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# REPUBLIC TOWNSHIP

## MASTER PLAN

2024 - 2029



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## 1.1 Introduction

The preparation of this Master Plan represents many months of study, analysis and review by the Republic Township Planning Commission. Existing Conditions and circumstances that affect the Township are discussed in Chapters 2 through 8. Chapters 9 and 10 use background information as a basis for developing goals and strategies as well as plans for the future.

A Master Plan is a land use and infrastructure plan that sets forth local goals, objectives and policies for community growth and development over the next 5 years. The Master Plan serves as the basis for the local zoning ordinance, subdivision regulations another local land use regulations as well as ensuring that capital improvements are consistent with the community goals and policies expressed in the Master Plan. With this in mind, the Master Plan represents a statement about what the community is, what the residents of the Township value, and what they hope the community will become.

Republic Township is faced with some serious issues regarding its future, therefore establishing and informed basis for decision making it a priority. The Michigan Planning Enabling Act, Public Act 33 of 2008, mandates the Planning Commission as the agency to create the Master Plan and describes the process in detail. The Master Plan will also discuss the current zoning districts and regulations in the Township and explain how the zoning districts are related to the districts covered in the Future Land Use Plan. Once this plan is adopted, it will serve as the guide to the development of some areas, to conserve other areas and to lead the Township for the capital improvements plan.

There has been considerable interest in planning for the Township's future. In 2006 a meeting held at the Republic Michigamme High School and chaired by the principal produced a plan and highlighted a number of concerns. Several of the concerns have been addressed and some issues still remain. A Township Recreation plan was developed in the 1990's and updated in 2013 and 2019, and most recent in 2023. A number of changes in the area have prompted this larger scale plan, which is designed to examine the Township's present status regarding recreation, as well as the potential for recreational development.

The Master Plan is the end result of a growing interest in taking action for the future of our community now. It also represents a great interest in having some influence on the Township's future so that it will remain a beautiful place to live as well as supplying the needs of its citizens. This plan reflects the community's deep concern for the natural beauty of the surroundings and a strong commitment to retain and strengthen the Township's quality of life.

In summary, 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. To that end, this plan will remain a “work in progress” and will require timely and thoughtful revision to be of the greatest value.

## 1.2 Historical Background

Republic and the mine which shares its name have been linked since the moments of their joint beginning. A map of the region dated 1871 shows just the one structure, likely to be the first house built in Republic by the mine geologist in 1870. A map dated 1872 illustrates a community named Iron City and a mine. The bluff which overlooked the Michigamme River was earlier found to contain “lenses” of high grade iron ore. The digging in the face of the bluff was the beginning of mining in Republic. When the lenses gradually played out, the mining continued in the digging of shafts which eventually extended half a mile into the earth. The name “Republic” appeared in 1873 when the Post Office serving the local population adopted the mine name for its mailing address, in all likelihood by the postmaster. In 1903, The Republic Iron Company was sold to Cambria Iron Company. The mine was sold again in 1913 to Cleveland Cliffs Iron Company, with whom the township’s destiny has been locked for years.

In 1890, the population of the village was 2,590 people, at a time when transportation was largely by railroad or horses. At one time Republic was served by these railroads. All of the needs of the residents had to be supplied by the railroad. By 1920, the population had slipped to 2,074 and by 1926 Cleveland Cliffs was faced with the cost of hauling ore a half mile up to the surface and the depletion of high quality ore and closed the mine. With the coinciding national depression, the community experienced hard times.

An interesting note from the mine manager in the 1920’s casts some light on the mindset of the community when he noted in a letter that “it is difficult to obtain labor because they prefer to go to Iron Mountain to the Ford Plant”. As we look at the history of the town we see that there has been a constant drain of manpower to neighboring communities from 1920 into the present. The appeal of the Ford Plant was higher wages, a cleaner workplace and regular hours. In those years, it is likely that “working away” was the answer to a lack of jobs in Republic. This trend continues into the present time.

Local government functioned almost as though it was a part of the mine, given that the mine manager also typically served as the Township Supervisor. At the time, government at the local level was likely to serve the interests of the mine. Thus, the closing of the mine in 1926 not only left a deep economic hole, but also left the government in the hands of people who had little experience governing. By 1950, word was out that CCI was going to open a low grade ore mine

using a pellet making process to improve the quality of the ore. Even with the announcement, nothing could stem the slow slipping away of the population; in 1950 there were 1490 people in the village.

The expansion of open pit mining provided employment for an average of 800 workers. That same expansion brought about two other changes that made a significant impact on the community. The first was the relocation of the main north/south transportation corridor, M-95, so that it bypassed Republic. The second and most significant was the initiation of a program to relocate houses from the Republic to a new location about 3 miles south of the village of Republic. The program began with the relocation of the first house in 1955. Homes on mine property were relocated from Swede Town Hill, Park City and portions of Republic.

This process resulted in serious divisions in the community between those who sought to preserve the town, particularly the businesses, and those who supported for one reason or another, the move south. Many community members were left with a sense of hopelessness and resignation due to the move. The end result was the moving of about one fourth of the families and their homes from the village of Republic and the establishment of a new location called South Republic. The Township Supervisor, Henry Adams, found a program which would have provided a grant for moving a small number of homes, perhaps four or five a year. This grant could be renewed each year to move an additional four or five homes. Conflict and resentment over the move appears to have been so great that the program was not put into operation.

In 1981, economic conditions were deteriorating and the demand for steel was down. Cleveland Cliffs chose to close the Republic Mine and many businesses in the community gradually closed or the owners moved. Those who remained have been distressed by conditions they had little control over. One of the little noted effects of the economic problems has been the loss of trained and successful managers. Very little capital was left in the community and the business closures left few venturesome individuals in the community. The best and the brightest of the high school moved on to live their lives elsewhere. The combination has left the community with an ongoing series of problems both economically and socially.





## Chapter 2.0 Population

### 2.1 Introduction

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

### 2.2 Population Trends

Republic, the community, began to take form concurrently with the mine it served. A map of the area dated 1871 shows one cabin in the forest along the Michigamme River. This was likely the cabin built in 1870, by the geologist for the mine. A map of the same area dated 1872 shows both a mine and a small community. The population at that early time is not known, but the 1890 census shows the population of Republic and its ethnic communities, Park City, Swede Town, Finn Town and French Town to be 2,590. This fairly large population was documented at a time when transportation was largely by horse and rail. All of the needs of the populace had to be supplied in the town. By 1920 the population had slipped to 2,074 and by 1926 Cleveland Cliffs, faced with the cost of hauling ore a half mile up to the surface and the depletion of high quality ore, chose to close the mine.

The population of the Township has been on the decline since 1970, when the population was 1,442. The population, according to the 2020 Census is at 994. The population decline in the Township coincides with the closing of the Republic Mine in 1981.

Communities surrounding Republic Township have experienced a similar decline since 1960. Champion Township, the City of Ishpeming and the City of Negaunee have all experienced large population decreases since 1960. In contrast, each of the remaining townships in Marquette County has experienced a marked increase in population. Area township populations have increased due to an out-migration of residents from urban to rural areas that offer lower taxes, lower densities, larger lot sizes, lower development costs, a more rural lifestyle, and lower incidences of crime.

The trend of population growth for most townships that surround cities is not simply a local phenomenon. In major metropolitan areas this trend takes the form of migration from the city to its surrounding suburbs, while in smaller urban areas people are moving into surrounding rural areas. There are many reasons for this migration, including lower taxes and user fees, lower development costs, a desire for a more rural lifestyle, lower incidences of crime, desire for larger residential lots, etc. Over the past two decades, the population growth in most townships surrounding Upper Peninsula cities has been substantial.

Area population trends are illustrated in Table 2-1.

<b>Table 2-1 Population Change, Selected Areas, 1970-2020</b>			
<b>Area</b>	<b>2010</b>	<b>2020</b>	<b>Change 2010-2020</b>
<b>Republic Twp.</b>	<b>1,060</b>	<b>994</b>	<b>-6%</b>
Ishpeming Twp.	3,513	3992	+1%
Champion Twp.	297	250	-16%
Ely Township	1,952	1900	+3%
Ishpeming City	6,470	6188	-4%
Marquette Twp.	3,905	4140	+6%
Negaunee City	4,568	4627	+1%
Negaunee Twp.	3,088	3232	+5%
Powell Twp.	816	734	-10%
Tilden Twp.	1,013	1045	+3%
Marquette County	67,077	66,661	-6%
Central U.P.	172,429	N/A	N/A
Michigan	9,883,640	10,077,331	+2%
United States	308,745,538	331,449,281	+7%

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

**Population Change**

Population change is the result of a combination of natural increase and migration. When births within a community within a period of time exceed deaths, a positive natural increase occurs. If deaths exceed births, a negative natural increase is the result. Communities with a relatively young population tend to have a high natural increase, due to a higher birth rate. 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 significant out-migration as residents leave in pursuit of employment opportunities elsewhere.

In Marquette County, births exceeded deaths in every decade from the 1960s to the 2000s. The net population decrease in Marquette County beginning in the 1980s can be explained by the large out-migration surpassing the County’s natural population increase. This information is presented in Table 2-2.

	1970-79	1980-1989	1990-1999	2000-2010	2010-2020
Live Births	12,781	11,558	7,445	7,010	7566
Deaths	5,380	5,039	5,285	6,748	7471
Natural Increase	7,401	6,519	2,160	262	95
Migration	2,014	-9,733	-10,709	-2,550	N/A
Total Population Change	9,415	-3,214	-8,549	-2,288	N/A

Source: Library of Michigan/LDDS, Dept. of History, Arts and Library and Michigan Department of Community Health

[<http://www.mdch.state.mi.us/pha/osr/chi/FullTableList.asp?RegionType=1&RegionCode=52&Submit=Tables>]

**2.3 Age & Gender**

According to data from the 2020 Census, the population of the Township is somewhat older than that of the county overall. The Township’s median age in 2020 was 52.8 years, over ten years older than Marquette County as a whole. The median age in the Township increased from 41.5 years in 1990 to 52.8 years in 2020. The median age in Republic Township is considerably

higher than that of the county, the state and the nation. Table 2-4 presents comparative data regarding median age.

<b>Table 2-3</b>			
<b>Median Age, Selected Areas, 2010-2020</b>			
<b>Area</b>	<b>2010</b>	<b>2020</b>	<b>Change, 2010-2020</b>
<b>Republic Township</b>	<b>52.8</b>	<b>59.1</b>	<b>+9.4%</b>
Marquette County	39.4	39.2	-.5%
Michigan	38.9	39.8	+2%
United States	37.2	39	+5%

Source: U.S. Census Bureau for years cited

The examination of a community’s age structure is critical to sound decision making within a community. Persons ages five through 18 make up the school age portion of the population which is further divided into elementary, middle and high school age groups. The working age population is generally accepted as those from 16 to 65 years of age. Those persons 18 or older constitute the eligible voting population. Of course, not everyone between the ages of 16 and 64 is in the labor force, and not everyone 18 or older actually votes. However, this breakdown does give communities a sense of how their population is distributed for planning and comparative purposes.

In 2020 the age group of 55-64 years made up the largest portion of the Township's total population at 256 persons. The elderly population, which is composed of those 65 years and older, made up over 25 percent of the population total. Among the older age groups, slight population increases have occurred despite a decline in the general population. Growth of the older segment of the population affects the types and costs of services offered by the Township and other providers.

An analysis of the information in Table 2-4 by age cohort provides a perspective on age distribution within the population. By studying the population fluctuations within this and other groups, it is possible to evaluate the important factors of in-migration and out-migration.

Table 2-6 Population by Age Groups, Selected Areas, 2020							
Age	Republic Township			Marquette County		State of Michigan	
	Total	Percent		Total	Percent	Total	Percent
Under 5	25	2.5%	Preschool	3101	5%	568,326	6%
<b>Subtotal</b>	<b>25</b>	<b>2.0%</b>		<b>3101</b>	<b>5%</b>	<b>568,326</b>	<b>6%</b>
5-9	25	2.5%	School	3268	29%	584,830	6%
10-14	74	7.4%		3553	31%	620,965	6%
15-19	50	5%		4596	40%	653,867	7%
<b>Subtotal</b>	<b>179</b>	<b>14.9%</b>		<b>11,417</b>	<b>100%</b>	<b>1,859,662</b>	<b>19%</b>
20-34	52	5.3%	Working	15,297	23%	1,981,870	20%
35-44	62	6.2%		7247	11%	1,165,587	12%
45-54	105	10.5%		7,350	11%	1,288,586	13%
55-64	299	30%		9,299	14%	1,398,035	14%
<b>Subtotal</b>	<b>722</b>	<b>52%</b>		<b>39,193</b>	<b>59%</b>	<b>5,833,078</b>	<b>58%</b>
65-74	206	20.7%	Retirement Age	7,614	11%	1,007,792	10%
75-84	76	7.6%		3,359	5%	483,313	5%
85 and older	23	2.3%		1,719	3%	220,836	22%
<b>Subtotal</b>	<b>305</b>	<b>30%</b>		<b>12,692</b>	<b>19%</b>	<b>1,711,941</b>	<b>17%</b>
<b>TOTAL</b>	<b>997</b>	<b>100%</b>		<b>66457</b>	<b>100%</b>	<b>9,973,007</b>	<b>100%</b>

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

Although the population totals do not show radical shifts up or down, the make-up of the population is showing a steady increase in age and an accompanying loss of children and of families with children. People moving into the Township are continuing to raise the median age level, due to the fact that the majority of residents in-migrating to the Township tend to be 50 or older, pre-retirement and retirement age. As a group, these new residents bring with them an

above average income and a pool of skills in a variety of areas. They represent a great opportunity for growth and renewal but they also present an issue because as a group, they are not well integrated into the rest of the community. Contributing to the lack of integration is first, the fact that many come from a different geographical area. Second, a significant number of the new residents live in a part of the Township which has no road linking it to the rest of the Township. Third, the kind of bonds which unite people in a rural/small town area, such as growing up together, sharing school years and sharing family ties are lacking. Finally, many of the new residents live in the Township for six months or less per year, spending much of the year elsewhere. These are concerns which need to be addressed in order to build a healthy community.

It can be said that the Township is experiencing an aging population. Not surprisingly, infants and children number significantly fewer in the Township than Marquette County and even less than the state. This does not bode well for Republic Michigamme School, which is already suffering from lack of students.

<b>SCHOOL YEAR</b>	<b>ENROLLMENT</b>
2019-2020	109
2018-2019	110
2017-2018	109
2016-2017	127
2015-2016	141
2014-2015	138
2013-2014	136
2012-2013	136
2011-2012	141
2010-2011	152
2009-2010	163

Source: Mischooldata.org & Republic-Michigamme School

#### **2.4 Racial Composition**

The racial composition of the Township, consistent with the entire Upper Peninsula, is overwhelmingly white. The largest non-white racial group was identified in the American Indian, Eskimo and Aleut category. In 2000, 11 persons identified themselves as “Other races (or two or more races)”, an increase from zero reported in 1990.

Race	2010		2020	
	Number	Percent	Number	Percent
Total	1,060	100.0	994	100.0
White	1027	99.1	939	94
Black	3	0.3	0	0
American Indian, Eskimo & Aleut	17	1.6	7	0.7
Asian	2	0.2	1	0.1
Native Hawaiian and other Pacific Islander	0	0	0	0
Other Races (or two or more races)	11	1.0	3	0.3

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

### 2.5 Educational Attainment

As shown in Table 2-9 below, the 2020 American Community Survey estimates that 93.2 percent of Township residents have a high school diploma or higher, slightly lower than that of the county (95.5) and the state (91.3). Approximately 22.8 percent of residents have obtained a bachelor’s degree or higher, lower than the county (34.0 percent) and at the state (30.0 percent).

The low amount of technical certificates suggests that there may not be a deep labor pool. There is little need for college or graduate level education for employment in the Township except in the school. Most professional and technical degrees work outside of the Township in one of the three hospitals in the region, or teaching.

Educational and training requirements have been increasing for workforce entrants. Employers who previously required little in the way of formal education are, in many instances, now looking for employees with post-high school education due to the complexity of the equipment and methods being utilized in the workplace. A highly trained, educated workforce is an asset in attracting employers to a community. These figures are presented in Table 2-9.

Educational Level	Republic Township		Marquette County	State of Michigan
	Number	Percent	Percent	Percent
Less than 9 <sup>th</sup> Grade	12	1.5%	1.2%	2.7%
9 <sup>th</sup> to 12 <sup>th</sup> Grade, No Diploma	41	5.3%	3.3%	6.0%
High School Graduate	361	46.3%	29.4%	28.5%
Some College, No Degree	148	19.0%	22.7%	23.2%
Associate Degree	40	5.1%	9.5%	9.6%
Bachelor’s Degree	136	17.4%	24.0%	18.3%
Graduate or Professional Degree	42	5.4%	10.0%	11.7%
High School Graduate or Higher	727	93.2%	95.5%	91.3%
Bachelor’s Degree or Higher	178	22.8%	34.0%	30.0%

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

**2.6 Population Density**

The Township’s total land area of 119.55 square miles and 2020 population of 994 produce a population density of 98.3 persons per square mile. In recent years, many homeowners have chosen to move to the outlying townships, due to the lower population density. Total area, population and density information for selected local communities is presented in Table 2-10.

<b>Place</b>	<b>Land Area 2010 (Square Miles)</b>	<b>Population</b>	<b>Persons Per Square Mile</b>
<b>Republic Township</b>	<b>11.55</b>	<b>994</b>	<b>8.3</b>
Ishpeming Township	9.36	6160	171.1
Champion Township	124.9	250	2.0
Ely Township	140.7	1900	13.5
Marquette Township	136	20,360	149.7
Negaunee Township	14.34	4638	323.4
Powell Township	162.3	732	4.5
Marquette County	1,809.1	66017	3.5
Michigan	96,990	10,077,331	103

Source: U.S. Census Bureau, 2020.

**2.7 Population Projections**

Population projections are useful for community planning endeavors. For instance, the demand for certain types of public services can be anticipated by using sound population projections. Formulating projections is complicated and fraught with unknowns such as economic conditions, which can greatly influence migration. Other considerations, like fertility and mortality data, have much less impact.

In 1996, the Michigan Department of Management and Budget prepared baseline population projections to the year 2020 for all counties of the state using a formula that includes the three main components of population change: births, deaths and migration. The 2010 projection of 68,400 is slightly higher than the Census 2010 reported figure of 67,077, which is likely due to The Great Recession during which Michigan saw a population decrease.

The population forecast for Marquette County projects a decrease of 900 persons from 2015 to 2020. However, this is contrary to the current trend of population growth within the County. These projections are presented in Table 2-11.



**Table 2-11 Population Projections, Selected Areas, 2010-2020**

Area	2010	2015	2020
Alger County	10,000	10,200	10,200
Delta County	39,100	39,200	39,400
Dickinson County	27,700	27,900	28,100
<b>Marquette County</b>	<b>68,400</b>	<b>67,600</b>	<b>66,700</b>
Menominee County	21,500	20,600	19,600
Schoolcraft County	8,900	9,000	8,900
Michigan	10,121,300	10,285,000	10,454,700

Source: Department of Management and Budget, Population to the Year 2020 in Michigan, 1996

**2.8 Issues and Opportunities**

The Township has experienced a significant decrease in the school age and normal working age populations and an increase in the retirement age population; land use plans and community services will need to take into account the needs of older citizens.

It might be possible to increase efforts to draw younger families to the area but the distance to travel to employment makes it extremely difficult to meet the employment needs of the population in the family-forming years. Efforts to improve the businesses which serve the local populace would help build a better retention rate for younger families and are essential for older adults since the present business community is unable to do that.



## Chapter 3 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 – defined as residents 16 years of age and older; either employed at one or more jobs or is actively seeking employment. The employed portion of the labor force provides the primary economic support of the total population.

The factors that affect 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 Republic Township, but it will also include comparative data from the county, region, and state.

### 3.2 Area Economy

Since the founding of Republic in the late 1800's, mining has played an integral part of the economy for its residents and those of the surrounding areas. The vast resources of iron ore were mined first by shaft methods with this leading to the introduction of the first iron ore open pit mine being constructed in the 1950's. The community provided a great percentage of the labor force for both types of mining. Logging and agriculture have also been significant factors in the area economy.

At present, very little farming outside of the home gardens is being carried on. Forestry and logging, however, continue to provide income to area residents. A small printing company operates in South Republic. Along the M-95 corridor is an auto repair shop, a granite grave marker and monument business, a storage facility, a marijuana dispensary, and several logging businesses. The Marquette County Road Commission maintains a salt and sand depot in the South Republic area. South Republic also has a True Value Hardware store providing gasoline and some groceries, Northern Michigan Outdoor Sales sells sheds, garages, poles barns, etc., Roots of Republic sells products for gardening and growing, and a Printing/Specialty shop. The K-12 Republic-Michigamme Schools and senior citizen/low income housing units are located in the South Republic location as well.

In the downtown area of Republic, there is one bar, one restaurant, antique store, St. Vincent DePaul and a Post Office and a small convenience store. There is ample opportunity for more businesses in the area.

**3.3 Civilian Labor Force**

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.

As shown in Table 3-1, Republic Township’s civilian labor force is comprised of 293 people, 274 of which are employed. This results in an unemployment rate of almost 6.5% percent as shown in Table 3-2. This is consistent with the unemployment trend today Marquette County and the State of Michigan.

<b>Table 3-1 Employment Status of Civilian Labor Force, Selected Areas, 2020</b>			
<b>Characteristics</b>	<b>Republic Township</b>	<b>Marquette County</b>	<b>State of Michigan</b>
Civilian Labor Force	293	32,539	4,956,499
Employed in Labor Force	274	30,641	4,658,357
Unemployed in Labor Force	19	1,898	298142

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

<b>Table 3-2                      Employment Status of Civilian Labor Force, Selected Areas,</b>			
Characteristics	Republic Township	Marquette County	State of Michigan
Civilian Labor Force	293	32,539	4,956,499
Female %	50%	56.5%	57.2%
Male %	43%	43.5%	42.8%
Total Employed	274	30,641	4,658,357
Female %	53.6%	48.8%	47.9%
Male %	46.4%	51.2%	52.1%
Unemployment Rate	6.5%	5.8%	6%
Female %	0%	3.5%	5.2%
Male %	13%	7.25%	5.8%

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

**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 3-6 for selected areas. Marquette County has generally recorded lower unemployment rates than the majority of the Upper Peninsula. However, local unemployment rates are frequently higher than those documented by the state overall.

Table 3-3 provides labor force and unemployment data for Marquette County, the UP, the State and the US. Marquette County has an unemployment rate of 8.6 percent for 2020.

**Table 3-3  
Labor Force and Unemployment, 1970-2013**

Year	Marquette County Labor Force			Unemployment Percent Rate			
	Employed	Unemployed	Total Labor Force	Marquette County	Upper Peninsula	State of Michigan	United States
1970	20,225	1,425	21,650	6.6%	9.2%	6.7%	4.9%
1975	24,775	2,275	27,050	8.4%	11.6%	12.5%	8.5%
1980	26,650	3,925	30,575	12.8%	12.2%	12.4%	7.1%
1985	24,875	3,575	28,450	12.5%	15.1%	9.9%	7.2%
1990	29,325	2,650	31,975	8.3%	9.2%	7.6%	5.6%
1991	29,725	2,750	32,475	8.5%	10.6%	9.3%	6.8%
1992	30,825	2,775	33,600	8.3%	10.8%	8.9%	7.5%
1993	31,375	2,350	33,725	7.0%	8.9%	7.1%	6.9%
1994	31,450	2,400	33,850	7.1%	8.7%	5.9%	6.1%
1995	29,900	2,625	32,500	8.1%	8.9%	5.3%	5.6%
1996	29,775	2,000	31,775	6.3%	7.9%	4.9%	5.4%
1997	30,075	1,925	32,025	6.0%	7.2%	4.2%	4.9%
1998	30,325	1,625	31,925	5.1%	6.4%	3.9%	4.5%
1999	30,900	1,875	32,775	5.7%	6.3%	3.8%	4.2%
2000	31,575	1,600	33,150	4.8%	5.8%	3.5%	4.0%
2001	31,350	1,975	33,325	5.9%	6.8%	5.3%	4.7%
2002	30,075	2,325	32,400	7.2%	7.3%	6.2%	5.8%
2003	30,675	2,225	32,875	6.7%	7.4%	7.0%	6.0%
2004	33,054	2,149	35,202	6.1%	7.4%	7.1%	5.5%
2005	33,689	2,064	35,753	5.8%	7.0%	6.9%	5.1%
2006	34,001	2,173	36,174	6.0%	7.2%	6.9%	4.6%
2007	33,966	2,219	36,185	6.1%	7.4%	7.2%	4.6%
2008	33,703	2,500	36,203	6.9%	8.2%	8.4%	5.8%
2009	32,209	3,629	35,838	10.1%	12.0%	13.4%	9.3%
2010	31,693	3,440	35,133	9.8%	11.8%	12.7%	9.6%
2011	31,416	2,982	34,398	8.7%	10.2%	10.4%	8.9%
2012	31,850	2,706	34,556	7.8%	9.2%	9.1%	8.1%
2013	31,607	2,860	34,467	8.3%	9.7%	8.8%	7.4%
2014	31,488	2,380	33,868	7.0%	n/a	5%	4.5%
2015	31,507	2,039	33,546	6.1%	n/a	4.4%	3.9%
2016	31,489	1,923	33,412	5.8%	n/a	3.8%	3.6%
2017	31,097	1,811	32,908	5.5%	n/a	3.6%	3.3%
2018	30,954	1,597	32,551	4.9%	n/a	3.3%	3.1%
2019	30,942	1,598	32,540	4.9%	n/a	3.1%	2.9%
2020	29,057	2,728	31,782	8.6%	n/a	3.7%	3.4%

Source: Michigan Labor Market Information, <http://www.milmi.org/>, 2023.

**Employment by Broad Economic Division**

As shown in Table 3-4, residents of Republic Township are employed in a variety of occupations. The percentage of Republic Township residents employed in the “Agriculture, forestry, fishing and hunting, and mining” category is much higher than the percentage of county, region and Michigan residents overall.

**Table 3-4  
Employment by Broad Economic Division, Selected Areas, 2020**

Broad Economic Division	Republic Township		Marquette County	State of Michigan
	Number	Percent	Percent	
Agriculture, forestry, fishing and hunting, and mining	29	10.6%	3.5%	4%
Construction	17	6.2%	5.7%	5.9%
Manufacturing	20	7.3%	6.6%	18.1%
Wholesale trade	4	1.5%	1.6%	1.9%
Retail trade	56	20.4%	1.4%	10.7%
Transportation, warehouse, public utilities	6	2.19%	4.2%	5%
Information	0	0	1.6%	1.3%
Finance, insurance, & real estate	3	1.9%	5.3%	5.8%
Professional, scientific, and management, and administrative and waste management services	29	10.6%	7.7%	10.2%
Educational services, and health care and social assistance.	59	21.6%	2.7%	2.3%
Arts, entertainment, recreation, accommodation and food services	34	12.44%	1.3%	8.7%
Other services, except public administration	6	2.19%	4.2%	4.5%
Public administration	11	4.01%	5.7%	3.5%
<b>TOTAL</b>	<b>274</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

**Place of Work and Travel Time to Work**

As shown in Table 3-5, the 2020 American Community Survey estimates that over 85% of Township residents worked within Marquette County. Due to the remote location of the Township, residents have a commute time of 31.4 minutes, compared to approximately 18.5 minutes for Marquette County on Table 3-6. Table 3-7 shows that the majority of residents in both the Township and County drive to work alone.

<b>Table 3-5</b> <b>Residents Aged 16 or Older by Place of Work, Republic Township,</b>		
Characteristics	Number	Percent
Total Township Residents Employed	274	100%
<b>Worked In Michigan</b>	263	96%
Worked in Marquette County	234	85.5%
Worked outside of Marquette County	29	10.7%
<b>Worked Outside of Michigan</b>	11	4%

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.



<b>Table 3-6 Residents 16 or Older, Travel Time to Work, Selected Areas, 2020</b>		
	<b>Republic Township</b>	<b>Marquette County</b>
<b>Home to Work Travel Time</b>	<b>Percent</b>	<b>Percent</b>
Less than 10 minutes	12.6%	31.4%
10 to 14 minutes	3.8%	20.6%
15 to 19 minutes	9.2%	13.5%
20 to 24	6.1%	11.4%
25 to 29 minutes	7.3%	4.9%
30 to 34 minutes	26.3%	7.9%
35 to 44 minutes	6.5%	3.7%
45 to 59 minutes	19.5%	2.0%
60 or more minutes	8.8%	4.5%
Mean Travel Time to Work	<b>31.4 minutes</b>	18.5 minutes

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

<b>Table 3-7 Means of Transportation to Work, Residents Aged 16 or Older, Selected Areas,</b>			
<b>Means to Work</b>	<b>Republic Township</b>		<b>Marquette County</b>
	<b>Number</b>	<b>Percent</b>	<b>Percent</b>
Car, truck, van- drive alone	189	74.7%	79.2%
Car truck van- carpool	17	6.7%	9.3%
Public Transportation	0	0%	0.4%
Walk	23	9.1%	6.0%
Other means	0	0%	1.3%
Worked at Home	24	9.5%	3.8%

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

**Annual Household Income**

Republic Township’s median household income was \$36,250 according to the 2020 American Community Survey, compared to a median household income of \$54,384 for the county and \$59,234 for the state overall. The Township’s per capita income and median family income figures were also slightly lower than the county’s and state’s overall.

<b>Table 3-8 Income Levels, Selected Areas, 2020</b>	
<b>Per Capita Income</b>	
<b>Republic Township</b>	\$ 25,597
Marquette County	\$28,149
State of Michigan	\$32,843
<b>Median Household Income</b>	
<b>Republic Township</b>	\$36,250
Marquette County	\$54,384
State of Michigan	\$59,234
<b>Median Family Income</b>	
<b>Republic Township</b>	\$59,909
Marquette County	\$70,290
State of Michigan	\$75,470

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

Table 3-9 Households by Annual Household Income, Selected Areas,				
Annual Income	Republic Township		Marquette County	State of Michigan
	Number	Percent	Percent	Percent
Less than \$10,000	18	10.5	6.7	6.4
\$10,000 to \$14,999	5	4.1	4	4.1
\$15,000 to 24,999	40	14.6	9.4	9.2
\$25,000 to 34,999	18	12	10.6	9.6
\$35,000 to \$49,999	24	10.7	14.9	13.3
\$50,000 to \$74,999	37	19.4	21	18.2
\$75,000 to \$99,999	5	9.7	14.6	12.9
\$100,000 to \$149,000	26	8.9	12.4	14.6
\$150,000 to \$199,999	0	1	3.3	5.9
\$200,000 or more	0	2.3	3.1	5.7

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

Poverty Rates

According to the 2020 American Community Survey, 17.8% of Republic Township residents live below the poverty line. Poverty rates in the Township are slightly higher than the County and the State. 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.

Children represent a disproportionate share of the poor in the United States; this is mirrored in the statistics for the Township, County, and State. Female-headed households across the state experienced high rates of poverty, especially those households with children.

Poverty Rates by Group	Republic Township	Marquette County	State of Michigan
All Persons	17.8%	15.2%	13.7%
Persons 65 and older	8.2%	10.4%	8.5%
Children under 18	11.3%	14.4%	18.8%
Female Householders	15.85%	31.5%	12.6%
Female Householders with Children under 18	8.4%	41.5%	26.8%
Families	83.9%	8.4%	9.2%
Families with children under 18 years	23.4%	14.8%	15.6%

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates.

### 3.4 Local Economic Projects

Republic Township’s goal is to “recreate a historically interesting, economically viable and aesthetically attractive township”, and hopes to transform the community into a more tourism-based area, capitalizing on nearby recreational opportunities like camping and snowmobiling. The Township is also focused on attracting services to the Township including: gas stations, restaurants, hotels, supermarkets, banks, and a pharmacy,

Economic development ideas, some already underway, include:

- The **Republic Wetlands Preserve**, covering 2,300 acres of former mining land. In 2008, the southern part of the preserve was opened to the public with a two-mile circular walking trail. Talks are ongoing to upgrade the trail, and allow further access.
- The **Republic multi-purpose Recreational Park**, covering 92 acres of Township owned property will be developed into 2.5 miles of bicycling, mountain biking, hiking and walking trails.
- Other economic development ideas include: gas station, supermarket, bank, Pharmacy, Dr. office/clinic.
- The **IOHT Trail Head #1 Welcoming Center** is a historic building that serves as the Iron Ore Heritage trail head site.

### 3.5 Issues and Opportunities

- The marked decline in school enrollment for the past ten years is a strong indicator that the community needs to investigate options for the use of the school facilities for additional types of educational ventures.

- The presence of rail and highway linking Republic to Milwaukee and Chicago offers an opportunity for light industry such as electronics, small parts production, etc. which would do much to improve the employment picture locally in addition to retention of younger couples.
- With Republic being centrally located in the Upper Peninsula, there is a definite need for a motel/hotel along with grocery and fuel facilities.
- Marquette County continues to experience a lower rate of unemployment than the Upper Peninsula as a whole, as well as the state, but rates have been increasing over the past several years.
- Poverty rates for the Township were slightly higher than the county's and the state's. Female householders, especially those with children, experience much higher poverty rates than any other group. Programs directed toward female heads of households may be needed to help alleviate poverty in the area.
- The Township maintains an active website that promotes the four-season recreation concept.
- More adequate low- income housing is needed.
- More affordable public transportation is needed for those with low incomes to get to places of training or employment.
- A grocery store and gas station are greatly needed in North Republic as currently very limited food items are available.
- A bank, medical clinic and pharmacy are also needed in Republic to provide local communities with vital services.



## Chapter 4 Natural Features

### 4.1 Introduction

No other aspect of an area has a bigger impact on the planning process than the natural features that are found within and around the community. These features dictate what land uses are available, where people live, work and recreate and what potential exists for further development and resource production. Often, communities are established, or grow and shrink based on one or more natural features and resources. Historically, Republic Township has certainly experienced booming growth and population decline due to its natural mineral resources.

### 4.2 Water Features

Over seventy percent of the earth's surface is water. Water features, i.e. lakes, streams, and rivers have important functions as natural resources. Among those important functions is the source of water for residential and commercial development. According to a 1999 Michigan Department of Environmental Quality publication, surface water serves as a drinking water source for approximately fifty percent of the State's population. Sufficient amounts of surface water are necessary for many industries and for the generation of electricity. Surface water features are also important for recreational use and often add scenic beauty to an area.

The Michigamme River has long been a source of recreation for Township residents and visitors alike. The Michigamme River drains from Lake Michigamme in the northwest corner of the Township, running south to the border with Humboldt Township. Watersheds, or basins, collect and drain water to a common point within a topographically defined area. Much of the Township is located in the Menominee River watershed, with just the northeast corner of the Township draining into the Carp River watershed (see map 4-1). There are numerous access points on the river within the Township providing ample opportunity for recreation along its length. Boating, paddling, fishing, hiking, wildlife viewing, etc are just a few of the activities the river provides.

The river was dammed just south of North Republic, creating a series of large basins. This dam does not currently provide hydroelectric power, although it has in the past. At present the dam is owned and operated by the Michigamme River Basin Tax Increment Financing Water Improvement Authority (TIFA), an entity of the Township. The Authority has received support from a millage, MDARD, DNR, EGLE and the State of Michigan with funds for the removal of the Republic Dam. It will be replaced with a rock crib spillway with a fish passage. A permit has been applied and design is in review.

While there are a number of homes, camps and resorts along the river, the potential exists for increased development of both seasonal and year-round residences. Many tributaries empty into the Michigamme River providing additional waterfront sites.

There are numerous lakes varying in size, scattered throughout the Township with the majority found in the southern half of the Township (see Map 4-2). Two of these lakes have State Forest Campgrounds (Squaw Lake and North Horseshoe Lake [inactive]); five have public boat launch sites (Squaw Lake, North Horseshoe Lake, Witch Lake and Twin Lake, all located in the southern end of the Township and Perch Lake, located just east of Republic.)

Many lakes are dotted with camps and homes, some verging on overuse, putting these lakes at risk of pollution and draw-down of the water table. However, many lakes are under-utilized, creating the potential for much more waterfront development to take place. Safeguarding the quality of our lakes and streams is a paramount concern of this Master Plan. This can be accomplished by amending the existing zoning criteria, including but not limited to:

- Increasing minimum lot size on certain lakes to avoid potential over-burdening by septic systems and draw-down of the water table by wells.
- Increasing the minimum setbacks and encouraging growth of natural vegetation along the shoreline to protect the lakes and rivers from pesticide and fertilizer run-off as wells deforestation and silting.
- Requiring construction of water and sewage systems capable of servicing multiple units on desirable properties

Wetlands are found throughout the Township, with a major parcel found at the old Republic Mine, where 2,300 acres have been set aside as a conservation easement as mitigation for other wetlands overtaken by the mining process. The preservation of wetlands is important for the following reasons, including but not limited to: reducing flood hazard by providing areas for water storage; filtering water; providing an ecosystem for wildlife and fish; preventing soil erosion.

### 4.3 Land Features

A majority of the land surface in the Township is forestland; much of it is zoned for Resource Production (See Map 4-3 and 4-4). There are many varieties of both hard- and softwoods. This natural resource is extremely important to the economy of the Township. Not only do these forests provide raw material for the paper and construction industry and potentially for ethanol production, but the forests are also home to a variety of flora and wildlife. Another key use of woodlands is for recreation including ATV and snowmobile trails, hunting, hiking, bird watching and similar activities. The Township could develop a Forestry Plan in order to better regulate use and preservation of this resource.



There is a limited amount of agricultural land; most of it in the southern half of the Township with hay and potatoes being the dominant crops. Other agricultural pursuits include beef cattle, corn, oats, maple syrup and honey.

A considerable amount of land is designated as mining production. Although no mines are currently in production within the Township, the possible existence of desirable metals and materials as yet undiscovered may lead to a modern day mining boom in the near future.

#### 4.4 Topography

The unique character of an area is derived from the physical features of its landscape. Topography describes this character in terms of elevation above mean sea level. This reveals the size and shape of watershed and places to avoid development due to grade in excess of recommended standards.

Steep topography or slopes of 10 percent or greater (a rise in gradient of more than 10 feet in a horizontal distance of 100 feet) can be aesthetically attractive for residential development and some commercial establishments. However the steep grade increases the likelihood of soil movement or slides and the weight of structures is an added force that encourages this movement. In addition there is an added expense if development occurs on the sloping surface itself. Excavation of a hillside and/or construction of retaining walls can greatly increase building costs. There is also a problem of erosion as the water rushes down the steep grades. Natural watercourses provide the pathway for such water and should be maintained in this capacity. Soil disturbance on 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).

The topography of the Township ranges from moderately hilly in the north, with many outcroppings of bedrock occurring, to relatively flat lands in the southern half of the Township (see Map 4-1). Elevations in the Township range from approximately 583 to 1922 feet above sea level.

#### 4.5 Soils

\*Note: Much of the following information was taken from the Soil Survey of Marquette County, produced by the USDA, together with other agencies. See Appendix for more information.

Soil is the surface layer of the land that was formed through the interaction of many factors. Physical, chemical and mineral composition of the parent material combined with climate, plant and animal life on and in the soil are major factors. Other factors include time and relief, or lay of the land. Soils are grouped into associations based on common characteristics such as

drainage, slope and texture. The soils in these associations respond to the various uses to which they may be subjected.

The soils in Republic Township are generally considered fair to poor composed of glacial (gravels and sands) and heavy loams with a minimum of topsoil present (see map 4-5). This severely limits agricultural production and presents problems in developing parcels for residential use due to septic issues. All soil types present are best used for woodlands as indeed they are.

Map 4-5, Soil Types, shows that much of the Township is characterized by Goodman-Sundog-Greenwood Association soils (all but the northeast corner of the Township). This type is described as very deep, nearly level to very hilly, well drained, loamy soils; and very poorly drained peaty soils on disintegration moraines. Slopes range from 0 – 45%.

***Soil Properties:***

- Goodman: (45% extent of soils in this association)
  - Very Deep, well drained silty mantle over sandy till, silt loam surface, gently undulating to very hilly slope.
- Sundog: (35% of soils in this association)
  - Very deep well-drained, silty or loamy mantle over sandy and gravelly outwash, silt loam surface, gently undulating to very hilly
- Greenwood: (10% of soils in this association)
  - Very deep, very poorly drained, organic deposits, peat surface layer, nearly level.
- Soils of minor extent: (10%) include Keewaydin, Wabeno, Cathro, Tawas and Wibeck soils.
- Major use of this association: Woodland
- Management concerns include: erosion hazard, equipment limitations and plant competition
- Management considerations include:
  - Building logging roads on the contour, installing water bars and culverts and seeding logging roads to prevent excess soil loss in very hilly areas.
  - Special care is needed when laying our logging roads in the very hilly areas. The grades of these roads should be kept as low as possible
  - Selective cutting can reduce the seedling mortality rate
  - Because of the extreme acidity and wetness, the Greenwood soils are generally unsuited to woodlands.

The second largest soil association is located in the northeast corner of the Township, east of the Michigamme River. It is known as the Keewaydin-Michigamme Rock outcrop Association. It is

characterized by rock outcroppings and very deep and moderately deep, nearly level to very hilly, well drained soils; on bedrock-controlled moraines. Slopes range from 1% to 70%.

***Soil Properties:***

- Keewaydin: (45% extent of soils in this association)
  - Very deep, well drained, loamy silty eolian deposits over gravelly and sandy till; cobbly fine sandy loam, nearly level to very hilly.
- Michigamme: (20% extent of the soils in this association)
  - Moderately deep to igneous or metamorphic bedrock; well drained, silty or loamy mantle over loamy till overlying igneous or metamorphic bedrock; cobbly fine sandy loam, gently rolling to very hilly
- Soils of minor extent; Carbondale, Cathro, Net and Witbeck soils in depressions and drainage ways; Champion, Dishno, Peshekee and Sundog soils in landscape positions similar to those of major soils
- Major use of this association: Woodlands.
- Management concerns: Erosion hazard, equipment limitations and plant competition.
- Management Considerations:
  - Building roads on the contour, installing water bars and seeding logging roads help prevent excessive soil loss.
  - Special Logging methods such as yarding with a cable may be necessary in the very hilly areas.
  - Selective cutting can reduce the windthrow hazard.
  - Site preparation helps control plant competition.

Also present in the Township (at the old Republic Mine location) are soils characterized as pits-dumps, Mine-slickens Association. The settings for these soils are bedrock-controlled moraines with slopes from 0% to 70%.

- Major uses of this association: Active and inactive open pit mines.
- Management Concerns: Onsite investigation is needed to determine suitability for specific uses.
- At the Republic Mine site, much of this area has been designated as a wetlands preserve.

A small portion of the Township around Gamble’s Creek is the eastern central portion of the Township s characterized by Pence and Sundog-Minocqua-Channing Associations. Pence Association soils are found in outwash plains and outwash terraces, with slopes ranging from 0% to 35%

***Soil Properties:***

- **Sundog:** Very Deep well drained, silty or loamy mantle over sandy and gravelly outwash; silty loam texture, nearly level to very hilly slopes
- **Minocqua:** Very deep, poorly drained, loamy deposits over stratified sandy and gravelly outwash, with a mucky texture and nearly level slopes.
- **Channing:** Soils are very deep, somewhat poorly drained, loamy deposits over stratified sandy and gravelly outwash, with fine, sandy loam texture and nearly level slopes.
- **Soils of minor extent:** Pellisier and pence soils in landscape positions similar to those of Sundog soils; Charbeneau soils in landscape positions between Sundog and Channing Soils; Carbondale and Tawas soils in depressions and drainage ways.
- **Major use of this Association:** Woodlands
- **Management Concerns:** Erosion hazards, equipment limitations, seedling mortality, windthrow hazard and plant competition.
- **Management Considerations:**
  - Building roads on the contour, installing water bars and seeding logging roads help prevent excessive soil loss.
  - The seasonal high water table in areas of Minocqua, and Channing soils restricts the use of equipment to midsummer, when the soils are dry or midwinter when there is adequate snow cover. Culverts are needed to maintain the natural drainage system. Year round logging roads require a gravel base.
  - Special care is needed in the very hilly areas of the Sundog soils. Grade should be kept as low as possible.
  - Because of wetness, seedling mortality and plant competition, trees are not generally planted in Minocqua and Channing soils.
  - Harvest methods that leave the remaining trees relatively closely spaced can reduce the risk of windthrow.

#### 4.6 Septic Suitability

Much of the Township has high water table levels found at the surface or within one foot of the surface. (See map 4-6). Soil permeability is generally poor to fair, with a majority of the Township having rates of 2" or less per hour. Despite these factors, modern techniques, equipment and processes may be able to overcome these limitations. Septic suitability must be determined on a case-by-case basis, as conditions vary greatly from parcel to parcel.

#### 4.7 Geology, Bedrock Geology, Mineral Resources and Groundwater

Among the primary factors which make geology important to a community's development is the ability to supply groundwater. The quality and quantity of groundwater are influenced by the types of bedrock in which it is found and also by the layers through which the water passes before it is extricated. Bedrock geology consists of solid rock formations found below the soil formed during the early periods of earth's evolution. These formations have undergone

extensive folding, uplifting, eroding and wreathing during the millions of years that since passed and are now overlain by surface geology and soil.

The geology of Republic Township is the result of glacial activity upon the underlying bedrock of Precambrian rock known as the Canadian Shield. Outcroppings of this rock are found throughout the Township, creating dramatic scenery but also difficulties for residential and commercial development.

Iron Ore deposits, located in what is known as the Republic Trough (corresponding with Negaunee Iron Formation, see Map 4-7), have in the past been exploited, resulting in the development and growth of the Township. The first iron ore mines were underground operations. The Republic Iron Company was formed in 1870 and operated until 1913, when Cleveland Cliffs Iron Company took over ownership. During the years of underground mining nearly 9 million tons of iron ore were shipped. The resource lay relatively dormant for the next 30 years, until new technologies enabled the profitable mining of lower grade ores, using open-pit methods and palletizing of the ore. The mine produced 2.7 million tons of pellets annually. Economic factors forced the closing of the Republic Mine in 1981, resulting in great economic upheaval. After the mine closed, the pit was flooded, creating a man-made lake which is 600 feet deep and covers 250 acres. This lake has potential as a recreation area, although currently, it is privately owned and inaccessible by the public.

While iron ore mining no longer seems to be viable, the possible existence of other ores and minerals may bring about resurgence in mining within the Township. Such mining activity should be closely monitored to prevent damage to our greatest asset; the natural beauty of our surroundings.

Finding water for domestic use is a concern within the Township. The village of Republic (including the area known as South Republic) is connected to a municipal water and sewer system, but residences and businesses located outside of the village must rely on wells for their water supply. Because of the nature of the geology in the Township, the depth of wells varies greatly, as does the volume of water produced by these wells. Quite frequently, in order to obtain a satisfactory volume, a process known as hydro-fracturing must be used, whereby water is forced into bedrock under pressure, resulting in fractures that allow extra ground water to enter the well, this sometimes results in poorer quality. Limitations imposed by these factors can affect development of properties.

#### 4.8 Climate

The climate of the Township is slightly less severe than that of neighboring northern townships with less snowfall on average. Temperatures, however, can be much colder in the winter and warmer in the summer as the moderating effects of the Great Lakes is not as pronounced this far

inland. Republic Township receives 33 inches of rain per year with the US average at 37 inches per year. The Township receives about 130 inches of snowfall while the average US city is 25 inches per year. The number of days with any measurable precipitation is 149. On average there are 186 sunny days per year in Republic Township. The July average high is around 79 degrees. The January average low is 1 degree.

The growing season is short with few suitable crop varieties able to be grown here. At present, only hay and potatoes are grown with any success. Several small truck gardens are in existence, but provide only supplemental income to their owners.

Seasons are quite definite. Spring thaw begins in late March/early April. Road restrictions in place during the thaw affect many economic activities, including logging, construction and hauling. Summers can be quite warm or quite chilly depending on many factors. In general, the Township experiences comfortable summer weather, not too hot or humid. A drawback to the warmer weather is the proliferation of insects, including sand flies, mosquitoes, deer flies and ticks. At times, insect hatches can prove detrimental to the tourist trade. Fall color season peaks in late September/early October. Color season provides a boost to the local economy as vacationers from Wisconsin and Lower Michigan come north for color tours. There is ample snowfall for all winter activities (skiing, snowmobiling, snowshoeing, etc.). Ice fishing is possible from December through March. These activities are the lifeblood of the tourist trade in this "off season".

#### 4.9 Alternative Energy

Alternative energy is typically defined as energy sources that do not deplete natural resources or harm the environment. Examples of alternative energy sources include compressed natural gas, biomass, hydroelectric, solar and wind power. Due to the steadily increasing cost of fossil fuels, alternative energy sources are being considered for everyday use.

As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. These classes range from a Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources. Particular locations in the Class 3 areas could have higher wind power class values at 80 meters than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may be suitable for utility-scale wind development.

Most areas within Republic Township are classified as having poor to moderate potential for wind power. Currently the possibility of implementing wind power within the Township is somewhat remote, but new technologies and more precise measurements may allow for such implementation in the future. Currently allowance for and regulation of wind farms should be addressed in this Master Plan and in the Zoning Ordinance.

Likewise, solar power may not be economically feasible at this juncture, but new technologies combined with the rising cost of fossil fuels may make solar power a viable option in the future. Again, regulation may be required to place standards and limitations on this type of power. The current Zoning Ordinance was amended to implement any changes regarding solar power.

#### 4.10 Issues and Opportunities

The natural features of Republic Township are important to the local quality of life. Scenic and natural areas have been identified throughout the Township. These areas present many possibilities for outdoor recreation. Preservation of these natural areas will be crucial in order to maintain these opportunities.

The climate of Marquette County presents a variety of challenges. Examples include: the need for snow removal from streets and parking lots, building codes which provide adequate support for snow loads and a short growing season which limits the type of crops which can be grown. The local climate may be attractive to a number of people and can be suitable for businesses or industries which specialize in certain types of goods or services.

As discussed in earlier chapters, iron ore mining has been an integral part of the development of Republic Township. Beginning with underground mining in the late 1800's and ending with the closure of the open-pit Republic Mine in 1981, this resource has dominated our economic landscape. While redevelopment of iron ore mining is unlikely, the possible existence of other ores and mineral deposits within the Township may indeed provide additional economic impact in the near future.

Development of lake and riverfront properties should be carefully considered. The Township wants to encourage development and the corresponding increase in tax base. Zoning Ordinance regulations for the two waterfront residential districts should be reviewed to ensure that adequate space for septic systems is available.





Leif Erickson Park, Trout Falls Creek area and the Republic Wetlands need to be carefully protected as over use or development could destroy their unique attraction. The Republic Basin and its beaches are also in need of protection to maintain constant water levels and water quality. The basin also needs to be monitored for over development and inappropriate uses.

### 5.8 Issues and Opportunities

The vast majority of Republic Township is rural and wooded. Residential Development is concentrated in Republic and South Republic. Significant development is also occurring on the waterfronts. Single family homes represent the largest percentage of residential land use.

As demographics change and the population continues to disperse, public buildings such as schools and churches are closed or abandoned. There is tremendous investment to be lost if no re-use plan has been developed. If the buildings are left abandoned, the potential for blight is likely. An example of such is the Republic Bank Building which has been converted to the Trail Head facility for the Iron Ore Heritage Trail.

As private forestland ownership changes, public access and commercial timber reserves may become less available. The Township will benefit from the maintenance of a sustainable forest industry.

Logging will continue to be a primary economic force in the Township. It is important, therefore that planning to ensure sustainable yield be implemented. and, farming where it exists in the Township can be broadened to include a greater number of climate appropriate crops such as bio-fuel components like hemp or switchgrass.

Creating new public parks and improving existing parks may be a way to attract tourists; particularly if fuel, food, lodging and recreational gear are also made available. Winter parks and summer parks could take advantage of the four season emphasis in Township Planning.

Mining will continue to be a part of the Township's landscape and the potential exists for mining in the future. Future mining endeavors will require careful planning by the Township. Site remediation and transport routing will need to be carefully planned and negotiated. Certain aspects of community remediation where the community and its land plan have been impacted need to be negotiated.

Township meetings brought forth a strong interest in community activities, community spirit, and the desire to preserve the rural forest quality of line which draws people here. Resolving the issues of building a strong economy, maintaining the values of a natural wild environment and strengthening the small town community spirit will require considerable planning and the integrity of the waterfront to be maintained.

Year round housing is usually dependent upon surfaced roadway. Increasing density therefore, is for the most part happening along or near easily accessible blacktopped roads. In the northwest corner of the Township, a web of well constructed gravel roads have allowed for the development of the southwest side of Lake Michigamme.

In Republic, there is no pressure for business space, although the plan has been to develop for service businesses to provide for activities which presently use the community or exist in the community. Several snow mobile trails pass through, fishing is popular, hunting brings fall hunters and the community is actively involved in promoting the development of the Iron Ore Heritage Trail.

Business has been developing along the M-95 corridor making use of the traffic volume. Presently, there is an automotive repair shop, a small unit self storage facility, a monument stone business, a medical and recreational marijuana dispensary, a gardening grow supply business and several other small business ventures. With the closing of the grocery store several years ago which had served both communities, a healthy and diverse commercial development is a great need in Republic Township. However, care will be required in managing development along M-95. Similar developments in the past have resulted in too many access points opening onto the highway which can lead to sprawling development and cause safety issues. Following access management standards can help alleviate problems associated with too many curb cuts.

### 5.5 Incompatible Land Use

Incompatible land uses occur when neighboring land uses negatively affect normal enjoyment or operation of one or more adjacent properties. An obvious example would be a residence located adjacent to an industrial operation without any buffering. Another type is when there is preponderance of nonconforming uses (those uses not permitted in the zoning district in which they are located); an example may be a large number of businesses in a residential district.

### 5.6 Poor Parceling and Land Fragmentation

As parcel sizes decrease, forest and agricultural land may become less productive or could fall out of production entirely. Frequent divisions of properties along lake and river fronts have the potential to damage wildlife habitat and create drainage and erosion problems. Poor parceling can result in parcels which are so irregular as to be nearly useless. Poor parceling may also result in having parcels that are cut off from road access.

Future Land divisions will have a great impact on the aesthetic and environmental character of Republic Township. Divisions should be carefully reviewed to assure the efficient division of land and its accessibility by public safety and service vehicles.

### 5.7 Sensitive Areas

Iron Mountain about 35 miles to the south. M-95 passes through the eastern bulge of the Township and then grazes the southeastern most corner of the Township. There are no other major transportation routes.

Old route 601 wanders northward through the eastern part of the two southern Townships then exits before Township 47N, the northernmost of the Townships. These are four paved roads that extend from the east roadways westward to the west boundary and woodlands. All four of these process to become dirt tracks. The southernmost of these is Fence River Road, Co. Rd. LH. Next to the north is Chief Lake Rd. Co. Rd. LG. In short, the western boundary of the Township is connected to the eastern side and its two villages by logging roads which limits the use of the entire west side of the Township.

#### 5.4 Existing Land Use

Logging represents the dominant land use and is practiced over 70% of the Township's land area (see Maps 4-4 and 5-1). Beginning in the south, Township 45N has 5,020 acres designated CFR, in the middle Township 46N has 10,035 in CFR and in the north Township 47N has 14,415 CFR acres which is a total of nearly 30,000 acres. Other parcels are owned by timber companies but are not designated CFR. It appears that nearly half of the Township is CFR.

Farming, though present, is very modest in acreage. Crops are chiefly potatoes with a modest planting of livestock feed. Farming is limited most by a short growing season and lack of good soil. With the land available for agriculture, the Township could encourage the expansion of crops that could be used as a fuel source for bio-fuels or other newly developing markets such as hemp growth.

Although lakes are scattered throughout most of the Township, most of them occur in the southern third of the Township. Most of the timberland is found in the northernmost third of the Township. Waterfront property in the south is mostly lakefront, while the northern third finds parcels on the southern arm of Lake Michigamme and then southward on the Michigamme River as far south as Republic and south to the state rest stop at Erickson park.

There is also significant land developed for residential housing including seasonal as well as full time residents. The lakefront properties are experiencing random development throughout the Township, with the exception of Perch Lake where a cluster of large lots has been developed. The two greatest growth areas are on the west and east side of the southern arm of Lake Michigamme. The most striking growth is occurring along Holli Blue Road on the east side. The second are shows significant new construction in the area of the Brass and Silver Roads.

The expanding network of highways in the nation, with the growing number of private automobiles, has enabled residents of rural areas to commute to larger communities for employment, shopping and services that may not be available to their local area. In addition, the road system has increased the accessibility of many areas to tourists. However, current budget restrictions are limiting the ability of the Township to maintain roads in the rural areas of the Township. Developments such as shopping centers, strip commercial areas and suburban residential areas have emerged as individual mobility has increased. Sprawl is frequently the result of such developments as agricultural and open land is converted for more intensive uses.

Taxation and land values play a part in many land use decisions. Families may move from urban areas because they feel that they are willing to trade off lower taxes and user fees for fewer municipal services and increased distance from employment, shopping and schools. Land may be less expensive in rural areas, thus making such residency more attractive. 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. In any situation, however, tax rates and land values will be very important considerations.

Technological advances such as computer networking, cellular telephones, facsimile machines, voice mail, teleconferencing (including video) and electronic mail gives businesses location options that were previously not practical. Often the quality of life associated with these rural locations is an additional attraction.

Natural features and cultural influences are an important determination of how land was used. The presence of rugged terrain and swampland, for instance, was not conducive to establishing settlements. Cultural influences are manifested in the types of buildings constructed, local commercial practices and community activities. Understanding the existing land use patterns and recognizing the needs current land use categories meet is a necessary element in planning for the future. Our decisions and projections will be conditioned by what is in existence at present, the needs which have produced present use patterns and the hopes of the community for its future.

### 5.5 Republic Township Description

The Township is laid out essentially as a section of the southwest corner of Marquette County, one Township wide and three Townships long consisting of Township 45N, 46N and 47N of Range 30W.

The middle of the east side of Republic Township is a strip added on to the eastern middle of the eastern boundary, two section wide and six section long which contains both of the population centers, namely the village of Republic and the village of South Republic. There is one transportation artery, M-95 which connects US41/M28 six miles north of the Township, with

deal with land use issues. These legal tools allow federal, state and local governments to consider the overall compatibility and appropriateness of development and land use.

Overall, the federal government has limited influence on local planning efforts and growth management strategies. However, the federal government does exercise many responsibilities that affect land use through various land and grant programs for community facilities, water and wastewater systems, housing, economic development, and planning. Federal regulations also address environmental concerns such as air quality, drinking water standards, etc. Although these programs and regulations do not usually directly affect land use and development, they have significant indirect effect. For example, a community that lacks sufficient sewage disposal capacity to serve industrial uses can possibly obtain federal funding to help with expansion of its sewage treatment facility, which in turn may lead to industrial development.

The role of the state has traditionally been limited to providing enabling legislation for local units of government to regulate growth and development through planning and zoning. However, with wetlands, floodplains and coastal areas, regulatory authority rest with the state. This can directly affect local land use decisions. The state also enforces standards for municipal water systems and wastewater treatment systems that are at least as strict as federal standards. These regulatory standards influence a community's ability to provide water and wastewater systems, as well as their user rate structures.

Local governments employ zoning ordinances, subdivision regulations, building codes and public investment in infrastructures to influence land uses. Infrastructure investments include water and wastewater systems, roads, parks, etc. Local planning efforts that seek to define the most desirable and appropriate uses for various parts of a community and anticipate and prepare for growth, can serve to guide future land use decision making.

Other factors affecting land use include existing transportation systems, taxation, land values, natural features, changing technology and market conditions. Changes in lifestyles, family size and structure, shopping preferences and consumer attitudes also affect land use decisions. Mobility is greater than at any previous time, families are smaller and life expectancies have increased. These changes may be reflected in shopping habits, housing preferences, employment patterns and leisure time activities.

From a land use standpoint, some pertinent issues include the preference for large homes situated on large land parcels, the apparent willingness of individuals to endure time and costs associated with lengthy 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 efficiently raw materials and finished goods can be received and shipped. This is a critical issue for many business enterprises.

## Chapter 5 Land Use and Existing Development Patterns

### 5.1 Introduction

Patterns of land use evolved from economic necessity. Trade routes were established along natural features such as lakes and streams to provide necessary economic linkages. Settlements were at or close by active points of commercial activity.

The two major factors that influenced growth and subsequent land use in Marquette County were the mining and lumbering industries. The discovery of iron ore near Teal Lake led to the permanent occupation and development of the Ishpeming-Negaunee area. Republic was also founded on the mining industry. At first, wagons and sleighs carried the ore over rough trails and plank roads that led from Negaunee to the Lake Superior shore where the ore was transferred to waiting ships in the harbor. As steam railroads developed, so did the County. Marquette turned into a city, along with Negaunee and Ishpeming. Immigrants came from Europe to work in mines and to harvest the forests. This diverse national heritage has enriched the region's cultural base.

### 5.2 Land Use Factors

There are many factors that determine how land is used. Home buyers, developers, land speculators, commercial interests and governmental entities all can affect and land use decisions.

Home buyers and commercial interests tend to base decisions on location. Factors such as access, available public and private services and the qualities of surroundings are often important as well. Speculators may purchase, hold or sell property based on an anticipated future return on investment; and developers, too, attempt to gauge the demand and supply aspects of the housing, retail, commercial and industrial markets for financial gain. To be successful, speculators must accurately assess the type, size and timing of developments.

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 such as supply and demand for the goods or services produced, adequacy and cost 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 thorough consideration of the potential impact on surrounding lands. Decisions determined in this fashion can potentially result in incongruous or incompatible developments since the community's overall pattern of development is not necessarily among the factors considered.

Local units of government have been granted authority through various laws and regulations to

## Chapter 6 Community and Public Facilities and Transportation

### 6.1 Introduction

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

As a part of the Master Plan, Republic Township's community facilities and services are described and evaluated as to their present condition and adequacy to meet the present and future needs of the community. Transportation facilities connect a community with the world around it and connect business with both its suppliers and its customers. Roads are what makes recreational development possible and for logging to be profitable.

### 6.2 Township Facilities and Services

#### **Township Hall**

The Republic Township Hall, located at 279 Kloman Avenue was constructed in 1964. The building has a 49' X 29' meeting room for community meetings and gatherings. The Township Hall provides office space for the various Township departments including Township Officials; the Supervisor/Assessor, Clerk and Treasurer. The Township Hall has wireless computer access (WIFI), phone and fax capabilities as well as two-way radios for Department of Public Works Communications. The recently renovated meeting room is equipped with audio/video recording capabilities to provide accurate transcription of public meetings. Recent remodeling has provided the capabilities for future expansion and alternative uses for the township hall.

Currently the US Post Office leases space in the Township Hall with 11 hour access to postal boxes six days a week.

#### **Department of Public Works**

Water, sewer, snow removal, and park/township facilities are maintained by the Public Works Department. The department is staffed by four employees. The Department of Public Works is located on Willow Drive in South Republic. The Township owns four trucks, a one ton dump truck, two ¾ ton trucks, front end loader, two back hoes, and one big dump truck, which are used by the DPW.

### **Water System**

Portions of Republic Township are served by the Township water system and with municipal wastewater system. Both North and South Republic are served by the water systems. The remaining areas of the Township utilize private wells for their own needs.

The most recent upgrades to the Township's water system in 2013 were the installation of a new water tank in North Republic for safety volume, due to the termination of the water service line traversing the Republic Mine property, and an almost complete upgrade of the water service lines in North Republic all completed with a USDA grant. Excluded from the upgrade were the westernmost block of 4<sup>th</sup> Ave./Magnetic Ave., the northernmost two blocks of 2<sup>nd</sup> St., Lilac Ave and Kloman Ave. have been approved. by a grant through the USDA for \$1.6 million to start in 2024.

Prior to the 2013 North Republic water system upgrade, in 2005 a new water tank was installed next to the original water tank on a Township owned parcel within the Republic Mine property, and the old tank decommissioned. In 1995 a filter plant for the water system was installed and the water service main was upgraded from 8" to 12" from the M-95/County Rd. 601 intersection on the south end, to the County Road 601/County Road LG – River Road on the north end. The current 8" water service line from South Republic to the south end of that 12" water main is vulnerable, has a history of breakage and is a safety concern. Historically, complete water system upgrades in both North and South Republic were completed in 1960. The southerly ends of the north/south service lines done in South Republic at that time, which are imbedded in Hemlock and Pine Streets in South Republic, are prone to freeze-ups and some of those residential service lines require keep-runs.

The need for a second water service line to North Republic, bypassing the South Republic water service system and the 8" northerly feeder line from South Republic, attaching to that southerly end of the aforementioned 12" water main is needed and under discussion. Also, select sections of water lines under Hemlock and Pine Streets in South Republic should be relocated to the adjacent alleys to prevent residential service line freeze-ups. An encompassing USDA grant will be needed for this estimated \$1.5 million dollar project.

Users are currently charged a flat rate of \$38.00 per month for water usage. There are 345 users of the water system in the Township. A survey of water systems was recently conducted by the UP District of the MDEQ; the results of surveyed communities within Marquette County are shown on Table 6-1.



Table 6-1 Water Rates Marquette County Communities, 2022

Community	Total Services	Minimum Rate	Rate per 5K Gallons	Last Major Upgrade
Republic Twp.		\$38.00	\$38.00	2013
Ishpeming Twp.		\$6.50	\$34.00	2006
Ely Twp Diorite		\$90.00	\$90.00	2005
Ely Twp Greenwood		\$50.00	\$50.00	2001
Forsyth Township		\$37.00	\$82.00	1998
City of Ishpeming		\$52.19	\$103.39	2012
Sawyer		\$6.39	\$31.95	2008
City of Marquette		\$11.65	\$87.15	2010
Marquette Township		\$23.00	\$66.80	2011
City of Negaunee		\$26.91	\$81.56	2006
Negaunee Township		\$23.44	\$67.09	2005

**Wastewater System**

Customers served by the Township water system also utilize the Township wastewater collection system. Waste water collected is treated at the three lagoon facility located in South Republic. There are currently 364 wastewater customers in the Township. Residential wastewater rates are currently set at a flat rate of \$41.00 per month. A comparison of wastewater rates based on a survey conducted by the UP District of the MDEQ with other communities in the Marquette County is shown on Table 6-2.

Table 6-2 Wastewater Rates, Marquette County Communities, 2022

Community	Total Services	Minimum Rate	Rate per 5K Gallons	Last Major Upgrade
Republic Twp.		\$41.00	\$41.00	
Ishpeming Twp.		\$28.00	\$28.00	1984
Ely Twp Diorite		\$9.00	18.50	1996
Ely Twp Greenwood		\$31.00	31.00	1991
Forsyth Township		\$28.00	\$58.00	2001
City of Ishpeming		\$38.79	\$77.59	2013
Sawyer		\$13.39	\$66.95	2002/2003
City of Marquette		\$11.65	\$87.15	2015
Marquette Township		\$15.70	\$76.60	2000
City of Negaunee		\$43.08	\$82.98	2013
Negaunee Township		\$23.44	\$38.54	2013

**Fire Protection**

The Republic Township Fire Department keeps equipment in the Emergency Services Building and in a building on M-95. A total of 18 volunteer firefighters currently staff the Republic Township Fire Department. The Fire Department retains three fire trucks and a pumper; the pumper was purchased in 2007. The Township maintains mutual aid agreements for fire services for Humboldt Township and Mansfield Township. Michigamme Township provides fire and ambulance services to the northwest corner of the Township. While the volunteer staff has been depleted over the past several years a renewed effort is underway to train new volunteers. The department is much in need of upgraded equipment, especially radios.

The fire insurance rating for Republic Township is a Class 7.9. Fire insurance ratings are determined by the Insurance Service Office (ISO) Commercial Risk, Inc. In rating a community, total deficiency points in the areas of evaluation are used to assign a numerical rating of 1 – 10. A rating of 1 indicates the best protection and a rating of 10 applies to properties located more than 5 miles from the responding fire department with no hydrants available. Many communities are assigned more than one rating because of water supplies and response distance factors. Where classified areas have split classification, the determination of the first listed protection class is a hydrant within 1000 feet while the second listed class is five road miles or less to the responding fire station and no hydrant within 1000 feet and the third if for over 5 miles from the fire department and there is no hydrant.

Generally a property owner may expect to pay 50 percent more in a fire insurance premium for a structure located in an area with a class 10 rating than in an area with a class 6 rating. The difference in fire insurance premium between a class six area and a class nine area is generally 30 percent. Table 6-3 provides the latest fire insurance ratings for surrounding communities.

Table 6-3 ISO Fire Insurance Ratings, Selected Communities, 2023

COMMUNITY	FIRE CLASS RATING
Republic Township	7.9
Champion Township	6
Ely Township	6
Ishpeming City	4
Ishpeming Township	4
Negaunee City	4
Powell Township	6
Tilden Township	5

**Police Protection**

Law enforcement in the Township is handled by the Michigan State Police or the Marquette County Sheriff Department through the 9-1-1 call center.

**Solid Waste and Recycling**

Solid waste disposal is provided by North Country Disposal Inc. Garbage pickup is provided weekly. The current cost to Township residents for garbage pickup is \$16.00 per month. North Country Disposal offers recycling services as well.

The Marquette County Landfill is located on a 210 acre parcel of land in the northwest corner of Sands Township. The landfill began operations in 2006. The landfill accepts both type II (residential/household waste) and Type III waste (demolition debris). The Marquette County Solid Waste Authority, organized in 1987, owns and manages the landfill. The appointed 7 member authority includes: 3 representatives at large, 3 members designated by the Marquette City Commission, and one member designated by the Sands Township Supervisor. Waste arriving into the landfill comes from all 22 units of government in the County. The waste collected from these entities is directly hauled to the landfill or in the case of Republic Township and five other Townships in the west end, and arrives via a transfer station.

**Ambulance Service**

The Township has a inter-government agreement with five Townships which include, Ely, Humboldt, Champion and Tilden. The West End Township Emergency Services Authority is a first responders Authority with two vehicles, an ambulance and EMS pick up truck.

**Education**

The Township is served by one school district; Republic – Michigamme Schools. The first Republic School was K-12 and was built in 1873 on Mirror Lake, which is now called School Lake. The current building was built in 1964 and is located at 227 Maple Street in South Republic. It was first called Republic Central School, but was renamed Republic-Michigamme Schools when it joined with the Michigamme District in 1965.

Republic-Michigamme Schools is a Pre-Kindergarten through 12th grade school. The school currently has an enrollment of approximately 109 students and 25 staff members. It has extra-curricular activities consisting of Junior High, Junior Varsity and Varsity Basketball for boys and girls as well as Junior Varsity and Varsity Football which is a cooperative program with Ishpeming High School. Track, Choir, High School Bowl and Band are also offered.

With declining enrollment and only 102 students in the 2020 school year, the future of the school is uncertain. The school has moved to a four day school week so that the district can cut costs by spending fewer days in the building, which cuts down on energy consumption, employee costs.

maintenance costs and more. The school has also decided to group certain grades together. For example, the 2<sup>nd</sup> and 3<sup>rd</sup> grades are combined and taught by one teacher, as well as 4<sup>th</sup> and 5<sup>th</sup> grades are being taught by another teacher. In 2012, the voters approved a bond issue for the school that enabled them to significantly upgrade the facility and add much needed technology to the classrooms; the upgrades included a new roof and conversion to a wood chip fired boiler system that is currently saving the school 50% over previous bills.

### **Library**

Library materials and services, and computers are available at the Republic-Michigamme School. The library is open to the public, but is not part of the County Library System.

### **Museum**

The Republic Area Historical Society collects and preserves historical material related to Republic and surrounding areas. The Republic Area Historical Society has renovated a house in South Republic to include several rooms with historical displays, photo documents, newspapers and historical objects. It has been named the Pascoe House after a prominent historical family. Currently they have acquired the house next door and are planning major renovations to enable them to expand their activities and displays. This house is named the Beulah House after Beulah Pascoe.

### **Parks and Recreation**

A complete listing of Township and Area parks and recreation facilities is provided in Chapter 8.

### **Building Permits**

building, mechanical, plumbing and electrical permits are obtained through the Marquette County Resource Department.

### **Zoning Administration**

Among its many 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 Township's Zoning Ordinance is reviewed annually by the Planning Commission to ensure that the latest regulations are included and is available for viewing on the Township website. The Township's Zoning Ordinance is administered by the Township Zoning Administrator.

## **6.3 Other Public Facilities and Services**

### **Marquette County Sheriff's Department**

The Marquette County Sheriff's Department operates out of the Marquette County Sheriff's Department and Jail. Located immediately adjacent to the Marquette County Courthouse in Marquette. The department is staffed by 62 full and part time employees, including 20 road patrol officers, 35 corrections officers, one detective, an under-sheriff, a sheriff and four support staff.

Its functions include road patrol, investigative services, civil process, marine/snowmobile patrol, search and rescue, management of the 80 bed Marquette County Jail and assistance with court activities (bailiff/transport/security). The Sheriff's Department participates in the Upper Peninsula Substance Enforcement Team.

### **Michigan State Police**

The Michigan State Police Post is located in Negaunee Township on M-28/US 41. There are currently 21 officers assigned to the post; nine officers, two lieutenants, six sergeants, two detective sergeants, one special sergeant (Fire Marshall) and one motor carrier officer. The troopers respond to incidents throughout Marquette County, as requested by Central Dispatch. All of the officers are authorized to enforce the state and local laws and ordinances.

The motor carrier officer enforces the state's commercial vehicle code and the Fire Marshall investigates fires within the area.

### **Enhanced 911 System**

Emergency services in Marquette County including fire, police and ambulance services are dispatched by the Marquette County Central Dispatch using an enhanced 911 system. The enhanced 911 service identifies the address from which an emergency call is made on the dispatch screen. This feature makes it easier for emergency personnel to locate a site if a caller is unable to provide directions. Central Dispatch is located within the Negaunee State Police Post. Also available now is the new Smart911.com system that allows people to provide in a secure place many facts about the household such as pets, medications taken, number of residents, known medical issues etc. More information can be found on the Township and County websites.

**Marquette County Emergency Services**

This office is responsible for multi hazard mitigation planning, protection of public health and safety, preservation of essential services, prevention of property damage, preservation of the local economic base and response to community disasters. A full time director reports directly to the Marquette County Board.

**Bell Memorial Hospital/UPHS Duke Lifepoint**

The original Bell Memorial Hospital was built in 1918 and located in downtown Ishpeming. In September 2008, the new Bell Hospital celebrated its Grand Opening. The new facility is located on 35 acres at 901 Lakeshore Drive in Ishpeming and is 102,427 square feet with a 44,244 square foot medical office building. Bell Hospital has over 90 physicians on its active and consulting medical staff, with additional offices throughout the Central UP. The hospital offers a full range of services including X-Ray, mammography, ultrasound, laboratory, repository therapy and nuclear medicine. In addition, general/ambulatory surgical units, a coronary care unit and obstetrics with private birthing suites, and a 24/7 emergency department. The surgical center performs procedures on a daily basis from colonoscopies, hysterectomies, gall bladder, total knee and hip replacements, arthroscopies, carpel tunnel, cataracts, endoscopies, hernias, tonsils and vascular.

Bell also offers rehabilitation services such as physical occupational therapy and speech therapy with the newest addition being the Sports Health Department.

**UPHS Marquette/Duke Lifepoint**

The Upper Peninsula's regional medical center; is located in the city of Marquette. The new hospital campus includes a state-of-the-art, 265-bed hospital and 80,000 square foot medical office building, and is located in the heart of Marquette on a 37-acre site known as the "Roundhouse Property." The hospital provides care in 54 specialties and sub specialties 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 works with about 2,700 employees providing care to approximately 11,000 in patients and 350,000 outpatients per year, they are also a level 2 trauma center.

**Marquette Sawyer Regional Airport**

The Marquette County Airport operations moved from their location on M-28 in Negaunee Township to the former K.1 Sawyer Air Force Base in September 1999. The new location has added considerable time and distance to Republic Township residents wishing to use the facility.

It is one of seven airports in the UP that provide local commuter and corporate charter service. The airport is served by American Airlines and Delta Airlines.

**Marquette Area Regional Educational Service Agency (MARESA)**

Technical education, early childhood education, special education and general services are provided by the Marquette Area Regional Educational Service Agency, formerly known as the Marquette County Intermediate School District. Administrative offices and instructional facilities are located in the city of Marquette. MARESA is a consortium of the public schools in Marquette County. Beyond direct and support services to students, the agency offers support services to teachers and administrators in areas such as professional development and regulatory compliance.

**Northern Michigan University**

Northern Michigan University; located in the City of Marquette; offers more than 194 programs in 28 different departments with credentialing that ranges from certificates and associate degrees to masters degrees. The physical campus includes 67 buildings on a campus of 357 acres. A 434 member faculty teaches the enrollment of approximately 7,197 students.

**Cable Television Service**

Cable television service is currently available through Cable America in both North and South Republic.

**Internet Services**

In Republic and surrounding areas, there are numerous companies offering internet service.

**Electrical Services**

Electrical service in Republic Township is provided by the Upper Peninsula Power Company (UPPCO). The distribution system (poles, lines, etc.) is owned and maintained by UPPCO.

**Postal Service**

The majority of the residents and businesses in the Township are served by the Republic Post Office (49879) located in the Republic Township Hall.

**Telephone Services**

Local telephone service is provided by AT&T, or through the internet with a VOIP system. Long distance service can be obtained through a variety of carriers that serve the area. Area Cellular service is mainly provided by AT&T or Verizon. There are smaller companies that also provide this service "piggy backing" on AT&T or Verizon towers.

#### 6.4 Road System

Republic Township is shaped like a long rectangle, extending from north to south on the western boundary of Marquette County. It is a north/south stack of three townships (36 sections each); there is an extension eastward in the midsection of the Township which itself is a north/south slender rectangle six sections long and two sections wide. This narrow strip contains both of the unincorporated villages of Republic and South Republic. This area also contains M-95, the only major highway which connects the Township with the rest of the state. M-95 rejoins the Township just inside the border of the southern third of the Township.

The northern one third of Republic Township has no major roads (Map 6-1).

County Road 601 meanders loosely north to south from Highway M-95 on the very north end, through Humboldt Township to the village of North Republic, then southerly through the bottom two thirds of the township along its eastern border. It ends at Witch Lake at its junction with Fence River Road.

Republic is poised roughly midway between two metropolitan areas; Marquette and Iron Mountain. Marquette is the larger of the two cities and commercially healthy. Both cities offer steady employment opportunities and are served by well maintained roads; M-95 and US-41. Both highways are well plowed and salted in winter, aiding in ease of travel.

East/west roads in the Township are limited. Starting from the south, Fence River Road is paved and extends westward from M-95 past the west boundary of the Township. Paving of Fence River Road ends about 1.3 miles past the west boundary of the Township. This road is used primarily for farm products (usually potatoes) and logging.

The next east/west road is Chief Lake Road and is 2.5 miles north of Fence River Road. Chief Lake Road does not connect with M-95. It extends westward for 3.5 miles and it ends in dirt tracks. An Additional east/west road is Eighteen Road, and is the only road in the mid-section of the Township. Eighteen Road also stems from County Road 601 and is paved for two miles.

In the north section of Republic; River Road, although paved for only 3 miles, extends all the way to Lake Michigamme and Dutchman's Point. It is gravel, changing to plain dirt for most of its length and is privately gated in its last two miles.

Dirt roads form a network over most of the Township connecting homes and hunting camps on lakes and in the forest. The chief commercial use of roads in the north 2/3 of the Township is logging.



North Republic and South Republic area are connected with a paved road and a small network of paved roads connects the homes on the fringes. The main street; Kloman Avenue extends east out of town past the old mine property then drops southeast and leaves the Township. Park City Road leaves the town going north for 2 miles and then joins M-95. .

### 6.5 Rail Service

There are two railroads in the Township, neither of which is in use. LS&I was a one customer line designed to serve the Republic Mine. Only a portion of its track is left and the right of way is still owned by the LS&J. The other track is owned by the E&LS Line, a Wells Michigan based freight line. Although the E&LS line is not actively used in Republic, it is an active freight business just south of the Township border in Dickinson County. The S&LS Line tracks are largely intact in the Township and are classified an active line by the MDNR.

### 6.6 Public Transportation

Local bus service is available from Marquette on a call and request basis. Marqtran serves Republic as requested and will take passengers to Ishpeming located 23 miles to the north and east. Bus tranfers are available in Ishpeming. There a person may change buses and go to Marquette, an additional 18 miles. In Marquette, there is a local service also run by Marqtran which runs a circle route to all major stores and malls.

### 6.7 Air Transportation

Commercial air service is not available within Republic Township. The Marquette County Airport operations moved from its location in Negaunee Township to the former K.I. Sawyer Air Force Base in September 1999. The new location has added time and distance to those in Republic Township wanting to use the County Airport. The airport is served by America Airlines and Delta Airlines, and has been renamed the Marquette Sawyer Regional Airport.

### 6.8 Issues and Opportunities

The upgrades listed on page 2 of this chapter have allowed the Township to improve water service to the community. All uses of the water system will be metered, which allows for usage tracking and helps monitor leakage. It also provides a fair billing method that charges based on usage. This will save wear on the water system equipment and cut supply costs, lowering operating costs for all users.

Continued declining enrollment for Republic-Michigamme Schools may require consideration of alternate uses for some of the facilities.

Commercial development will most likely be drawn to the M-95 Corridor. Lack of services and roads will most likely limit development to the west side of the Township.

Large scale hauling is limited to Park City Road and M-95 since they are the only Class A roads in the Township and will not be subject to road restrictions in the spring. Unless a substantial change occurs, growth in the Township will be limited by its roads.

Another very significant issue will be managing the development along the M-95 corridor. Development will be tempting, due to the large volume of traffic. Effort must be made to promote business communities and these communities will need to share access with common driveways and common parking in order to prevent a string of business from one end to the other cluttered with a myriad of individual access ways to M-95.

## Chapter 7.0 Housing

### 7.1 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.

From 1960 to 2005, the rate of home ownership nationwide was on the rise. From 2010 to 2020, the rate of home ownership has been steadily decreasing, and is predicted to continue to decrease. The Great Recession and deferral of marriage are major factors in the decline of home ownership rates.

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 Republic Township.

### 7.2 Housing Characteristics

#### Trends

According to the 2020 Census, a total of 1,006 housing units were recorded in Republic Township (Table 7-1). In 2010, a total of 1,116 housing units were recorded. This represents a 9% decrease in the number of housing units from 2010 to 2020 (Table 7-2).

From 2010 to 2020, the number of housing units in Marquette County increased from 34,330 units to 33,464 units, an increase of 2.5%. Marquette Township, saw the highest increases in housing units. Significant development within the townships follows a nationwide trend. Most urban areas, large and small, have seen new housing develop at a greater rate in the surrounding townships.

<b>Table 7-1</b>		
<b>Total Housing Units, Selected Areas, 2010-2020</b>		
<b>Unit of Government</b>	<b>2010</b>	<b>2020</b>
<b>Republic Township</b>	<b>1,116</b>	<b>1,006</b>
Ishpeming Township	1,732	1,689
Champion Township	260	213
Ely Township	1,125	1,049
Marquette Township	1,907	2,094
Negaunee Township	1,399	1,373
Powell Township	928	829
Tilden Township	553	529
Ishpeming City	3,149	3,041
Negaunee City	2,119	2,116
Marquette County	34,330	33,454
State of Michigan	4,532,233	4,570,173

Source: U.S. Census Bureau, for years cited.

**Occupancy and Tenure**

According to the 2020 Census and presented in Table 7-3 below, only 44.5% of the Township’s housing units were occupied, with the remaining 55.5% listed as vacant. Many of the vacant housing units reported in the Township are likely being used as seasonal, recreational, or occasional use.

Over 85.8% of Republic Township’s occupied housing units were reported as owner-occupied. This is higher than Marquette County’s rate of 71.5%. The proportion of renter-occupied housing is typically higher in cities and areas with a larger population, due to the presence of infrastructure needed to support multi-family developments. The proximity to shopping, health care, universities and other services may also be a factor in the location of multi-family housing.

<b>Table 7-2</b>				
<b>Total Housing Units, Occupancy and Tenure, Selected Areas, 2020</b>				
<b>Housing Units</b>	<b>Republic Township</b>		<b>Marquette County</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
<b>Total Units</b>	<b>1089</b>	<b>100%</b>	34,907	100%
Occupied	485	44.5%	21,177	77.9%
Owner	416	85.8%	19,435	71.5%

Renter	69	14.2%	7,742	28.5%
Vacant	604	55.5%	7,730	22.1%

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

**Age of Housing**

As presented in Table 7-3 below, nearly 25% of the Township’s housing stock was built in 1939 or earlier. This level is consistent with Marquette County, but much higher than the 15.6% reported by the State of Michigan in 2012. Less than 1% of the Township’s housing stock was built 2010 or later, which is consistent with the estimates for Marquette County. The higher proportion of older homes in the area reflects the Township’s heritage as one of the early mining communities in the area. As shown in Table 7-6, the median year the housing stock in Republic Township was constructed is 1967. This is similar to the County and the State.

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. 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.

Unit of Government	2014 or later	2010 or later	2000 - 2009	1990 - 1999	1980 - 1989	1970 - 1979	1960 - 1969	1950 - 1959	1940 - 1949	1939 or earlier
<b>Republic Township</b>	<b>0.4</b>	<b>0.1</b>	<b>9.0</b>	<b>13.6</b>	<b>9.9</b>	<b>12.0</b>	<b>16.7</b>	<b>11.5</b>	<b>2.2</b>	<b>24.9</b>
Ishpeming Township	.07	0.0	5.7	3.2	10.4	23.7	13.2	19.9	6.4	17.6
Champion Township	0.0	0.0	2.4	8.5	5.8	14.9	16.3	5.1	10.8	36.3
Ely Township	8.1	1.2	8.6	15.9	6.9	28.2	12.1	9.4	7.7	10.0

Marquette Township	2.0	0.5	24.6	19.1	8.9	20.1	8.5	5.3	5.5	7.4
Negaunee Township	3.7	0.7	13.5	13.9	8.1	25.3	8.9	13.9	6.4	9.2
Powell Township	0.0	0.4	7.5	21.7	8.7	23.2	11.8	6.3	4.7	15.7
Tilden Township	4.2	0.0	4.4	12.2	7.8	23.0	4.9	9.7	4.3	33.7
Ishpeming City	0.0	0.0	2.3	3.7	3.6	9.6	2.4	12.3	5.7	60.4
Negaunee City	4.0	0.0	5.3	5.1	4.0	10.4	6.0	12.1	6.7	50.4
Marquette County	1.4	0.2	7.8	9.3	7.3	20.5	13.3	11.8	5.8	24.0
State of Michigan	1.8	0.1	10.0	12.9	9.9	15.6	12.1	15.5	8.3	15.6

Source: U.S. Bureau of the Census, 2020 American Community Survey 5-Year Estimates.

### Household Type

As shown in Table 7-4, in 2020, family households comprised 60.8% of Republic Township’s total households. This is similar to the figures in Marquette County and the State of Michigan, 60.5% and 66.0%, respectively. A family household consists of a householder and one or more persons living in the same household who are related by birth, marriage or adoption.

The proportion of non-family households in Republic Township was reported at 39.2%, with slightly more than three-quarters of non-family households representing persons living alone. Marquette County reported a figure of 39.5% non-family households and the State of Michigan reported 27.9%.

Households	Republic Township	Marquette County	State of Michigan
<b>Family households</b>	<b>60.8%</b>	60.5%	66.0%
With own children	15.4%	23.4%	28.6%
Husband-wife family	51.4%	47.8%	48.0%
With own children	10.8%	16.0%	18.9%
Male householder, no wife	2.7%	4.1%	4.8%
With own children	1.4%	2.3%	2.4%
Female householder, no husband	6.8%	8.6%	13.2%
With own children	3.3%	5.0%	7.3%
<b>Nonfamily households</b>	<b>39.2%</b>	39.5%	34.0%
	35.5%	30.4%	27.9%

<b>Table 7-4</b>			
<b>Households by Type, Selected Areas, 2020</b>			
Householder living alone			
65+ living alone	14.9%	10.6%	10.2%

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

The number of people living in a household, as well as the age and relationship of those people, all influence the type of housing needed in a community. The general trend across the country has been to build larger homes, often with multiple levels, on large lots. At the same time, the population is aging and households are getting smaller. However, consumer preferences have been changing since the early 2000s to reflect a greater desire for walk ability and cultural/social amenities vs. large houses and acreage.

Household Size

The number of persons in a household has been decreasing in the United States over the past several decades, and Republic Township is no exception as shown in Table 7-5 below. The Township has experienced a 7% decrease in household size since 2010.

<b>Table 7-5</b>			
<b>Persons Per Household, Selected Areas, Multiple Years</b>			
Area	Persons Per Household		Percent Change 2010- 2020
	2010	2020	
<b>Republic Township</b>	<b>2.05</b>	<b>1.9</b>	<b>7%</b>
Ishpeming Township	2.43	2.47	1.6%
Champion Township	2.27	2.27	0%
Ely Township	2.57	2.53	1.6%
Marquette Township	2.24	2.17	3.1%
Negaunee Township	2.62	2.65	1.1%
Powell Township	1.93	1.96	1.6%
Tilden Township	2.46	2.4	2.4%
Negaunee City	2.30	2.4	4.3%
Marquette County	2.26	2.36	4.4%

<b>Table 7-5 Persons Per Household, Selected Areas, Multiple Years</b>			
State of Michigan	2.49	2.45	1.6%

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

As discussed in Chapter 2, a smaller average household size may be attributed to several factors, including families having fewer children, an increase in the number of single parent families and increasing numbers of elderly residents living alone and remaining in their own homes.

**Housing Values and Rent**

In 2020, the United States Census Bureau reported that the median housing value in the Township was \$66,700, a marked decrease from the 2010 value of \$73,500 but considerably lower than the median housing value of the County and the State.

<b>Table 7-6 Median Housing Values, Selected Areas, 2010 and 2020</b>		
Unit of Government	2010	2020
<b>Republic Township</b>	<b>\$73,500</b>	<b>\$66,700</b>
Ishpeming Township	\$103,900	\$160,800
Champion Township	\$63,400	\$77,500
Ely Township	\$101,900	\$166,800
Marquette Township	\$160,800	\$180,100
Negaunee Township	\$144,900	\$199,500
Powell Township	\$103,500	\$138,500
Tilden Township	\$94,800	\$83,700
Ishpeming City	\$75,700	\$86,600
Negaunee City	\$105,200	\$123,000
Marquette County	\$125,100	\$154,200
State of Michigan	\$144,200	\$162,600

Source: U.S. Bureau of the Census, Census 2010 and 2020 American Community Survey 5-Year Estimates.

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 Republic Township increased from \$430 in 2010 to \$805 in 2020 as shown in Table 7-7. Gross rent in the Township is higher than the County average and about the same of the State’s level.

Area	2010	2020
<b>Republic Township</b>	<b>\$430.</b>	<b>\$805</b>
Ishpeming Township	\$517	\$579
Champion Township	*	*
Ely Township	\$386	\$760
Marquette Township	\$571	\$820
Negaunee Township	\$652	\$772
Powell Township	\$525	*
Tilden Township	\$594	\$808
Ishpeming City	\$448	\$526
Negaunee City	\$491	\$620
Marquette County	\$557	\$775
State of Michigan	723	\$892

Source: U.S. Bureau of the Census, Census 2010 and 2020 American Community Survey 5-Year Estimates.

\* - Too few sample observations to compute an estimate

**7.3 Financial Characteristics**

As discussed in Chapter 3, median incomes in the Upper Peninsula are significantly lower than statewide averages. While this can be offset somewhat by lower local housing costs, the ability of local households to afford housing can be impacted by these lower incomes.

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 (mortgage, taxes, etc.) should consume no more than 25 to 30 percent of gross household income. Poverty status by age for Republic Township is presented in Table 7-13 and income levels for the Township are presented in Table 7-14. Tables 7-15 and 7-16 below indicate percentages of income directed to the cost of housing. Although the Census data is somewhat limited, it does illustrate the greater impact housing costs have on lower income households.

<b>Table 7-8 Poverty Status by Age, Republic Township, 2020</b>				
	64 years and under	65 years and above	Population for whom Poverty Status is Determined	
			Persons	Percentage
Above Poverty	305	499	804	85%
Below Poverty	149	25	174	15%

Source: U.S. Bureau of the Census, 2020 American Community Survey 5-Year Estimates

<b>Table 7-9 Income Levels, Selected Areas, 2020</b>					
Area	Median Income		Per Capita Income	Income Below Poverty Level	
	Household	Family		% of Persons	% of Families
<b>Republic Township</b>	<b>\$36,250</b>	<b>\$50,909</b>	<b>\$25,597</b>	<b>17.8%</b>	<b>15%</b>
Marquette County	\$54,585	\$70,290	\$28,537	15.2%	8.4%
State of Michigan	\$59,234	\$75,470	\$34,768	9.2%	9.2%

Source: U.S. Bureau of the Census, 2020 American Community Survey 5-Year Estimates. Community Survey 5-Year Estimates.

#### 7.4 Selected Housing Characteristics

Substandard housing information is presented in Table 7-10. 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. According to the 2020 American Community Survey estimates, there are no substandard homes in the Township.

<b>Table 7-10 Substandard Occupied Housing, Selected Areas, 2020</b>			
Characteristics	Republic Township	Marquette County	State of Michigan
	Percent	Percent	Percent
Lacking Complete Plumbing Facilities	0	0.5%	0.3%

<b>Table 7-10</b>			
<b>Substandard Occupied Housing, Selected Areas, 2020</b>			
Lacking Complete Kitchen Facilities	0	0.6%	0.7%

Source: U.S. Bureau of the Census, 2020 American Community Survey 5-Year Estimates.

The type of heating fuel utilized in occupied housing units is presented in Table 7-11. Most of the occupied housing units in Republic Township use either bottled gas, tank gas, LP gas, or fuel oil or kerosene for heating. Utility gas is used in the majority of homes throughout Marquette County and the State.

<b>Table 7-11</b>			
<b>Occupied Housing Unit Heating Fuel, Selected Areas, 2020</b>			
Source	Republic Township	Marquette County	State of Michigan
	Percent	Percent	Percent
Utility Gas	7%	65%	76%
Bottled, Tank or LP Gas	51%	14%	8%
Electricity	9%	11%	10%
Fuel Oil, Kerosene, etc.	18%	1%	1%
All other fuels	0	0.2%	0.9%
No Fuel	0.6%	3%	0.4%
Wood	12%	4%	2%

Source: U.S. Bureau of the Census, 2020 American Community Survey 5-Year Estimates.

## 7.5 Issues and Opportunities

- The number of housing units in Republic Township has decreased 2.4% from 2010 to 2020. The population has also decreased by 6% in the same time period, meaning that there may be an excess housing supply and increase in long-term vacant residences. Blight may become an issue if these houses sit vacant for too long.
- About 25% of the Township’s housing stock was built before 1939. Maintaining the aging housing stock within the Township is essential for purposes of historic preservation and prevention of blight.

- About 90% of the housing stock in Republic Township consists of single family homes. The number of people living in a household, as well as the age and relationship of those people, all influence the type of housing needed in a community. With the decrease in household size and increase in the number of non-family households, an effort should be made to continue to provide diversified housing options in the Township.
- Median housing values in the Township have increased dramatically since 1990, while gross rent has also increased, but still remain lower than the State average. Higher rent has a significant impact on lower income households. Rental assistance programs could be pursued to curb the impact of higher housing costs.
- None of Republic Township's housing units are considered to be substandard, a decrease from levels reported in 2000.
- Almost half of all occupied housing units in Republic Township use bottled gas, tank gas, LP gas, fuel oil or kerosene for heating. With fuel costs rising, alternative heating methods should be looked into.
- New housing development is occurring on bigger lots and around waterfronts wherever available. In order to accommodate larger homes Zoning Ordinance adjustments have been made. Paramount were the requirements of Septic/Well separation needs. Also, frontage requirements have changed preventing spaghetti development. The zoning ordinance is the chief regulatory tool to guide development. A review and revision of the Township's Zoning Ordinance may be beneficial to guide future development.

## Chapter 8 Recreation

### 8.1 Introduction

Outdoor recreation opportunities abound in Republic Township. Republic Township is blessed with inland lakes, ORV/snowmobile trails, campgrounds, cross country ski trails, hiking trails, wildlife observation facilities, canoe/kayak rivers and streams and an abundance of scenic beauty.

Information provided in this chapter is intended to provide current and comprehensive data to guide Republic Township decision makers regarding future park development and or acquisition. Existing parks and other recreational facilities and events are discussed in the context of location, features and use. This information was obtained from the Republic Township Recreation Plan adopted in 2007 and revised in 2013, 2019, and 2020.

There are both private and public recreational facilities within Republic Township. Recreation related to tourism is vital to area economics and is an expanding industry nationwide. Attractions and facilities located in the Township present many opportunities for active and passive recreations. Republic Township is rich in natural resources, which draw a growing number of visitors each year. Heritage based tourism and ecology based tourism are becoming increasingly popular. Having adequate recreational facilities to meet the needs of visitors as well as residents is vital to the community.

### 8.2 Recreation Administration

Recreation coordination, program development and planning are the responsibilities of the Planning Commission appointed by the Township Supervisor and approved by the Township Board. The Planning Commission reports to the Township Board and makes recommendations. In 2010 the Planning Commission formed the Republic Recreation Committee to make recommendations to the Commission on recreational needs. Policy and funding decisions concerning parks and recreation in the Township are the responsibility of the elected members of the Township Board. To that end, seasonal workers are hired to maintain recreation facilities.

The Township Board has the power to recommend, administer and update recreation facilities for the Township. The Recreation Plan is regularly reviewed by the Planning Commission and is updated as necessary.

### 8.3 Recreation Inventory

The following inventory of recreation sites was collected using Township records and local knowledge of Township officials and is also presented in the Republic Township Recreation Plan 2024-2029.

## Republic

**Republic Beach** is located at the intersection of County Road LG (River Road) and M-95 in Republic. This 21-acre facility was acquired by the Township in 1996 through a land swap with the Kocber Mining Company. The Township would like to continue to develop the property.

The beach, which is on the north side of County Road LG, is sand, sloping down gradually to a water depth of approximately 15 feet. The Township has installed:

- Floating dock
- A swimming raft
- Public changing house/restroom facility
- A brand-new play area with age appropriate activities was installed in Summer 2019
- Small pavilion with a concrete floor
- Paved circular drive
- Regulation sized fenced basketball court
- Regulation sized volleyball court
- Twelve (12) lighted horseshoe courts on the south side of County Road LG

**Paul's Park** is a playground equipped for children 12 years of age and younger. The park is maintained by the Township employees. The Township would like to continue to develop this property. The park contains:

- One adult sized 6-swing set
- Junior sized climbing sets
- One slide and two euclid tires

**Munson Park** is located at the intersection of County Roads LLK and 601 on the Michigamme River. The park has been developed by the Republic Lions Club as a community park. Picnic tables, various flowering shrubs and an assortment of shade trees have been planted. The Township maintains a seasonal dock.

**Northern Lights Campground**, located next to Munson Park was developed using funds from grants from the Michigan Department of Natural Resources Trust Fund and the Cliffs/EAGLE Community Foundation. Maintained by the DPW, It features 11 RV sites with electricity, water, Cable TV and WIFI, with an additional 12 tent sites available. A sanitary dump station has been installed nearby. The Campground is fully ADA compliant.

### **IOHT Welcoming Center/Trail #1**

An empty bank building purchased by the Township with a Natural Resources Trust Fund Grant has been converted into a trail interpretive center/welcome center. A DNR Trust Fund was received and funds were used to install bathrooms and restore the building.

**Moose Rapids Campground** is located about 5 miles northwest on County Road LG from the M-95 intersection. The Township has developed a rustic eleven (11) site campground. At present, payment for use is on the honor system. Maintenance at the campground is handled jointly by the Republic Sportsmen's Club and Township employees. Limited facilities include a hand pump well. The Township would like to continue to develop this property.

**CR 601 Launch site** is on the Michigamme River. This is a very small (approx. ¼ acre) unimproved boat launch site. It has a removable dock and is maintained by the DPW.

**Moose Country Snowmobile Trail** is maintained and groomed by the Moose Country Snowmobile Club under contract with the Michigan Department of Natural Resources. The Trail is approximately 150 miles long, interconnecting across the Upper Peninsula in Marquette and surrounding counties. Access by trail is provided to surrounding areas such as Amasa, Big Bay, Gwinn and Ishpeming. The club headquarters are located in Republic.

**School Lake** is a popular fishing lake on all but the south side, this lake has an ADA accessible dock for fishing.

**The Western End of The Iron Ore Heritage Trail** is in North Republic. An empty bank building was purchased by the Township with a Natural Resources Trust Fund Grant to convert it into a trail interpretive center/welcome center. A DNR Trust Fund has been received and funds were used to install bathrooms and restore the building. The Iron Ore Heritage Recreational Authority has placed benches and a bicycle repair rack near the trailhead. The Republic DW maintains this building, the entrance is ADA compliant.

**Republic-Michigamme School** is located in Republic Township provides schooling for children ages Pre-Kindergarten through 12<sup>th</sup> grade.

The school also has an extensive playground system and sports equipment. The playground was recently updated to meet State of Michigan Guidelines. Equipment includes:

- Three sets of adult sized 6-unit swings
- Ladder and snail shaped climbing unit
- Regular teeter-totter
- Jungle gym climbing system
- Two (2) fenced tennis courts
- Two (2) single basketball backboards with hoops attached to tennis court fence
- Regulation quarter mile track including long jump and pole vault pit (may be used for school athletic events and by the general public.

**The Township Baseball Field** is located on 10.8 acres of Township land directly behind the Marquette County Road Commission District Garage. The field was originally designed for softball but has attracted a wide range of teams due to the quality of the field. The Township Department of Public Works employees maintain and monitor the field during the summer months. The field is used regularly for Little League teams. The field is kept locked to prevent vandalism, but is available to the public on a request first come/first served basis. Through the effort of volunteers over the past two years, the in-field has been completely re-done and plans are underway to continue to upgrade the facilities to attract local softball and baseball tournaments.

**The Moto-Cross Track/Golf Driving Range** is owned by the Township and is situated on 26.5 acres. With the assistance of local contractors, the Republic Lions Club and the volunteer fire department members, an AMA approved regulation Moto-Cross track and a full functional driving range have been developed.

**Boulder Ally Disc Golf Course** is located within the 26.5 acres of the driving range, between M-95 and Hawk's drive in South Republic. There are 9 baskets installed with two natural tee pads per basket. Sponsor signs and tee signs have been installed, and a road sign is placed on M-95 to mark the entrance to the course. This course have been the home to multiple fundraising tournament to help with the expansion.

**The Sledding Hill** is a former abandoned ski hill that has been renovated to be used for sledding. The hill is located at the intersection of M-95 and County Road LLI (?) approximately 1 mile south of South Republic. The sledding hill is located on Township property and the Sportsman's Club hosts a sledding event yearly for the children.

**The Republic Township EMS building** is a fully accessible facility that has been made available for public and private functions, and is located on M-95 between North and South Republic. The building can accommodate up to 200 people for various events.

#### **8.4 Handicapped Accessibility**

The Township makes every effort to make all recreational activities available to those with disabilities. The Township Hall and Youth Center are barrier free. Improvements have been made at Republic Beach to comply with Americans with Disabilities Act requirements. Accessibility is provided at the Republic Beach; the beach house is handicapped accessible, a hard surface walkway allows those with disabilities access to the beach and dock area, at Republic Beach. And the Township installed new handicapped accessible picnic tables at Republic Beach in the spring of 2015. However, handicapped accessible vault toilets and picnic tables need to be installed at Moose Rapids Campgrounds.



### 3.5 Future Recreational Development

After discussion with various community groups and interested residents, the following have been identified as possible recreation facilities to be developed:

- Republic Township in conjunction with the Iron Ore Heritage Recreation Authority has developed a multi use Iron Ore Heritage Trail. This trail links the Township with other communities within the trail system highlights Marquette County's rich iron ore heritage.
- Cliffs Natural Resources owns a 2300-acre wetland preserve adjacent to the former Republic Mine. The Township and Cliffs Natural Resources, in cooperation with the Iron Ore Heritage Recreation Authority will attempt to create a system of barrier free non-motorized trails consistent with the stipulations of the conservation easement in place. The system of non-motorized trails within the preserve will link with multi-use trails outside of the preserve. This system of trails within the Iron Ore Heritage Trail System will enhance the quality of life of the residents of Republic Township, encourage outdoor recreation, facilitate economic activity within the community and draw visitors and tourists from around the country to Republic Township.
- The baseball field fencing in Republic needs to be addressed, either the fencing moved out 10-15 feet or the present fencing needs to be elevated.
- Improvements to the Republic Mine Dam located near Republic is of recreational interest to the Township. Maintenance of the reservoir during the operation of the mine provided a body of water that homes and camps were developed along and the community centered many recreational activities near the reservoir. The reservoir is viewed as an asset to the community and refurbishing the dam will maintain this asset. TIFA ownership of the dam and recent DNR grant approvals will finally allow for the upgrades necessary to the dam. The Authority has received funding through a Township millage, MDARD, DNR, EGLE and the State of Michigan for the removal of the Republic Dam and replace it with a rock crib spillway with a fish passage. A permit has been applied and design is in review.
  - Fishing is greatly improved with the help of water being held back by the dam;
  - The annual Fishing Derby sponsored by the Republic Sportsmen's Club is a big draw for the community, attracting many people from outside the area;
  - Without the Spillway/dam, the tournament would not be possible;
  - Without the spillway/dam, Republic Beach would be lost;
  - A number of campgrounds and resorts have been established along the river and rely on water levels made possible by the spillway/dam;
  - Homes and camps have been established along the river and rely on water levels made possible by the spillway/dam. Property values would be greatly reduced

- without the dam for these and other developments; and
- Wildlife viewing is enjoyed by many area residents. Water levels made possible by the dam serve to attract wildlife to the area.

**Action Plan:**

- Non-motorized trail system for hiking, biking and bird watching within the Cliffs Natural Resources wetland preserve including parking, landscaping, bathroom facilities and a kiosk with information and maps. **(Utilize Township funds, private funds and MDNR Trust Fund Grants)**
- Improvements to Republic Beach facilities. **(Utilize Township funds and MDNR Trust Fund Grants)**
- Develop 9 addition disc golf baskets at the Republic Boulder Alley Disc Golf course. **(Utilize crowding funding with matched funds raise for Boulder Alley, and proceeds from local tournament held at Boulder Alley)**
- Develop 2.5 miles of mountain biking, bicycling, walking and hiking trails on Township owned property. **(Utilize Township funds and MDNR Trust Fund Grants)**

### 8.6 Historic Sites

Heritage tourism, or tourism oriented toward the cultural legacy of an area is becoming increasingly popular. Heritage tourism involves visiting historical sites to gain an appreciation of the past. Special historical significance is recognized through listings of the State or National Register of Historic Places. Properties may receive designation from both. Identification and preservation of historical sites can enhance a community's awareness of its past. There are two Township historical site currently on the State and National Register of Historic Places listed below:

- M-95 (old) Michigamme River Bridge is located about two miles south of Witch Lake. This concrete arch bridge spans the Michigamme River on an abandoned segment of M-95. The crossing is situated immediately west of the current alignment of the highway, immediately north of the Dickinson County Line. The structure is comprised of two filled spandrel arches with elliptically shaped continuous arch rings. The date "1910" is

inscribed on one of the guardrails. Now situated on a private road, the Michigamme River Bridge is in unaltered though deteriorating condition.

- The Park Hotel and Cabins, hotel complex located at 11137 County Road LLK in Republic Township, Michigan was added to on the National Register of Historic Places in 2013. The Park Hotel is located on a 15-acre (6.1 ha) plot along the Michigamme River covered with pine trees. The site contains a two-story log hotel near the street and 15 stone cabins along the edge of the river. It also contains two open woodsheds and the foundation and lower walls for an unfinished house. The hotel is a two-story hipped roof structure with walls of large vertical pine logs sitting on a concrete foundation and double-hung three-over-one wood windows. The hotel originally had a wraparound veranda on all sides sheltering a ground-floor porch and supporting a second-floor deck. The porch still exists in the front, but the entire veranda superstructure has been removed. The hotel originally had 12 rooms, with eight on the second floor and four on the first; the remainder of the first floor contained the lobby, a kitchen and dining room, and office space. The first floor rooms were later converted to a private residence. There was a lounge in the basement called the Nature Bar. The corridors on the second floor form a cross shape, reached by a stairway from the lobby. The interior is finished with hardwood floors and veneer paneling. The 15 cabins are located on a two-track loop behind the hotel. They are hipped roof structures made from cut stone, with concrete floors and pine veneer interior walls and ceilings. Twelve of the cabins are single-room structures with a kitchenette; the remaining three are two-bedroom units with a central living area.

### 8.7 Issues and Opportunities

Natural features throughout Republic Township provide a variety of year-round active and passive recreational opportunities for residents and visitors.

Republic Township has an updated 5-year recreation plan approved by the MDNR, which allows the Township to apply for MDNR Trust Fund Grants. The Township has identified several priorities for recreational development. Grant funding has been secured for numerous projects in Republic Township.

The Township continues its support of the Iron Ore Heritage Trail and the Republic Wetlands to provide a wide array of recreational opportunities to residents and visitors in Republic Township.

The Township and Cliffs Natural Resources, in cooperation with the Iron Ore Heritage Recreation Authority, are attempting to create a system of barrier free non-motorized trails consistent with the stipulations of the conservation easement in place.

All current and future recreation sites should be developed to achieve maximum benefits for all users, including ADA compliance. This could include the upgrade of play areas, removal of

uneven surfaces and sidewalk obstructions and procurement of additional wheelchair accessible picnic tables. Creation of new recreation areas to address the interests of the younger and senior generations and those with special needs is necessary.

The Township possess numerous historical sites, a couple recognized by the State Historic Registers. Grant funding could be pursued to restore and preserve these pieces of cultural history. With the increasing popularity of heritage tourism, promotion of cultural attractions could bring a boost to tourism and to visits from residents.

Environmentally safe recreation via responsible behavior should be promoted throughout the Township in order to preserve recreation and natural areas.

Republic Township and its abundance of natural and recreation areas could become a popular destination for eco-tourism with proper promotion.

## Chapter 9.0 Goals, Policies and Objectives

### 9.1 Introduction

Throughout the preceding chapters of this Master Plan, detailed information has been presented defining the historical trends and current situation in Republic 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 policies and 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, policies 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, policies and objectives set forth in this Master Plan. It should be emphasized, however, that these goals, this Master Plan, policies and objectives are only a guide to provide long term vision; ideas and projects mentioned are adjustable per a community's needs. While the Planning Commission has developed this Master Plan based on the best information available, the needs of the community or changes in the local population or economy may mean that these goals, policies and objectives will periodically need to be re-evaluated. This plan must remain flexible enough to respond to changing needs and conditions while 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, policies 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.
- **Policy:** A statement of position or course of action which provides a means of obtaining a stated goal. Policies are factual in nature and can be measured by the impact they have on existing conditions.

- **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.

## 9.2 Goals, Policies and Objectives

### GOALS:

- Prevent further population decline and eventually achieve a manageable population growth rate.
- Provide adequate and efficient public and private sector services for the aging population.
- Encourage the availability of safe and affordable housing units of varying style and size sufficient to meet the needs of the local population.
- Apply resources to attract younger families to the area.
- Take advantage of outside resources to promote the area as a good place to live.

### POLICIES:

- Encourage those persons who currently reside in the Township to remain residents of Republic Township.
- Encourage the availability of appropriate housing development sites throughout the Township
- Maintain consistent and vigilant enforcement of an ordinance designed to ensure public health and safety and control blight and structural deterioration.
- Encourage development of subdivisions in areas that can be served by municipal water and sewer services.
- Encourage development of a variety of housing types to meet the needs of the present and future population of the Township.
- Encourage rehabilitation of existing housing stock to provide safe living conditions and prevent deterioration and blight.

### OBJECTIVES:

- Maintain current infrastructure and make infrastructure improvements whenever possible to continue to provide services to residents, encouraging them to remain in the Township.
- Assist residents in obtaining training in business and entrepreneurship when possible to keep residents in Republic.
- Continue to communicate in a positive manner with resident to foster hope.

- Provide services focused on the aging population, encouraging older residents to remain in Republic Township.
- Utilize the Zoning Ordinance and other land use regulation tools to ensure that areas are available for residential development.
- Periodically review the Township Infrastructure and services to ensure there is sufficient capacity to meet existing and future residential and commercial requirements.
- Neighborhoods, businesses and public entities should be vigilant regarding physical appearances, sanitation and general ownership responsibilities.
- Review the Zoning Ordinance to assure there is a variety of densities and dwelling types.
- Use the Zoning Ordinance to guide denser development areas where utilities and natural features are suitable for such development.

### 9.3 Economic Base

#### GOALS:

- Provide reasonable opportunities for the establishment of commercial uses which meet the demonstrated market needs of Township residents.
- Ensure that the architecture, landscaping and signage associated with commercial establishments are compatible with the Township's rural residential character.

#### POLICIES:

- Encourage commercial development in locations where compact and coordinated development can occur without impacting residential land uses.
- Discourage the establishment of multiple access points for freestanding commercial uses. Encourage the use of shared access and service drives.
- Require new commercial site developments to conform with the applicable recommendations of the Marquette County Master Plan.
- Review commercial architectural and landscape designs to ensure that such uses are carefully integrated into the Township's landscape.
- Require the establishment of transitional uses and/or landscaped screening between commercial and residential agricultural or open space land uses.
- Consider the impact new developments will have on the Township ecosystem, specifically the impact of increasing impervious surface area on Republic watersheds.

### 9.4 Resource Conservation

**GOALS:**

- Maintain the Township's scenic and wooded 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.
- Encourage the retention of important forestlands, farmlands and open space areas.
- Protect the quality of surface and ground water resources in the Township from development and related impacts.
- Protect Township residents and property from natural hazards associated with development which infringes on natural systems.

**POLICIES:**

- Encourage maintenance of undisturbed natural buffers around inland lakes, streams, rivers, wetlands and other sensitive environmental systems.
- Encourage the use of cluster designs to conserve scenic views, agricultural land, wetland areas, inland lakes, groundwater recharge areas, steep slopes and other environmentally sensitive areas.
- Encourage the use of native plant species and naturalized landscape designs where appropriate to enhance the community's existing character.
- Encourage the retention of productive forest and agricultural lands through available mechanisms such as open space and farmland agreements, forest stewardship programs and conservation easements as well as local zoning incentives.
- Encourage the stewardship of privately owned forestlands, wetlands, inland lakes and other environmental systems.
- Encourage the establishment of a continuous open space system that interconnects public and private natural areas and recreational facilities.
- Encourage inclusion of parks, bicycle and pedestrian linkages and open space areas in conjunction with new and established developments.

**9.5 Industrial Land Use**

**GOALS:**

- Provide locations for light industrial uses that are adequately served by public facilities and services.
- Ensure that architecture, landscaping and signage associated with industrial establishments is compatible with the Township's rural residential character.



**POLICIES:**

- Discourage industrial development which will negatively impact environmentally sensitive areas or require substantial changes to the natural systems.
- Utilize the concept of planned industrial areas that emphasize access control, building and site design and controlled signage and lighting.
- Require new industrial developments to conform to the applicable recommendations of Marquette County's Master Plan.
- Consider the impact new developments will have on the Township's ecosystem, specifically the impact of increasing impervious surface area in the Republic Township watershed.

**OBJECTIVES:**

- Efforts should be made to attract new industry that will have a relatively low impact on the community and environment.
- Identify areas that are suitable for industrial development but will not adversely impact adjacent land uses.
- Review current zoning district designations to ensure suitable areas are identified for industrial development.

**9.6 Commercial Land Use**

**GOALS:**

- Increase employment and investment that will result in economic diversification compatible with the character and long term interests of the Township.

**POLICIES:**

- Develop a commercial district along the M-95 corridor while maintaining the small town community spirit in Republic.
- Focus on diversification of business in the "typical downtown" area as well as along the M-95 corridor.
- Ensure that retail, commercial and industrial growth occurs where it does not endanger or diminish the Township's natural surroundings or quality of life.
- Encourage the establishment of home-based and natural resource-based industry through promotion of area's rural setting and overall quality of life.
- Ensure that commercial and industrial development is located where adequate infrastructure is in place or is available and would be compatible with adjacent land uses.

- Efforts to attract new industry to the Township should focus on “light” industry, firms with relatively low impact on the community and with minimal demands for public services such as water and sewer.
- Encourage existing businesses and industries to remain, except in cases where such uses are nonconforming or where state and federal standards are not being complied with. Where violations of state or federal standards exist, encourage firms to come into compliance to reduce land use conflicts and the potential for negative impacts on the environment.

**OBJECTIVES:**

- Review and revise if necessary zoning regulations to allow for home occupations and small rural businesses to the extent such businesses do not adversely impact other residential uses and are compatible with the level of services provided.
- Identify areas that are suitable for commercial development but will not adversely impact adjacent land uses.
- Review current zoning district designations to ensure suitable areas are identified for commercial development.

**9.7 General Land Use**

**GOALS:**

- Achieve a pattern of land use that will allow for manageable and compatible development in areas where adequate facilities exist or can be provided, while preserving open space and the community’s rural character.

**POLICIES:**

- Ensure that land uses are adequately supported by existing infrastructure.
- Where development is not connected to municipal water and/or wastewater systems, adequate land area should exist for private wells and septic fields.
- Driveways and private roadways should be designed with adequate right-of-way and constructed to provide safe ingress and egress.
- Commercial development should utilize shared driveways and parking, frontage roads, deceleration and turning lanes to reduce turning incidents and improve traffic flow.
- Development in the outlying portions of the Township should preserve open space and rural character of the Township and provide adequate space for private wells and septic systems.
- The cleanup of environmentally contaminated sites within the Township should be encouraged.

- Incorporate a wind and solar energy overlay zoning district and map into the zoning ordinance to provide for regulations regarding potential small and large scale wind turbines.

**OBJECTIVES:**

- Review recurring incidents of similar variance requests to determine whether zoning provision should be modified.
- Review and revise the zoning ordinance to discourage intensive development in areas where natural characteristics limit the sustainability of sites; examples include areas of high water tables, soils with low permeability, limited groundwater availability or areas of excessively well-drained soils.
- Review the zoning ordinance to provide for adequate lot sizes, setback, etc. to maintain the values of waterfront areas and other areas that are potentially not suitable for intensive development.
- Provide housing and other facilities and programs that meet the needs of young people and young families in order to maintain the desirability of Republic Township.
- Identify areas that are unsuitable for residential or commercial development.
- Review the established minimum lot sizes of the different zoning districts. Revise minimum lot size requirements as appropriate and to encourage more dense residential development in certain areas of the Township.
- Ensure that adequate areas are zoned for new residential, commercial and industrial development in the Township where infrastructure are in place or readily available to support development.

**9.8 Community Facilities and Services**

**GOALS:**

- Provide necessary community facilities and services efficiently and in conformance with all applicable regulatory standards for all Township residents and visitors.

**POLICIES:**

- Ensure that Township facilities, infrastructure and equipment are maintained in good repair.
- Work with other local government bodies, agencies and organizations which provide services in the area in order to maximize the level of service provided to Township residents.

- Ensure adequate fire protection coverage and emergency medical technician services to all areas of the Township.
- Continue to provide existing services in a safe and efficient manner in compliance with state and federal standards and expand services as needed.

**OBJECTIVES:**

- The Planning Commission shall develop a multi- year Capital Improvement Plan to be used as a long range planning and budgeting tool by the Township Board.
- Expansion of facilities and/or services should be predicated on the Township's ability to sustain operational and maintenance expenses.
- Identify areas that could be served by the Township water system to provide for potential industrial, commercial and or residential expansion.

**9.9 Recreation**

**GOALS:**

- Continue to provide adequate recreational facilities to residents and visitors
- Promote the Township as a four season recreation destination.

**POLICIES:**

- Ensure that recreational facilities are safe, clean and accessible to users of all ages, and ADA compliant.
- Ensure that recreational facilities are; to the maximum extent possible; developed for multipurpose and or year round use to optimize cost and benefits accrued to the public.
- Encourage public participation in the development and provision of Township recreational facilities and services.
- Develop marketing tools to promote the Township's recreation opportunities.

**OBJECTIVES:**

- Continue to support those "west-end" endeavors that will mutually benefit the Republic area.
- Maintain a current Republic Township Recreation Plan in accordance with Michigan DNR guidelines.
- Cooperate and coordinate with other communities throughout the county to maintain and improve recreation facilities and historical sites.
- Support other local governments' efforts to obtain grant funds for recreational facilities in the area.

- Pursue grant funds as appropriate to expand and improve community recreational facilities. Identify opportunities to make sites and facilities more accessible to people with disabilities.
- Facilitate and encourage community involvement in all aspects of the recreation planning process and site development in order to ensure that facilities are developed in accordance with local needs and that local residents feel “ownership” of these recreation areas.

#### 9.10 Transportation

##### GOALS:

- Promote a safe, efficient and well maintained multi-modal transportation system to serve the needs of residents, businesses and visitors.

##### POLICIES:

- Private driveway access to state trunk lines and other heavily traveled roadways by commercial uses should be limited in order to avoid increasing traffic congestion and safety hazards.
- Support the improvement and development of trails for motorized and non-motorized uses.

##### OBJECTIVES:

- Continue to develop local road improvement priority lists within the Township.
- Participate with the Marquette County Road Commission in setting road improvement priorities on primary roads.
- Participate in trail planning activities with local, state and federal and private agencies.
- Consider adoption of an access management plan.



Chapter 10.0 Future Land Use

**10.1 Introduction**

The previous chapters of the Master Plan provide an overview of the existing conditions in Republic Township. A future land use plan is representative of the “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. In addition for public facilities, open space, environmental conservation and recreational areas as well as 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.

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 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 the 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 other potential modifications to the districts will also be discussed in this chapter.

The Republic Township Zoning Ordinance reflects the assumption that land use patterns in Republic Township will continue to be influenced by transportation on corridors, particularly along M-95 as well as the Township’s natural features, such as the Michigan River. Other major considerations which helped shape the future land use map are a desire to establish appropriate uses and to develop consistent land use patterns throughout the Township.

Determining future land use in Republic is problematic at best. The Township is at a crossroads; will it move forward with the new businesses, industries and technologies or try to maintain the rural character of the Township and concentrate on recreation and tourism? Is it possible to do both? Should development be consigned to be certain areas and if so, where would those areas be? As a Planning Commission, many discussions have been held on these questions and the consensus is that there just isn’t enough information available to make any hard and fast conclusions. Instead, a more generalized version of what we’d like to see happen in our Township will be presented, leaving the details of who, what, when and where to be decided as opportunities arise. In this way, we hope to leave open and all appropriate options in regards to economic development.

## 10.2 Mission Statement

The mission statement for Republic Township is as follows: We will encourage and support activities and economic development that make the most of our central location, natural resources, habitats and heritage while minimizing environmental impact on the natural beauty of the area.

## 10.3 Policies

In particular future land use planning should include the following policies:

- Protect natural resources and features of the Township from inappropriate and incompatible land use.
- Provide appropriately zoned land areas for future growth of all land use types (for example: create a new commercial zone that allows for a cluster of businesses to be developed, as opposed to a “strip” or “pocket” development).
- Support efforts to reunite the areas of North and South Republic to provide for a stronger sense of community.
- Allow for continued residential growth of waterfront areas at densities appropriate for minimizing ecological and visual impacts in order to preserve the unique environment of Republic Township.
- Promote and encourage the diversification of the Township’s economic base.
- Require that all development projects be presented to the Planning Commission for review before implementation.
- Promote the development and use of green technologies including wind and solar energy, biomass production (both agricultural and forestry products).
- Encourage and support efforts of citizens to become more self sufficient (as in the development of home gardens and hobby farms).
- Encourage negotiation before; and remediation after; mineral extraction takes place.
- Ensure that recreation and tourism remain viable, as these are assets we currently have and which represent an economic base on which we can build.

## 10.4 Issues and Opportunities

There are several main issues that confront Republic Township. A main concern is the separation of North and South Republic, both physically and socially. At times it seems the two communities are mutually exclusive. Development of a scenic roadway and bike path between the communities may encourage a stronger sense of community, but giving folks *reason* to travel from one area to another is an issue that remains unresolved.



### 10.5 Current Zoning Districts

The Township is currently divided in twelve zoning districts. The intent and general purpose will be depicted for each district. A review of the current districts is pertinent to the discussion of any updates to the Zoning Ordinance.

#### R-1 SINGLE FAMILY RESIDENTIAL

The purpose of the R-1 district is intended to promote residential uses on smaller parcels of land, thus maintaining a high density residential district. The district regulations are also designed to restrict incompatible development such as apartment complexes, offices or commercial establishments from locating in this district.

#### R-2 MULTIPLE FAMILY RESIDENTIAL

The purpose of the R-2 district is established to provide medium density, semi-rural or suburban living on moderate size lots in areas not expected to be served by public water and sewer in the near future. Care should be taken to not place zone district where general soils information, if available, indicates severe development limitations for on-site waste disposal systems.

#### RR- RURAL RESIDENTIAL

The RR district is intended to promote lower density, semi-rural living in areas neither requiring nor anticipating the provision of public water and sewer services while allowing limited development compatible with the principal, residential use.

#### WR-1 WATERFRONT RESIDENTIAL

The WR-1 district is intended to provide a moderate level of residential and recreational use which is compatible with the water resource.

#### WR-2 WATERFRONT RESIDENTIAL

The WR-2 district is intended to provide for a more intensive use of waterfront areas which are already, or would be further developed with public services.

#### C/LI. COMMERCIAL

It is the intent of the C/LI. Commercial Light Industrial district to provide a business area for the location of office and retail stores, as well as compatible light industrial development.

## RP RESOURCE PRODUCTION

It is the intent of the RP district to establish and maintain for low intensity those areas which, because of their location, accessibility and natural characteristics, are suitable for agricultural, forestry and recreational uses.

## MR MINERAL RESOURCES

The purpose of the MR district is to establish and zone land areas for the reservation, protection and extraction of minerals for the long term future, to provide for the orderly economic growth of Marquette County and Republic Township and to provide for proper environmental management during the site planning, operational and reclamation stages of the mineral extraction process.

## MP MINERAL PRODUCTION

The purpose of the MP district is to establish and zone land areas for the reservation, protection and extraction of minerals, to prevent non-compatible land uses from denying the use of minerals, to protect mineral deposits near urban centers, to provide for the orderly economic growth of Marquette County and Republic Township and to provide for proper environmental management during the site planning, operational and reclamation stages of the mineral extraction process.

## 10.6 Potential Zoning Ordinance Amendments

As discussed earlier in this chapter, the Planning Commission is open to any compatible economic development in Republic Township. The Township currently uses twelve Zoning Districts to effectively zone the Township. Modifications may be made to several zoning districts as well as the consolidation of districts and the addition of new districts.

## ALTERNATIVE ENERGY

With increasing energy costs, there has been a growing interest in utilizing alternative energy resources. Regulations regarding alternative energy sources will continue to be reviewed by the Township and incorporated into the zoning ordinance as appropriate.

Regulations regarding the Wind Energy Systems (WES) shall continue to be reviewed by the Township. Language regarding large scale wind farms as well as wind turbines for use on single property should be considered.

Solar energy systems hold promise for the future energy needs of the Township because they use a renewable energy resource. They require less capital, land, water and other resources needed for central station generation of electricity and because they do not pollute the community's

water and air. The successful use of solar energy systems for such purposes as supplying space heating, water heating or the production of electricity is dependent upon sufficient access to direct sunlight. Regulations could be adopted promoting the use of solar energy systems and protecting access to sunlight for solar energy systems when in compliance with minimum lot requirements and setbacks.

#### **10.7 Conclusion**

Predicting the future of Republic Township is challenging. The Township Planning Commission has worked for months to produce the Master Plan and sought input on the plan from the public as to where the residents would like to see the Township progress. Republic Township has the potential for growth and this plan presents a vision for development.

Planning is intended to guide the forces of change in ways that encourage desirable outcomes while striking an appropriate balance with development and preservation. Priorities will likely require periodic review and further study as unforeseen circumstances bring about new challenges. The Planning Commission will be responsible for the review of this plan every five years. Patience, resolve and flexibility are necessary to achieve the goals set forth in this plan. The Master Plan is one of the tools that Republic Township can employ to encourage better land use decisions.

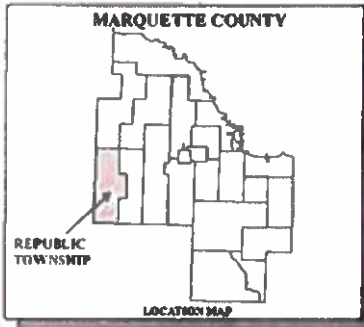


**Appendix A**

**Maps**

# REPUBLIC TOWNSHIP

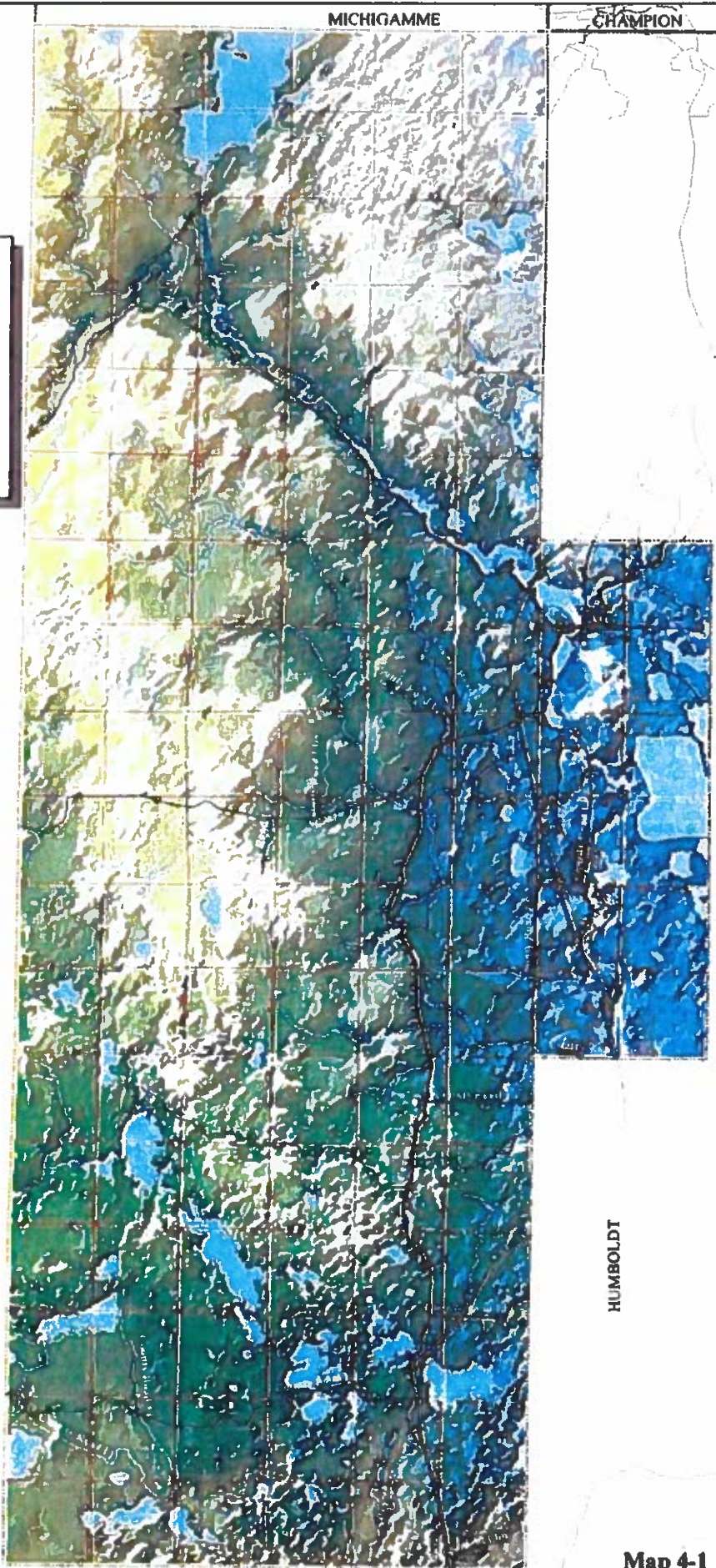
## Surface Topography



- State Trunkline
- County Primary
- County Local
- Not a Certified Public Road
- Lakes
- Rivers
- Section Line
- Township Boundary

**Elevation**  
Value (in feet)

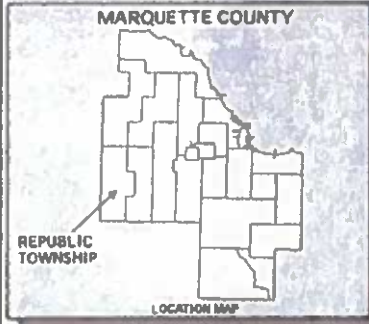
- High 1922
- Low 583



Map 4-1

**REPUBLIC TOWNSHIP**

*Orthophoto*

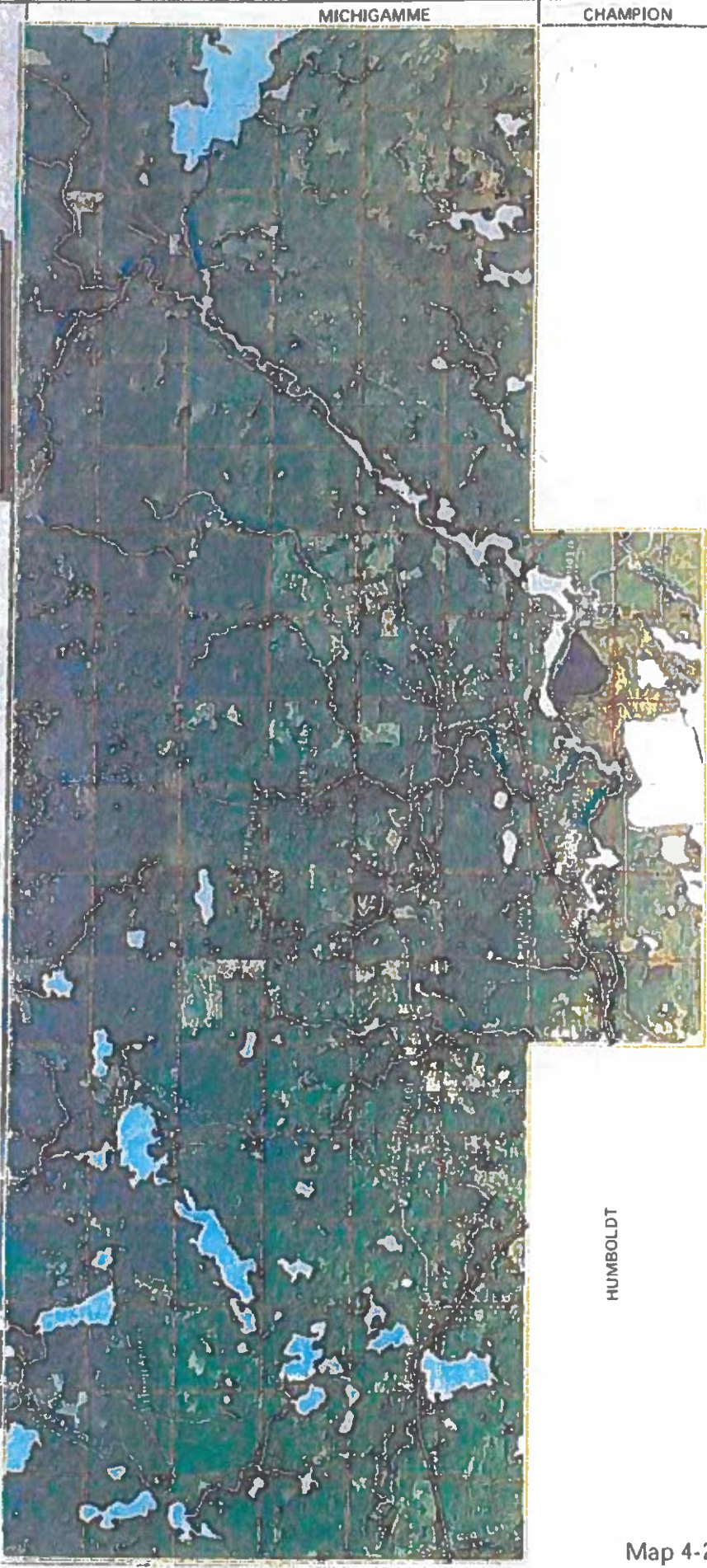


MICHIGAMME

CHAMPION



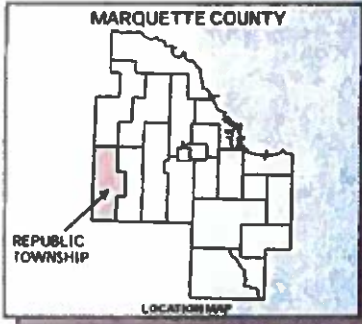
- State Trunkline
- County Primary
- County Local
- Not a Certified Public Road
- Lakes
- Rivers
- Section Line
- Township Boundary



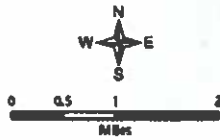
Map 4-2

# REPUBLIC TOWNSHIP

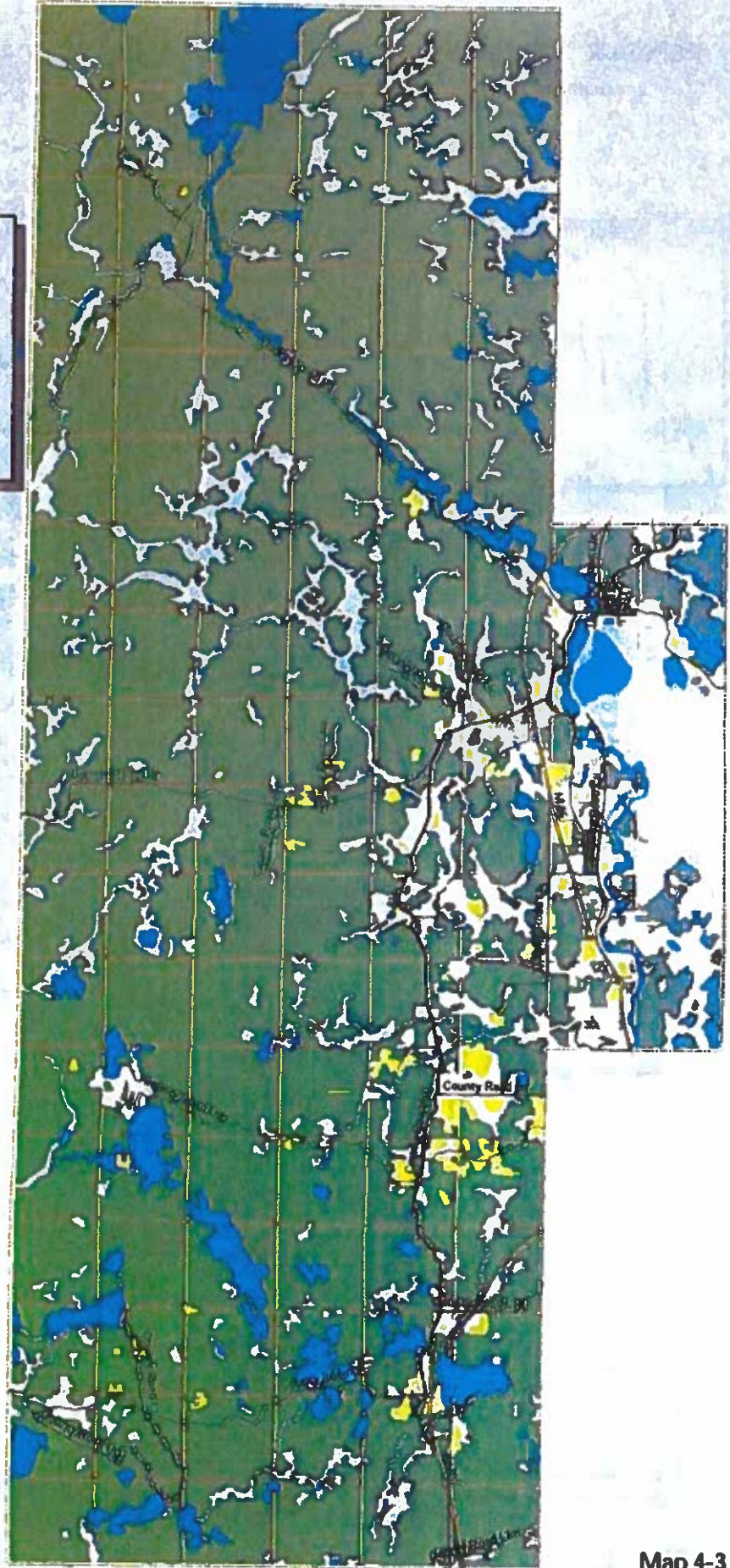
Land Cover



Type	
	Agricultural Land
	Barren
	Forest Land
	Metallic Mineral Quarry
	Rangeland
	Urban and Built Up
	Water
	Wetlands



	State Trunkline
	County Primary
	County Local
	Not a Certified Public Road
	Rivers
	Section Line
	Township Boundary



Map 4-3



# REPUBLIC TOWNSHIP

Soil Types  
(Generalized)

## MARQUETTE COUNTY



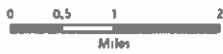
REPUBLIC TOWNSHIP

LOCATION MAP

### Republic Soils Association

Association

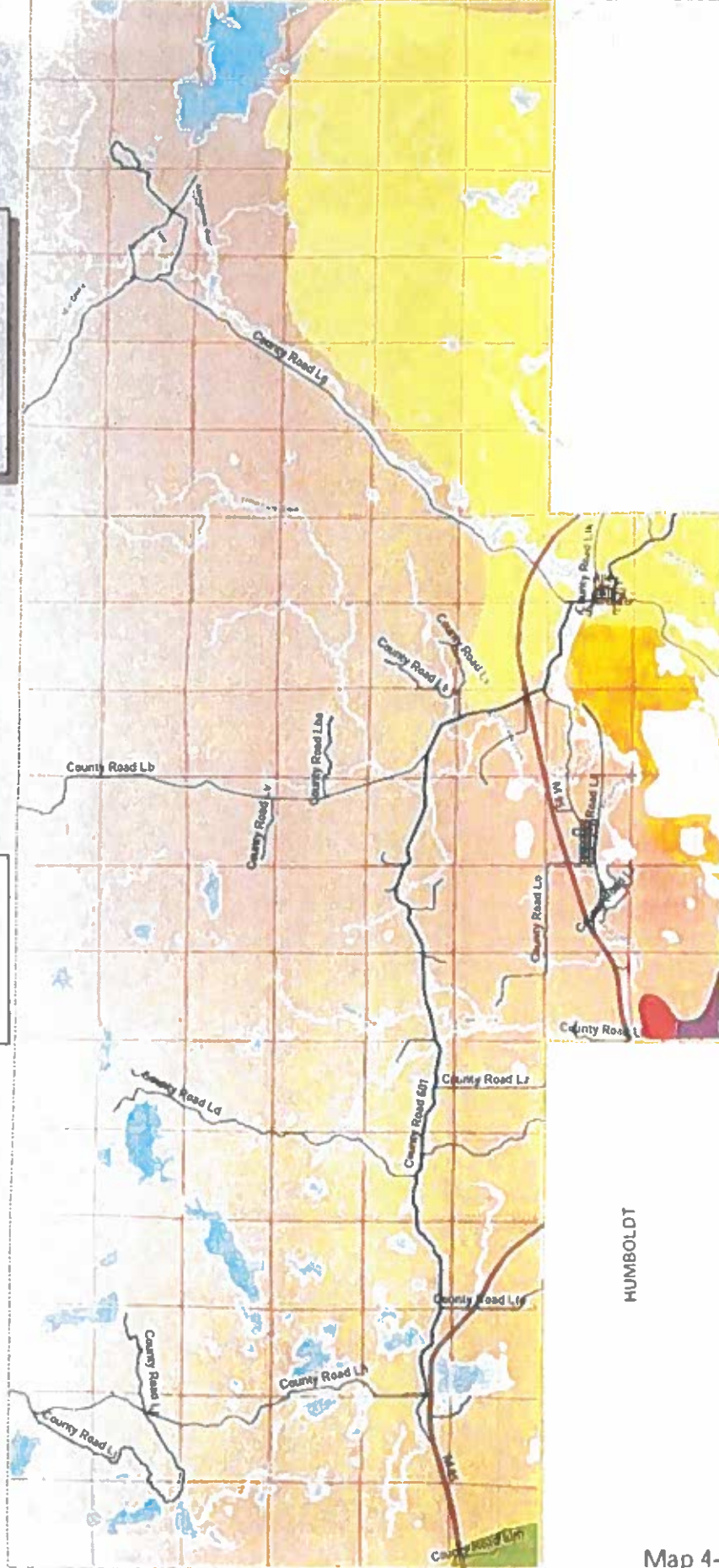
- Goodman-Surdeq-Greenwood Association
- Kooeydyr-Michigamme-Rock Outcrop Association
- Perce Association
- Piru-Dumps-Mine-Slickens Association
- Sagola-Rubicon Association
- Sundog-Minecqua-Channing Association



- State Trunkline
- County Primary
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- Rivers
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- Township Boundary

MICHIGAMME

CHAMPION



HUMBOLDT

REPUBLIC TOWNSHIP

MICHIGAMME

CHAMPION

Depth to Water Table









Depth

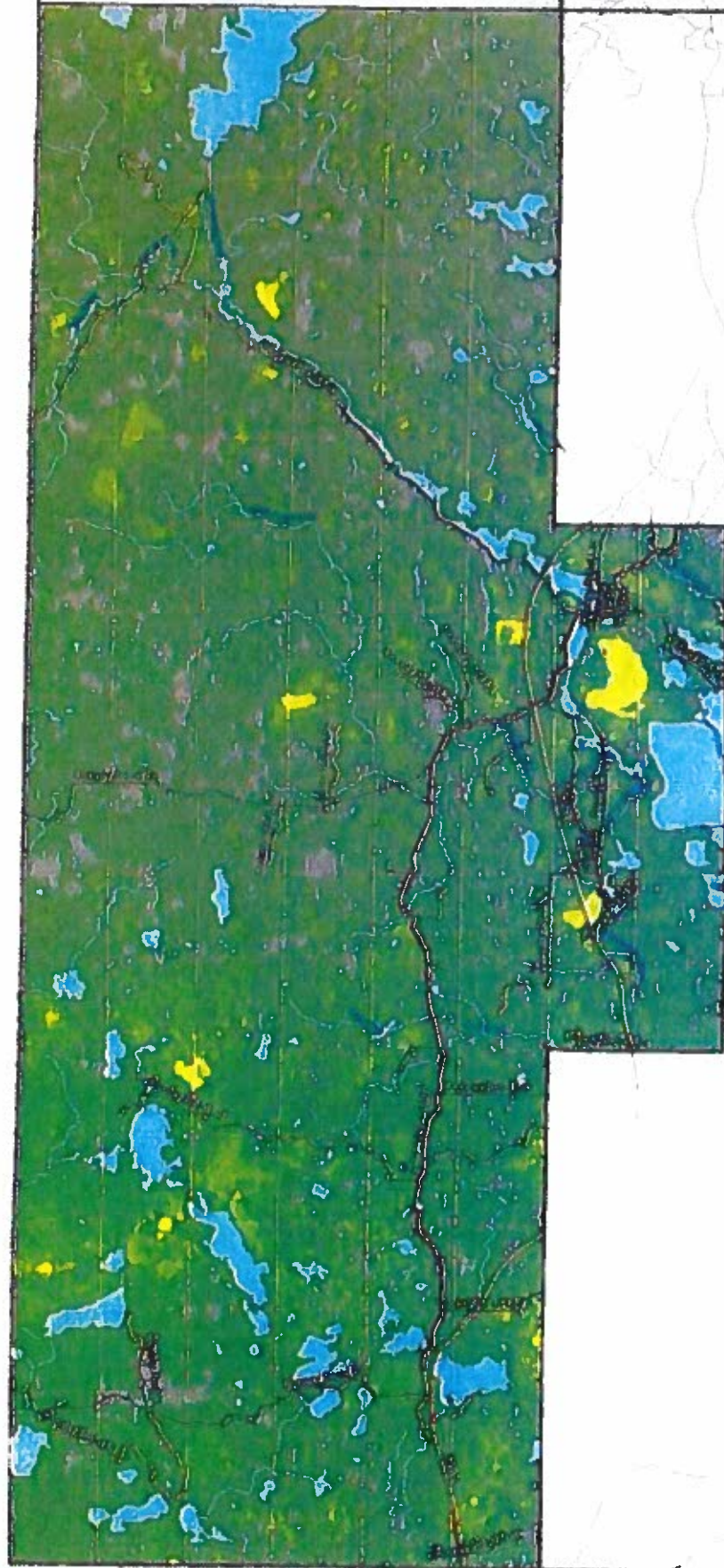
Value (in feet)

-  Errors (in data)
-  0 - 24
-  25 - 50
-  51 - 75
-  76 - 100
-  101 - 125
-  126 - 150
-  151 - 175
-  176 - 190



Roads  
LEVEL

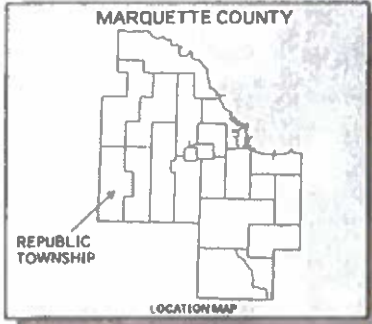
-  State Trunkline
-  County Primary
-  County Local
-  Not a Certified Public Road
-  Rivers
-  Lakes
-  Section Line
-  Township Boundary



HUMBOLDT

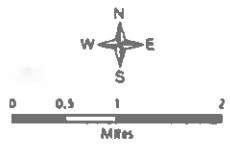
# REPUBLIC TOWNSHIP

Geology



### Geology

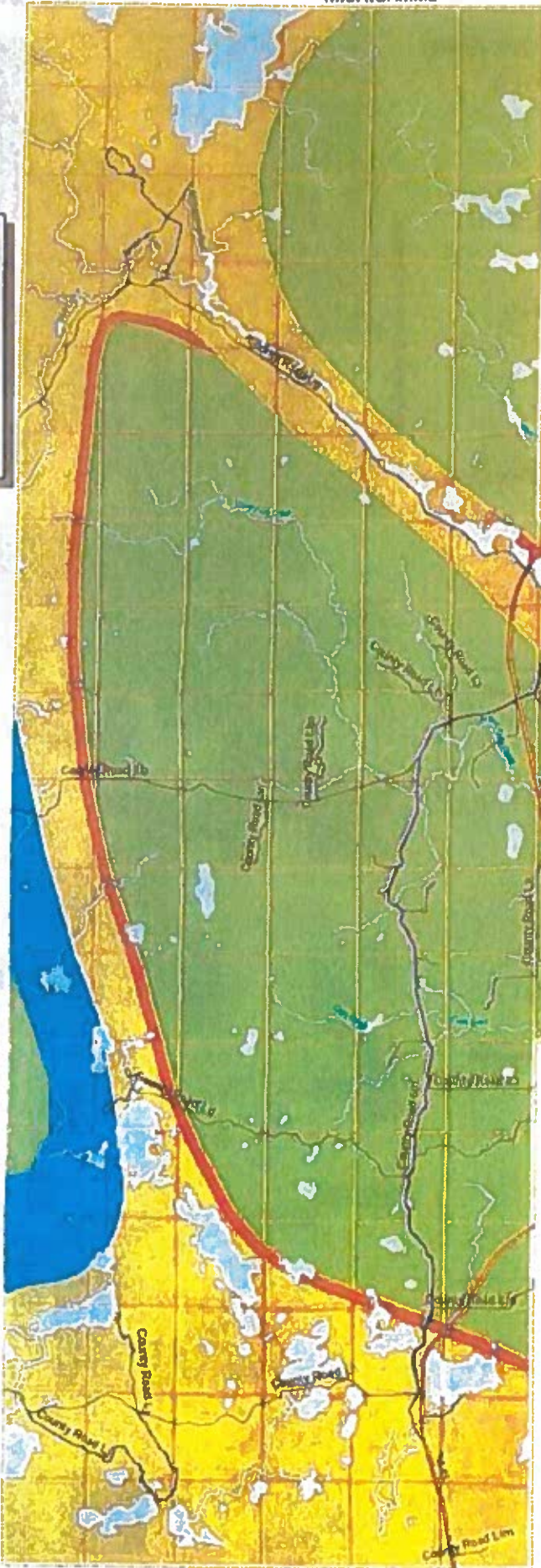
- ARCHAIC GRANITE & GNEISSIC
- HEMI LOCK FORMATION
- MICHIGAMME FORMATION
- NEGAUNEE IRON FORMATION



- State Trunkline
- County Primary
- County Local
- Not a Certified Public Road
- Lakes
- Rivers
- Section Line
- Township Boundary

MICHIGAMME

CHAMPION



HUMBOLDT





Roads  
LEVEL

- State Trunkline
- County Primary
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