River rises from the outflow of Second Lake (which is fed

by Pine Creek and the outflow of First Lake) on the boundary between Delta County and Menominee County. The north branch of the Bark River rises in a marshy area just east of Schaffer, in Bark River Township.

There are numerous smaller lakes and rivers in Ford River Township, including North Lake, South Lake, Henderson Lakes, Sevenmile Marsh, Ten Mile Creek, Finnlands Creek, Sunny Brook and No See-um Creek.

Land use and development patterns are heavily influenced by the presence of water features. While lakes and rivers are physical barriers that limit growth of communities and/or transportation facilities, they are attractive for development such as waterfront residential or industries requiring large volumes of water. Residential development along the waterfronts in Ford River Township has increased as of late.

9.9 Wetlands and Floodplains

Marshes, swamps, ponds and bogs are nurseries for migratory birds, fish and aquatic plants. These wetland areas are an important part of the ecosystem. Wetlands help regulate water levels within watersheds, improve water quality, reduce flood and storm damage and provide fish and wildlife habitats. Wetlands are generally defined as lands where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands are also valuable in their ability to trap and slowly release surface water, rain, snowmelt and flood waters. The wetland vegetation slows the flood waters and distributes them more slowly over the floodplain. This activity lowers flood height and reduces erosion. Floodplains and wetlands are important for a planning standpoint due to their potential limitations on future development. In the case of floodplains it is important to consider the possible impacts on existing development.

Significant wetland areas are found throughout the township. Development in these areas is regulated by the Michigan Department of Environmental Quality and the U.S. Army Corps of Engineers. Any development occurring in wetland areas is subject to the regulatory authority of the Michigan Department of Environmental Quality.

Flood plains are designated by the Federal Emergency Management Agency (FEMA) in communities that choose to participate in the National Flood Insurance Program. Both 100-year and 500-year floodplains are mapped by FEMA (Map 8-1). The 100-year flood is defined as the area in which there is a 1 percent chance of a flood occurring in any given year. Since the meaning of the term "100-year floodplain" has been confused, the National Flood Insurance Program has replaced it with the designation of "base flood elevation" (BFE). The 500-year flood has a .02 percent (two in 1,000) chance of occurring each year. The 100-year and 500-year floods are the standards used by most

federal agencies for floodplain management and to determine the need for flood insurance.

Ford River Township participates in the flood insurance program. Several neighboring townships and the cities of Escanaba and Gladstone also participate in the program. The flood hazard areas identified in Ford River Township are located along the Lake Michigan shoreline. There are restrictions on development in these areas due to potential damage and health and safety risks. Federal and state funding programs tend to discourage development in floodplains. As mentioned in Chapter 8, the Department of Environmental Quality requires permits for activities in floodplains and high risk erosion areas. The DEQ Shorelands Management Unit requires structures in flood risk areas to be constructed at an elevation which ensures that the floor of the structure is above the 100-year floodplain. The Shorelands Management Unit also reviews and approves local zoning ordinances, modifications and amendments which regulate flood risk areas.

9.10 Climate

July is the warmest month, January the coldest. Daily maximum and minimum July temperature averages recorded are around 76 and 57 degrees respectively (Fahrenheit scale). The maximum daily average in January is near 25 degrees while the minimum daily average is 7 degrees. The average temperature in July is 67 degrees and the average temperature in January is 16 degrees. High and low temperatures are greater at inland locations where the influence of Lake Michigan is diminished.

August is the wettest month averaging 3.52 inches of precipitation. February is the driest averaging 0.95 inches. Average snowfall in the Ford River area is 48.8 inches. Delta County is known as the "Banana Belt" of the Upper Peninsula; due to its relatively mild weather and considerably less snowfall than the rest of the Upper Peninsula. Average rainfall in the Township is 28.4 inches. Afternoon thunderstorms are common during summer months.

9.11 Wildlife and Fish

The area supports a wide variety of wildlife including game animals such as whitetail deer, black bear, turkeys, ruffed grouse, squirrels, and rabbits. The Ford River is a designated trout stream.

9.12 Issues and Opportunities

 Soil association characteristics have been rated as to the suitability of constructing dwellings with basements and for septic tank absorption fields. For both uses, the soil suitability has been rated as being "very limited" indicating

that some problems may be encountered such as high water table, depth to bedrock, large stones and slopes.

- The Breezy Point area is an area of concern due to groundwater quality.
- Waterfront development has been increasing in the Township over the last 20 years.
- Waterfront development in high risk erosion areas are regulated by the MDNRE.
- Development in wetland areas is strictly regulated. Areas along the Lake Michigan shoreline have been mapped as flood hazard area. Floodplains and wetlands can potentially limit certain types of development or result in increased costs for development.
- Prominent water features in the Township include the Ford River, Bark River and the Bay of Green Bay. Both the Ford River and the Bark River are the Township's largest streams and fed by several cold water streams. The Bay of Green Bay forms part of the Township's eastern boundary.
- The Township's abundant natural features provide recreational opportunities for residents and visitors.

Chapter 10.0 Goals and Objectives

10.1 Introduction

Throughout the preceding chapters of this Master Plan, detailed information has been presented defining the historical trends and current situation in Ford River Township. This background information has helped the Planning Commission gain an understanding of the forces which have shaped the growth and development of the Township to this point.

In order for a community to have a sound plan for growth and development, it is essential that goals be set. These goals are broad statements which reflect the desired future conditions and are based on the background information, assumptions, alternatives and policy variables presented in earlier chapters. More specific objectives are then developed, defining actions that can be taken to implement the goals.

The final stage of the planning process, implementation, begins once the goals and objectives have been defined. The first step in implementation is the adoption of this plan by the Planning Commission and the Township Board following a public hearing and consideration of any public comments received.

Plan implementation continues through adherence to the goals and objectives set forth in this plan. It should be emphasized, however, that these goals and objectives are only a guide and provide long-term vision; ideas and projects mentioned are adjustable per a community's needs. While the Planning Commission has developed these goals and objectives based on the best information available, and the needs of the community at a point in time, changing needs and desires within the community, or changes in the local population or economy may mean that these goals and objectives will need to be reevaluated. This plan must remain flexible enough to respond to changing needs and conditions, while still providing a strong guiding mechanism for future development. The Planning Commission and Township Board, together with other groups, organizations and individuals, can use this plan as a dynamic decision making tool, and should assure that the plan is referred to frequently and updated periodically.

To assist in understanding the nature of the goals and objectives presented on the following pages, the following definitions are presented:

Goal:

A broad statement of a desired future condition, the generalized end toward which all efforts are directed. Goals are often stated in terms of fulfilling broad public needs, or alleviating major problems. Goals are generally difficult to measure and are idealistic.

Objective:

A specific attainable end derived from a related goal or policy to be accomplished within a specific time. When attained, they represent significant and measurable progress toward a goal, thus providing a means of evaluating progress.

10.2 Population

Discussion:

Population change is a primary component in tracking a community's past growth as well as forecasting future population trends. Ford River Township, like other townships in Delta County has experienced population growth in recent decades, while population numbers in the cities has declined. Over the past forty years, Ford River Township has experienced a population growth of 71.3 percent; growth has leveled off within the last twenty years. According to estimates, the Township has experienced a 3.4 percent population loss from 2000 to 2008. The Township also reported a decrease in household size, following national trends.

The Township may be experiencing an aging population due to the loss of younger residents pursuing careers outside of the County, combined with increases in middle and older age groups, often associated with an aging baby boomer population. Ford River Township has many retirees and "snow birds" that live in the area for a portion of the year.

Goal: Maintain the existing population and manage future growth in the Township.

Objectives:

- Encourage Ford River Township residents who go south or somewhere warmer for the winter to claim Michigan as their permanent home.
- Incorporate new Census information into the Master Plan when data becomes available.
- Emphasize the area's low crime rate, cost of living advantages, strong community commitment and overall quality of life.

10.3 Economic Base

Discussion:

Central to a community's stability and growth is its economic base. Population changes in an area are generally closely related to changes in the amount of economic activity in

the area. The factors that influence the economic base in a community extend beyond its boundaries, increasingly so as the effects of the global economy are realized. A small number of Township residents work in the Township; most residents are employed in the Gladstone-Escanaba area. Income levels reported in the Township are generally higher than the County as a whole, possible due to the Township's place as a bedroom/retirement community. The three leading employment sectors for Ford River Township were manufacturing; education, health and social services; and retail trade. Delta County generally reports lower unemployment rates than other Upper Peninsula counties, likely due to a diversified employment base.

Goal: Provide reasonable opportunities for the establishment of commercial and industrial uses which meet the needs of Township residents.

Goal: Continue to enhance the physical appearance of the community.

Objectives:

- Explore reuse options for vacant properties throughout the Township.
- Continue to support the renovation and reuse of vacant or underused buildings and land.
- Continue to develop compatible businesses along the US-2 and M-35 corridors.
- Encourage mixed-use development where feasible in the Township.
- Encourage commercial and industrial development where utilities already exist or where utilities could be easily extended.
- Encourage unique small businesses to locate in the "downtown" Ford River area.
- Encourage development of the Township owned property adjacent to the Renaissance Zone.
- Encourage low-impact businesses to locate in the Township.
- Encourage the balance of a "rural township" lifestyle with the potential for an increased tax base with additional business.

10.4 Housing

Discussion:

Housing is one of the key factors to consider when planning for a community's future. The location and type of housing available establishes where public infrastructure must be provided. Housing characteristics can also reveal information about a community's history and its economic and social situation. The Township has experienced an increase in the number of housing units within the Township from 1990 to 2000. Nearly 83 percent of the total housing units in the Township are occupied; leaving approximately 17 percent of the Township's housing units vacant. Many of the vacant units are used for seasonal, recreational or occasional use.

There are few rental units in Ford River Township and there no public housing units have been established. The Township represents a mixture of older homes and many newly built homes; the median value of housing in the Township has nearly doubled since 1990. Housing is affordable in the Township; only 15 percent of residents pay more than 30 percent of their incomes toward housing. New housing in the Township has been increasingly popular along the Lake Michigan shoreline as well as along Ford River. Currently, there are an abundance of homes and seasonal properties available along the M-35 corridor.

Goal: Develop a housing stock offering a range of cost, type and location to meet the needs, preferences and financial capabilities of the local population.

Goal: Preserve and enhance existing housing stock to offer residents a quality neighborhood environment.

Objectives:

- Encourage the renovation and reuse of existing buildings.
- Encourage neighborhood beautification programs.
- Explore options for a Township spring or fall clean-up.
- Encourage owners and/or occupants to maintain dwellings and yards properly so as to avoid blighted or unsafe conditions.
- Consider Zoning Ordinance revisions to provide for additional multi-family housing, including townhouses and condos.

• Encourage the development of various residential housing types appropriate for all income levels, the elderly and persons with special needs.

10.5 Community Facilities and Services

Discussion:

Services and facilities provided by local government are vital elements of a community's progress and well-being. The Township Hall is currently in good condition; an office space expansion would be favorable to alleviate overcrowding. The Township may benefit from developing an auxiliary fire hall in the southern portion of the Township and improve the ISO rating for many residents. The Township's water system has experienced several upgrades in recent years but does not have the capacity to add a substantial number of new customers at this time. The Township owns and maintains two cemeteries.

Ford River Township residents have a variety of educational opportunities to choose from, including higher education. School enrollments have been declining in recent years; consolidation of districts may be necessary in the future. Township residents also have several options for health care, including OSF St. Francis Hospital and Medical Group and the Cedar Hill Medical Center. Cable, cellular phone, natural gas and recycling services are limited throughout the Township.

Goal: Provide, maintain and continuously improve the efficiency and quality of community facilities and services in a cost-effective manner.

Objectives:

- Augment local revenue resources with federal and state grant and loan programs to provide improved facilities and services.
- Pursue funding opportunities to expand the Township Hall.
- Pursue grant funding for auxiliary fire halls in the northern and southern ends of the Township.
- Pursue grant funding for fire department equipment, gear and vehicles.
- Explore recycling opportunities.
- Encourage public participation in community events and facility maintenance.
- Continue to take part in Delta County Joint Governmental meetings to discuss project opportunities and intergovernmental cooperation.

• Continue to expand the water system when necessary if funding opportunities arise, particularly to the Breezy Point area.

- Develop a long range street improvement plan.
- Develop long range plans for the cemeteries.
- Support meeting ADA standards for all Township buildings and facilities.
- Consider a millage for road improvements.
- Pursue an expansion of cable and internet services.
- Encourage the placement of cell towers in the Township to improve service capabilities.
- Encourage the incorporation of "green building" into any new public facility.
- Upload documents, such as the Master Plan, Zoning Ordinance and meeting minutes to the Delta County website.
- Develop a Township newsletter to inform residents about current Township issues and events.

10.6 Transportation

Discussion:

Transportation allows for the movement of people and goods within and outside an area. It is vital to the economy and development of an area and central to land use patterns. The Delta County Road Commission has seen a decrease in the amount of funding they receive in recent years. The Township currently funds road projects via the general fund. Limited public transportation is available locally on a demand-response basis. Daily bus transportation is available by DATA. Cab and motor coach services are also available. The aging of the local population could result in future needs for additional transportation services for the elderly and/or disabled. The Township does not currently maintain any walking, nature or multi-use trails. Residents have expressed an interest in developing these types of trails in the future.

Goal: Provide a safe, well maintained and efficient multi-modal transportation network.

Objectives:

 Participate with the Delta County Road Commission and the Michigan Department of Transportation in setting road improvement priorities.

• Develop a long-range street improvement plan, including paving of residential streets.

- Consider a millage for road improvements.
- Pursue non-motorized transportation opportunities and encourage neighborhood "walkability."
- When major road construction occurs, develop non-motorized paths or lanes.
- Pursue grant funding for non-motorized facilities.
- Work with the Delta County Road Commission to clean the road right-of-ways in the Township.
- Promote visual enhancements along roadways; discourage signs that are gaudy, unnecessary or in poor condition.

10.7 Recreation

Discussion:

Natural features throughout the Township provide a variety of year-round active and passive recreational opportunities for residents and visitors, including hunting, fishing and boating. Public and private facilities provide additional recreational opportunities for all ages. The Township does not have an approved 5-Year Recreation Plan at this time. The Township has developed several priorities for recreational development to include in a future Recreation Plan. Expansion of recreational activities and facilities promoting the natural beauty of the surrounding area may be beneficial to residents and visitors.

Goal: Maintain and improve recreational opportunities for residents and visitors of all ages.

Objectives:

- Develop a 5-Year Recreation Plan to submit to the MDNRE.
- Continue to survey residents and encourage participation for recreational opportunities.
- Support waterfront access improvements to facilitate expanded recreational opportunities.
- Work with the MDNRE to improve the Ford River launching site, possibly blacktopping the parking area.

 Collaborate with area snowmobile clubs to establish connecting links and improve access to snowmobile trails.

- Promote community get-togethers such as the annual ice cream social and Friday community luncheons for seniors.
- Ensure that recreational facilities are, to the maximum extent practical, developed for multi-purpose and/or year-round uses to optimize cost and benefits accrued to the public.

10.8 Land Use

Discussion:

The general historic land uses common to the Upper Peninsula are reflected in the land use patterns that have developed in Ford River Township. Logging and timber production were common throughout Ford River Township, and still are today. Changing lifestyles and family structure, residential development, commercial businesses and Township needs will all affect future land use patterns. The desire for increased development of residential and commercial properties will further the growth of the Township. Ford River Township appears to be absorbing some of the residential growth from the City of Escanaba. The availability of public and private services, accessibility, existing conditions of the area and price are other important considerations for residential development.

Areas along the Lake Michigan shoreline are included in the high risk erosion zone by the MDNRE. Commercial land use is concentrated along the M-35 corridor and along US-2 in Hyde. Agricultural land use has declined in the Township when compared to past usage. Large tracts of land in public ownership mean that less land is available for private development. The Township includes a significant amount of wetlands. The majority of the wetland areas is undevelopable and presents limited future usage opportunities.

Goal: Establish land use patterns in the Township that provide for development in areas where adequate facilities exist or can be extended, maintain the overall character of the community and ensure the health, safety and welfare of Township residents.

Objectives:

- Continue to seek development opportunities for vacant properties.
- Develop regulations for small wind energy units, outdoor wood burners (for units that meet EPA standards and those that do not) and solar panels.

- Support the renovation and reuse of existing buildings.
- Review the Township Master Plan on a regular basis.
- Review the Zoning Ordinance on a regular basis.
- When making land use decisions, review land uses in adjacent communities for compatibility.
- Encourage commercial development along the US-2 and M-35 corridors.
- Encourage property owners to improve dilapidated properties.
- Consider developing regulations to diversify the housing stock in the Township and encourage multi-family housing where appropriate.
- Encourage the development of non-motorized trails.
- Encourage public awareness of the Township's existing wetland cover with regards to future development.
- Promote a compatibility of land uses that will preserve agricultural land and other open space while limiting ribbon development.
- Develop additional recreation opportunities for residents and others who visit the area as a means of increasing economic revenue for the Township.

10.9 Natural Features

Discussion:

Natural features are one of the primary determinants of land use. In the case of Ford River, the presence of forests was critical to the early development of the area. The area has an abundance of wetlands, many of the areas are considered undevelopable. The Township has three main water features, Lake Michigan, Ford River and No See-Um Creek. Natural features throughout the Township provide a variety of year-round active and passive recreational opportunities for residents and visitors, including hunting, fishing and boating.

Goal: Enhance the natural environment while providing for compatible development.

Goal: Maintain the Township's scenic character by minimizing the impact of development on natural and wooded features such as but not limited to, wetlands, steep slopes, shoreline and wildlife habitat.

Objectives:

• Ensure that development occurs in areas suitable to sustain such growth.

- Improve access to water features in the Township.
- Encourage property owners to abide by MDNRE regulations for the high risk erosion zone.
- Discourage development in wetland areas.
- Encourage and participate in planning for natural emergencies and mitigation of hazards.
- Encourage alternative energy usage.
- Maintain the rural atmosphere of the Township by preserving open space and agricultural lands.
- Protect the Lake Michigan shoreline and the Ford River.

Chapter 11.0 Future Land Use and Zoning Plan

11.1 Introduction

The previous chapters of the Master Plan provide an overview of the existing conditions in Ford River Township. A future land use plan is representative of a "preferred future" of how the community would like to grow and includes recommendations on how development will be carried out. It is based on analyses of environmental opportunities and constraints, existing trends and conditions and projected future land use needs.

Future land use planning establishes the desired amounts and locations of residential, commercial, and industrial development; public facilities; open space; environmental conservation and recreational areas; non-motorized transportation facilities; and changes or improvements to the local traffic circulation systems. This Chapter also presents the Zoning Plan, which along with the rest of the relevant parts of this Future Land Use Plan, is intended to guide the implementation of and future changes to the Township's Zoning Ordinance and Map.

The Michigan Zoning Enabling Act (MZEA) requires in Sec. 203 (1) that zoning be based on a plan. Similarly, Sec. 7 (2) of the Michigan Planning Enabling Act (MPEA) sets forth the purposes for which a master plan must be created. In order for a master plan to serve as the basis for zoning, it should promote the purposes in the MZEA and MPEA. The zoning plan identifies the zoning districts and their purposes, as well as the basic standards proposed for each district. Current zoning districts utilized in the Township Zoning Ordinance and any potential modifications to the districts will also be discussed in this chapter.

Map 11-1, Future Land Use, reflects the assumption that land use patterns in Ford River Township will continue to be heavily influenced by the forest products industry, state and federal land holdings, the Lake Michigan Shoreline, the Ford River and major traffic corridors (M-35 and US-2). When making future land use decisions, township officials should carefully review adjacent land uses in bordering jurisdictions for compatibility. Other major considerations which helped shape the future land use map are a desire to establish appropriate uses and to develop a consistent land use patterns throughout the Township.

11.2 Current Zoning Districts

The Township is currently divided into eight zoning districts; six of the districts are currently designated on the Township Zoning Map. The intent and general purpose will be depicted for each district. A review of the schedule of regulations will also be

included. A review of the current districts is pertinent to the discussion of any Zoning Ordinance revision efforts as well as future land use.

Current Ford River Township Zoning Districts and Schedule of Regulations

District R-I: Residential One

Intent: The R-I, Residential One, District is intended for the establishment and preservation of single-family home neighborhoods as desired by large numbers of people, free from other uses except those which are both comparable with and convenient to the residents of such a district. The R-I District is designed to accommodate residential opportunities for those who desire exurban residential living and are willing to assume the costs of providing many of their own services. For the individual lot split type of residential development, it is reasonable to require spacious lots, insuring a safe, potable water supply and treatment of wastewater on the same lot, considering the excessive cost of extending public water to virtually any area of the District. For the larger, unified developments, such facilities will be necessary and this District includes properties to which such services are provided or could be readily provided.

District R-2: Residential Two

Intent: The R-2, Residential Two, District is intended for the establishment and preservation of quiet neighborhoods for single-family dwellings, two-family dwellings, and mobile homes, free from other uses except those which are both comparable with and convenient to the residents in this District. For the individual lot split type of residential development, it is reasonable to require spacious lots, insuring a safe, potable water supply and treatment of wastewater on the same lot - considering the excessive cost of extending public water to virtually any area of the District.

District RR: Rural Residential

Intent: The RR, Rural Residential, District is established to protect and generally preserve the existing character and use of those areas of Ford River Township which are presently rural or agricultural. Soil and natural conditions vary throughout this District, including substantial wood lots and some active farms. These areas are considered to be suitable for both rural (predominantly scattered-site) residential development and the perpetuation of existing farming or other low intensity uses.

District AP: Agricultural Production

Intent: The AP, Agricultural Production, District is intended to maintain for agricultural purposes those lands which because of their soil characteristics, drainage and other factors, are especially well suited for farming, dairying, forestry operations and other

similar agricultural operations and to ensure that uses within this District are retained for agricultural purposes.

District RP: Resource Production

Intent: The RP, Resource Production, District, is established to maintain low density rural areas which because of their rural character and location, accessibility, natural characteristics and the potentially high cost of providing public services for intensive uses are suitable for a wide range of forestry, agricultural, natural resource and recreational uses.

District PL: Public Land

Intent: The PL, Public Lands, District is intended to acknowledge the publicly owned properties that presently exist within the Township. This District applies to only those properties that are used or authorized for public and quasi-public use, in tax-exempt status or public recreation.

District C: Commercial

Intent: The C. Commercial, District is established to preserve general commercial areas consisting of shopping centers and commercial areas where customers reach individual business establishments primarily by motor vehicle.

District I: Industrial (Reserved for Future Use)

Planned Unit Development, PUD

Intent: To permit more flexibility and consequently encourage a greater imaginative and creative use and design of structures and land than is allowable under the other districts of the Zoning Ordinance, where such modifications will not be contrary to the intent of the ordinance or significantly inconsistent with the Master Plan. It is further intended to promote more efficient and economical use of the land, while providing a harmonious variety of housing choices, a higher level of urban amenities, the preservation of natural scenic qualities of open space and to give the developer reasonable assurances of ultimate approval before expending complete design monies while providing Township officials with assurances that the project will retain the character at the time of project approval.

Schedule	of Regulations					
			Minimum Set	back (Feet	:)	
District	Minimum Lot Size (Square Feet or Acreage)	Minimum Lot Width (Feet) ^A	Front	Side	Rear ^E	Maximum Height (Feet)
R-1	33,000	165	30	10 ^B	35 ^c	30
R-2	33,000	165	30	10 ^B	35 ^c	30
RR	1 Acre	165	30	10	30	30
AP	20 Acres	200	30	30	30	D
RP	1 Acre	165	30	30	30	D
PL	None	None	None	None	None	None
С	1 Acre	165	30	5	20	30

- A Lot width shall be measured at front setback line.
- B A detached garage or accessory building may be located 5 feet from a side lot line and if there are restrictions or easements along the sides of lots, the setback shall be measured from those encumbrances.
- C A detached garage or accessory building may be located 10 feet from a rear lot line.
- D Height at any point on a structure shall not exceed the horizontal distance to any lot line.
- E The rear lot line shall be used in cases where water borders a lot. Setback distances shall be measured from the normal high water mark

11.3 Sensitive Areas

The sheer number of natural resources in Ford River Township requires careful consideration for development. Development in sensitive areas should occur in a manner that protects the overall quality of the resources consistent with resource conservation principles and the rights of property owners. Any land development that occurs in the High Risk Erosion Zone will need to comply with MDNRE standards and regulations. Development along the Lake Michigan shoreline and along the Ford River will need to take the vulnerable nature of shorelines into account. Density along the Ford River should be reviewed periodically.

The Public Land District is listed in the Township Zoning Ordinance; no land has been designated in this district on the Zoning Map at this time. The Township may wish to consider acknowledging the publicly owned properties that exist in the Township on the Zoning Map. The Future Land Use Map (Map 11-1) reflects the Public Lands, including Escanaba State Forest Lands and Delta County owned lands in the Township.

11.4 Commercial Development

As discussed in Chapter 7-Land Use, the majority of commercial development in the Township is concentrated along Highways M-35 and US-2 and in the "downtown" Ford River area. Besides the business advantages of locating along the high traffic volume corridor, the availability of land parcels that meet access and parking requirements increases the desirability to locate here.

Future commercial development within the Township is likely to continue to occur along established commercial corridors, such as US-2 and M-35. Should development along the highway continue, consulting the MDOT and developing suggested Access Management standards will be essential to provide for safe development and access, as well as adequate parking. There is the potential to further expand the existing commercial district along the US-2 corridor.

The Township has established Planned Unit Development (PUDs) regulations in the Zoning Ordinance. PUDs are a flexible zoning technique that allows a land developer much more creativity in how land is used without sacrificing public concerns for compatibility with adjacent units of land and often with greater protection of significant environmental features. PUD is a special type of floating overlay district which generally does not appear on the municipal zoning map until a designation is requested. This is applied at the time a project is approved and may include provisions to encourage clustering of buildings, designation of common open space, and incorporation of a variety of building types and mixed land uses. A PUD is planned and built as a unit thus fixing the type and location of uses and buildings over the entire project. The intent of a PUD listed in the Zoning Ordinance could be revised to include promoting commercial and service development in addition to housing choices and open space. The PUD has yet to be utilized by a developer in the Township.

The former Ford River Elementary School was placed out for bids by the Escanaba School Board; the building was purchased in the spring of 2010. The school has been closed for the past six years and is showing limited signs of distress from being vacant. The Township is willing to work with the developer to create compatible development. The property is currently zoned Rural Residential, which provides a variety of uses.

11.5 Industrial Development

There are no industrial uses designated in the Township at this time. A section of the Zoning Ordinance regarding industrial uses has been reserved for future use. Ideally, industrial uses would locate adjacent to the Delta County Renaissance Zone and could potentially extend existing water and sewer infrastructure. Airports present a variety of unique considerations to land use planning. Height restrictions are necessary in the vicinity of airports and airways for the protection of aircraft in flight. Noise restrictions may also be necessary. Land uses near airports and their approach/departure corridors must remain compatible for the comfort of residents nearby. The Township will need to carefully review any potential development adjacent to the Delta County Renaissance Zone and ensure that proper measures are taken to safety.

11.6 Residential Development

Residential land use in the Township includes single family homes, and mobile homes, in a low density pattern. The Township has a small number of multi-family units. Single family homes are concentrated along the Ford River, along the Lake Michigan shoreline, along M-35, in Hyde and west of M-35 from the City of Escanaba/Township line to Ford River.

There may be a need in the future to expand the number of multifamily residential units in the Township. Expansion could occur within existing residential districts with modifications to the Zoning Ordinance. Townhouses and condominiums have become a popular housing option in the Upper Peninsula; the Township would need to consider adding regulations to the Zoning Ordinance to permit townhouses and condominiums.

Residential development should continue in to fill in within existing residential districts according to established densities. There are selected areas of available buildable land along the Lake Michigan shoreline, in the R-2 district along the southern end of the Township where there is potential for single-family or multi-family housing. Single family or multi-family residential units could also be developed in the current location of the RV Park and along the river on larger lots located on higher ground. Residences could develop between Jaeger Road and Old State Road; there is currently an issue with access, but there is potential. I Road going south, as well as County Road 537 offers potential for further residential development.

There is a concern along the Lake Michigan shoreline due to old 75 feet wide lots of record and overdevelopment issues. Zoning regulations currently stipulate that the minimum lot width is now 165 feet. Lots of record are "grandfathered" in and development is permitted on those lots. There area should be monitored for potential problems with septic systems.

11.7 Recreational Development

Future recreational development in the Township will likely focus on the development of non-motorized trail opportunities and improving Lake Michigan and Ford River access.

The Township is working on developing a recreation plan with a recreational development schedule to follow. Residents were surveyed on their preferences for recreational development in the winter of 2009-2010. The survey results will be used by Township officials to develop a recreational development schedule.

11.8 Transportation and Utilities

Water infrastructure and services are fundamental to the Township's ability to accommodate future growth and development. Growth can be managed somewhat through the strategic placement of such services. Water extensions are dependent on development; extensions should be made in a way to promote the orderly development of the Township, as well as by necessity. There is potential for another water system expansion near the Delta County Airport property to pick up additional customers in the Township. This extension could be tied in to the current water system.

There are concerns about the groundwater quality in the Breezy Point area. Approximately 20-30 households are affected. According to Public Health of Delta and Menominee Counties, there has been bacterial contamination through surface water infiltration into poorly constructed wells (See Appendix C). Possible solutions include: extending the Ford River Township water system, abandoning the poorly constructed wells and drill replacement of water wells. Another potential option for Breezy Point area households would be connecting to the City of Escanaba water system.

The Township is no longer considering a millage for road improvements at this time. Jaeger Road is in need of improvements to better accommodate emergency vehicles. Jaeger Road could also be extended across the Ford River; approximately ½ mile of roadway construction would be necessary as well as a bridge, which may be cost prohibitive.

11.9 Alternative Energy Resources

Ford River Township recognizes the importance of alternative energy resources. The Township would like to encourage residents to utilize alternative forms of energy such as outdoor wood burners, solar panels and small wind energy systems where appropriate. Rural residential, agriculture production and resource production districts could serve as prime areas for alternative energy uses, particularly wind energy. To the greatest extent possible, zoning standards for developing alternative energy resources should be based on industry norms and standards.

Wind energy systems could be developed by taking advantage of existing land use patterns; these districts (AP, RP, RR) have larger minimum lot sizes and large tracts of land could be preserved while utilizing the area for wind energy. Potential sites for wind energy may be limited by the following factors: tree cover, wetlands and proximity to shorelines. On-site wind energy systems could be encouraged in all districts.

Areas with extensive tree cover are less suited to the development of alternative energy resources because, in general, these areas have less open area with less wind volumes.

Encouraging turbine development in areas with heavy tree cover may also encourage the removal of existing foliage to increase the efficiency of the turbines. Wetland areas are considered environmentally sensitive; very little alternative energy resources should be planned for these areas of the Township. Ford River Township has miles of Lake Michigan shoreline. According to the existing land use map, this shoreline area is developed (or proposed) for residential and very limited commercial use. The shoreline also has several high risk erosion areas. As a result, the shoreline area would generally be excluded for larger wind energy systems; small systems could be explored provided minimum lot size and setback requirements are met.

11.10 Conclusion

Planning is intended to guide the forces of change in ways that encourage desirable outcomes while striking an appropriate balance with development and preservation. The Master Plan should be reviewed on a yearly basis and amending the plan as necessary will maintain its use as a reliable planning tool. State law requires that the Master Plan must be revised at least every five years to establish if updating is necessary.

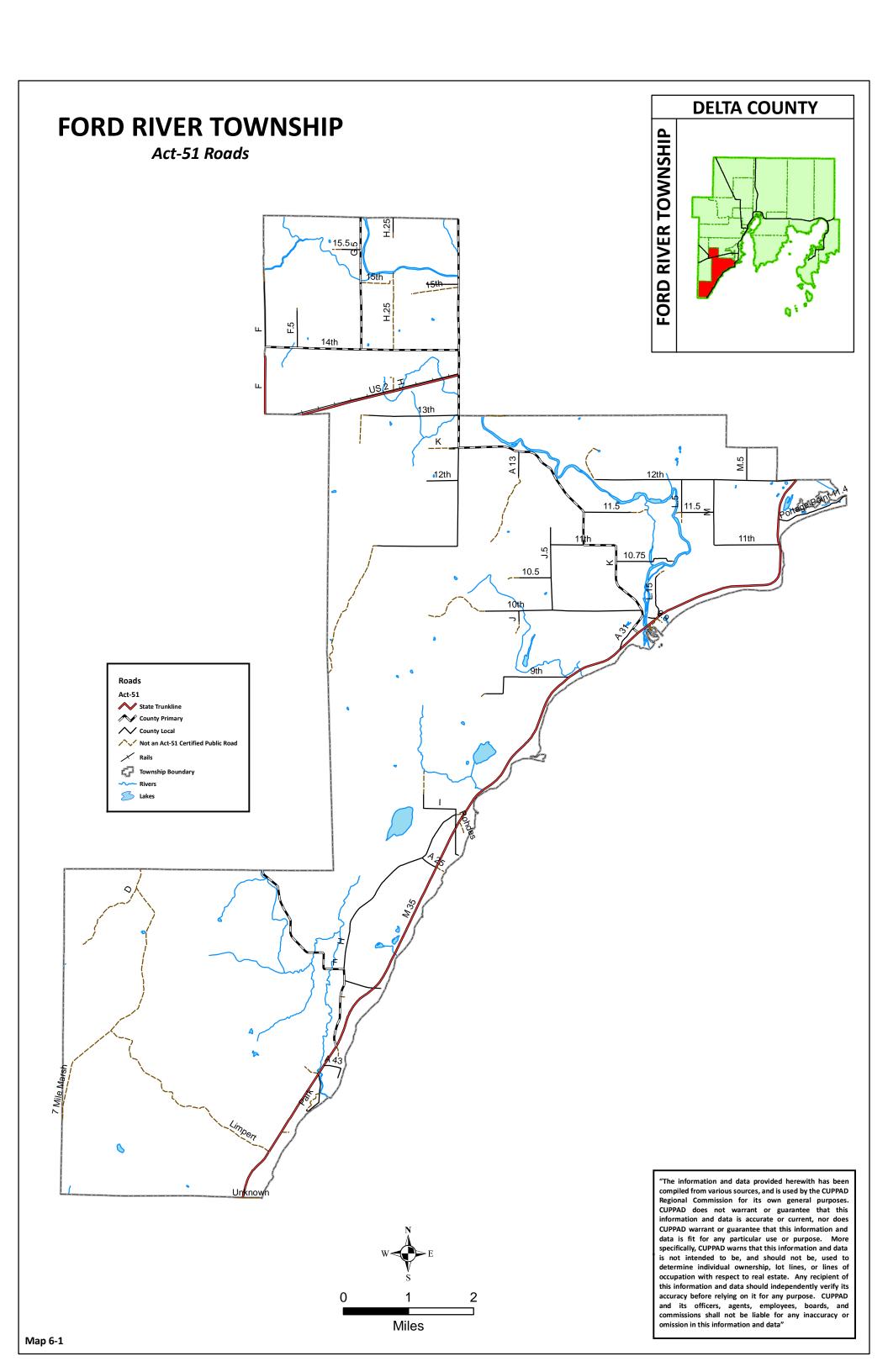
As the developers and most frequent users of this document, the Planning Commission will be responsible for reviewing the objectives and progress of the Plan. An outdated Plan that is not frequently reviewed can diminish the decision making process. Therefore, the Planning Commission should conduct an annual review of the Plan and amend it as appropriate. Amendments that should occur include:

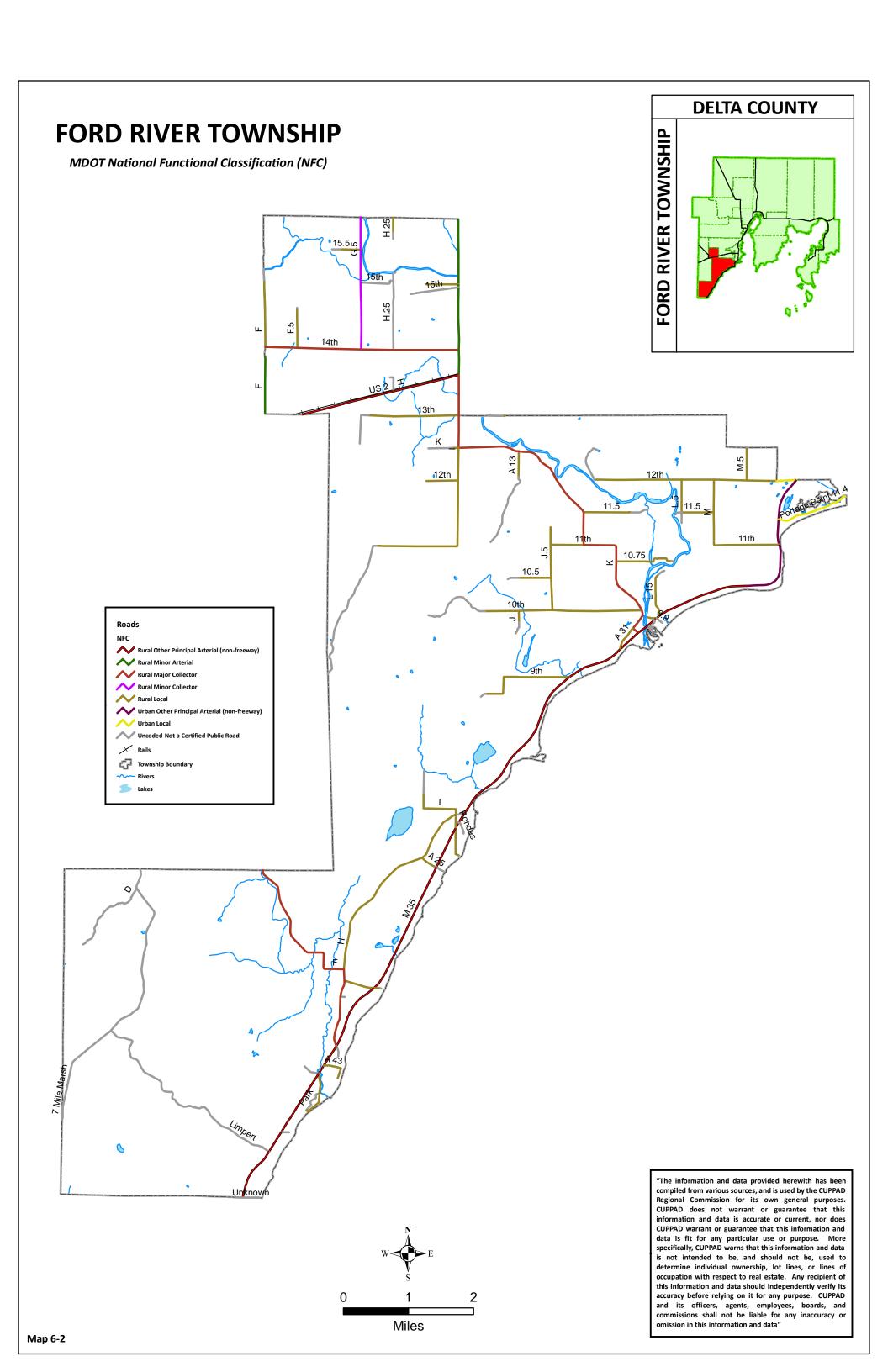
- Delete goals and objectives that have been accomplished and add new objectives as needs and desires arise.
- Modify the Future Land Use Map to reflect any zoning decisions that have changed the direction of development in the Township.

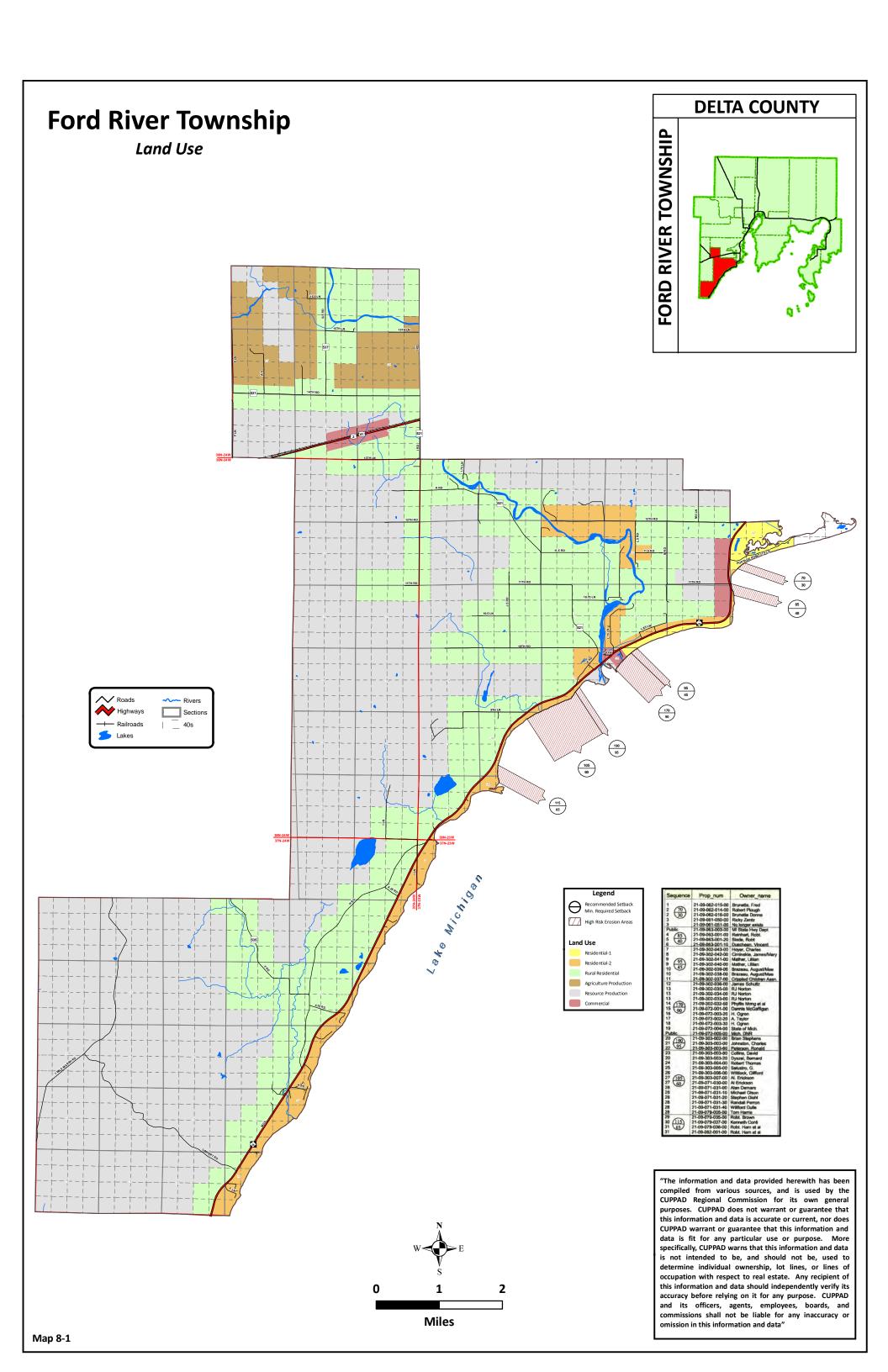
This Master Plan represents over a year of effort by the Planning Commission, Township officials and residents. Development of the plan involved collection and analysis of data on population, housing, land use, transportation, infrastructure and socioeconomic conditions. The Master Plan process also included a Citizen Survey and citizen input at regular Planning Commission meetings. The Plan sets forth several recommendations, and as such, this Plan will only be as successful as the implementation measures taken to achieve the vision set forth in previous chapters.

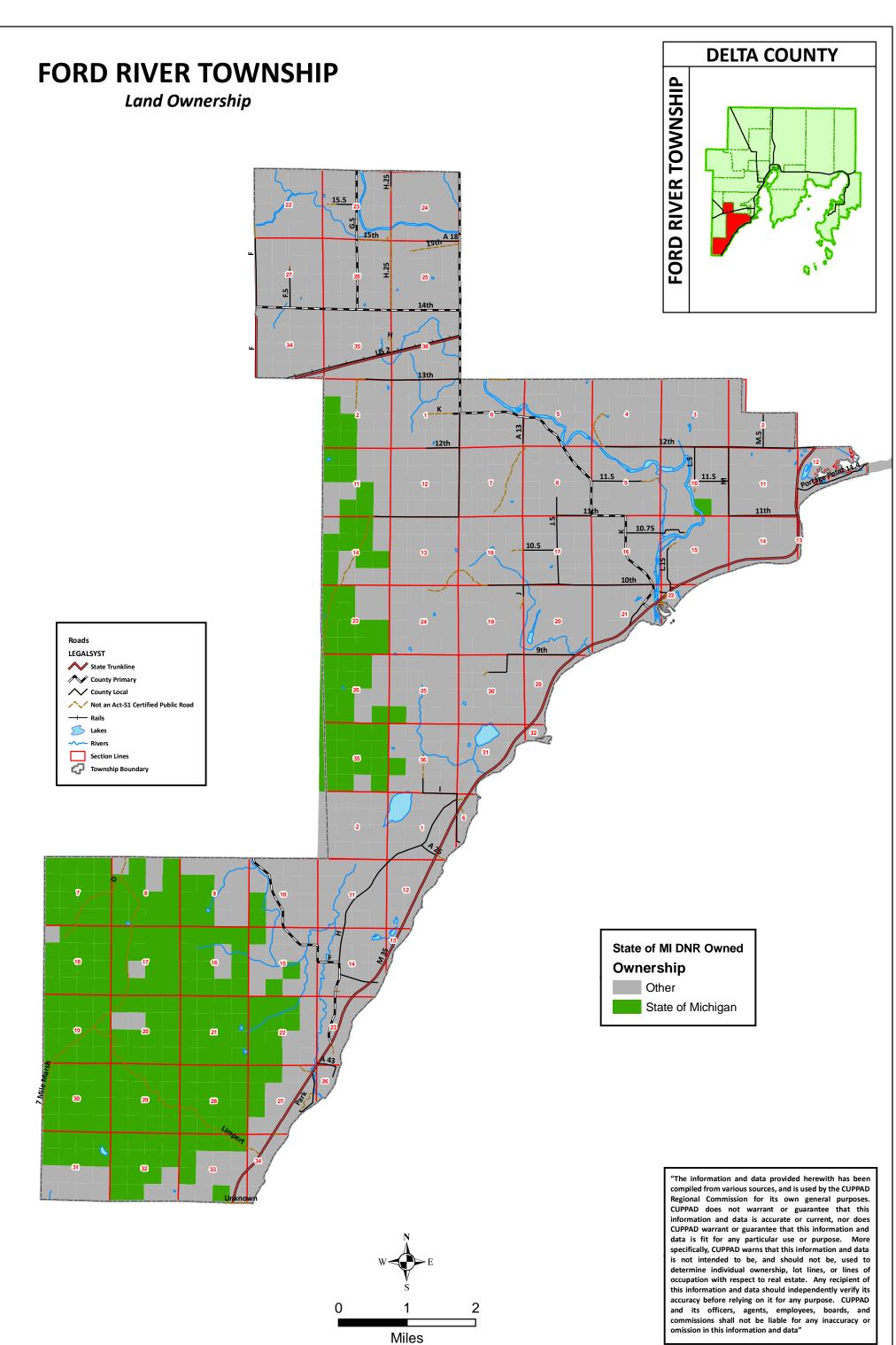
Appendix A

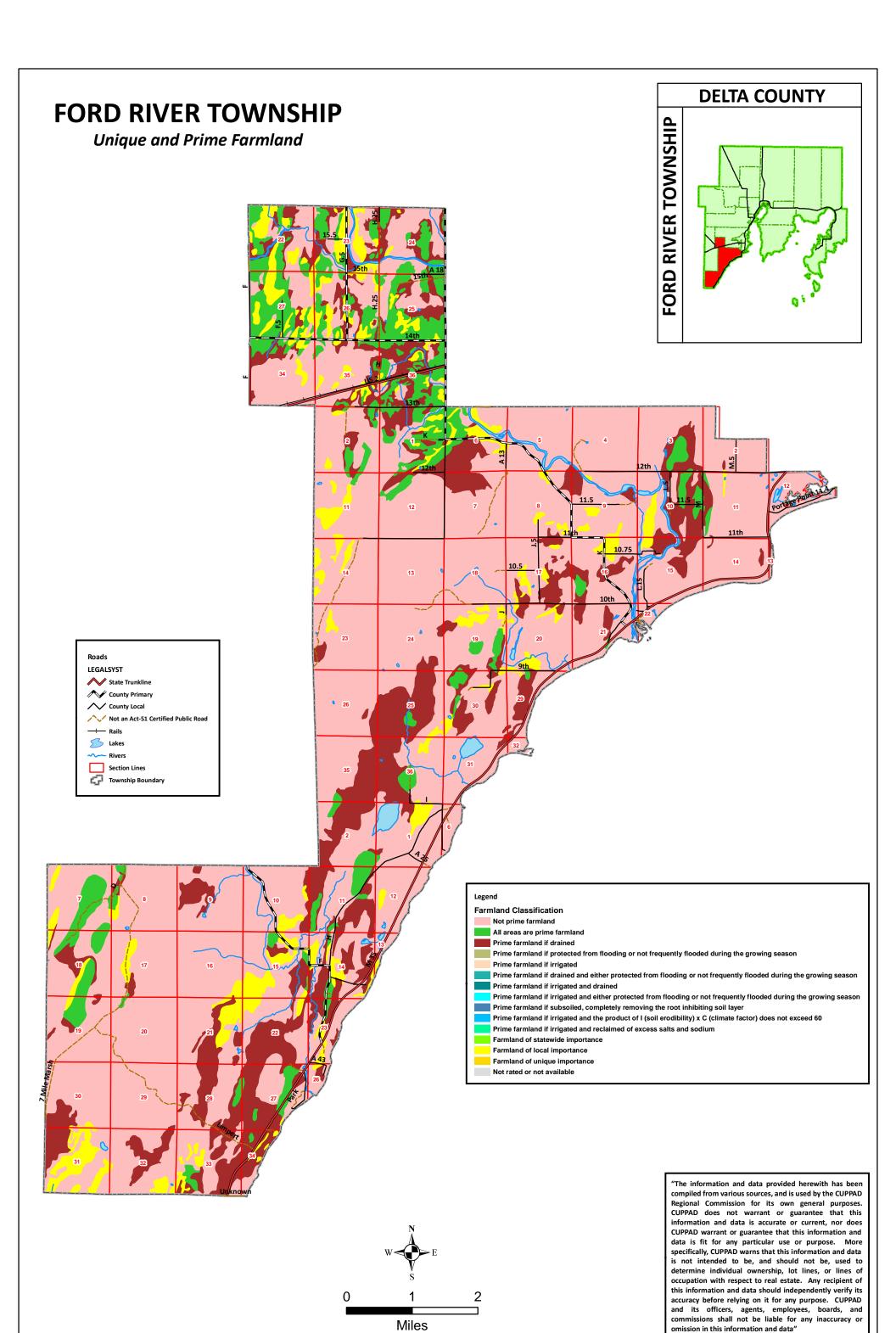
Maps



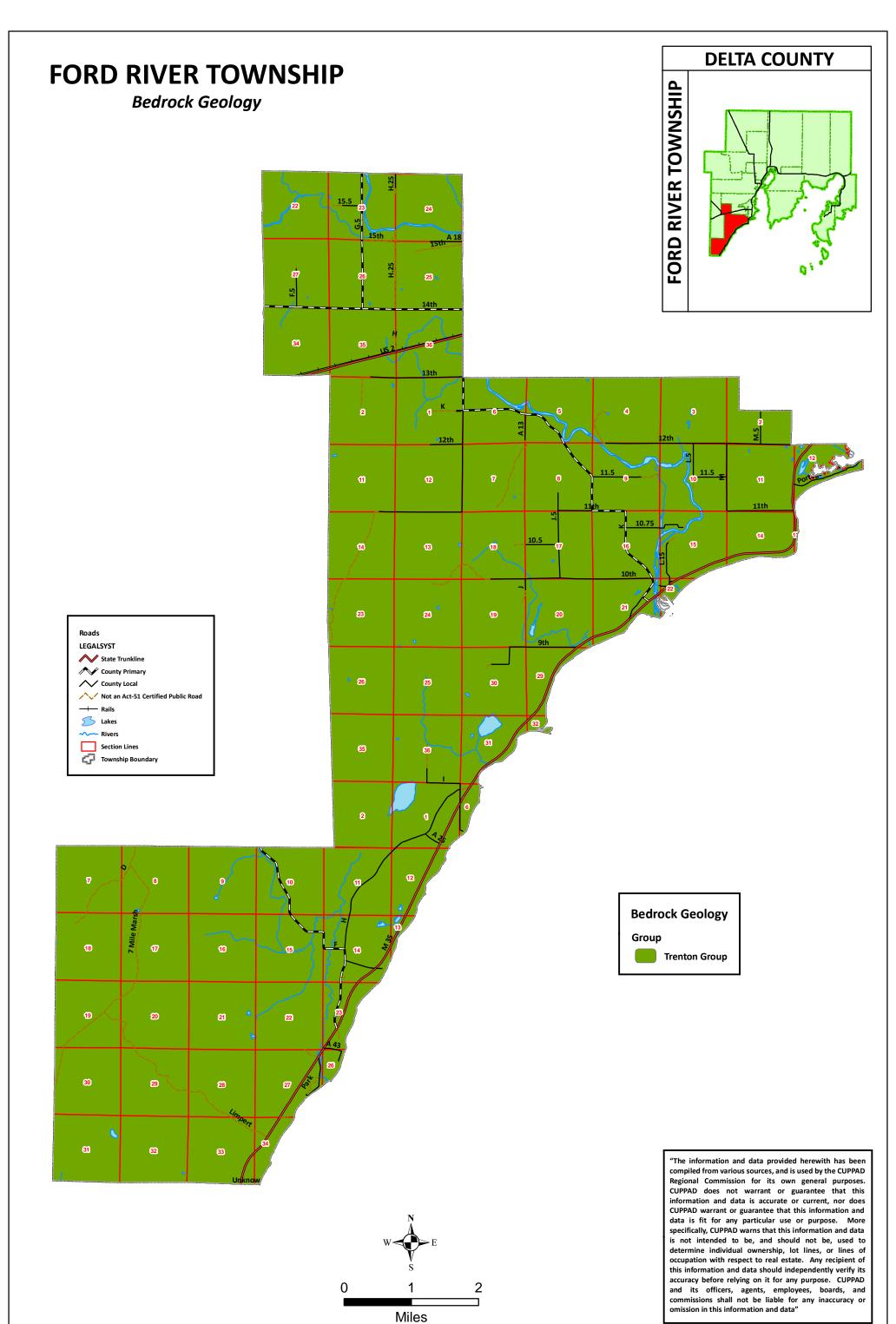








Map 8-3



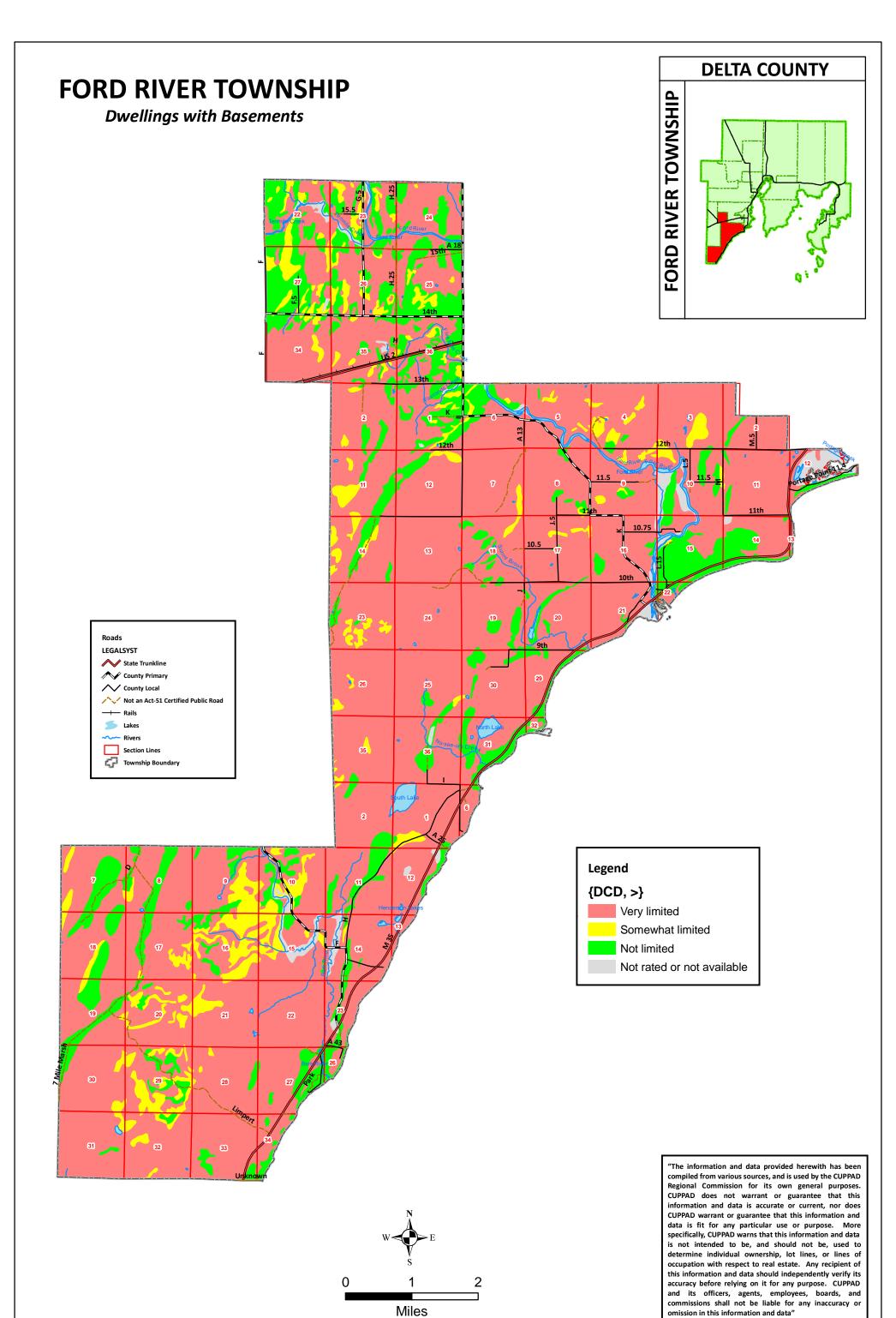
DELTA COUNTY FORD RIVER TOWNSHIP FORD RIVER TOWNSHIP Hydrologic Soil Groups Roads LEGALSYST State Trunkline County Primary Not an Act-51 Certified Public Road Section Lines "The information and data provided herewith has been compiled from various sources, and is used by the CUPPAD Regional Commission for its own general purposes. CUPPAD does not warrant or guarantee that this information and data is accurate or current, nor does CUPPAD warrant or guarantee that this information and data is fit for any particular use or purpose. More specifically, CUPPAD warns that this information and data Legend is not intended to be, and should not be, used to determine individual ownership, lot lines, or lines of **Hydrologic Soil Group** occupation with respect to real estate. Any recipient of this information and data should independently verify its accuracy before relying on it for any purpose. CUPPAD {DCD, <} and its officers, agents, employees, boards, and Α commissions shall not be liable for any inaccuracy or omission in this information and data' A/D В B/D С C/D Not rated or not available The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows: Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission. Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrinkswell potential, soils that have a high water table, soils that have a claypan

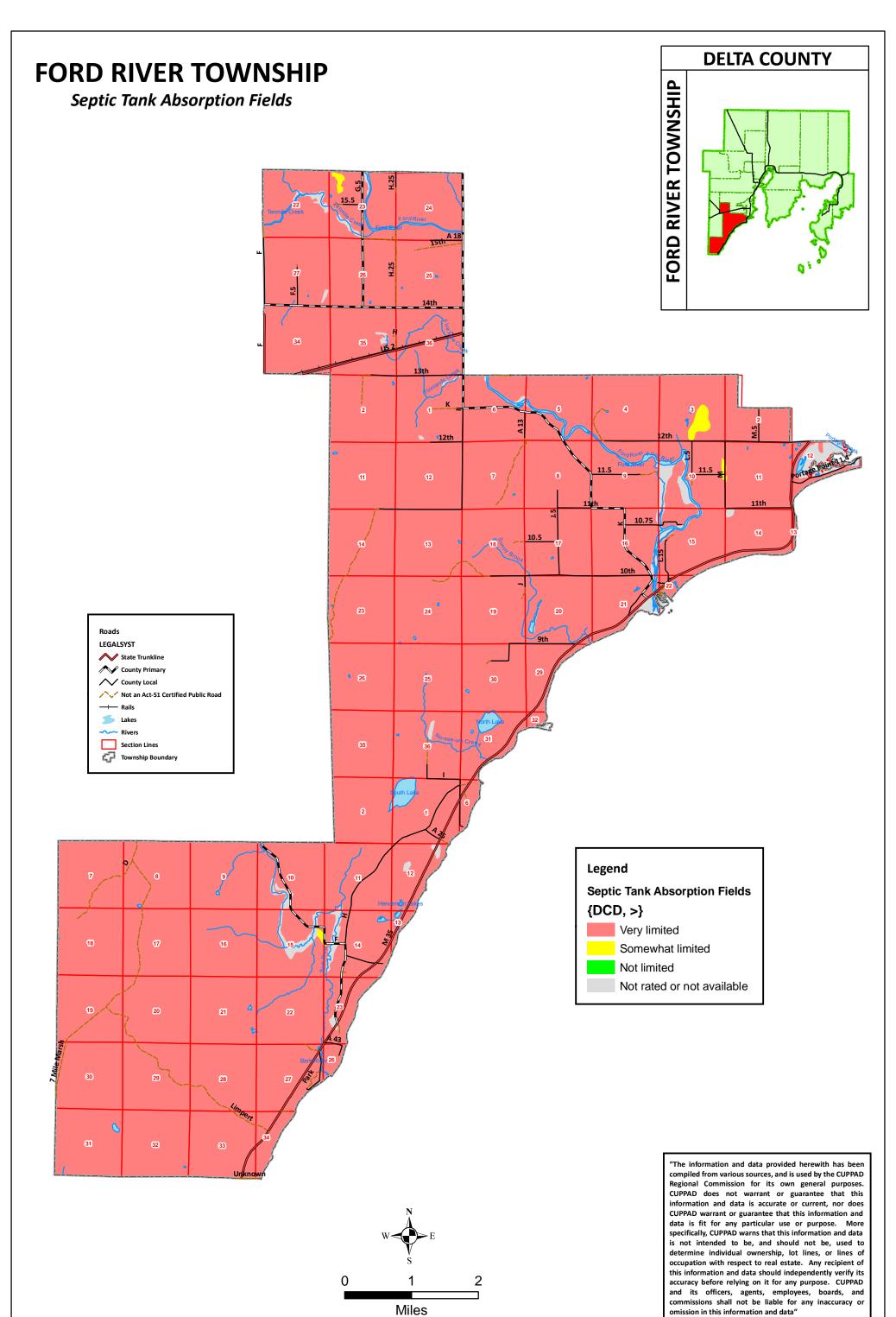
or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water

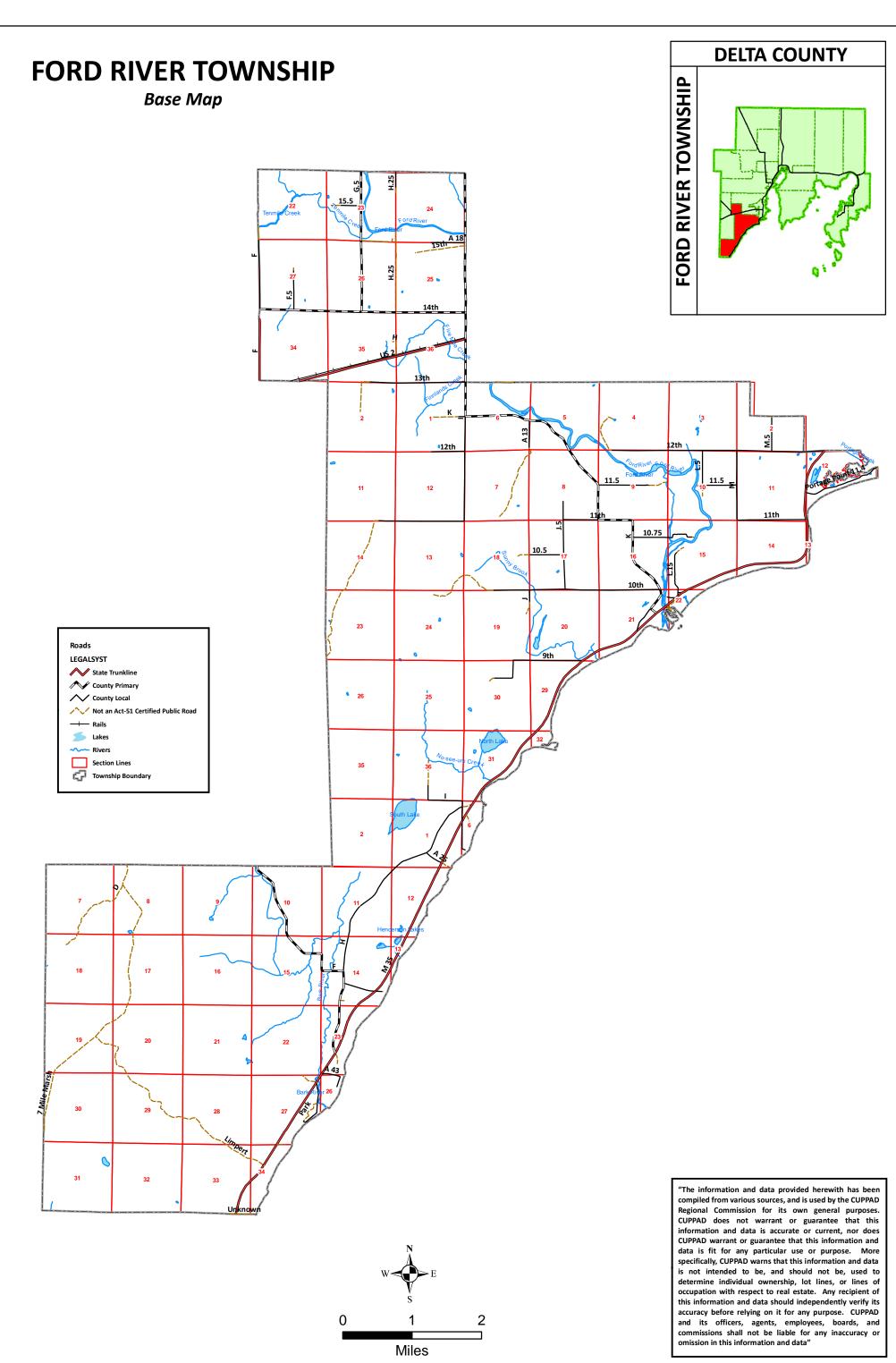
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual

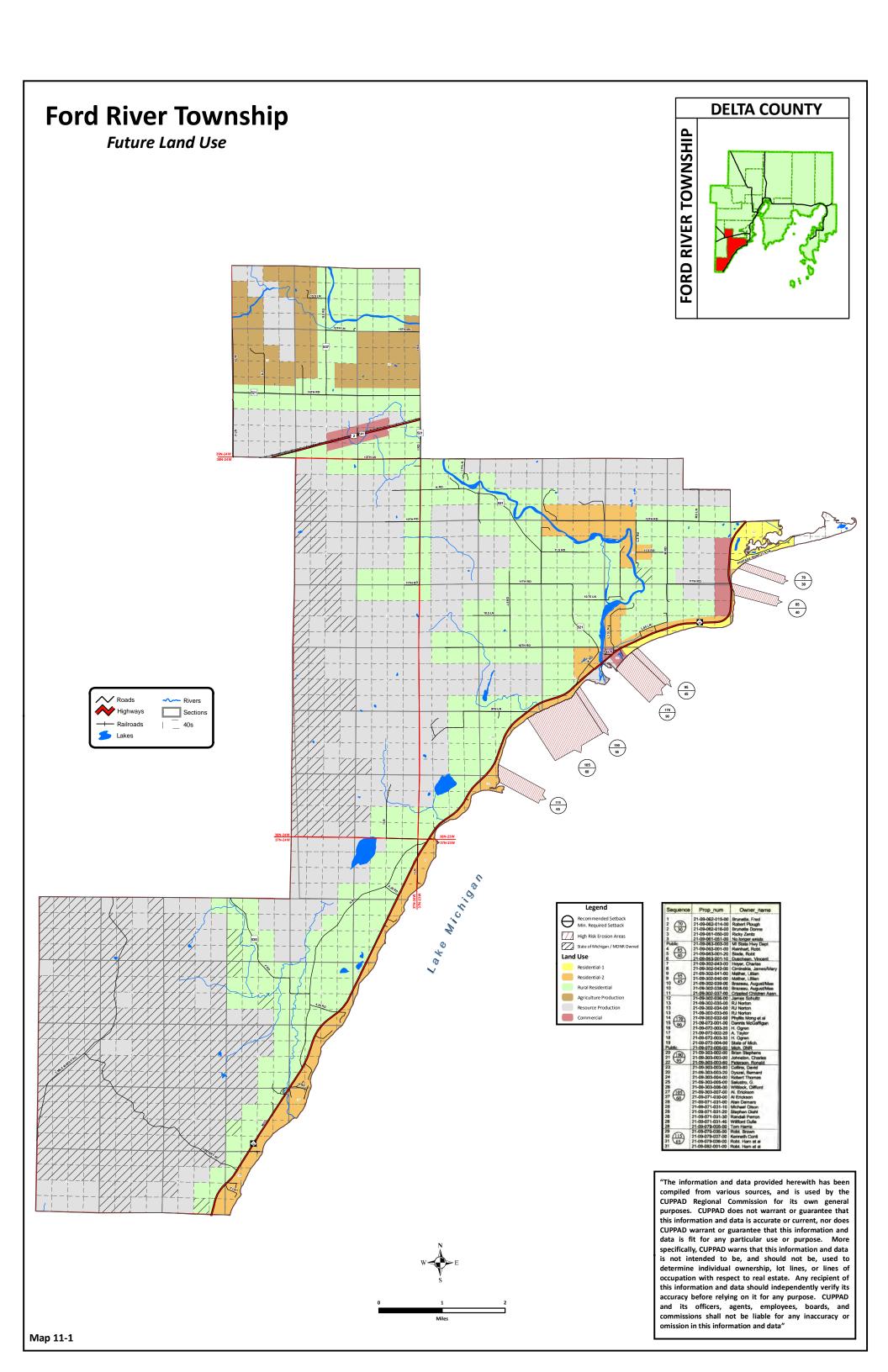
transmission.

Miles









Appendix B Citizen Survey and Results

Ford River Township Citizen Survey

Ford River Township is currently working on a Master Plan for land use planning. Local development decisions affect your quality of life in many ways, including: a healthy environment, clean and plentiful water, safe roadways, compatible land uses, adequate public facilities, and impacts to property values and taxes. A Master Plan is the blue print for a municipality that depicts current land uses, and guides decisions for both growth and conservation in your community. The Master Plan will include a chapter on Future Land Use, which will help guide future zoning changes. Citizen input is an integral part of the Plan. Please complete the following questionnaire. Your responses are anonymous and will be reported in group form only. Please return your completed survey to the Ford River Township Hall.

Please circle one of the answers below.

a. Less than one yearb. Between 1 and 5 years

1. How long have you lived and/or owned property in Ford River Township?

Between 5 and 10 year	rs			
l. Between 10 and 20 ye	ars			
e. More than 20 years				
2. Do you live in Ford I	River Township year ro	und?		
ı. Yes				
o. No				
B. What strategy woul	d you prefer for growt	h management in Ford	l River Township?	
. Growth encouraged	, ,		•	
o. Growth takes its own o	course			
Planned and limited gr	rowth			
l. Goal of no growth				
I Place chack the be	ox that comes closest to	o vour oninion for oad	h of the following gue	stions:
i. Please check the bo	ox that comes closest to	o your opinion for each	ii oi tile iollowilig que:	Stions.
a. Overall how would y	ou describe the quality	of life in Ford River To	wnship?	
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
•	the overall quality of y	_		
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
	rd River Township as a រុ	place to raise children?		
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
	rd River Township as a _ا			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
•	rd River Township as a ہ			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
5. Please rate each of	the following characte	eristics as they relate to	o Ford River Township	as a whole:
a. Sense of community	,			
	☐ Good	☐ Fair	□Poor	□Don't know
o. Overall appearance	of Ford River Township			
☐ Excellent	□ Good	☐ Fair	□Poor	□Don't know
. Quality of the K-12 s	chools in the Ford Rive	r Township area		
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know

d. Opportunities	to attend cultural	activities			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Dor	n't know
e. Opportunities	for leisure-time ac	tivities			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Dor	n't know
f. Shopping oppo	rtunities				
☐ Excellent	☐ Good	☐ Fair	□Poor	□Dor	n't know
g. Recreation opp					
☐ Excellent	☐ Good	☐ Fair	□Poor	□Dor	n't know
h. Job opportunit		_	_	_	
□ Excellent	Good	☐ Fair	□Poor	□Dor	n't know
i. Access to afford					
□ Excellent	☐ Good	☐ Fair	□Poor	∐Dor	n't know
j. Economic devel		— .			
☐ Excellent	☐ Good	☐ Fair	□Poor	∐Dor	n't know
6. To what degre	ee are the followir	ng problems in Ford	River Township?		
a. Drugs		O per distriction in 1 or or			
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
b. Taxes	- P	P P	-) -		
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
c. Growth	,	, ,	, ,		
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
d. Crime					
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
e. Traffic					
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
f. Run down hom	es and buildings				
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
g. Parking					
☐ Not a problem	☐ Minor problem	☐ Important problem	☐ Major problem	☐ Extreme problem	☐ Don't know
7 Diago voto th	a anacal of avoidable	in the fellowing so	ctions of Ford River T	aurahin ayar tha na	act C was are.
	· · ·	i in the following se	ctions of Ford River 1	ownship over the pa	ast 5 years:
a. Population gro		lavv. 🗖 Diahtamavnt	Communication foot	□ Mush to a fact	□ Dan/t-lina
☐ Much too slow	☐ Somewhat too s	iow Light amount	☐ Somewhat too fast	☐ Much too fast	☐ Don't know
b. Business/retail	Growth ☐ Somewhat too s	low Dight amount	□ Comowhat too fact	□ Much too fost	□ Don't know
☐ Much too slow	☐ Somewhat too s	iow Light amount	☐ Somewhat too fast	☐ Much too fast	☐ Don't know
c. Job growth	Comeniuhet to co	lavv. 🗖 Diahtamavnt	Communication foot	□ Mush to a fact	☐ Don't know
☐ Much too slow	☐ Somewhat too s	iow 🗀 Right amount	☐ Somewhat too fast	☐ Much too fast	□ Don't know
8. Overall, how w	vould you rate the	quality of services	provided by Ford Rive	er Township?	
☐ Excellent	□ Good		Poor	-	n't know
O How do you wa	to the succlitures of a	ach of the followin	a Foud Divou Townshir	com/icos?	
	• •	acii di the followin	g Ford River Township	services?	
a. Planning and zo		□ r. ·		П.	a/4 lun a
□ Excellent	☐ Good	☐ Fair	□Poor	⊔Dor	n't know
b. Fire services		П г.:	□n	Пъ	o't know
☐ Excellent	☐ Good	☐ Fair	□Poor	⊔Dor	n't know

c. Electric services						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't kno	ow
d. Water services						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't knd	ow
e. Recreation facilities						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't knd	ow
f. Park maintenance						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't knd	ow
g. Parks in general						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't knd	ow
h. Cleanliness of streets						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't kno	ow
i. Street lighting						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't kno	ow
j. Water quality						
☐ Excellent	☐ Good	☐ Fair	□Poor		□Don't knd	OW
10. Please rate the follow	wing statements by ch	necking the box	that most clo	sely represents	your opin	ion:
a. I receive good value fo	or the Township taxes	that I pay				
☐ Strongly agree ☐ Ag	gree 🔲 Neither agre	e nor disagree	□Disagree	☐Strongly disagr	ree 🗆	Don't know
b. I am pleased with the	overall direction that I	Ford River Tow	nship is taking			
☐ Strongly agree ☐ Ag	gree 🔲 Neither agre	e nor disagree	□Disagree	☐Strongly disagr	ree 🗆	Don't know
c. I am well informed on	major issues in Ford R	iver Township				
☐ Strongly agree ☐ Ag	gree 🔲 Neither agre	e nor disagree	□Disagree	☐Strongly disagr	ree 🗆	Don't know
d. Ford River Township v	velcomes citizen involv	vement				
☐ Strongly agree ☐ Ag	gree Neither agre	e nor disagree	□Disagree	☐Strongly disagn	ree 🗆	Don't know
44 104 1	_					
11. Where do you work?	?					
a. Ford River Township						
b. ☐ Outside of the Towns	• • • • • • • • • • • • • • • • • • • •					
c. Outside of Delta Coun	ity, but in Michigan					
d. Outside of Michigan						
e. □ Retired						
OPEN ENDED QUESTIONS: 12. What do you feel will b		rtant issue facin	g Ford River Tov	vnship over the I	next severa	ıl years?

13. Please use the following space for comments, suggestions and solutions you would like Ford River Township to consider.

Ford River Township Citizen Survey Results

1. How long have you lived a	nd/or ov	wned pro	perty in	Ford Rive	r Township	? 129 res	ponses	
a. Less than one year	2	1.6%	. ,		•		•	
b. Between 1 and 5 years	17	13.2%						
c. Between 5 and 10 years	12	9.3%						
d. Between 10 and 20 years	37	28.7%						
e. More than 20 years	61	47.3%						
2. Do you live in Ford River To	ownship	-	nd? 129	response	s			
a. Yes	92	71.3%						
b. No	37	28.7%						
3. What strategy would you pa. Growth encouraged	orefer for 40	r growth 32.3%	manageı	ment in Fo	ord River To	ownship?	124 responses	
b. Growth takes its own course	42	33.9%						
c. Planned and limited growth	43	34.7%						
d. Goal of no growth	5	4.0%						
4. Please check the box that	comes cl	osest to	your opi	nion for e	ach of the	following	questions:	
a. Overall how would you des ☐ Excellent 40 – 31.7 ☐ G	cribe the	•	of life in F		•	126 resp 0-0.0%	onses Don't know	6- 4.8%
b. How would you rate the ov Excellent 40-31.7%	erall qua ood 64 –		_	orhood? 17 – 13.5%	•	nses 1 – 0.8%	□Don't know	4-3.2%
c. How do you rate Ford River Excellent 35 – 28.0%		ip as a pl - 45.6 %			n? 125 res □Poor 0 – 0		on't know 24 – 19.2%	
d. How do you rate Ford River ☐ Excellent 44 – 34.6% ☐ G			ace to liv		•	1-0.8%	□Don't knov	w5 3.9%
e. How do you rate Ford River ☐ Excellent 45 – 38.8% ☐ G	Townsh			tire? 116 15 – 12.9 %	•	3 – 2.6%	□Don't know 8 – 6	5.9%

5. Please rate each of the following characteristics as they relate to Ford River Township as a whole:

a. Sense of community 1	-	istics as they relate to	Toru Miver Township	as a wilole.	
☐ Excellent 12 9.6%	☐ Good 55 44.0%	☐ Fair 39 31.2%	□Poor 6 4.8 %	□Don't know 10.4%	13
b. Overall appearance of ☐ Excellent 11 8.7%	Ford River Township Good 80 63.5%	126 responses ☐ Fair 30 23.8%	□Poor 3 2.4%	□Don't know 1.6%	2
c. Quality of the K-12 sch ☐ Excellent 4 3.3%	nools in the Ford River □ Good 33 27.5%	Township area 120 re ☐ Fair 17 14.2%	sponses □Poor 8 6.7 %	□Don't know 48.3 %	58
d. Opportunities to atter ☐ Excellent 2 1.7%	nd cultural activities 1 □ Good 34 29.3 %	16 responses □ Fair 32 27.6%	□Poor 28 24.1%	□Don't know 17.2%	20
e. Opportunities for leisu ☐ Excellent 27 23.3%	ure-time activities 116 □ Good 55 47.4%	Fair 20 17.2%	□Poor 6 5.2 %	□Don't know 6.9%	8
f. Shopping opportunitie ☐ Excellent 5 4.3%	s 116 responses □ Good 26 22.4%	□ Fair 30 25.9%	□Poor 47 40.5%	□Don't know 6.9 %	8
g. Recreation opportunit ☐ Excellent 25 21.6%	ies 116 responses □ Good 55 47.4%	□ Fair 28 24.1 %	□Poor 4 3.3%	□Don't know 3.3%	4
h. Job opportunities 114 Excellent 1 0.9%	l responses □ Good 9 7.9 %	□ Fair 22 19.3%	□Poor 58 50.9 %	□Don't know 21.1%	24
i. Access to affordable ho ☐ Excellent 6 5.3%	ousing 113 responses	□ Fair 32 28.3 %	□Poor 3 2.7 %	□Don't know 22.1%	25
j. Economic developmen □ Excellent 1 0.9%	t 114 responses ☐ Good 18 15.8%	□ Fair 35 30.7 %	□Poor 34 29.8%	□Don't know 22.8%	26

6. To what degree are the following problems in Ford River Township? a. Drugs 115 responses ☐ Not a problem ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 10 24 24 6 2 49 8.7% 20.9% 20.9% 5.2% 1.7% 42.6% b. Taxes 116 responses ☐ Not a problem ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 21 40 29 12 7 34.5% 2.5% 10.3% 6.0% 18.1% 6.0% c. Growth 114 responses ☐ Not a problem ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 39 35 18 3 1 18 34.2% 30.7% 15.8% 2.6% 0.9% 15.8% d. Crime 116 responses ☐ Not a problem ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 17 54 21 1 1 22 14.7% 46.6% 18.1% 0.9% 0.9% 19.0% e. Traffic 117 responses ☐ Not a problem ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 41 37 20 6 6 35.0% 31.6% 17.1% 6.0% 5.1% 5.1% f. Run down homes and buildings 117 responses ☐ Minor problem ☐ Not a problem ☐ Important problem ☐ Major problem ☐ Extreme problem ☐ Don't know 28 41 24 1 4 16 23.9% 35.0% 20.5% 3.4% 3.4% 13.7% g. Parking 115 responses ☐ Not a problem ☐ Don't know ☐ Minor problem ☐ Important problem ☐ Major problem ☐ Extreme problem 77 21 2 0 0 15 67.0% 18.3% 1.7% 0.0% 0.0% 13.0% 7. Please rate the speed of growth in the following sections of Ford River Township over the past 5 years: a. Population growth 115 responses ☐ Much too slow ☐ Somewhat too slow □ Right amount ☐ Somewhat too fast ☐ Much too fast ☐ Don't know 3 15 52 11 5 2.6% 13.0% 45.2% 9.6% 4.3% 25.2% b. Business/retail growth 115 responses ☐ Much too slow ☐ Somewhat too slow ☐ Much too fast ☐ Don't know ☐ Right amount ☐ Somewhat too fast 26 42 2 16 36.5% 22.6% 25.2% 0.0% 1.7% 13.9% c. Job growth 115 responses ☐ Much too slow ☐ Right amount ☐ Somewhat too fast ☐ Much too fast ☐ Don't know ☐ Somewhat too slow 43 19 18 2 33

37.4%

16.5%

15.7%

0.0%

1.7%

28.7%

8. Overall, how would y	ou rate the quality	of services provided	d by Ford River Townsh	nip? 115 responses
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
16	62	25	3	9
13.9%	53.9%	21.7%	2.6%	7.8%
9. How do you rate the	quality of each of th	ne following Ford Ri	iver Township services	?
a. Planning and zoning	g 115 responses			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
13	25	50	5	22
11.3%	21.7%	43.5%	4.3%	19.1%
b. Fire services 115 re	esponses			
☐ Excellent	□ Good	☐ Fair	□Poor	□Don't know
43	34	17	0	21
37.4%	29.6%	14.8%	0.0%	18.3%
c. Electric services 113	3 responses			
☐ Excellent	□ Good	☐ Fair	□Poor	□Don't know
14	42	36	8	13
12.4%	37.2%	31.9%	7.1%	11.5%
d. Water services 115	responses			
☐ Excellent	□ Good	☐ Fair	□Poor	□Don't know
24	32	41	8	10
20.9%	27.9%	35.7%	7.0%	8.7%
- December (callete	110			
e. Recreation facilities	•	- - ·	П.	5 5 7.1
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
12	45	26	7	20
10.9%	40.9%	23.6%	6.4%	18.2%
f. Park maintenance 1	L10 responses			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
7	36	49	9	9
6.4%	32.7%	44.5%	8.2%	8.2%
g. Parks in general 11	LO responses			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
5	31	33	19	22
4.5%	28.2%	30.0%	17.3%	20.0%
h. Cleanliness of stree	ts 113 responses			
☐ Excellent	☐ Good	☐ Fair	□Poor	□Don't know
14	17	54	19	9
12.4%	15.0%	47.8%	16.8%	8.0%
i. Street lighting 113 r	esponses			
☐ Excellent	□ Good	☐ Fair	□Poor	□Don't know
3	7	49	47	7
2.7%	6.2%	43.4	41.6%	6.2%
j. Water quality 115 re	esponses			
☐ Excellent	Good	☐ Fair	□Poor	□Don't know

17382932714.8%33.0%25.2%2.6%23.5%

10. Please rate t	the following s	tatements by ch	neckin	g the box	that most cl	osely represents you	r opinion:
a. I receive good	l value for the ⁻	Township taxes	that I p	pay 119 r	esponses		
☐ Strongly agree	☐ Agree	☐ Neither agre	e nor di	isagree	□Disagree	☐Strongly disagree	☐ Don't know
6 - 5.0%	44 - 37.0%	39 - 32.8%			13 - 10.9	9 - 7.6%	8 - 6.7%
b. I am pleased v	with the overal	I direction that I	ord R	iver Towi	nship is taking	g 118 responses	
☐ Strongly agree	☐ Agree	☐ Neither agre	e nor di	isagree	□Disagree	☐Strongly disagree	☐ Don't know
8 - 6.8%	40 - 33.9%	41 - 34.8%			9 - 7.6%	2 - 1.7%	18 - 15.3%
c. I am well infor	med on major	issues in Ford R	iver To	ownship	118 response	es	
☐ Strongly agree	☐ Agree	☐ Neither agre	e nor di	isagree	□Disagree	☐Strongly disagree	☐ Don't know
6 - 5.1%	30 - 25.4%	36 - 30.5%		_	17 - 14.4%	19 - 16.1%	10 - 8.5%
d. Ford River Tov	wnship welcon	nes citizen involv	/emen	it 117 res	sponses		
☐ Strongly agree	☐ Agree	☐ Neither agre	e nor di	isagree	□Disagree	☐Strongly disagree	☐ Don't know
10 - 8.5%	40 - 34.2%	32 - 27.4%			5 - 4.3%	3 - 2.6%	27 - 23.1%
11. Where do yo	ou work? 123	responses					
a. Ford River To	ownship		10	8.1%			
b. Outside of the	ne Township, bu	t in Delta County	37	30.1%			
c. Outside of De	elta County, but	in Michigan	5	4.1%			
d. ☐ Outside of M	1ichigan		17	13.8%			

43.9%

54

e. 🗆 Retired

Ford River Township Open Ended Question Survey Results

What do you feel will be the single most important issue facing Ford River Township over the next several years?

- Road maintenance
- Limited growth. Maintain current zoning and our quality of lifestyle
- M-35 Heritage Corridor
- Electricity and road repair
- Encourage economic development
- Encourage residency here
- Keeping the tax rate down
- Ability to limit the purchase of land for the sole purpose of subdivisions/house building for profit
- Keeping taxes low
- Economy-loss of jobs in the local area
- Destruction of quality of living by MDOT. There are more driveways between the River and Breezy Point than in Escanaba, yet speed and volume of traffic continue to increase
- Attracting families to live here, therefore, being able to reopen the school
- Attracting people to run for Township offices that are fully qualified and capable to continue things that have begun
- The unrealistic assessed value on our home, look at all the homes along the lake that aren't selling
- Taxes
- Jobs
- Zoning enforced-at least on example on Port Pt. Road
- More and more people are moving out of Delta County to find work. I am worried that
 if EMP and New Page fail we will no longer be able to stay here
- Property taxes
- Lack of employment
- Taxes are too high for this area
- Get absentee homeowners to mow lawns and keep homes street presentable
- Do something about falling down structures
- Make people clean up (recycle) junk metal scrap
- Keeping Ford River "rural"
- The volunteer fire dept is a good organization
- We appreciate Ford River water but aren't crazy about the metering system
- Traffic on M-35
- Road maintenance/paving
- Water quality
- Increase of building along the Bay/Lake shore
- Reducing property taxes

- Job creation in the County
- Stabilizing taxes
- Increase use of Ford River. Dredge and build retaining wall; rentals in the summer for boating, kayaking, tubing, winter ice shanties
- Better roads
- Maintain green space/privacy
- Expand natural gas lines
- Expand Township water service
- Development and zoning w/community cooperation
- Zoning
- Junk cars and trash in yards
- Enforcing the blight ordinances already in place!
- Enforcing the speed zones on M-35. When we come out of our drive we are taking our lives in our own hands
- Economic issues
- Employment opportunities
- Communication w/residents
- Economic growth
- A small majority trying to implement big city ideas on our small rural setting that we like as is
- Overpopulation destroying the country flavor
- Funding
- Pushing the average citizen out b/c of high cost property taxes b/c of the home the neighbor builds
- Getting Township governance in line w/today's technology, ordinances and trends to make it affordable and productive for its residents and businesses
- Water system and traffic enforcement are important to work on
- Sewage
- Revenue
- Casino traffic disrupting peace and nature
- Budget
- Save the wooded areas and low swampy areas
- Some of the farming area might be changed to residential
- Urban sprawl
- Global warming
- Economy
- Make this a community where people want to live and move into
- Two areas that need improvement are zoning and road repair
- High water rates
- Very little growth
- Water service
- Sewer system down the road

- Cost of water
- Getting more people involved instead of the same people
- Water
- Taxes
- Water services and billing
- Loss of people due to jobs
- Keeping a good supervisor! Good work Larry!
- I am not really sure. I know the water issue has been an issue in the past. Hopefully this can/will get settled in the near future. I also know the Township has been working diligently on this.
- Property taxes
- Overcrowding of coastal area
- Growth
- Jobs
- Zoning; too strict, 100 foot lots should be fine with respect to average size house/income in the area
- Taxes
- To not have property taxes increased
- As with the rest of the US, our jobs and housing-the lack of jobs in our area and housing cost depreciation
- Growth and zoning
- Trying to find a reasonable solution to the water problem
- Bureaucracy
- The high water rates discouraging families, retirees and businesses from staying in or moving to Ford River
- M-35 truck traffic
- Taking care of traffic problems
- Taking care of water system
- Well-planned growth
- Land management
- Rising taxes
- Not letting individuals determine what is best for the entire Township
- Establishing a good master plan that will protect the environment, be good for residents and keep costs down
- Deciding a direction to move in and what to actually promote growth wise. Choosing if business, environmentally sage and to bring some kind of jobs for various people
- Water
- Keeping taxes down while providing sufficient services. The services provided now are more than adequate

Please use the following space for comments, suggestions and solutions you would like Ford River Township to consider.

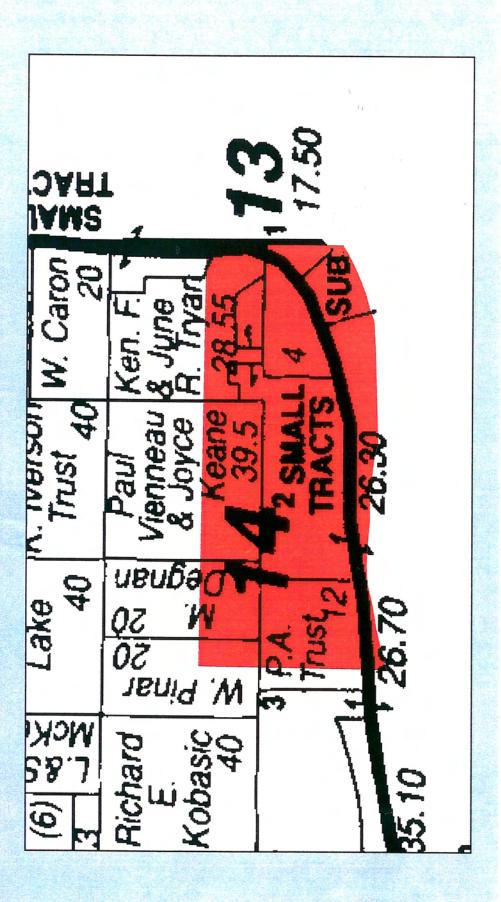
- It would be an asset for those living past the Ford River to get cable to those areas. In the age of the internet we really need high speed cable internet.
- Could use a cell tower that will service residences south of Ford River along M-35 near Delta/Menominee line
- School
- Replace water line on Gerald Rouse Road
- When someone moves into Ford River, I think there should be a packet of information including town meetings, area ordinances, and list of board members, a "welcome" letter and a list of businesses. (I like to do local businesses)
- Garbage pickup
- Newsletter
- I would like to be able to get to the 40 acres that I own and pay taxes on. I inherited the property from my father, who had inherited it from his mother and we can't get to it at all. How fair is that? They hunt on our property but I can't.
- The Township's visual appearance is extremely disheartening. So much junk and old cars in yards. Isn't there an ordinance for this and shouldn't it be enforced?
- Better maintenance of F Lane
- Please consider planned, strategic revenue building that also maintains the quality of life in Ford River
- Ford River is a very nice community. However, I believe something should be done to clean up the junk cars, trucks, equipment, trash buildings etc. that are allowed to sit in front yards of many residents. For me it is hard to differentiate b/w a home and a junk yard. Clean up the junk!
- A skating rink for citizens; a baseball field.
- If someone wants to start a small business from their home they should be allowed to do so.
- Need to provide alternatives to areas that do not perk for drainage and septic systems.
- Jobs
- Lower speed on M-35 to 40mph; speed too high for children, walking and biking and making left and right turns
- An ordinance that would prohibit fireworks on any day other than the 4th of July or at least confine it to 9-11pm only. They currently go off at all hours of the afternoon and evening, sometimes many days prior and for weeks after the 4th. It terrifies my dog!
- Taking a look at the cost of the water system-our bill has increased for such a small household that doesn't add up. It would be nice to have the school open again-what a waste of property and opportunity for our children-we love living in Ford River.
- I use my cottage as a rental-school taxes are high for me since I already pay them in Wisconsin.
- Proper continued observance of zoning and growth.
- The rate you pay for water should be based on the amount used. If a customer uses a lot less than the base amount they should get a lower bill. If you use 2,000 gal. but are

- allowed 5,000 you should not have to pay for the extra 3,000. Part-time residents should get a break also.
- Lower water rates after base fee is paid.
- Contract w/garbage hauler to negotiate a lower rate for Township residents.
- Have a recycling day where people can bring stuff to the Township Hall to dispose of (washers, refrigerators, tv's, etc).
- Send out a letter once or twice a year that summarizes Township budget, water budget, upcoming events, votes, and general communications.
- Seeing to it that road shoulders are all mowed-not hit and miss.
- Checking up on property that has a lot of junk lying around.
- Not to let people who have a summer home or just move in try to dictate what goes on in the Township.
- A thank you to Larry for being available and helpful.
- Clean water spilling from L.15 Lane to river
- Look into solutions to reduce costs to residents, such as-wind power to produce electricity.
- Find better ways to keep residents informed of what is going on.
- Find ways to lower property taxes and/or make sure taxes are based fairly for all residents.
- Reduce taxes based on the loss of value
- We would like to decide what to do w/our own property. Residential, farming, develop, etc. We bought our 40 acres to do with it as we please. On 40 acres we should not have to follow any state, county or township building codes. Zoning and overall appearance are necessary.
- Consider a condo development on the lakeshore.
- For a small rural town or township the expense of a master plan is probably overkill/overreach. Besides Obama's debt will make growth just a dream.
- Do not make major changes to any area of the Township w/o letting people that would be affected know what is being proposed.
- Need side roads paved to encourage growth and property values.
- Better roads/streets
- I have a seasonal home and have to pay high taxes.
- The water quality/taste is the best I have ever had!
- Do not divide property into small lots, we don't need another Escanaba here!
- Develop some opportunities for residents to better appreciate this community, i.e. a "nature center," walking trails adjacent to river/lakeshore at access site, annual meeting and/or newsletter for water system customers to update them on status/rates/news.
- Work for better traffic enforcement on M-35 to keep speeds down for this neighborhood.
- Enforce zoning laws.
- Review individual special requests for property owners w/respect and consideration
- Would like to maintain its rural appeal.
- Plan more community wide events at the hall.

- Maintain proper balance between individual property owners rights vs. rights of Township as a whole.
- Garbage pickup at a reasonable rate.
- Would like water meter readings to show actual usage per home instead of volume increments.
- Taxes are too high for this area.
- Run down homes.
- Bike and walking path along M-35.
- A more uniform mailbox requirement. Some mailboxes detract from road appearance.
- Water line connection to Escanaba water.
- Better appearance on Ford River/Lake Michigan area so higher priced homes are built-higher tax revenues result.
- Thank you for all of the hard work you do to make Ford River a wonderful place to live. Even though it is not said, you are all appreciated.
- Need ordinance to clean up run down homes-maintenance of laws.
- Vacant home on M-35 needs to be checked.
- We need better channels of communication. The core of Ford River Township feels like a click and I'm not a part of it.
- We have to preserve the wild open spaces of FR so we maintain its natural beauty and character. Keep the wilderness look, that's what makes it so attractive.
- Stop allowing large tracts of land to be sold and developed for profit. Too many houses are being built and sold for profit. Our privacy is being compromised.
- Exercise control of traffic volume and road (highway) location. If we have zoning requirements then other government agencies should honor it.
- We really appreciate the facilities at the Town Hall for the kids.
- Clean up some of the yards and property in the Township.
- We are retired. We have not needed Township services. Roads are satisfactory. Would like better internet service than dial-up. Would like cellular phone service for our Cingular phone. Cable would be nice.
- It would be really nice to get Ford River School going again.
- We have lake property and the DNR is stopping us from improving on our property.
- My wife and I are pleased with how things are going.
- Why is my family not allowed to camp on my property until something is built on it?
- I seriously would like to see the Township acquire ownership of the Rod River Elementary School as a community center. There are numerous possibilities for its use-including renting parts of it out to others.

Appendix C

Areas of Concern Due to Groundwater Quality



AREAS OF CONCERN DUE TO GROUNDWATER QUALITY BREEZY POINT

Legend

Areas of Groundwater Quality Concern - Residents Served by:

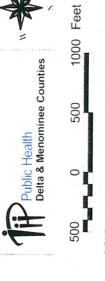
Community or Private Water Wells Community Water Systems Private Water Wells

The Areas of Concern boundaries are approximate. Private water wells within these areas may or may not produce water of degraded quality. The Areas of Concern shown on this map may not represent a comprehensive list. The indicated Areas of Concern are determined require special water well construction to protect locations Public Health, Delta & Menominee Counties has public health. The Areas of Concern served by community boundaries. The indicated community water systems water systems are displayed as the water distribution provide safe water to their clients. Area of Concern boundaries have been estimated and digitized by Public Health, Delta & Menominee Counties personnel.

Source of digital base files: Michigan Resource Information System, Michigan Department of Natural Resources

This map is designed for general planning purposes only and not for making site specific decisions

Map produced by Lori Schultz





#01043

Areas of Concern Due to Groundwater Quality, Delta County*

/27/2010

Site	Description of Problem	Possible Solution(s)	Special Water Well Construction Requirements	Approx. # of Households Affected
Breezy Point	Bacterial contamination through surface water infiltration into poorly constructed wells	Extend Ford River Twp. community water system; abandon poorly constructed wells; drill replacement water wells	Six inch casing grouted into blue shale (Lower Trenton Formation)	20-30

*Source of information: Public Health, Delta & Menominee Counties

The Areas of Concern may not represent a comprehensive list. The indicated Areas of Concern are primarily locations the Public Health, Delta & Menominee Counties has determined require special water well construction to protect public health. Community water systems provide safe water to their clients.

Report created 11/14/95; last updated 11/6/08