

MISSAUKEE COUNTY COMMUNITY MASTER PLAN 2014



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Chapter 1

Introduction

MISSAUKEE COUNTY



Missaukee County is a unique blend of rural, agricultural, forested land, and plentiful recreational opportunities located within the northwestern lower peninsula of Michigan. Missaukee County is an easily accessible vacation and recreation retreat for travelers eager to enjoy the lakes, waterways, trails, campgrounds, and greener environment of this less urbanized locale. The value of these features, both aesthetic and otherwise, is not lost on the local residents who also enjoy the all-seasons recreation and more leisurely lifestyle found within our borders. Proposed land uses found in this plan are based upon a variety of factors to include land and water resources, existing land use distributions and community character, and the desires of citizens of Missaukee County. Questions which will be addressed within this Master Plan include where Missaukee County is now, how it got to this point, where do we want to go, and by what means can we get there?

A Master Plan is a policy-based document which cannot regulate land use or zoning; any recommendations found within the plan are for the purpose of guidance and not for regulation of property or land use. Implementation will occur through county or local decisions, public facility and infrastructure improvements, and private property owners acting consistently with the plan. A current Master Plan is an asset to a community; the information and data contained within the plan has been provided by county departments and other sources within the community, which better enables the judicious use of available resources. Additionally, having a framework in place will benefit businesses and other members of the community as it will allow for some idea of what to expect in terms of development; likewise, businesses and families considering relocation to Missaukee County will have a reasonably accurate description of what the future will hold. For all of these reasons, it is imperative that the Master Plan be maintained and kept current.

The Missaukee County Planning Commission is responsible for the interpretation, evaluation, revision, currency, and relevance of the Master Plan to ensure that it upholds Missaukee County's vision of the future. All public County decisions relating to land use, transportation, acquisition of land, and major capital improvements within Missaukee County should be reviewed with the Master Plan to ensure compatibility. The County Board can take action not consistent with the Planning Commission's recommendations; however, according to state law, the Commission has the authority to evaluate such proposals regarding their consistency with the Master Plan. The Commission has the important responsibility of ensuring that the Master Plan is current and in general, keeps with what the public and decision makers want the County to become in the future.

The Michigan Planning Enabling Act, Public Act 33 of 2008 (formerly authorized under the County Planning Act 282 of 1945) states that any County is authorized and empowered to make, adopt, amend, or carry out a county plan. "It shall be a function of the county planning commission to make a plan for the development of the county....Such plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the county which will be in accordance with present and future needs". The Missaukee County Planning Commission has accepted the responsibility and has followed the

directives of this Act in crafting and adopting a suitable plan for future development of Missaukee County.

Plan Purpose

This plan is recommended by the Missaukee County Planning Commission and adopted by the Missaukee County Board of Commissioners. The Missaukee County Master Plan was developed in an effort to both preserve and enhance the characteristics which make Missaukee County so distinctive, while at the same time guiding the future growth and decision-making processes. This comprehensive plan will identify factors related to policy and decision-making, such as future land use and discouragement of inappropriate uses; infrastructure, guiding principles, and will take into consideration factors which include public input, population, physical characteristics, social and economic conditions, and others. The information contained within this document will aid in the decision-making process used by the Missaukee County Planning Commission and the Missaukee County Board of Commissioners when called upon to review proposed land use requests and other local plans; it will also guide recommendations made regarding roads, parks, county buildings, and other infrastructure. This plan will illustrate what the people desire in terms of economics, land use, and preservation of community character, while at the same time remaining flexible enough to allow for change throughout the plan's cycle and subsequent updates which must occur at least every five years.

Development of this plan was ultimately guided by recognition of Missaukee County's natural and unchanging features formed by the land and water resources of the area, and the importance of these features when considering future development of residential, commercial, or industrial areas. It also recognizes the importance of Missaukee's agricultural lands and heritage when considering development and long range planning.

Plan Use

This plan is comprised of several components which will aid in the decision-making process. Research conducted in preparation for plan development clarified what the current baselines are in terms of demographics, the local economy, land use, the area's natural resources, the tax base, transportation issues, and the public facilities which are found within the county.

Public input gave a clear indication of what citizens would like to have happen here over the next twenty years, and that input was used to develop strategies, goals, and objectives toward which future projects would be steered based upon this guidance (Appendix B).

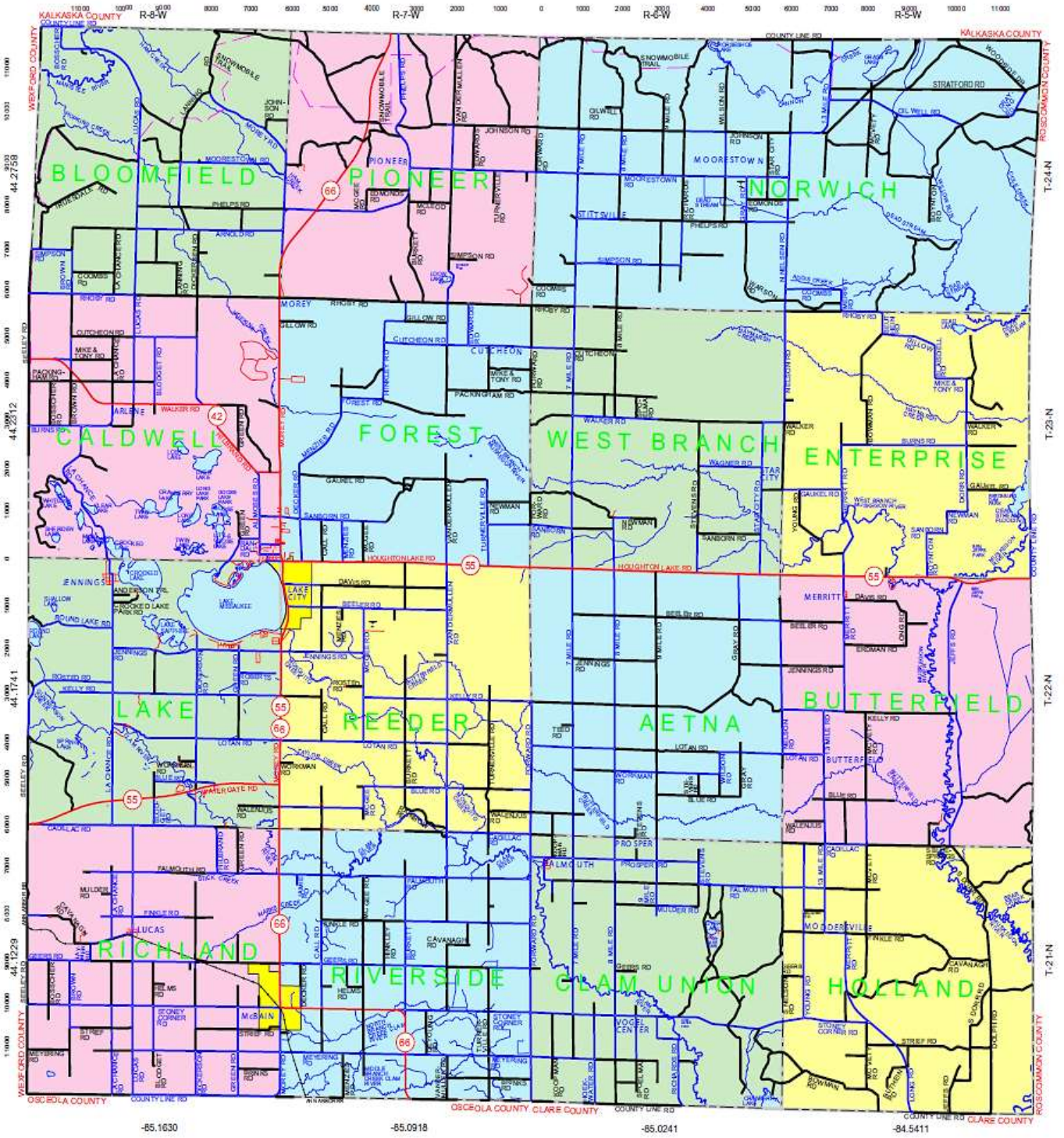
Existing infrastructure was identified. This plan will help describe and establish future improvements in infrastructure components, to include sewer, roads, and water to support potential development over the next twenty years.

This document will identify the strategies and coordination efforts that will make it possible to carry out the recommendations found within and carry forward from the current conditions existing at the time of plan development through the next two decades.

All data and information found within the Missaukee County Master Plan has been meticulously researched and obtained through a variety of sources, from the local through the federal level. However, it is important that site specific plans and decisions be investigated prior to proceeding due to the generalized nature of this document.

Chapter 2

COMMUNITY OVERVIEW



Map 1 – Missaukee County

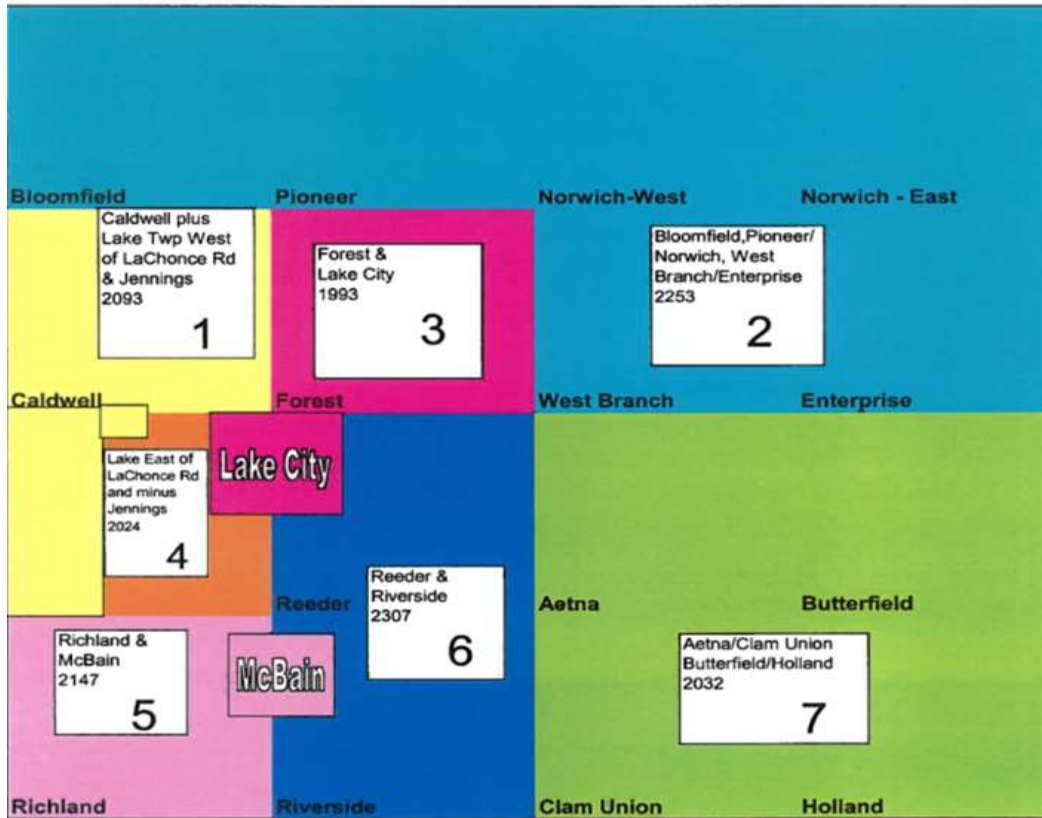
Missaukee County is located in the northwestern quadrant of the northern lower peninsula of Michigan. Bordered by Roscommon County, US-127, and I-75 to the east and Wexford County and US-131 to the west, Missaukee is easily accessible to travelers from any direction, and in any season. Visitors to Missaukee County have the options of either enjoying the varied local recreation options during their stay, or venturing to such celebrated locations as Sleeping Bear Sand Dunes National Lakeshore, which was named Good Morning America's "Most Beautiful Place in America" in 2011; or Traverse City – one of National Geographic's "Best Summer Trips" of 2012. These, or any number of other popular destinations, can be reached in little more than an hour's drive.

Missaukee County was established in 1871; the land was first surveyed in 1840 but it wasn't until the 1860's that Government land grants began to draw settlers in. Still, other than transient Native American hunting camps, the area was largely unpopulated until after the Civil War. Soon after, the logging industry took hold and spurred further growth. Initially, the population centers were mainly around the eastern shore of Lake Missaukee and in Vogel Center, in the southeastern section of the county where the rich, fertile soil was well suited to the dairy farms of the Dutch immigrant families. The lumber industry played an important role in the early growth of Missaukee County; the industry's demise not long after the turn of the century led to the agricultural landscape that is prevalent today in many areas of the county.

Demographics

The demographic information contained in this chapter illustrates the need for planning for future land uses, and unless otherwise noted, the data provided in this plan was obtained from the 2010 Census, which contains the most current population and demographic data. When planning for a community, it is important to understand *who* will be affected by the plan, as well as *how*; this portion of the master plan is primarily data presentation.

The population of Missaukee County has steadily increased since 1960. The relocation to this area of many downstate individuals and families during the 1970's resulted in an increase in population which eventually topped out at 40.5%. Subsequent decades have also demonstrated increases in growth; however, the increases slowed to 2.6% between 2000 and 2010. Missaukee County has continued to experience growth at a pace each decade comparable to that of the rest of the region; the increases have resulted from both newcomers moving into the area as well as from natural increase.

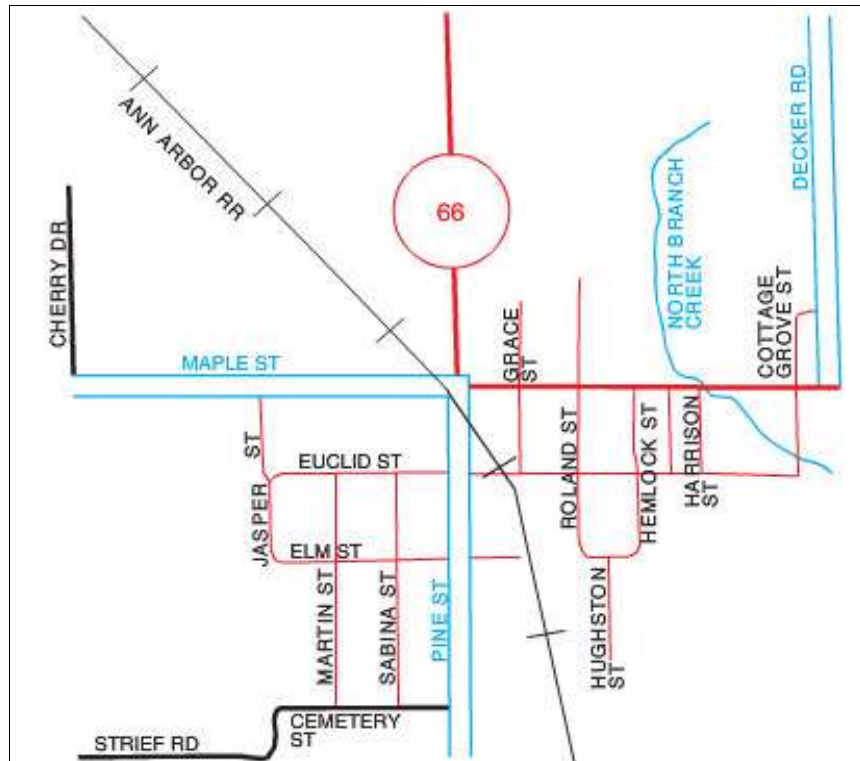


Map 2 – Commissioner Districts

The 2010 Census reports a population of 14,849, which is a 2.6 % increase over the 2000 Census. Missaukee ranks 23rd in population increase out of the 83 counties in Michigan. Missaukee County also kept pace with the other counties in the northwestern Lower Peninsula, with 9 out of the 10 counties experiencing growth between 2000 and 2010. However, Michigan's overall population decreased by 0.6%. The density of the population currently averages 26 persons per square mile. In comparison to Michigan's average density of 176 persons per square mile, Missaukee remains a very rural county. The townships immediately surrounding Lake City, which is the county seat, comprise 43% of the county's total population. Lake City is located on the east shore of Lake Missaukee. The City of McBain is flanked by Richland and Riverside townships; the combined total of Lake City and McBain equals 22% of the county's population overall.



Map 3 – Lake City



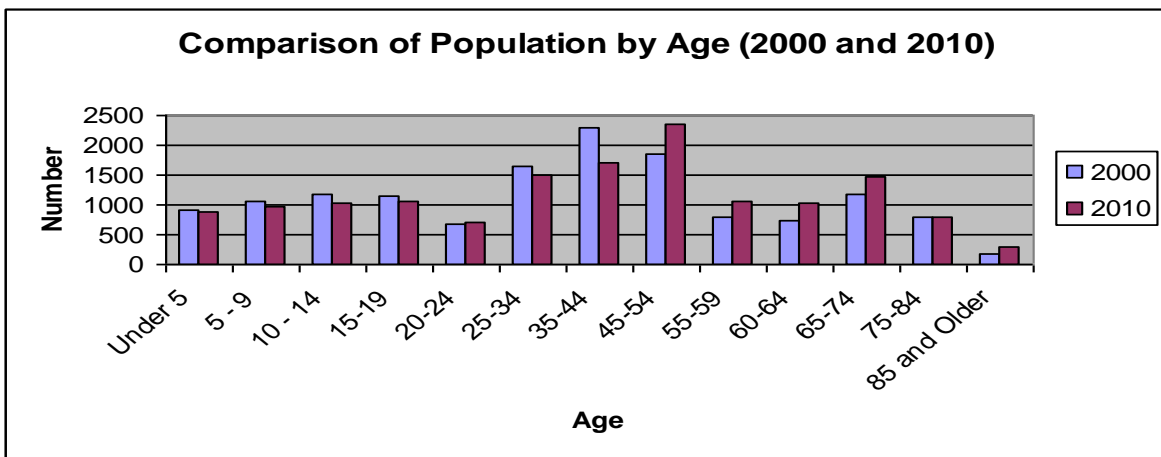
Map 4 – McBain

Populations with unique needs (functional needs, low-income, senior citizens, or various diverse ethnic backgrounds) are dispersed throughout the county. The city of McBain is the home of a 95 bed long-term care facility, a 47-suite assisted living retirement center is located within Missaukee County, between Lake City and Cadillac, and a 25-bed assisted living facility is located east of Lake City. Several smaller care facilities are located in more rural areas of the county. In addition, a state-of-the-art rehabilitation facility near Lake City offers specialized aquatic brain and spinal cord therapy. This facility also offers fitness classes to adult members of the community. Several organizations within the county are also available to assist citizens in difficult circumstances with procurement of food, necessary clothing items, or provide other aid when needed.

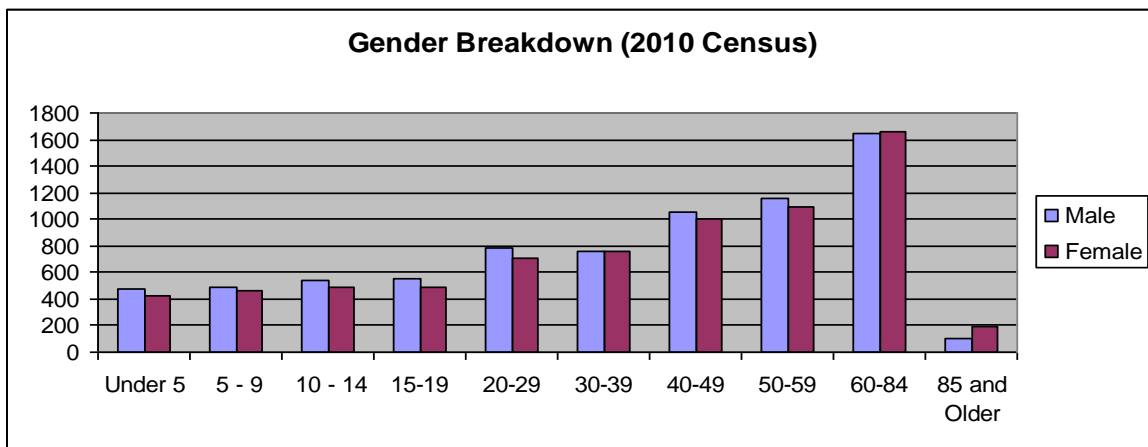
Facilities in Missaukee County are constructed or remodeled to meet the Americans with Disabilities Act (ADA) requirements. The Planning Commission and the Park Commission, respectively, review proposed projects prior to presentation to the Missaukee County Board of Commissioners. Part of the review process is to determine the measures necessary to ensure compliance with the ADA. Missaukee County recognizes a responsibility to accommodate individuals with unique needs by providing the necessary accessibility and recreation options.

Age and Gender Distribution

Twenty-four percent (24%) of Missaukee’s population, or 3,596 persons, are 17 years of age and younger. At the other end of the spectrum, 17 % or 2,581 persons are aged 65 and older according to 2010 Census data. This data also indicates that the 65 and older gender breakdown is 1,248 males and 1,333 females. The majority of residents fall within the age range of 44 to 55 years, with a second age peak around age 75. The needs of all age groups must be considered in community planning. The overall gender breakdown is approximately 50% for each gender (7,557 males and 7,292 females).



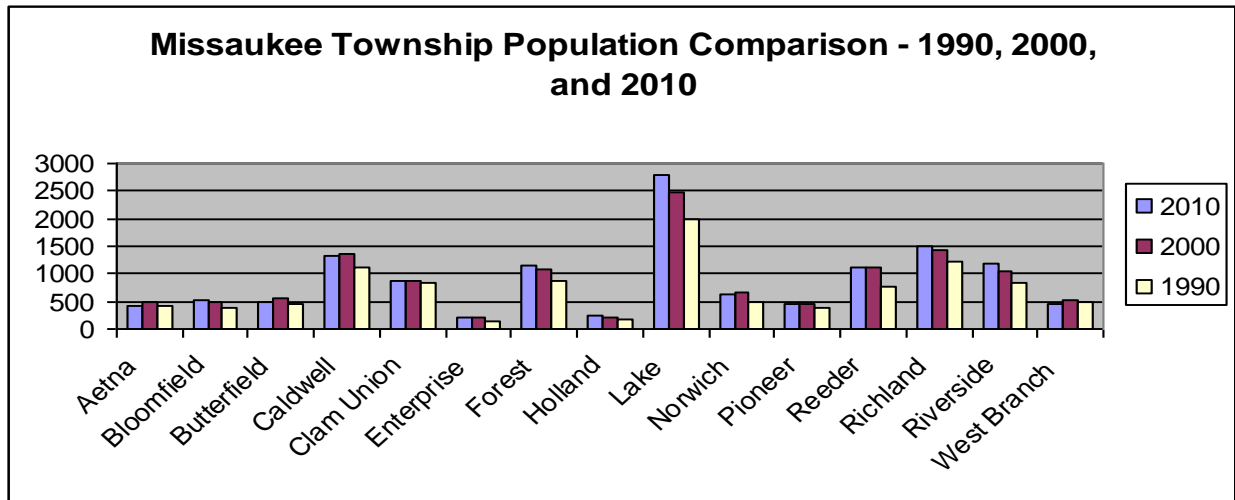
Graph 1



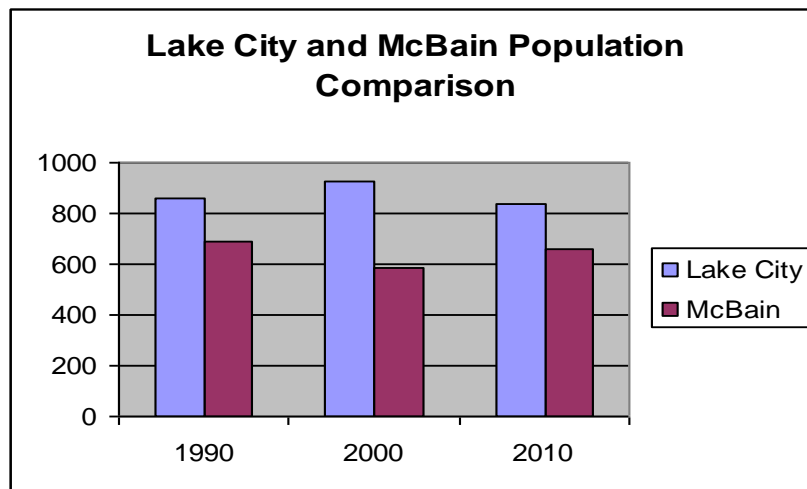
Graph 2

Population Distribution

Population increases are, for the most part, clustered. Areas around the cities, lakes, and townships bordering Wexford County show the highest densities. Holland Township, located in the southeast corner of Missaukee County has approximately 6.92 persons per square mile. In comparison, Lake Township, which is on the southern edge of Lake Missaukee and contains Crooked and Sapphire Lakes and borders Wexford County on the west, has a population density of approximately 88.32 persons per square mile. The western and southern portions of the county are more densely populated. A large portion of northern Missaukee County is state-owned land. Approximately fifty (50%) percent of some townships are state owned property. Farm use of the land is more prevalent in the southern part, although soils throughout most of the county will support agricultural use. The highway system of M-55/66 provides rapid access from the southern and western areas of the county to the city of Cadillac in Wexford County, as well as Houghton Lake in Roscommon County to the east. These diverse density patterns must all be considered in planning.



Graph 3



Graph 4

Seasonal Population Variations

The Northwest Michigan Council of Governments (NWMCOG) produced a Seasonal Population Model in 1996. Local information regarding motels/hotel rooms available and vacancies, campgrounds, seasonal rental housing units, and homes occupied on a seasonal basis was used to determine the percent of increase in county population by month. These increases ranged from a low of 5% in December, January and February to highs of 25%, 27% and 26% respectively for June, July and August. Using the peak of 27%, Missaukee County's population could increase by approximately 4,000 persons during the month of July, bringing the county total population to nearly 19,000 persons. The tourism industry in Missaukee has remained strong in the years since the study was conducted. Although NWMCOG has not commissioned a newer study, it could be assumed that the seasonal increases have likely remained at least proportional to the statistics found in the initial study. The continuing expansion of four-season tourism has allowed the seasonal resident of Missaukee County to spend a considerable amount of time in the area. The seasonal resident exerts many of the same demands upon local services as does the year-round resident; this will progress into an increasing demand for services which must therefore be adjusted to handle the varying loads placed by seasonal residents. An illustration of this can be found in the fact that 9117 total housing units are located in Missaukee; of these, 2,596 units are dedicated to seasonal, recreational, or occasional use.

Racial and Ethnic Distribution

Ethnic groups are widely varied throughout the county. The city of McBain is especially proud of its Dutch and German heritage, while Lake City claims a variety of ethnic groups which include English, Irish, Polish, Italian, German and Finnish. The vast majority of our population is of one race, with 97.10% white. Missaukee has growing Hispanic and Asian populations, with 306 and 45 respectively. The population increase of other ethnic groups may have an impact on how opportunities are presented and perceived, and have the potential to present language and communication challenges.

Population Comparison by Race

RACE	2000	2010	% Change
White	14030	14230	1.4%
Hispanic or Latino	169	306	81.1%
Black/African American	27	42	55.6%
American Indian and Alaska Native	69	71	2.9%
Asian	35	45	28.6%
Native Hawaiian and Other Pacific Islander	0	1	0
Some Other Race	6	0	-100%
Two or More Races	142	154	8.5%

Table 1

Population Projections

Historically, between 1960 and 1970 approximately 90% of the population growth in Michigan took place in metropolitan areas. Between 1970 and 1980 almost 65% of the growth occurred in non-metropolitan areas due to migration from the metropolitan areas.

Population increases in Missaukee County between 1980 and 1990 equaled 21.4%. Missaukee County was ranked 11th in the state in population growth in 1980, and ranked 3rd in the state in 1990. Census 2000 data shows Missaukee County 20th in the state in rate of growth, and the 2010 data indicates that Missaukee County ranks 23rd in Michigan. Many of the current residents of Missaukee County are from families who vacationed here 20 to 30 years ago, and have returned to make this their permanent residence. Several generations of families have enjoyed our beautiful lakes and rivers as vacation destinations, and it is not uncommon for generations of the same family to own and use seasonal homes throughout this area.

Growth in the Cadillac area, a major source of employment for the Missaukee County labor force, and growth in the industrial park in McBain have combined to draw more individuals, families, and retirees north to enjoy the benefits of life removed from urban congestion.

A 1996 study by the Office of the State Demographer at the Michigan Information Center projected Missaukee's 2010 population would reach 16,400 citizens, a prediction which far exceeded the actual population of 14,849.

Labor Force, Income, and Unemployment

The County's labor force averaged 6061 persons in 2010, with an average unemployment rate of 14.7%. The non-seasonally adjusted rates for 2009 and 2008 were 15.6% and 10.7% respectively. The state average unemployment rates for 2010, 2009, and 2008 were 12.5%, 13.3%, and 8.35% respectively. Unemployment in Missaukee County has steadily increased over the past decade, from a low of 5.0% in 2000 to a high of 15.6% in 2009.

Median household income for the year 2010, as released by the U.S. Census Bureau, was \$40,376, compared to \$38,657 in 2009. Approximately 2,202 individuals, or 15% of the county's population, lived below the poverty level during the same time frame; just over 23% of youth between the ages of 0-17 were living below the poverty level.

Labor by Industry

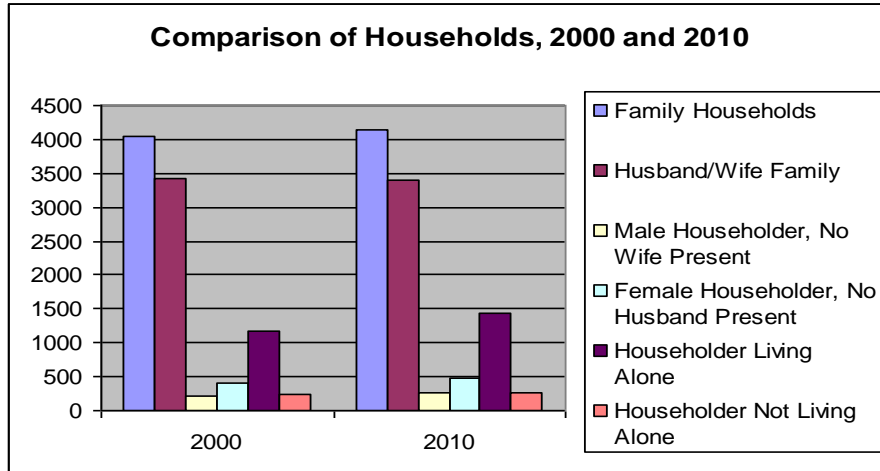
Industry within Missaukee County offers a variety of employment opportunities, according to the North American Industry Classification System (NAICS) - 2009 County Business Patterns data. Based upon the number of paid employees for the year 2009, the industries in Missaukee County with the greatest number of employees include Retail Trade (381), Manufacturing (286), Health Care and Social Assistance (270), Accommodation and Food Services (184), and Construction (154). Other listed industries include Forestry, Fishing, Hunting, and Agriculture Support; also Finance and Insurance and Administrative/Support/Waste Management/Remediation Services.

Households

The number of households in the county totals 5,843 (U.S. Census Bureau, 2010 Census), of which 4,137 (or 70.8 percent), are listed as family households; the size of the average Missaukee County family is 2.96 members.

Housing Units

In 2010, of 9,117 total housing units in the county, 5,843 units were occupied. Within that total, 4,758 were owner-occupied and 1,085 were renter-occupied. Of the remaining 3,274 vacant units, 2,596 units were seasonal, recreational, or occasional use; the balance is identified as "other vacant".



Graph 5

Education

The Northwest Michigan Community Action Agency offers a variety of Head Start early education options throughout the county to help develop a culture of successful children and families; these programs are a key in the preparation of children for the challenges of elementary, middle, high school, and college education. Missaukee County is served by two public school districts (Lake City Area Schools and McBain Public Schools) and one private (Northern Michigan Christian, located in McBain); however, students in the northwestern edge of the county fall within the Manton (Wexford County) School District, while students in the eastern edge of the county fall within the Houghton Lake (Roscommon County) School District. Eligible students at the public high schools have the option of taking Advanced Placement classes as well as the opportunity to take some classes for college credit, depending upon the program at each respective school. High school graduation rates in Missaukee County have consistently exceeded rates for the Wexford-Missaukee Intermediate School District, of which Lake City Area Schools and the McBain Rural Agricultural Schools are included.



Map 5 – Wexford-Missaukee ISD

Missaukee County residents also have access to a variety of post-secondary education options. Baker College has a campus in Cadillac; the Baker College of Cadillac Center for Transportation and Technology campus is located south of Lake City and offers a truck driving certificate program. Other higher education opportunities within a 75 mile or less radius include the Northwestern Michigan College University Center in Traverse City, Kirtland Community College in Roscommon, Ferris State University in Big Rapids, the University Center in Gaylord, and Mid-Michigan Community College in Harrison; online education offers additional flexibility.

Senior Citizens

Senior citizens in Missaukee County benefit from a variety of programs and agencies as well. The Missaukee County Commission on Aging generally serves eligible members of the age 60 and over population, and is a clearinghouse for information and services available to residents, either free of charge or for a small fee. Eligible individuals may receive in-home services, snow removal, transportation assistance, Medicare/Medicaid assistance and referrals, and other services. Senior Centers located in Lake City and Merritt provide seniors with opportunities for companionship and meals; other non-profit and ministerial associations are available to fill in additional gaps.

Churches and Faith-Based Organizations

Churches and other faith-based organizations play a prominent role in the lives of Missaukee County residents. According to one data source, there are approximately 24 congregations located throughout the county and just over 33 % of Missaukee residents belong to a particular religious congregation; the majority of these residents belong to a Christian Reformed congregation. Other local churches include, but are not limited to, United Methodist, Baptist, Lutheran, and Catholic. Several faith-based organizations are available as well to assist families and individuals in need with the procurement of necessities such as food, clothing, independence-building, and other assistance.

Emergency Services and First Response Organizations

Missaukee County is served by six volunteer fire departments located throughout the county. Each department is responsible for a designated jurisdiction, but mutual aid agreements ensure that any fire department can request assistance from or provide assistance to other departments within the county, as well as from several departments outside of the political boundaries. The Missaukee County Sheriff's Department provides law enforcement coverage throughout the county to include traffic patrol, medical response, criminal complaint response and a variety of other services; marine, ORV, and snowmobile patrols are also conducted and training is offered to the public to increase the overall safety of riders. Additional law enforcement is provided by the Michigan State Police – Houghton Lake Post. The Missaukee County Emergency Medical Service is a division of the Missaukee County Sheriff's Office, and is responsible for emergency medical care needs throughout the county as well as extrication and

rescue. All of the agency ambulances are equipped at the Advanced Life Support level; other available equipment includes a rescue boat and an emergency command and communications vehicle. Medical transports are typically to Mercy Hospital in nearby Cadillac.

Other

The Lake City Chamber of Commerce coordinates and assists with many events that take place within the Lake City area, to include the Greatest Fourth in the North and the Festival of the Pines (Appendix C); the Michigan State University Extension 4-H program provides Missaukee County youth with opportunities to participate in programs that include equestrian training and events, nutrition, archery, the sciences, and many others.

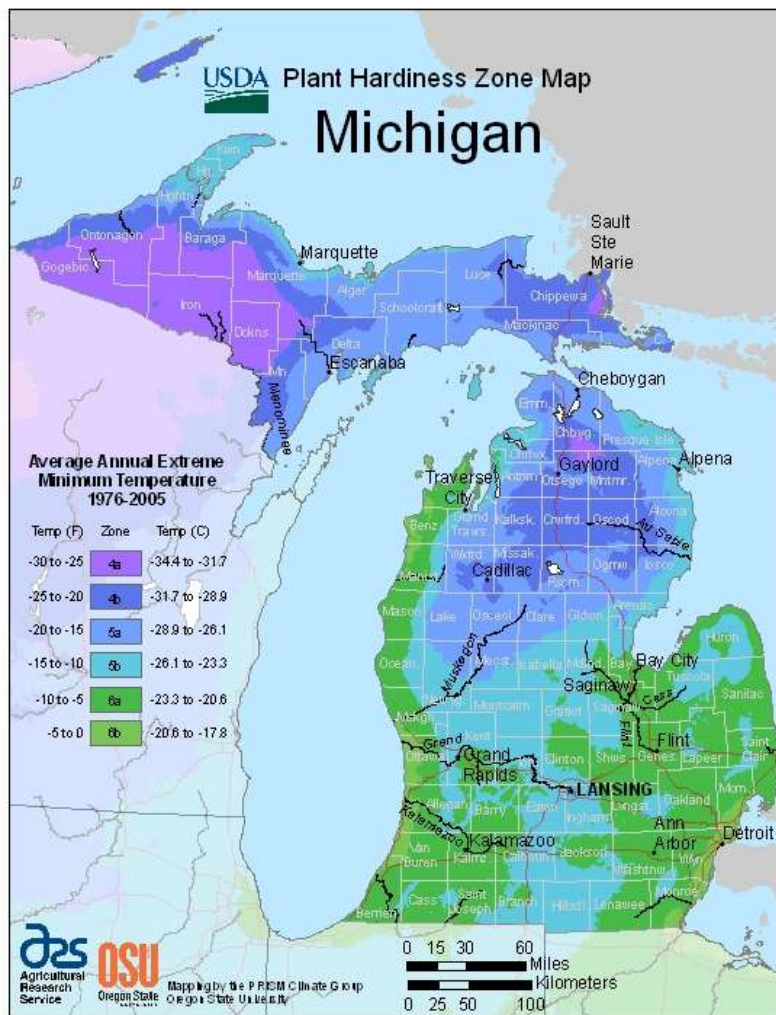
Climate

Weather plays a major role in daily activities and the manner in which they will be conducted. In the Koppen Climate Classification System, Missaukee County (as well as most of the rest of Michigan) falls within the Moist Continental Mid-Latitude climate category, which features warm to cool summers and cold winters. The warmest month is greater than 50 degrees Fahrenheit, while the coldest month is less than -22 degrees Fahrenheit. Winters in areas that fall within this classification tend to be severe with snowstorms, strong winds, and include bitter cold from Continental Polar or Arctic air masses. This region is further sub-classified as "Dfb", which signifies a humid climate, with severe winters, no dry season, and warm summers. Overall average precipitation between 1981 and 2010 was approximately 32 inches. The average annual temperature during the same time period was 43.3 degrees Fahrenheit; the average January temperature was 18.3 degrees Fahrenheit but has climbed as high as 54 degrees and dropped as low as -28 degrees. The average July temperature was 67.2 degrees Fahrenheit during this time frame, but has climbed to a high of 97 degrees and fallen to as low as 31 degrees. While average maximum temperatures have changed relatively little in Michigan, minimum temperatures have increased since about 1980 and account for the majority of an overall temperature increase since then. This trend appears across all seasons but is most pronounced during the winter.

The summer outdoor recreation season is about four months long, starting in mid to late May and tapering off in mid-September. The cooler fresh air attracts people from relatively warmer southern Michigan as well as from out of state. This influx of tourists has the potential to increase the county's population by about 27% or nearly 4,000 people, according to the Northwest Michigan Council of Governments Seasonal Population Model of 1996.

The attractions of all-season outdoor recreation have traditionally been very popular; the seasonal weather variety encourages year-round activities. Missaukee County has long winters with an average of over 200 days with freezing temperatures or below, and 25 days per year with temperatures below 0 degrees Fahrenheit. In general, while mean temperatures in Michigan have increased during the last 20-30 years, they still remain just within the overall

(upper) range of observations during the past 120 years. Average seasonal snowfall is 77 inches, with peak snowfall accumulations typically occurring in December and January. Winds blowing across the Great Lakes tend to prevent extremely hot or cold temperatures but they do bring more cloudiness. Missaukee County has cloudy days about 6 out of every 10 days in the summer and 7 out of 10 days in the winter. Overall climate has become wetter and cloudier in the Great Lakes region, especially during the last 50 years. Some Climate Models show an overall warming trend continuing through the end of this century, implying that Michigan will be experiencing warmer winters. Even so, weather conditions in Missaukee County (driven in large part by close proximity to Lake Michigan) are such that it is normally sufficiently cold enough for snow during the winter months. The warming of a couple degrees Celsius may not have as significant an impact as may be the case further south. The USDA Plant Hardiness Zone Map, below, was updated in 2012 to reflect this general increase in temperatures.



Map 6 – USDA Plant Hardiness Zone Map

Planning for facilities, recreation, and other objectives are influenced by the weather and climate; these characteristics, along with the overall climate play an important role in planning. The timing and duration of regular weather events can determine feasibility of various seasonal activities such as swimming, camping, skiing, and snowmobiling, as well as activities with an economic impact, such as construction. Facility design and placement are controlled by weather events to a large degree. Facility designs must account for frost depth in the soil, wind and snow loads, and a variety of other criteria.

CHAPTER 3

NATURAL ENVIRONMENT AND RESOURCES

From a planning standpoint, soils are the most important facet of the physical environment. Each soil type possesses certain properties that serve to classify the soil as to its suitability as a resource material for man's use. An understanding of a given soil's properties and limitations leads to an intelligent utilization of this resource.

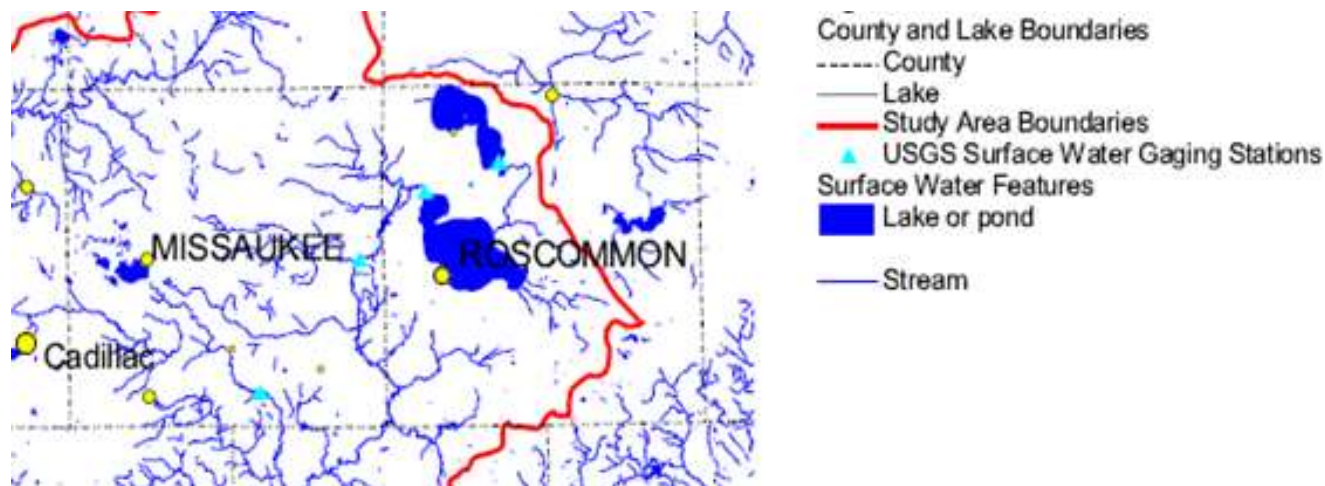
The soils and terrain of this area generally result from activity which occurred during the Pleistocene Epoch, or more specifically, the Wisconsinan Glaciation, which scoured the landscape from about 70,000 years ago to as recently as approximately 10,000 years ago. The greatest period of glacial activity occurred between about 22,000 years ago and 12,000 years ago. Glacial erosion, along with the processes which acted upon the glacial deposits after the glaciers receded, left a variety of soils, rocks, and formations which today provide the agricultural soils, forestlands, lakes, and wetlands which are such an asset and so greatly enjoyed and utilized by residents and visitors to Missaukee County.

The soils in Missaukee County are more easily understood if they are first studied as they occur in broad areas. These areas are commonly known as general soil areas or soil associations. Each area is made up of several different soils that occur in a characteristic pattern. In most places, the pattern is related to the nature of the soil materials and to the shape of the land surface. The pattern, of course, is not strictly uniform in each association, but the same soils are present in somewhat the same arrangement.

A variety of soils exist in Missaukee County; areas are named for the major soil series in them, but soils of other series may be present in any of the areas. Boundaries of the associations are not necessarily exact, due to the gradation from one area to another. It should be emphasized that this soil association information is for general planning only and should not be used for specific site selection purposes. A description of the soils associations is provided in the Missaukee County Community Recreation Plan; more detailed information can be found in the USDA's Soil Survey of Missaukee County. Generally speaking, though, in Missaukee County a predomination of sandy soils is present, along with large areas of loamy soils in the southwestern area of the county which have supported the area's agricultural industry for more than a century. A significant portion of the eastern side of the county is comprised of the Dead Stream Swamp and its poorly drained soils.

Surface Hydrology

The surface waters of Missaukee County and the surrounding area are depicted in Map 7. Approximately twenty percent of the county can be classified as wetland; only 1.3 percent by area can be classified as lakes or streams. There are approximately 22 inland lakes and 209 miles of streams covering 4,800 acres of the county.



Map 7 – Hydrologic Features (USGS 1985)

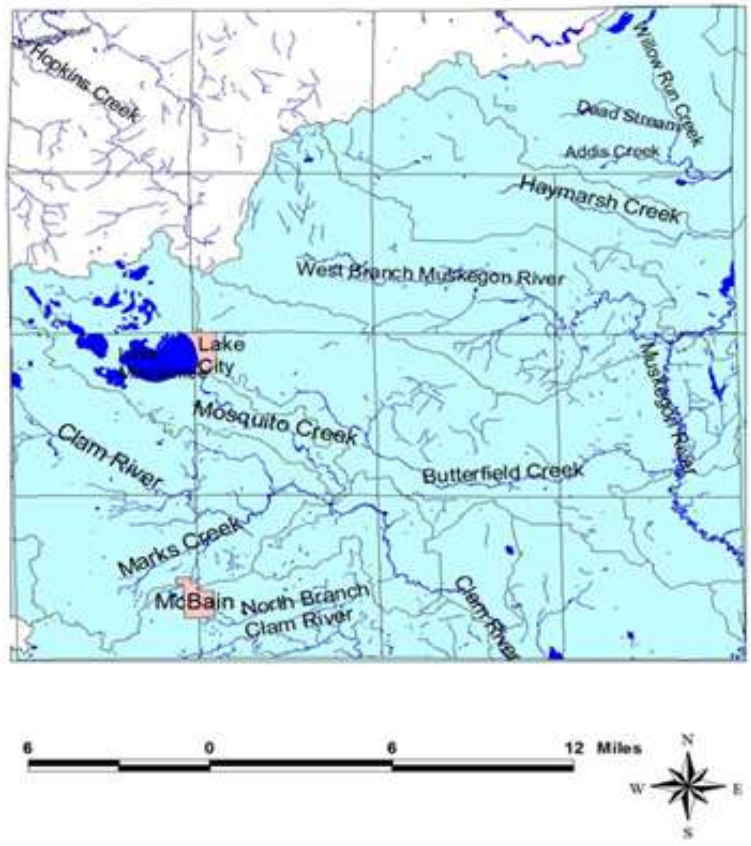
Missaukee County lies within the Upper Manistee River (Map 8) and Muskegon River (Map 9) Watersheds. In total, the Upper Manistee covers 570 square miles while the Muskegon River Watershed covers another 2,700 square miles. Nearly 70% of Missaukee County’s area is part of the Muskegon River Watershed, which in turn is within the Lake Michigan Watershed. The third drainage system in the county is that of the Clam River, which is within the Muskegon River Watershed.

The Upper Manistee River is the northern branch of the Manistee River, which eventually empties into Lake Michigan. The Upper Manistee River watershed originates near Alba and covers parts of Antrim, Otsego, Crawford, Kalkaska, and Missaukee Counties. The main part of the river is approximately 78 miles long and drops in elevation from 1,250 feet to about 935 feet at the planning boundary of the western edge of Missaukee County.



Map 8 – Upper Manistee River Watershed (MDEQ)

The main rivers of the county are the Manistee, the Muskegon, and the Clam; the Clam River is a tributary of the Muskegon River. Parts of the Upper Manistee River and its tributaries are included in the Natural Rivers Act, which provides additional protections to designated rivers. Tributaries of the Upper Manistee found in Missaukee County include Silver Creek, Filer Creek, Ham Creek, Gravy Creek, Hopkins Creek, Cannon Creek and Fisher Creek. Major lakes found in the County include Lake Missaukee, Crooked Lake, and Sapphire Lake. In the summer, these waterways and bodies of water provide excellent fishing, boating, swimming, and water skiing in addition to their undeniable aesthetic appeal. Ice fishing, snowshoeing, cross-country skiing, and snowmobiling are favored winter uses of the lakes. The wetland areas of the county provide excellent waterfowl habitat, which generate hunting and wildlife viewing opportunities for residents and visitors alike. From a recreational planning standpoint, these water bodies should be managed carefully to ensure continued enjoyment of this irreplaceable resource. In addition to these unique and valuable water systems, the Dead Stream Swamp in the northeastern portion of the county is recognized by the National Park Service Department of the Interior as one of twelve National Natural Landmark sites in Michigan. Contained within the Houghton Lake State Forest and shared between Missaukee and Roscommon counties, this 12,403 acre treasure is an example of a northern white cedar swamp and is considered a climax stage in bog forest development.



Map 9 - Muskegon River Watershed (Muskegon River Watershed Assembly)

No part of Missaukee currently falls within a federally-identified flood plain, so therefore Missaukee County does not participate in the National Flood Insurance Program (NFIP). However, any other floodplains in the county are regulated by the Michigan Department of Environmental Quality under the Floodplain Regulatory Authority, found in Part 31, Water Resources Protection of the Natural Resources and Environmental Protection Act (Part 31). This states that any filling, grading, or constructing within a 100 year floodplain requires a permit from the DEQ before initiation of the work. Furthermore, floodplains are regulated at the local level through State Building Codes, which are enforced by the local building department. State building code requirements are more restrictive than FEMA's through the National Flood Insurance Program. Therefore, Missaukee County meets the requirements of the NFIP by virtue of compliance with state building codes. Soil Erosion and Sedimentation Control (PA 451 Part 91) Permits that are issued through the Conservation District for proposed construction that will take place within 500 feet of a water body or for the disturbance of one or more acre of land regardless of distance from water source (if more than one acre of land will be disturbed) offer significant, additional protections of water resources.

Vegetation and Fauna

Missaukee County is located within the transition zone, between the boreal forests to the north and the mixed deciduous forests to the south. This provides residents and visitors alike the unique potential to view flora and fauna found more commonly in other areas of the region, in addition to the wealth of species typical of this area. The forests of Missaukee County are generally a pine community, comprised of jack pine and red pine on the sandy, drier, more sterile soils. White pine, which competes with hardwoods (to include red and white oak, sugar and red maple, and yellow and white birch, among others), is located on more nutrient-rich soils. Black ash, tamarack, and balsam fir are found in swamplier areas, with hemlock growing in the drier areas of swamps. Also in the swamps, wetland vegetation patterns are found along with a multitude of shrubs. Most forested areas are second growth, resulting from intensive lumbering which took place during the late 1800's and early 1900's, and altered some of the original forest patterns.

This expanse of forested land, almost 63 percent of the county (see Table 2) is one of the most prominent features of Missaukee County. Harvesting, processing, and manufacture of timber products remain viable industries in the county. In addition to private enterprise, forest lands are invaluable in terms of quality water, wildlife habitat, recreational areas, and tourist attractions.

Lakes, rivers and streams of the county support a variety of fish species; among the many streams and rivers in the county, the Clam River in particular stands out as a Blue Ribbon Trout Stream. The Bluegill, Yellow Perch, Smallmouth Bass, Largemouth Bass, Northern Pike, and Walleye provide family fishing. Michigan's Official State Fish, the Brook Trout, is native to the area. German Brown Trout and Rainbow Trout have been successfully introduced into the waters of this area.

Hunters are attracted to the area by the abundance of white-tailed deer, wild turkeys, and ruffed grouse, as well as a wealth of small game species to include squirrels and rabbits. Lakes, ponds, and wetland areas throughout the county yield prime waterfowl habitat. During the spring and fall migrations, these areas are stopping points for numerous waterfowl; wintering populations of species to include the Common Goldeneye, Bufflehead, American Black Duck, Mallard, and Common and Hooded Mergansers are common to rivers which may remain open throughout the season. Outdoor enthusiasts have the opportunity to view and observe a wide variety of wildlife in various habitats throughout the county. In addition to the more common avian species, such as the Great Blue Heron, Red-Tailed Hawk, and Blue Jay, mammals such as rabbits, raccoons, several species of squirrels, and North America's only marsupial, the Virginia Opossum, and many other species may be observed. Missaukee County may also be home to a variety of Endangered, Threatened, or Species of Special Concern, to include mollusks and snails, birds, insects, reptiles, and mammals, according to the Michigan Natural Features Inventory. Within the many forms of the local flora and fauna normally observed, there are some species which are not typically readily visible, such as the Black Bear or Pileated Woodpecker. For certain species, this may be due to their preference for isolation and solitude; for others, it may be the result of factors including the rarity of the species or requirements for areas of undisturbed habitat. The Michigan Department of Natural Resources and Environment, Wildlife Division has provided a listing of several species of wildlife shown as endangered, threatened, or special concern under federal and or state law that have been identified as having occurred within portions of Missaukee County. These include various plants, birds, reptiles, insects, and fish species. The federally enacted Endangered Species Act of 1973, along with Part 365, Endangered Species Protection of the Michigan Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, provides protection for these important special resources. A success story is found in Bald Eagle, which has become more common in Missaukee County and elsewhere in the region and country due to the ban of chemicals such as DDT in the 1970's, as well as the habitat protections offered by the Endangered Species Act. Although once forced nearly to extinction, Bald Eagle populations have recovered to the point that they were delisted from the Endangered Species Act August of 2007; however, protection to these birds is still offered through the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. This majestic species is often spotted soaring over the many lakes and rivers in the area. The vast diversity of the natural resources found within Missaukee County provides endless potential for education and recreation, as well as opportunities to appreciate the natural world, both for those who reside in this beautiful and unique area and for those who visit.

The blend of forest and wetland habitats within the county and the wealth of species which inhabit them are a resource which would be a valuable asset to any community. The recreational use of these resources encompasses a wide variety of activities, to include sightseeing, picnicking, camping, and bird watching, as well as fishing and hunting. Multiple uses may require employment of a variety of management strategies; strategies must be carefully planned to ensure conscientious stewardship of resources. Wildlife and forests within parks can be successfully managed to satisfy the requirements of recreation and other uses, while also promoting good wildlife and forest management practices.

Land Use

The traditional uses of land in Missaukee County have remained steady in recent years, according to the Missaukee County Equalization Department. The pressures of increasing land prices, higher taxes, rising agricultural production costs and competitive land uses will continue for the foreseeable future. Table 2 displays the present land use in terms of acres devoted to specific land uses.

TABLE 2

Present Land Use in Missaukee County

LAND USE	ACRES	PERCENT
Total Area	362,798	100.0%
Inland Water	4,800	1.3%
Land Surface	357,998	98.7%
Forested	227,100	62.6%
Agricultural	97,790	27.1%
Transportation	8,349	2.3%
Recreation*	102,654	28.3%
Other	37,908	10.4%

*Other public recreation land includes publicly owned land used primarily for recreation purposes. Included in this definition are all state forest campgrounds, state parks, game areas, recreation areas, public fishing sites, public water access and county and township recreational areas.

Source: Michigan Department of Natural Resources Office of Planning Service
Missaukee County Equalization Department

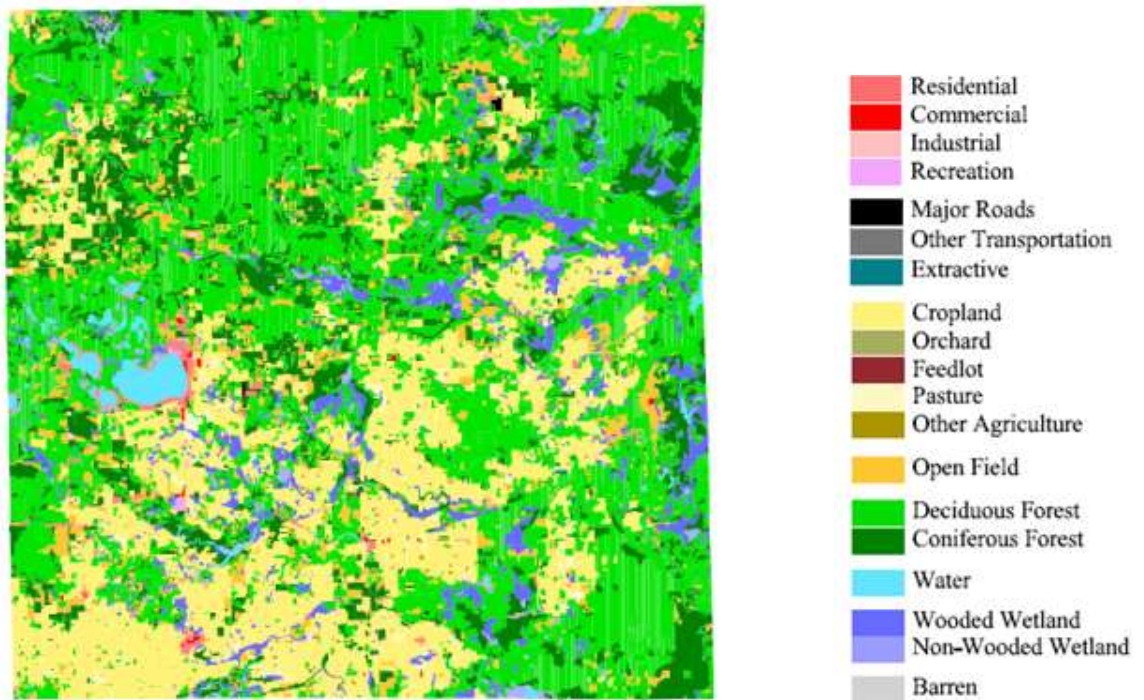
More than sixty-two percent of Missaukee County is covered with forest; most of this forested area is within the Pere Marquette State Forest and is therefore state-owned. The acreage of woodland is expected to increase slightly as planting of the poorer soils continues and as some formerly cropped areas revert to trees and brush. Because of state ownership of a large part of the forested lands, multiple-use forestry practices have been employed, thus causing a shift in the use of woodlands from forest cropping to other values such as recreation and wildlife. In addition to the regular forestry improvement practices, planting for wildlife food and cover or for purely aesthetic appeal and the construction of wildlife ponds and recreation trails should be encouraged on these acres.

The generalized land use of the county is presented in Map 10. Future allocation of land for various uses must account for the proximity of other land uses, population patterns, transportation routes and economic characteristics which will all play important roles in the correct utilization of the lands and facilities. The planning of land uses and facilities must recognize the need for a balanced approach to land use with the creation of a diversified and compatible mixture of land uses. Preservation of the rural and agricultural heritage of

Missaukee County is considered to be a high priority; protection of agricultural land use must be encouraged for the future - particularly the prime agricultural lands in the southern portion of the county. Recreational or other use of agricultural lands should be discouraged to help ensure that a viable land use balance is maintained in the county, while potential industrial development should be encouraged in the industrial park areas of McBain and Lake City to utilize space which is already available and has some infrastructure and utilities already present.

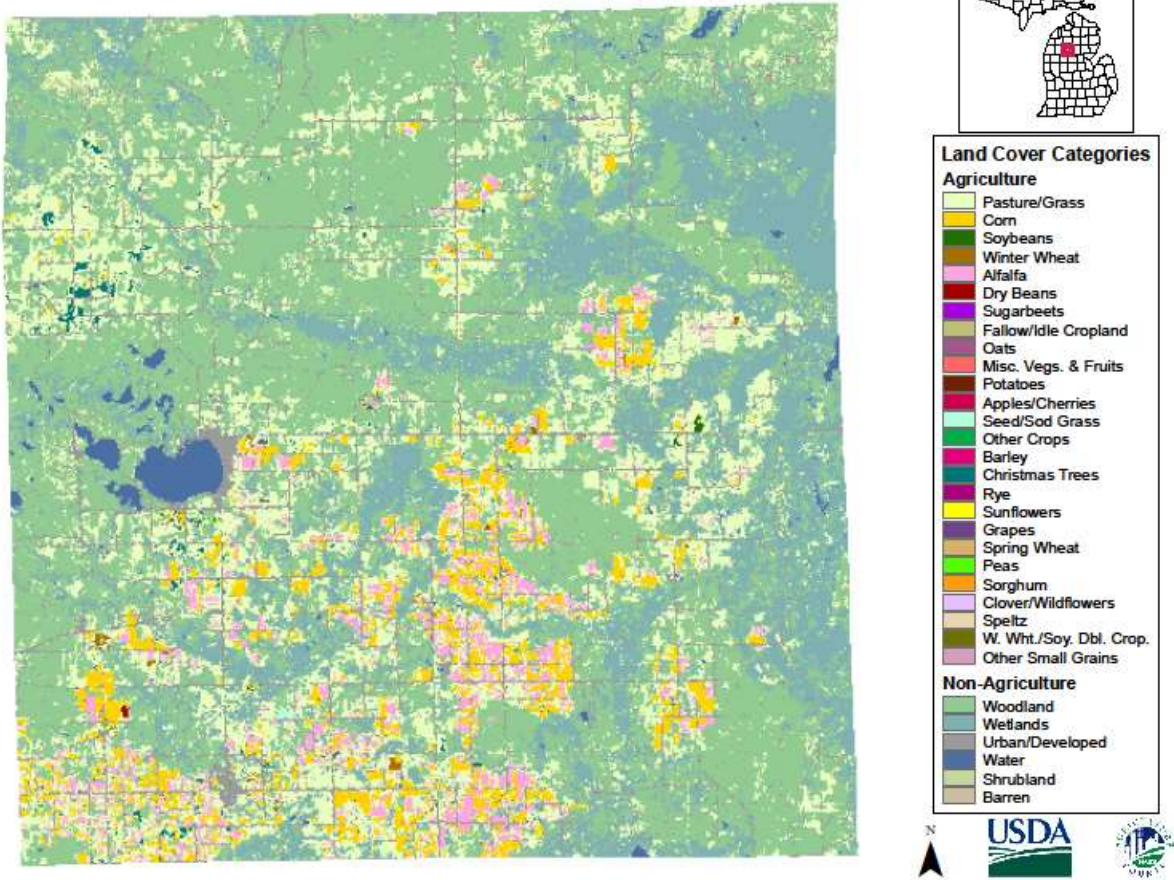
The influx of permanent and seasonal residents of the county places an increasing load on the existing recreational lands of the county. The rapid expansion of all-season pursuits such as fishing, trail activities, and other sports, along with snowmobiling, skiing, and other more seasonal activities allows the managers to anticipate added pressures for the expansion of recreational land use. These pressures will take the form of more acres of land devoted to various types of recreation.

History has shown that the development patterns of Missaukee County have remained steady and predictable for many years; the Planning Commission does not anticipate that this pattern will alter within the next 5-10 years and the expectation is that the current generalized land use map will still be accurate at least for that time frame.



Map 10 – Generalized Land Use

2008 Missaukee County, Michigan



Map 11– Land Cover Categories

Missaukee County is not zoned; however, the cities of Lake City and McBain are zoned and townships may have ordinances in effect locally as well. The large number of acres in the county that are state owned have provided, to a great extent, a buffer zone to separate developed areas from open space and recreation uses. Groundwater contamination and non-point pollution are a priority with environmental groups in the county. Soil Erosion and Sedimentation Control (PA 451 Part 91) Permits are issued through the Conservation District for proposed construction that will take place within 500 feet of a water body or if more than one acre of land will be disturbed, regardless of the distance from a water source. Missaukee does not have a legal setback from a water body, although additional permitting through the Michigan Natural Rivers Program is required in Norwich, Pioneer, Bloomfield, Caldwell, and Forest Townships on creeks which feed into the Manistee River, due to the designation of the Upper Manistee River under the Natural Rivers Act. Another valuable Conservation District resource is the Michigan Agriculture Environmental Assurance Program (MAEAP) Water Stewardship Technician, who works closely with local farmers to implement the program and provide environmental risk assessments of management practices, structures, and site conditions on farms. Technicians work with farmers to develop and implement management

plans to prevent contamination of water at farm headquarters, production fields, orchards, nurseries, greenhouses, and livestock operations and to ensure that best management practices are used when handling chemicals and herbicides. Farmers that participate in the program can become environmentally assured through MAEAP; this indicates that the farm is in conformance with state and federal environmental laws and guidelines and that it is protecting Michigan's important natural resources for the use of future generations. As of October 2013, 23 farms have been MAEAP verified; of those 23, 16 farms earned the Farmstead verification, 22 earned the Cropping verification, and 12 earned the Livestock verification. The hard work that these farmers invested in earning the verifications for their operations has resulted in an overall positive environmental impact in Missaukee County.

The communities of McBain and Lake City have municipal water supplies and public sewers. Each of these communities strives to maintain a clean drinking water supply through the identification of hazards and prevention of possible pollution issues through implementation of a wellhead protection program. McBain utilizes a variety of methods, including local zoning and ordinances, to properly direct any construction or other projects that have the potential to adversely impact the community's water supply. Hazard identification helps to ensure time to mitigate, prevent, or treat problems that arise. The city of Lake City has completed water system modeling, which identifies zones of influence for aquifer recovery and potential sources of infiltration. Eventually, a contaminant source inventory will be created, and townships that fall within the recovery zones of city wells will be involved in an agreement package to further protect the aquifers. Installation of public sewers around Lake Missaukee, Crooked and Sapphire Lakes has helped protect these beautiful bodies of water, all of which are an important resource not only for recreational purposes, but for the pristine environment we all enjoy. An additional layer of protection for the lakes is the lake associations, whose goals, according to the Missaukee Lake Association, include "to promote and protect the environmental integrity of the lake through education, safety, and quality initiatives, and public awareness".

The Stoney Corners Wind Farm development was begun during the summer of 2008, and is located in the rich, hilly farmland near the City of McBain. This impressive and unique spectacle is visible for many miles and currently boasts nearly 30 state-of-the-art wind turbines, each of which extends 475 feet high from the ground to the blade tip. The construction and establishment of the wind farm has generated a great deal of interest locally, regionally, and nationally, and sightseers have enjoyed traversing the rural vistas of southwestern Missaukee County to view this extraordinary example of green energy production. The energy generated at this site is currently being sold to several power companies in Michigan; according to Heritage Sustainable Energy, between 15,000-30,000 average U.S. homes could be powered by the Stoney Corners Wind Farm each month. The local economy has benefitted from the increased tax base, and employees, parts, and materials are hired or sourced locally to the greatest extent possible. Trainees visiting the park typically stay for extended periods of time in the local area; the presence of the turbines has provided additional revenue through property taxes or payments in lieu of taxes, as well as revenue to landowners who have leased property. Revenues also increased during the construction phase of the project, and long-term service

jobs for operations and maintenance have been created with the development of the project. The geology of Michigan has provided excellent conditions for the development of oil and natural gas deposits throughout a large portion of the county. The North American land mass as we know it today was once covered by a vast, warm sea; the milder climate and the flora and fauna that inhabited the sea 443 million years ago became the basis, once the climate cooled and the seas receded, for the Missaukee gas deposits which were first discovered in 1931 near Falmouth and the oil deposits first discovered in the early 1940's, primarily in the eastern and southern portions of the county. Norwich Township currently has approximately one hundred oil wells. In 1981, more than 10,000 feet below the surface (and more than 3,000 feet deeper than previous discoveries) in Ordovician-age horizons, large quantities of natural gas were discovered, again, near Falmouth. Production of both commodities has continued through to the present; in 2010 an exploratory gas well drilled in Pioneer Township which extended nearly two miles below the earth's surface sparked a tremendous amount of interest in Missaukee's natural gas production potential. The geology of the area has also made possible the development of a large gas storage complex.

CHAPTER 4

HISTORICAL PERSPECTIVE AND EXISTING LAND USE

Land in the northwestern portion of the Lower Peninsula of Michigan was originally the territory of the Native American Ottawa and Ojibwa tribes; Missaukee County is believed to be named for the Ottawa Indian Chief Nessaukee, who signed treaties in 1831 and 1833. Although Missaukee County is not known to have been a permanent home to any Native Americans tribes, evidence of ancient, transient populations can still be found in the form of several earthen circles and mounds located on land which is private property today. A study of the structures suggested that they were perhaps actually built at different times by two different groups of prehistoric cultures. The area which is now Missaukee County was included in the lands which were ceded from the Native tribes to the United States by treaty in 1836. Missaukee, as we now know it, was at various times a part of Mackinac, Grand Traverse, and Manistee; in 1869, boundaries were established which attached Missaukee County to Wexford County. A census taken in 1870 showed 34 households and a total of 130 residents in what would officially become Missaukee County; nearly half of those families originated in the Netherlands. In 1871, Missaukee County was formally established and was divided into five separate townships – Caldwell, Clam Union, Pioneer, Reeder, and Riverside. The County Seat of Missaukee County was originally in Falmouth, but a move to Lake City (known at that time as Reeder) followed a vote in 1873.

Prior to the commencement of the logging industry, approximately ninety percent of Missaukee County was forested. Today, approximately sixty-two percent of Missaukee County remains forested and much of that land is state-owned. Forests and farming have historically helped to shape the county; settlers lured to the area in the late 1860's by land grants typically either farmed the rich soils in the southern areas of the county or made a living from the logging industry which harvested the red and white pines first, then eventually the hardwoods for products which included a variety of items to include boards, broom handles, shingles, and bowls; wood scraps were distilled for the chemical industry. The first logging camp in the county was built near Vogel Center in approximately 1866; this area was also the site of the first schoolhouse in the county, which was constructed in 1872. Two area churches, according to the State of Michigan's State Historic Preservation Office, are today listed as state historic sites. The Swedish Lutheran Church, now known as St. John's, and the Lake City United Methodist Church are each historically significant and were especially prominent, according to the SHPO, between the years of 1886-1900. More logging camps quickly appeared throughout the area to capitalize on the growing lumber industry. The first saw and shingle mill was under construction by 1871; by the early 1880's, Missaukee County boasted about eight sawmills. It is estimated that in Missaukee County throughout the 1870's, approximately one hundred million board-feet of lumber were cut annually. Depending upon the location from which they were cut, many of the felled logs were transported to the Muskegon and Manistee rivers to be floated to mills to the west and south in Manistee and Muskegon. According to the Census of 1880, Missaukee County's population was 1,554 – an increase of 948 people in only six years.

The Census of 1890 showed that the county's population had increased to 5,040. By 1910, the county's population had more than doubled to 10,606 individuals. The population of the town of Jennings peaked at about 2,000 residents by the mid 1880's, but the drawdown of the lumber rush precipitated the decline of the town by the early 1900's. In the early 1920's, approximately seventy of the mill's company-owned homes were transported to the city of Cadillac, where many can still be seen today in some residential neighborhoods. The Christmas tree production of today, the logging history of the area, and those who contributed to both are honored each year through Lake City's Festival of the Pines celebration, which is held annually in September.

The first logging railroads appeared in Missaukee County in the mid-1870's; among the earliest were the Lake George & Muskegon River Line and the Muskrat Lake & Clam River Railroad. Passenger railroads followed in the mid-1880's. An historical account of Missaukee County indicates that in approximately 1884 a narrow gauge railway, the Grand Rapids and Indiana, linked Cadillac to the western shore of Lake Missaukee; from there, the account states, passengers could board a ferry which would transport them and any freight across Lake Missaukee to Lake City. A 1906 atlas of Missaukee County does not show rail lines approaching the western shore of Lake Missaukee; however, a spur extended into Jennings at the western shore of Crooked Lake; Crooked Lake at that time was connected to Lake Missaukee by a channel. The Grand Rapids and Indiana line extended across the width of the county and branched as far south as Falmouth and as far north as Jennings, with stops in between that allowed residents outside of Lake City to more easily travel to town to stock up on supplies or sell their wares; the first GR&I train reached Lake City on April 23, 1890. Interestingly, a 1924 Grand Rapids & Indiana schedule listed stops traveling east from Cadillac as Missaukee Junction (which is north of Cadillac and near the current site of a church), Round Lake Junction, Jennings, Wagner, Missaukee Park, Lake City, and Falmouth. By 1886, a road was finally constructed around Lake Missaukee, and the Ann Arbor Railroad graded through Lucas in 1887 as it moved towards a connection in Cadillac. Logging by rail increased between 1877-1879; the Lake City Journal reported that the volumes increased from 102 million feet in 1881 to 122 million feet in the winter of 1882. In contrast to the robust, primarily logging rail availability in the late 1800's, the only rail in Missaukee County today is the Great Lakes Central Railroad, which transects the southwestern corner of the county and the city of McBain.

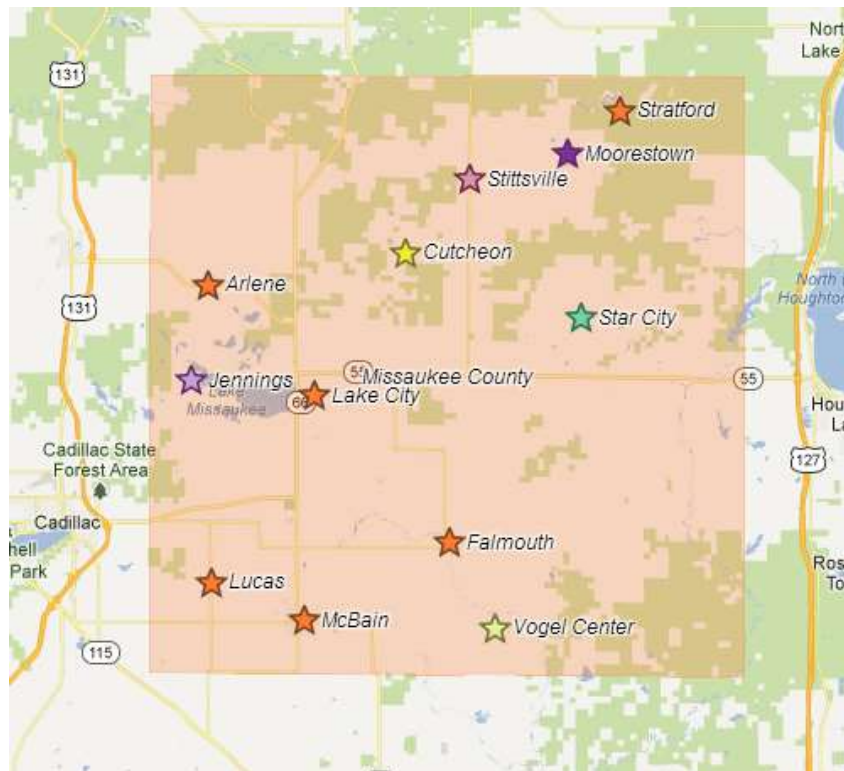
In 1872, the first post office in the county was located in the home of Daniel Reeder in Reeder, which later became Lake City. Over the course of Missaukee's history, as many as twenty-six post offices were scattered throughout the county in settlements to include Arlene, Cutcheon, Edson Corners, Jennings, Haymarsh, Moorestown, and others. Today, the cities of Lake City and McBain each have a post office, as do Falmouth and Merritt. The construction of Lake City's first schoolhouse occurred in 1873, and in April of 1877, it was reported in the Lake City Journal that the Tawas and Manistee State Road, near today's M-55, was under construction. Soon after, the incorporation of Lake City as a village in the winter of 1886-1887 took place; "Owens", now known as "McBain", was platted in September of 1887 and incorporated as a village in 1893. One of the first independent telephone lines ran from Stittsville to Lake City via Pioneer and Morey and was installed in the fall of 1894.

Devastating fires also shaped history and the future of Missaukee County. Seasons of forest fires occurred in 1891 and 1892; a fire in May of 1893 claimed the lives of ten Sands Lumber Company employees and another nearly burned Falmouth; further disaster was reportedly averted only by a fortuitous change in wind direction. On July 4th, 1887, a blaze which started in a saloon in Lake City ultimately destroyed the businesses on the east side of the street before crossing to the west side and claiming the Grand Central Hotel and several other structures. At that time, Lake City had only a pail brigade to combat the flames; little could be done to avert the disaster. In 1894, McBain nearly fell victim to fire; a hand pumper fire engine was the only resource available to combat the flames. In 1895, a major blaze left only two structures standing in Moorestown; a second Lake City fire in 1912 destroyed the few wooden buildings left remaining after the 1887 blaze. Subsequent construction in Lake City was primarily out of other, less combustible materials. A third Lake City fire, on February 18, 1944, destroyed the three-story Missaukee County Courthouse, which had been constructed in 1883. The challenges of the past in combating fires is in dramatic contrast to today; Missaukee County currently boasts six well-equipped volunteer fire departments distributed throughout the county; coverage extends to the borders and all points in between, and mutual aid agreements with surrounding agencies as well as the availability of the Department of Natural Resources and United States Forest Service provides an additional buffer between safety and danger both in populated and unpopulated areas.

The lumber boom resulted in the appearance, growth, and subsequent decline of many settlements throughout the county over the course of several decades. A few original settlements survived and continue to thrive in present times, such as Lake City, Falmouth, and McBain, but many others shrank or nearly disappeared as the logging industry depleted the forest resources and moved on. In addition to Jennings, in Lake Township, which peaked in population at 2,000 before nearly disappearing in the 1920's, other villages which experienced rapid growth followed by decline include Norwich Township's Moorestown, which was at first the site of a logging camp in 1881 and eventually boasted a post office, hotel, saloon, several stores, a sawmill, a blacksmith shop, and a railroad known as the West Branch and Moorestown. By 1882, more than eight million feet of logs had been cut in the Moorestown area; these were eventually transported to the Muskegon River to be floated downstream. Population peaked at 125 in 1905. Cutcheon, in Forest Township, was populated by more than 100 people in 1890, and was served by a post office and a general store. West Branch Township's Star City had a post office from 1890 until approximately 1923, and at one time was populated by as many as 500 people. Also in Star City were a general store, sawmill, a hardware store, a hotel, and a livery. Stittsville, in Norwich Township, offered a daily stage to Lake City and was the site of a post office from the late 1890's until the 1930's. Other establishments in Stittsville included a hotel, a store, barber, blacksmith shop, and a restaurant; eventually, the store was purchased by a lumber company which added a narrow-gauge railroad. Norwich Township's Stratford was a thriving logging village from 1898 until 1910. The site of a railroad station, in 1897 Stratford was connected with Kalkaska County's Rapid City by rail. During the twelve years that the village existed, more than 450 million feet of timber were harvested. Today, nothing remains of Stratford other than depressions in the earth that suggest the locations of buildings that once occupied the village. Other settlements of note are

Arlene, in Caldwell Township; Galt, which was one of the original settlements in the county and was located in Riverside Township; grain, hay, and potatoes for the lumber camps were produced here. Lucas, in Richland Township, was once populated by as many as 300 people that were served by several general stores and also housed a broom handle factory and a gristmill as well as a potato warehouse and a creamery. Many other small settlements met the fate of boom and bust, and today those settlements and their former inhabitants are recalled as an interesting footnote in history.

Historic Missaukee County Locations



Map 12 – Historic Locations

As the forests diminished due to the logging boom, agriculture began to take a firm hold in the area. The dairy farms and Christmas tree farms of today were preceded by a variety of crops; an account dated 1912 indicated that the northwestern and southwestern portions of the county supported the growth of fruit, corn, and potatoes, while the heavier soils of the central and eastern portion of the county supported the growth of wheat, hay, oats, and other grains; vegetables were also produced to include potatoes, sugar beets, celery, cucumbers, and others; a variety of fruits to include apples, plums, cherries, pears, peaches, and small fruit was also grown. None of these were likely large-scale operations but rather for the support of the family with perhaps some remaining for sale or trade. As the transition from logging to agriculture

took place, the difficult and time-consuming job of stump removal was a tedious but necessary early step in the process.

Agriculture, following on the heels of logging, has played a major role in shaping the landscape of Missaukee County, both during and following the lumber boom. Dairy and Christmas tree farms are today a familiar sight throughout the countryside, with tree production placing Missaukee County solidly as the top producer in Michigan and one of the top producers in the United States. Missaukee is also one of the top dairy producers in the entire state of Michigan.

According to the most current USDA Agriculture Census data collected in 2007, Missaukee County boasts 52 Christmas tree farms, with 8,845 acres under production. Additionally, more than eight species are grown for the national market, compared to the thirteen species grown in Michigan overall. Interestingly, the earliest Christmas trees produced in Missaukee County did not originate from farms or domestic growth; rather, they were wild balsam trees harvested from the swamps and trucked into cities for sale. The first agricultural Christmas trees in the county were not planted until the late 1940's or early 1950's. The 2007 Agricultural Census also outlines, by acreage, Missaukee's top crops; at 28,710 acres forage-land for all hay, haylage, grass silage, and greenchop is in the top spot for the county and sixth in acreage compared to the rest of the state. Corn for silage uses 11,232 acres for a second place ranking in the county and seventh place in the state. Although Missaukee leads the state in the production of cut Christmas trees, this is accomplished on only 8,845 acres for third place in the county and first in the state. Corn for grain comes in fourth in the county and forty-ninth in the state with 5,009 acres, and oats for grain rounds out the list at 709 acres and twenty-eighth place in the state. The most valuable commodity group in the county is milk and other dairy products from cows; this is followed by cattle and calves, then grains, oilseeds, dry beans, and dry peas. Overall, approximately 79,639 acres of land are dedicated to agriculture.

Missaukee boasts sixth place in the state in the number of milk cows; in 2012, the total number of heads of cattle stood at 14,200. According to USDA statistics, in 2011 Missaukee County housed fifty-seven dairy farms and a total of 13,800 cows, which produced \$64.7 million of milk. This is in comparison to Osceola County, with 50 farms, 6,000 cows, and \$28.1 of milk sold, and Wexford County, with a total of 13 dairy farms, 700 cows, and \$3.3 million of milk sold during the same time period. Other examples of important livestock in the county are colonies of bees, hogs and pigs, and horses and ponies.

Several of the early, original farms in the area currently meet the criteria to be designated as Centennial Farms; to receive this distinctive honor the farm must be a working farm of ten or more acres and must have remained in the same family for at least 100 years.

In addition to the larger scale farming that is common throughout the county, smaller niche operations have been gaining a foothold in the area. Organic growers, hydroponics, beekeeping, alpaca farming, maple syrup production, pasture-raised poultry, and community-supported agriculture programs (CSA's) are some examples of the creative opportunities that are becoming more of a presence locally. The current interest in local foods is shifting into

schools and local restaurants as well; one local school system maintains a MAEAP-verified greenhouse; students tend the gardens and the produce is utilized in meal production at the school, while more and more restaurants feature local foods on their menus. Capitalization on this trend provides benefit to the producers, the consumers, and everyone in between; the popularity of local seasonal farmer's markets is also an indication of the level of interest in knowing the origin of the food on the table.

A variety of factors will influence the development patterns of any particular area. Some of these factors include the location of lakes, streams, and rivers, while soil types must also be considered due to the agricultural aspects. These, along with forested versus non-forested areas, transit routes, and the proportion of publicly-owned land to privately-owned land are among the factors that help to shape growth patterns.

CHAPTER 5

EXISTING INFRASTRUCTURE

Missaukee County is distinctly rural, with the primary population centers of McBain (half in Riverside Township and half in Richland Township) and Lake City (Reeder and Lake Townships) both located in the western quarter of the county. Several other, smaller population centers are widely distributed across the county in other townships. In this chapter, infrastructure and other factors that support current use and future growth will be discussed.

INFRASTRUCTURE

Roads and Highways

The transportation system in the county is comprised of a road system which includes seasonal roads, local county roads, primary county roads, and state highways. The state highways are M-42, M-55, and M-66; the Missaukee County Road Commission has a maintenance contract with the Michigan Department of Transportation for the state highways which covers snow plowing and any necessary shoulder maintenance.

The primary roads in the county are maintained entirely by the Missaukee County Road Commission throughout the year, while the local county roads are maintained year round by the Road Commission through a combination of funding shared between the townships in which the roads are located, and the Road Commission. The townships are responsible for seventy-five percent of construction costs and twenty-five percent of maintenance costs on the local roads, which includes sealcoats, brining, and other maintenance activities. The fourth category of road – the seasonal road – is unimproved and maintained only seasonally. The maintenance typically occurs one time after the snow melts in the spring and then again before the winter season begins. Another consideration is bridges; Missaukee County has a total of approximately seventy bridges. Approximately half of these are less than twenty feet long and therefore not eligible for state or federal funding. Of the remaining bridges, sixteen are considered primary and twenty are local; eight are rated for load, meaning they are weight-restricted.

An Asset Management Program is utilized by the Road Commission for determination of the future of the primary and local roads system. Once the current road conditions are assessed, a determination can be made about what treatments are needed and the estimated costs to accomplish those goals; from this, current available funding sources and future funding sources must be determined. Throughout the process, consideration is given to, among other factors, the traffic volumes on the roads, new businesses, and the growth of the agriculture industry which results in an increased traffic volume of large agricultural equipment on the roads.

Sanitary Sewer

According to the 2010 Census, Missaukee County's population is 14,849. Lake City's population is 836, Lake Township's is 2,800, and McBain's is 656. Lake City, Lake Township, and McBain all maintain sanitary sewer systems. The population served by Lake City's system fluctuates seasonally due to the presence of Lake City Area Schools, which increases the daily population during the school year while the influx of travelers and seasonal residents throughout the summer also has an impact. Both campgrounds in Lake City - Maple Grove and Lake Missaukee Park - are connected to Lake City's sanitary sewer system. The system in Lake Township primarily serves residences along the lakeshore, while McBain's serves only that city.

The city of Lake City's sanitary sewer system (Missaukee Sanitary Sewer #1) encompasses the entire city and small segments of some surrounding townships. The area along Houghton Street is the eastern boundary of the system; along Houghton Street, the system extends north to M-55 and includes the businesses west along M-55 and north on M-66 to approximately Broadway on the east and Randall on the west; coverage then extends to the west and serves the homes along the lakeshore into Redman Island and back; the system continues east and south along the lake to approximately the city limits; a lagoon sits to the east of Lake City on the south side of M-55. Lake City currently has no plans for further expansion of the sanitary sewer system.

Lake Township also maintains a sanitary sewer (Missaukee Sanitary Sewer #2); this further protects the lakes from potential contamination by providing homes along the lakeshore access to the sanitary sewer rather than having to rely on a septic system. This sewer system services Sapphire Lake, the north and east sides of Crooked Lake, Crooked Lake Park, and the southern side of Lake Missaukee. The Lake Township system meets up with Lake City's near the city limits at the southern edge of Lake City on the east side of the lake and extends along the lakeshore to the south and west. It continues west along Lake Missaukee through Birch Haven Beach Drive, ensuring that the entire residential shoreline of Lake Missaukee is protected, in combination with the City of Lake City's system. Lake Township's system also includes 2 lagoons with a combined area of 4.5 acres and a capacity of 14.7 million gallons. Current plans project that three additional lagoons will be constructed in the future which will increase the area to 6.5 acres and a capacity of 20.825 million gallons.

The City of McBain's wastewater collection and treatment system was built in 1980 and serves the entire incorporated city limits, an area of one square mile, with 220 utility hook ups. The population served by the system varies throughout the year, depending upon whether or not school is in session. The start of the school year results in an increase of approximately 1000 daily users of the system. The collection system is comprised of four lift stations, and the treatment site west of town is comprised of three stabilizing lagoons totaling fifteen acres

located on a total of eighty acres. The treated wastewater is irrigated onto twenty-seven acres of farmland by a spray irrigation system; an additional forty acres is available for any additional irrigation needs. Six monitor wells are located on the surrounding property to help ensure the integrity of the area's water supply through ground water testing.

Septic systems are utilized throughout the remainder of the county; according to a 2011 report published by the District Health Department #10, there are an estimated 7,498 septic systems in the county and 2,596 seasonal homes; the report states that in 2011 there were 8 septic failures for a failure rate of 2%. All septic systems are subject to permitting requirements and monitoring; the Michigan Department of Environmental Quality (MDEQ), Resource Management Division administers Michigan's Septage program, with assistance from the District Health Department #10.

Water Systems

Lake City maintains a water system that encompasses approximately the same area that is covered by the sanitary sewer. A Wellhead Protection Program has been implemented and all well delineations have been completed, including the ten-year time of travel for the water supply. All water system modeling has been completed for the identification of zones of influence for aquifer recovery as well as potential sources of infiltration. Ultimately, a contaminant source inventory will be developed along with an ordinance and agreement package with the townships that are within the recovery zones of wells used by the city; this is to better protect the aquifers from which the water is drawn.

The City of McBain established a water system in 1920; continuous upgrading has occurred throughout the years since the system's establishment. In 2000, McBain developed and implemented a wellhead protection plan to safeguard the purity of the drinking water supply. The wellhead system is comprised of two well fields. Each field has two wells; the wells in well field #1 were both refurbished in 2010. The flow rate of the wells varies between 190 gpm and 500 gpm, depending upon the well. The city's water tower capacity is 330,000 gallons and the system is controlled by a SCADA system.

Areas not that are not in a service area for water systems must rely on wells, which are also subject to permitting requirements by District Health Department #10.

Utilities

Consumer's Energy is the primary energy provider in Missaukee County; two others, Great Lakes Energy and MichCon (DTE) each also have a small presence locally. The McBain area was selected by Heritage Sustainable Energy for development of a wind farm that, as of 2012,

boasted twenty-nine turbines. The energy produced by these turbines is enough to power all of Wexford County for an entire year; this energy is sold wholesale to utility companies.

Communications

Landline phone service is available throughout the county, and cellular service is available throughout most of the county, depending upon the location and the provider. Interest in improving the availability of broadband coverage to underserved areas has been amplified recently, due at least in part to the tourism surge during the summer months and the desire to “stay connected”, even while in a campground or on vacation. Studies have shown that accessible and reliable broadband can have a positive economic impact by allowing local and home businesses to expand through utilization of the internet. What could arguably be one of the most important benefits to broadband accessibility, however, is from the education standpoint; allowing students even in rural areas to access the internet for completion of research and class assignments. An initiative recently undertaken by Missaukee County in partnership with Connect Michigan is seeking to bridge the accessibility gap by demonstrating the need for increased coverage to providers who can implement the technology.

Industrial Areas

An industrial park with approximately 90 acres of developable land is located in McBain. This park houses a variety of industries, and is served by all utilities. This area has access to rail service through a rail line that transects McBain, and there are plans for a renewable energy park to eventually be sited here. Long range planes are to expand as needed.

Lake City’s undeveloped Industrially Zoned area is located on approximately 12 acres in the northeastern part of the city.

Also located in Missaukee County are sawmills in McBain and east of Lake City in Forest Township, which are part of a larger parent company with locations throughout Michigan and Wisconsin; these facilities compliment the logging industry that is so firmly rooted in the county. To the north of Lake City is a forge that supplies specialty parts for a large range of applications that include defense, automotive, construction, and other industries.

OTHER

No landfills are sited within Missaukee County; however, Missaukee does have reciprocal agreements with several landfills in other counties. The closest is the Wexford County Landfill. Several waste haulers operate in Missaukee County, and the Missaukee County Recycling Center, which is managed by the Missaukee County Conservation District under the direction of the Missaukee County Board of Commissioners, has developed a robust recycling program

which has shown growth during each year of operation. An anonymous donation in 2007 allowed the construction of the Center's current storage facility in 2008, and the Center's staff has expanded from a core group of dedicated volunteers collecting and sorting materials dropped off by residents and visitors each Saturday morning to a paid staff of three assisted by a group of volunteers. In addition to the regularly scheduled drop-off times at the Recycling Center, Household Hazardous Waste and electronics recycling events have been scheduled annually to provide residents an opportunity to dispose of those products and materials that would otherwise end up in landfills or directly into the environment. Since the Center first opened, business hours have more than doubled in response to the increased demand. Center staff also provides educational presentations to local schools and community groups upon request, which broaden the reach of the Center's philosophy of recycling to reduce waste and reduce the volume of landfilled materials.

CHAPTER 6

COORDINATED PLANNING

Political subdivisions are far from self-contained societies. Transportation networks, labor markets, economic development, and watersheds are just a few examples of shared services, infrastructure, and natural resources that cross political boundaries. In addition to the potential for cost-sharing between units of government achieved through the combination of services, coordinated planning can benefit local economies and facilitate greater awareness and protections of natural resources. The Michigan Relative Risk Analysis Project of 1992 indicated that the “lack of integrated and coordinated land use planning” was one of the most significant environmental problems in the State of Michigan, with “far-reaching effects”. Coordinated planning and plan reviews across political entities help to ensure that the goals detailed in one community’s plan are not at odds with the plans of another; this is mutually beneficial, particularly considering the prevailing emphasis on regional planning. The guidelines that a plan provides make it easier for entities to be aware of the goals of their neighbors, which aids in the identification of common goals and the mutual achievement of objectives. In addition to the crossover of natural resources such as state and national forests, rivers, lakes, and watersheds, labor markets also cross political boundaries and their development should also be cultivated for the common benefit of the entire area.

The need for coordinated planning is clear, and the intent of the Michigan Legislature, by enacting the Michigan Planning Enabling Act, was to make coordination an important facet of the planning process. The Missaukee County Planning Commission has progressed through a series of distinct steps during the plan development process, beginning with notification of adjacent political subdivisions, accomplished through a mailing that detailed the Planning Commission’s intent to begin the planning process (Appendix A).

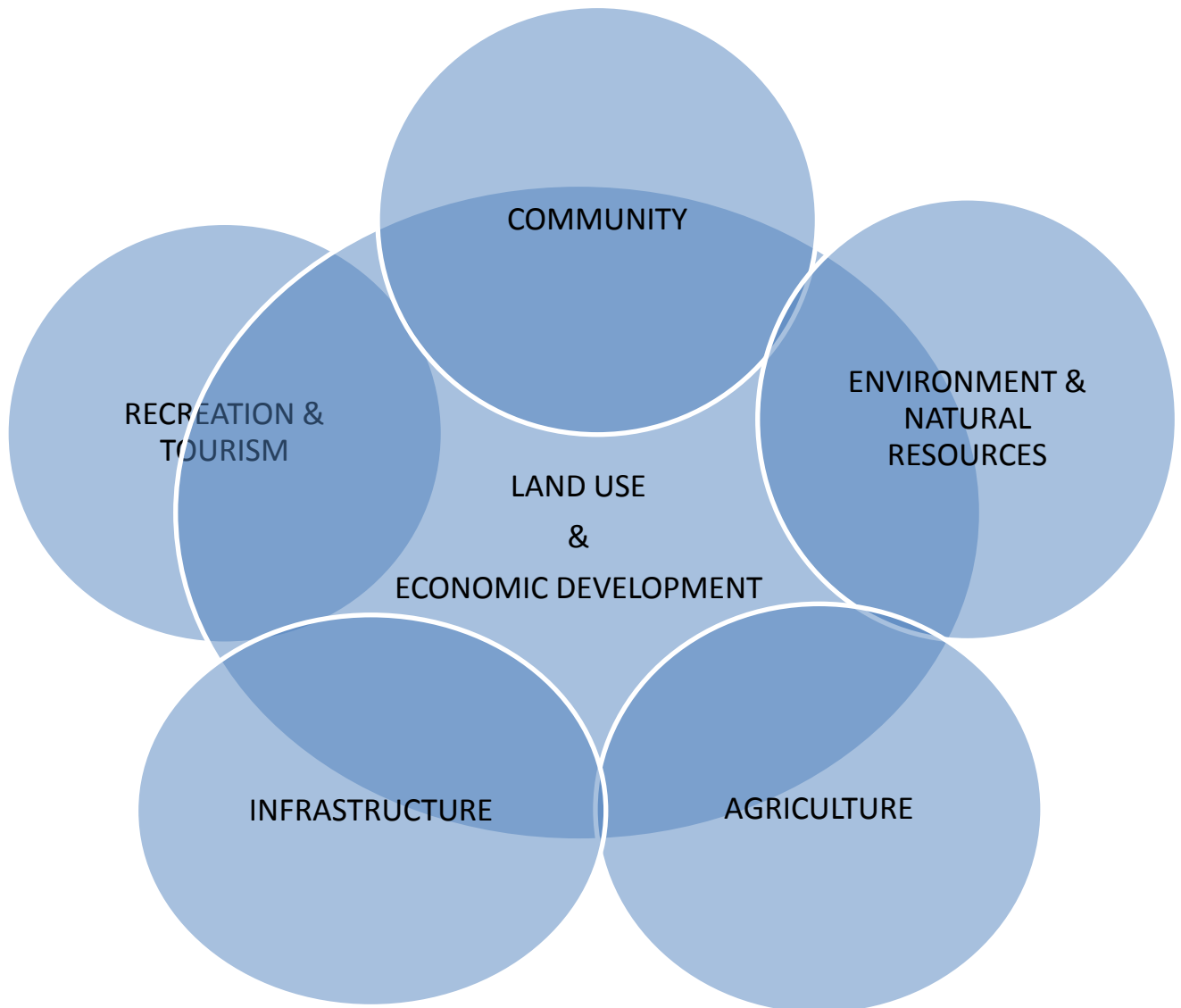
The Planning Commission invited experts from the USDA and Michigan State University Extension to conduct informal workshops during meetings to educate commission members on best practices relating to plan development and methods of outreach to engage the public in the planning process. The primary method used to garner public input across a wide demographic was the “S.W.O.T.”, or “Strengths, Weaknesses, Opportunities, and Threats” exercise. A series of exercises was conducted with a variety of groups, starting with the

Planning Commission but also with groups of school children in several grade levels, emergency response personnel, senior citizens, and others. Many of the responses were as expected, and the Planning Commission, following review and analysis of the results discovered some common themes that reappeared throughout the process, regardless of the age or group that participated in the exercise. The Planning Commission compiled these results and has continuously reviewed and referred back to them throughout the process, to ensure that the goals and desires of the community are accurately reflected in the finished plan (Appendix B).

It is the intent of the Missaukee County Planning Commission to coordinate planning with neighboring political jurisdictions and other organizations to develop a plan that will guide the progress and responsible development of Missaukee County's assets for years to come.

CHAPTER 7

COMMUNITY GOALS AND OBJECTIVES



Through organization of community input gathered by the Missaukee County Planning Commission over the course of several years, a vision for Missaukee County's future has been developed by incorporating the thoughts and ideas of the citizens that live here into a framework of opportunity and preservation for the future.

By building off of the central focus of Land Use and Economic Development, the concepts of Community, Environment and Natural Resources, Agriculture, Infrastructure, and Recreation and Tourism were related back to build an overall representation of the community's vision. The concepts are expanded upon below.

LAND USE AND ECONOMIC DEVELOPMENT

To simultaneously preserve our environment and maintain our agricultural heritage, emphasizing education and economic growth while safeguarding and improving the quality of life and standard of living in our communities.

COMMUNITY

Support all people of Missaukee County through a robust network of service, faith-based, social, and community organizations.

Promote quality of life by emphasizing education and economic opportunities, local products, safe communities, and current technology.

Cultivate and preserve community programs, events, and activities.

ENVIRONMENT AND NATURAL RESOURCES

Collaborate with state, local, and private organizations to encourage best practices for all public and private land and water within Missaukee County to benefit multiple uses including but not limited to agriculture, forestry, hydro and geological exploration, solar, wind, and tourism.

AGRICULTURE

Support judicious use of groundwater and land use to perpetuate the agricultural industry.

INFRASTRUCTURE

Maintain, improve, upgrade, or expand as needed all infrastructure systems including transportation, communication, and utilities.

- *Transportation: Roads, bridges, rail, air

- *Communications: Land lines, wireless, internet, emergency

- *Utilities: Water, sewer, power, pipelines

RECREATION AND TOURISM

Support local recreation and tourism opportunities through the county website, the Lake City Area Chamber of Commerce, and the Pure Michigan campaign to attract visitors and increase local interest.

Promote and preserve the County Park system, to include Missaukee Mountain, for future generations.

APPENDIX A – Notice of Planning Recipient List (September 2010)

**Delores Peterson
Clam Lake Township Clerk**

**Kirk Soule
Haring Township Clerk**

**Catherine Gouge
Cedar Creek Township Clerk**

**Marjorie Bogart
Liberty Township Clerk**

**Kathryn Decker
Winterfield Township Clerk**

**Sharon Hartman
Beaver Creek Township Clerk**

**Sandi Parker
Springfield Township Clerk**

**Juanita Persons
Garfield Township Clerk**

**Judy Houts
Fife Lake Township Clerk**

**Aloma Joslin
Summerfield Township Clerk**

**Kathryn Decker
Winterfield Township Clerk**

**Emerson Davis
Frost Township Clerk**

**Thomas Downing
Marion Township Clerk**

**Kathy Barnhart
Highland Township Clerk**

**Gloria Langworthy
Sherman Township Clerk**

**Annamarie Reno
Lyon Township Clerk**

**Cynthia Russo
Lake Township Clerk**

**Barbara Stevenson
Roscommon Township Clerk**

**Kay Ouwinga
Lake Township Clerk**

**Daraleen Wilms
Lake City Clerk**

**Evelyn Lucas
McBain City Clerk**

**Marietta Tucker
Aetna Township Clerk**

**Laura Muste
Bloomfield Township Clerk**

**Marilyn Myers
Butterfield Township Clerk**

**Shelley Sloat
Caldwell Township Clerk**

**Steve Ebels
Clam Union Township Clerk**

**Lynn Pope
Enterprise Township Clerk**

**Catherine Molitor
Forest Township Clerk**

**Donna Bode
Holland Township Clerk**

**Lois Whipple
Norwich Township Clerk**

**Karen Emond
Pioneer Township Clerk**

**Roger Jenema
Reeder Township Clerk**

**Julie Dick
Richland Township Clerk**

**Mildred Rozeveld
Riverside Township Clerk**

**Penny Aldrich
West Branch Township Clerk**

**Missaukee County Road
Commission**

**Lake City Chamber of
Commerce**

**Lake City Area Schools
Superintendent**

**McBain Public Schools
Superintendent**

**Northern Michigan Christian
School
Administrator**

Cadillac Area Land Conservancy

Farm Bureau

**Muskegon River Watershed
Assembly (MRWA)**

Missaukee Conservation District

Wolverine Power Cooperative

**Clare County Planning
Commission**

**Crawford County Planning
Commission**

**Kalkaska County Planning
Commission**

**Grand Traverse County
Planning Commission**

**Osceola County Board of
Commissioners**

**Roscommon County Board of
Commissioners**

Notifications were also made to the Northwest Michigan Council of Governments (NWMCOG), Consumers Energy, DTE, and the Great Lakes Central Railroad in October of 2013.

APPENDIX B – SWOT

The Missaukee County Planning Commission collaborated with the USDA – Rural Development to conduct Strengths, Weaknesses, Opportunities, Threats (“SWOT”) exercises with many diverse groups throughout the community to gain an understanding of how the residents of Missaukee County feel about Missaukee now, and what is viewed as desirable for the future in terms of development, preservation, or a balance between the two ends of the spectrum. The groups that participated in the study included:

- *Missaukee County Planning Commission** (*May 12, 2009*)
- *Missaukee County Local Emergency Planning Committee/Local Planning Team (LEPC/LPT)** (*July 15, 2009*)
- *Lake City Planning Commission** (*August 24, 2009*)
- *Coalition for Poverty Reduction** (*December 15, 2009*)
- *Lake City Middle School – Mrs. Linderman’s 7th Grade – 2nd, 3rd, and 6th Hour Classes** (*January 25, 2010*)
- *Lake City Lower Elementary School – Mrs. Gillow’s 3rd Grade Class** (*January 26, 2010*)
- *Lake City High School – Mrs. Phillip’s 11th Grade – 6th Hour Class** (*February 2, 2010*)
- *Human Services Leadership Council** (*March 23, 2010*)
- *Missaukee County Planning Commission** (*April 7, 2010*)
- *Missaukee County Commission on Aging (COA) Board of Directors** (*October 18, 2010*)
- *Missaukee County Conservation District Board of Directors** (*December 21, 2010*)
- *Lake City Chamber of Commerce** (*April 19, 2011*)

The detailed results of each SWOT were carefully compared and analyzed by the Planning Commission to determine specific areas of interest, satisfaction, and concerns within the community.

A summary of the results can be found in the following table, which identifies the common categories that recurred throughout the exercises, along with areas of less concern. The number of times each was mentioned is identified, as is the verbiage used within the specific groups. This data was referred back to by the Planning Commission throughout the entire Master Plan Development process.

STRENGTHS	WEAKNESSES
<u>NATURAL RESOURCES (23)</u> Lakes and Beaches, State Land/Parks, Woods, Wild Animals, Rivers	<u>NATURAL RESOURCES(8)</u> Geese on beach, dead fish/foam/seaweed/animals, water quality, bottles on beach, dirty, lack of dock lifter
<u>FARMING/AGRICULTURE</u> Cows/Christmas Trees/Forestry (8)	<u>FARMING/AGRICULTURE (1)</u> Too many farms
<u>COMMUNITIES (53)</u> Health Department, Churches, Library, GMLC, small town, low crime rate, cost of living, low traffic, clean environment, safe communities, L.C. Council, Planning, human service organizations, appearance of downtown, volunteerism	<u>COMMUNITIES (38)</u> Abandoned animals/in shelters, size of community, lack of diversity, YMCA – transportation, vandalism/lack of safety, “drive-through” community, no networking between programs, no latchkey programs, appearance of downtown, medical options, departure of youth, aging population, small town (everyone knows too much), robbery, slum lords, lack of licensed daycare, lack of resources for special needs
<u>ECONOMIC DEVELOPMENT (3)</u> Jobs, grants	<u>ECONOMIC DEVELOPMENT (25)</u> Homelessness, too few opportunities/professions, lack of grocery/shopping, unemployment, closed businesses, lack of convention centers, empty buildings, housing, youth leaving, low income/low income housing, retention of higher-educated persons, low median income, substandard rent
<u>INFRASTRUCTURE/TRANSPORATION (3)</u>	<u>INFRASTRUCTURE/TRANSPORATION (15)</u> Aging, cars, high cost of alternative energy, landlocked, some roads, funding, public transportation, too many trucks, lack of high speed internet/broadband
<u>SENIOR CITIZENS (2)</u>	
<u>RECREATION/TOURISM(AGRIBUSINESS & AGRITOURISM) (43)</u> Farm markets, hospitality/retail (motel, restaurant, retail)	<u>RECREATION/TOURISM (9)</u> Limited when weather is bad, snowballs, lack of recreation, need lift at Missaukee Mountain, need “older kid” park, skate park should be sports park, limited youth programs, teen activity, not enough for kids to do, lack of 4 wheel terrain
<u>EVENTS (12)</u> G4N, Chamber of Commerce, Festival of the Pines	
<u>LACK OF ZONING (3)</u>	<u>LACK OF ZONING(2)</u>
<u>ALTERNATIVE ENERGY (2)</u> Wind, bio	
<u>EDUCATION (3)</u> Schools, Baker, CTC, Kirtland, music	<u>EDUCATION (6)</u> Outdated structures, limits within county, no health education, bigger school/high school
	<u>SOCIAL (16)</u> Bullying, family fighting, broken bones, too many “no” voters, non-generational, “south of Clam” mentality, resistance to change, teen pregnancy, unwillingness to ask for help, teen drinking, lack of understanding of disability, grandparents raising grandkids, kids smoking, lack of

	recognition of “good”, percent of aging population does not support growth
	<u>NO MASTER PLAN (1)</u>

OPPORTUNITIES	THREATS
Tourism (including motels) (18)	Tourism (3)
Restaurants/Retail (27)	Natural Resources (Pollution/Lake Runoff/Litter)(5)
Natural Resources (19)	Social (Losing jobs/Losing Homes/Transient population/Poor/Aging) (24)
Industry (Gas/Oil/Alternative Energy/Technology) (19)	Economic (19)
Economic Development (Transportation/Advertising/Housing/Senior Housing) (35)	Transportation (3)
Social (Community more user-friendly; Seniors) (38)	Lack of Zoning (2)
Public Transportation (3)	
Recreation (Bike Trails/Hunting/Fishing) (15)	
Education (17)	
Agriculture (11)	

In addition to the SWOT exercises, the plan’s progress was outlined in a Missaukee Sentinel article; announcements were also made at “Good Morning Lake City” meetings. Invitations were extended for all to participate in the process by providing input and suggestions.

***Missaukee Sentinel**

December 14, 2012

***Good Morning Lake City announcements**

May 17, 2013

August 16, 2013

APPENDIX C – EVENTS

JANUARY – Polar Plunge

MAY - Lake City's Annual Garage/Yard Sale

JULY - Greatest Fourth in the North

JULY - Homecoming Days (McBain)

AUGUST – Car Cruise and Show

AUGUST – Falmouth Youth Show

AUGUST and SEPTEMBER – Farmer’s Market (Tuesdays – Check ahead to verify days)

SEPTEMBER – Festival of the Pines

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