

PERE MARQUETTE CHARTER TOWNSHIP
**COMPREHENSIVE
PLAN**

Adopted JULY 2016

PERE MARQUETTE CHARTER TOWNSHIP PLANNING COMMISSION
EXCERPT OF MINUTES July 19, 2016

The following resolution was adopted by the Pere Marquette Charter Township Planning Commission at a Regular Meeting held on July 19, 2016 beginning at 6:30 p.m. at the Pere Marquette Township Hall, 1699 S. Pere Marquette Hwy., Ludington, MI 49431. Members present: James Nordlund, Jr., Douglas Busch, James Hinman, Andrew Kmetz, William Perry, and Michael Romansik. Member absent: Rex Pope.

PLANNING COMMISSION RESOLUTION TO ADOPT THE UPDATED COMPREHENSIVE PLAN

WHEREAS, the Michigan Planning Enabling Act, MCL 125.3801 (MPEA) authorizes the Planning Commission to prepare a Comprehensive Plan for the use, development and preservation of all lands in the Township; and

WHEREAS, the Planning Commission prepared a proposed updated Comprehensive Plan and submitted the plan to the Township Board for review and comment; and

WHEREAS, on May 10, 2016, the Pere Marquette Township Board received and reviewed the proposed updated Comprehensive Plan prepared by the Planning Commission and authorized distribution of the updated Comprehensive Plan to the Notice Group entities identified in the Michigan Planning Enabling Act; and

WHEREAS, notice was provided to the Notice Group entities as provided in the Michigan Planning Enabling Act; and

WHEREAS, the Planning Commission held a public hearing on July 19, 2016 to consider public comment on the proposed updated Comprehensive Plan, and to further review and comment on the proposed updated Comprehensive Plan; and

WHEREAS, the Planning Commission finds that the proposed updated Comprehensive Plan is desirable and proper and furthers the use, preservation, and development goals and strategies of the Township;

THEREFORE BE IT HEREBY RESOLVED AS FOLLOWS:

1. **Adoption of 2016 Comprehensive Plan Update.** The Planning Commission hereby approves and adopts the proposed 2016 Comprehensive Plan Update, including all of the chapters, figures, maps and tables contained therein, as well as the changes noted in the minutes of the July 19, 2016 meeting.
2. **Distribution to Township Board and Notice Group.** Pursuant to MCL 125.3843 the Township Board has not asserted by resolution its right to approve or reject the proposed updated Comprehensive Plan and therefore the approval granted herein is the final step for adoption of the plan as provided in MCL 125.3843 and therefore the plan is effective as of July 19, 2016. In addition, the Planning Commission approves distribution of the adopted amendments to the Township Board and Notice Group.
3. **Findings of Fact.** The Planning Commission has made the foregoing determination based on a review of existing land uses in the Township, a review of the existing Comprehensive Plan provisions and maps, input received from the Township Board and public hearing, and with the assistance of LIAA, a nonprofit community service and planning organization and its *Resilient Ludington* Project, and finds that the updated Comprehensive Plan will accurately reflect and implement the Township's goals and strategies for the use, preservation, and development of lands in Pere Marquette Charter Township.
4. **Effective Date.** The Comprehensive Plan Update shall be effective as of the date of adoption of this resolution.

The foregoing resolution was offered by Busch and supported by Romansik.

Upon roll call vote, the following voted:

Ayes: Hinman, Kmetz, Nordlund, Perry, Romansik, and Busch

Nays: NONE

Member absent: Pope

Resolution declared adopted.

.....

I, the undersigned, the duly qualified and acting Secretary of the Charter Township of Pere Marquette, Mason County, Michigan, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Planning Commission at a meeting of the Planning Commission held on the 19th day of July, 2016. I do further hereby certify that public notice of said meeting was given pursuant to and in full compliance with Michigan Act 267 of 1976, as amended, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Douglas Busch

Douglas Busch, Secretary

PERE MARQUETTE CHARTER TOWNSHIP COMPREHENSIVE PLAN

July 2016



PERE MARQUETTE CHARTER TOWNSHIP

Board of Trustees

Paul Keson, Supervisor
Rachelle Enbody, Clerk
Sara McCallum, Treasurer

Joanne Kelley, Trustee
Jim Nordlund, Sr., Trustee

Andy Kmetz, Trustee
Paul Piper, Trustee



Planning Commission

Jim Nordlund, Jr., Chairman
Jim Hinman, Vice-Chairman
Doug Busch, Secretary

Andy Kmetz
Rex Pope

Bill Perry
Mike Romansik



Building and Zoning Administrator

Terry L. Wahr



Plan Update Prepared by:



LIAA
324 Munson Ave.
Traverse City, MI 49686

TABLE OF CONTENTS

SECTION I	INTRODUCTION	1
SECTION II	COMMUNITY PROFILE	17
CHAPTER 1	NATURAL FEATURES AND THE ENVIRONMENT	18
CHAPTER 2	POPULATION.....	31
CHAPTER 3	INCOMES, EMPLOYMENT AND HOUSING	36
CHAPTER 4	EXISTING LAND USE.....	43
CHAPTER 5	TRANSPORTATION, UTILITIES AND COMMUNITY FACILITIES.....	47
SECTION III	COMPREHENSIVE PLAN.....	60
CHAPTER 6	GOALS AND OBJECTIVES.....	61
CHAPTER 7	FUTURE LAND USE PLAN AND ZONING PLAN	71
CHAPTER 8	IMPLEMENTATION STRATEGIES	83
APPENDICES		
APPENDIX A – IMPLEMENTATION TABLE		
APPENDIX B – RESILIENT LUDINGTON COMMUNITY ACTION TEAM SUMMARY		
APPENDIX C – U.S.-10/U.S.-31 CORRIDOR CHARRETTE SUMMARY		
APPENDIX D – RESILIENT LUDINGTON COMMUNITY VULNERABILITY ASSESSMENT		
APPENDIX E – RESILIENT LUDINGTON ONLINE COMMUNITY SURVEY RESULTS		

SECTION I. INTRODUCTION

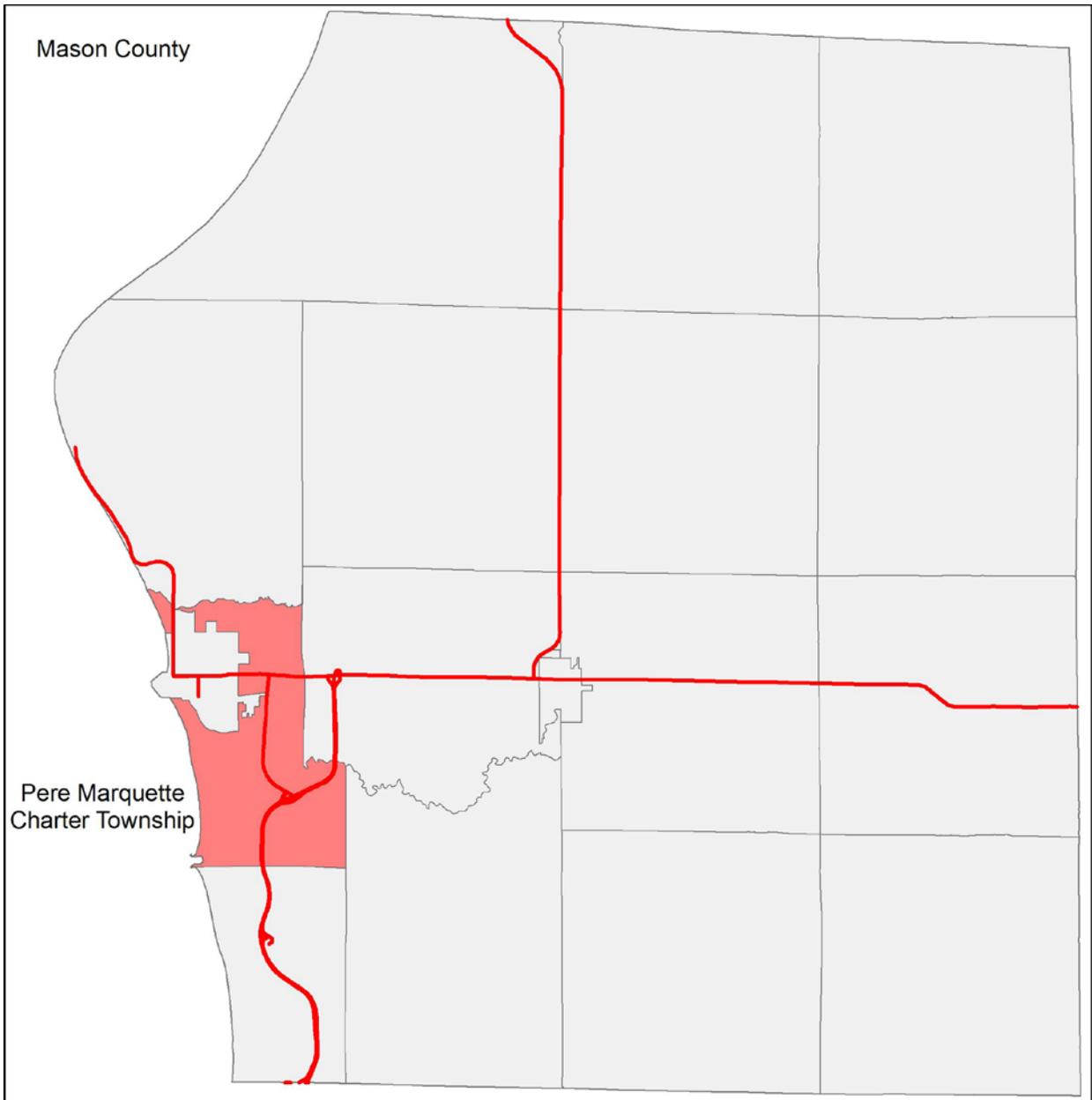
This Comprehensive Plan update was created as a part of the completion of the Resilient Ludington planning process in 2014-15.

In 1999, The *Pere Marquette Charter Township Master Plan* was created by the Pere Marquette Charter Township Planning Commission to reflect the community's commitment to the economic well-being of its residents while maintaining the area's natural beauty and quality of life. The Plan outlined the preferred future for the community and a comprehensive plan to realize it. The Plan was appropriately general, recognizing that planning for the future is a delicate blend of art and science and that sufficient flexibility will be needed to respond to the challenges of the future.

Over the course of time, the plan was rewritten and updated to reflect changes in the community, new information, and new themes in general community planning. The current update to the *Pere Marquette Charter Township Comprehensive Plan (2016)* recognizes that, since the adoption of the last plan update in 2008, conditions within the community have changed, new challenges have emerged, and many of the past plan's goals have been realized. Despite these changes, much of the 2008 *Comprehensive Plan* remains valid and applicable to the Township today. Therefore this update of the *Pere Marquette Charter Township Comprehensive Plan* is intended to build upon past planning efforts, using direct excerpts and revised language from the 2008 plan where appropriate.

The most recent update to this plan is based on a robust, multi-jurisdictional public input and planning process called *Resilient Ludington*.

Pere Marquette Township is located in Mason County in West Michigan along the Lake Michigan Shoreline. It lies at the intersection of US-31 and US-10 and adjoins the City of Ludington, and the Townships of Riverton, Summit, Amber, and Hamlin (see map on the following page).



Location Map



Data Sources:
MI Geographic Data Library

Prepared July 2015 by:



THE PURPOSE OF THE PLAN

The purpose of the *Comprehensive Plan* is to serve as the official document used to guide the future development and growth of the Township and the management of its resources. The *Comprehensive Plan* provides the framework and basis for future decision making and establishes a vision and direction for the Township. The Plan also:

- Identifies and evaluates existing conditions, characteristics, community values, trends, issues, and opportunities as the factual basis for decision making.
- Gives guidance to property owners, citizens, developers, regional and state agencies, and neighboring jurisdictions about expectations and standards for public investment and future development.
- Solidifies the vision for the community.
- Establishes the basis for the zoning ordinance, capital improvements, new policies, and other implementation tools and programs.
- Provides the framework for day-to-day planning and land-use decisions by Township staff, the Planning Commission, and the Township Board.
- Establishes the basis for the policies and tools that help build greater community resilience.
- Builds an informed constituency that can help support and participate in the plan's implementation.
- Builds support for the allocation of funding and helps leverage funding from regional, state, and federal agencies.

The *Comprehensive Plan* is intended to be a flexible document that guides growth and development within the Township for the next 20 years and beyond, while providing the ability to respond to changing conditions, innovation, and new information. In addition to describing where new development should be directed, the *Comprehensive Plan* also identifies:

- Important natural and cultural resources to be preserved.
- Standards to which new buildings should adhere.
- The characteristics of existing development within the Township.
- Recommended improvements to transportation systems.
- Ways that the community can better adapt to changing climatic and economic conditions.

RESILIENT LUDINGTON PLANNING PROCESS

In early 2014, the City of Ludington, Hamlin Township, Pere Marquette Charter Township, and Mason County began a community-wide planning process called Resilient Ludington. Through this cooperative planning effort, the citizens and leaders of the greater Ludington Community worked together to address shared issues and identify ways to manage changes and challenges of all kinds. The City of Ludington, Hamlin Township, and Pere Marquette Charter Township reviewed and revised their respective master plans as a part of the project.

Local officials and staff from each of the four participating governments formed a joint Community Planning Committee to oversee the planning process and consider the recommendations created during the project. Research, planning, and facilitation services for the Resilient Ludington project were provided by the nonprofit Land Information Access Association (LIAA) with support from the Michigan Municipal League (MML), Michigan Townships Association (MTA), Michigan Association of Planning (MAP), and the University of Michigan's Taubman College of Architecture and Urban Planning. Funding for the Resilient Ludington project was provided by the City of Ludington, Hamlin Township, Pere Marquette Charter Township, Mason County, and the Kresge Foundation.

Ultimately, the goal of the Resilient Ludington project is to help the citizens and local officials of the greater Ludington Community refine and update their land use and development plans with a focus on building greater community resilience. The planning process supports the City of Ludington, Hamlin Township, and Pere Marquette Charter Township in performing the required five-year reviews of their Master Plans. In all cases, this community planning process followed the requirements of the Michigan Planning Enabling Act (P.A. 33 of 2008).

Community Planning Committee

A Community Planning Committee (CPC) was formed to manage and oversee the Resilient Ludington project. The CPC was made up of appointed planning commissioners, elected officials, and municipal staff from the City of Ludington, Hamlin Township, Pere Marquette Charter Township, and Mason County. The CPC met regularly over the course of the project to review existing planning documents and make recommendations for the master plan updates of the City, Hamlin Township and Pere Marquette Charter Township. CPC meetings were open to the public and included informational presentations designed to build a better understanding of local land use and demographic trends

as well as climate and economic resilience. The project team also conducted personal interviews with a wide variety of community stakeholders during the beginning portions of the planning process. These interviews, along with insight from the CPC, helped identify the major issues and land use and development topics that became the focus of the Resilient Ludington process.

Public Forum

In May of 2014, the Resilient Ludington project team held a Public Forum at Ludington City Hall to officially begin the public involvement portion of the project and gather input from citizens of the greater community. The Public Forum consisted of brief informational presentations on the Resilient Ludington project, community resilience, the potential impacts of climate change, and the master planning process. A community visioning session was also conducted at the Public Forum, giving citizens the opportunity to voice their concerns, identify important community issues, and share their visions for the future of the Ludington Community.



Leadership Summit

In May of 2014, a day-long Leadership Summit was held to educate and engage interested citizens, public officials, and community leaders in discussions about the future of the greater community. The Leadership Summit provided educational presentations that helped the audience better understand the challenges presented by a changing climate and global economy. Presentations were made by experts from Michigan

State University, the University of Michigan, Michigan Technological University, Michigan District Health Department #10, the City of Grand Rapids, the Mason County Emergency Management Office, and LIAA. Following the presentations, attendees gathered in small groups to discuss community-wide issues and visions for the future. These small group discussions helped form the basis for the Community Action Team meetings that were held later in the summer and fall.

Community Action Teams

As part of the Resilient Ludington community planning project, leaders formed Community Action Teams (CATs) to discuss the various aspects of the systems that sustain the Ludington Community, with an emphasis on resilience. Citizens from the entire community were invited to attend a series of working sessions to formulate system-specific recommendations for the City of Ludington, Pere Marquette Charter Township, and Hamlin Township. Attendees chose to participate on one of six CATs addressing different systems within the community. Those systems were (1) Access and Transportation, (2) Agriculture and Food, (3) Energy and Economy, (4) Environment and Natural, (5) Human and Social, and (6) Neighborhoods and Infrastructure. Each team had the opportunity to learn about the workings of the system, as well as its strengths and weaknesses. Then, the CATs established goals and recommendations to submit to the Community Planning Committee.

About 70 individuals participated in the CAT process, which included a series of three meetings between June and September of 2014. CAT members were able to choose the system they were most interested in by signing up using forms provided at community meetings, using an online



signup page, or choosing a system at the CAT meetings. Each CAT meeting was conducted in a large meeting space and began with a presentation to the entire group. The presentations included information about community planning, the Resilient Ludington project, community resilience, and instructions for meeting activities. Following the presentations, the CATs conducted separate discussions

focused on the six systems, then reported their conclusions to the overall group.

The primary outcome of the CAT gatherings was a series of key recommendations and goals that addressed community issues and concerns. The goals and recommendations were further developed to include underlying objectives and specific tasks. A summary of the CAT process can be found in Appendix B.

U.S.-10/31 Corridor Planning Charrette

In July of 2014, the Resilient Ludington project team conducted a three-day planning charrette focused on the U.S.-10/U.S.-31 corridor between Ludington and Scottville. A charrette is a multi-day collaborative planning event that engages community members to create and support a feasible plan for sustainable and positive change for a specific issue or area of the community. The U.S.-10/U.S.-31 Corridor Charrette incorporated a public workshop, multiple community stakeholder meetings, an open house meeting, and a final presentation. Over the course of the three-day event, a wide variety of conceptual alternatives for the corridor were developed. The findings of the Charrette were presented to the public, collected in a Charrette Summary Report, and presented to the Community Planning Committee. A summary of the charrette and its recommendations can be found in Appendix C.

Online Community Planning Survey

The project team worked with the CPC to develop questions for an online survey that was conducted in order to gather additional public input for the Resilient Ludington planning process. The survey was announced in late August of 2014 and responses were accepted through the end of September, 2014. The goal of the survey was to learn more about the citizens of greater Ludington, the importance they placed on a variety of community-wide issues, and their visions for the future of the community.

The online survey allowed anonymous participation and solicited feedback from all members of the greater community. Due to the fact that the open, anonymous online survey could be taken multiple times by one individual and that relatively few (88) survey forms were submitted, the project team and CPC used the survey results to verify the themes that had emerged during other public input opportunities. A summary of the responses to the online survey can be found in Appendix E.

BUILDING COMMUNITY RESILIENCE

Most communities across Michigan are wrestling with difficult economic, social, and environmental challenges. The shifting global economy and statewide recession forced big changes in business practices and employment. State and federal funding is declining and new long-term assistance appears unlikely. Fuel and electrical energy costs have been high and subject to unpredictable price fluctuations. Further, paying for basic energy supplies continuously siphons off community resources. Making matters worse, the harmful impacts of extreme weather events on agriculture, infrastructure, and human health are being felt everywhere across Michigan.

These are turbulent times for many Michigan communities. However, with planning and preparation, communities can weather the storms and recover, becoming even better places to live and thrive. Through community-wide planning, resilient cities and townships actively cultivate their abilities to recover from adverse situations and events, working to strengthen and diversify their local economies and communications networks, increase social capital and civic engagement, enhance ecosystem services, improve human health and social systems, and build local adaptive capacity.

Resilience

Resilience can be described as the capability of a person or community to withstand and recover from a shock or serious misfortune without permanent disruption. According to the Rand Corporation, community resilience is *a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and/or recover from adverse situations*.^{1,2} Communities that are resilient are able to learn from adversity and adapt quickly to change. In general, the most important characteristics of community resilience are: (1) strong and meaningful social connections, (2) social and economic diversity, (3) innovation and creative problem solving capacity, and (4) extensive use of ecosystem services.

Resilience includes adaptive capacity. Adaptation is a critically important part of resilience because it allows us to prevent further harm from disasters and disruptions while making the most of the new conditions.

¹ Rand Corporation, *Community Resilience*. <http://www.rand.org/topics/community-resilience.html>

² *Focus on Community Resilience*. Santa Monica, CA: RAND Corporation, 2012. http://www.rand.org/pubs/corporate_pubs/CP640-2012-04

By adapting rapidly to changing circumstances, our communities may not only survive challenges, but thrive.

Communities interested in becoming more resilient assess their vulnerabilities and make action plans to reduce their sensitivities and exposures to hazards of all kinds. For example, local governments can improve building standards to reduce heating and cooling challenges posed by severe temperature swings (cold and hot).

Improvements in social cohesion and civic engagement also improve community resilience, by increasing the capacity of volunteer organizations and providing more secure neighborhoods, among other things. Planning processes can help increase civic engagement by improving communications and cooperation between cultural and service organizations and assuring more effective community projects.

To improve economic resilience, communities can work to encourage and support local production of goods and supplies, increasing self-reliance and reducing the flow of funds out of the community. Programs to encourage local investing and entrepreneurship have been helpful in building both employment and production capacity. Local investments, consumption of locally produced products, and locally owned businesses all help to diversify the community's economy, giving it greater resilience.

Economic Trends and Challenges

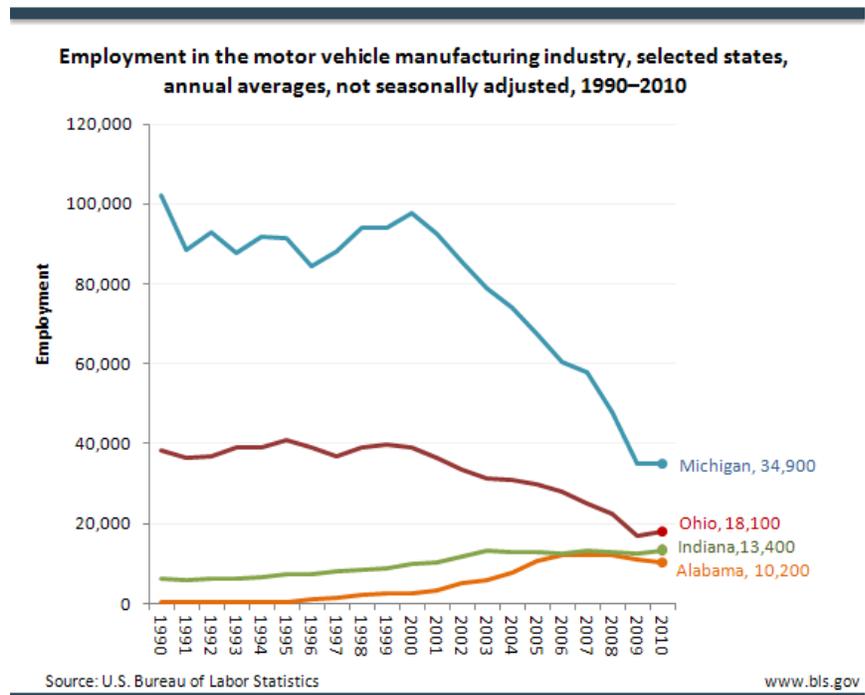
Over the past 20 years, technologies such as broadband digital communications and the rapid transport of agricultural and manufactured goods have changed the global economy. Many manufactured goods can now be produced anywhere in the world and transported anywhere else, increasing global competition. As a result, many manufacturing jobs have been and are being moved to countries with the lowest cost for labor and related expenses.

The trend toward moving jobs to other, lower-cost countries together with the continuing automation of processes has resulted in the nation, as a whole, losing manufacturing jobs. The impact of this changing trend has been particularly hard on Michigan's economy, which has relied more heavily on manufacturing than most other states. In the vehicle manufacturing sector alone, Michigan lost 65,100 jobs from 1990 to 2010. Overall, between 2000 and 2010, Michigan lost 367,000 manufacturing jobs.³

³ U.S. Bureau of Labor Statistics, *BLS Spotlight on Automobiles*. October 2011. <http://www.bls.gov/spotlight>

Over the past decade, most communities across Michigan have faced severe economic challenges due in part to a statewide loss of manufacturing jobs combined with a severe national recession. Along with the harsh economic downturn came a loss in population and a significant loss in real estate values as many people moved to other locations. Ranked 17th of all states in 1970, Michigan was ranked 34th in average household income by 2007.

Figure 1



According to many experts, most of the future economic growth in Michigan will come in the high-technology and services sectors, including health care, financial management, highly-skilled manufacturing, human services, and the food industry. While the recovering manufacturing sector will remain a major component of our state’s economy, most of the jobs already lost will not return. Rather than compete for a decreasing number of manufacturing jobs, the experts say, communities and regions should embrace this *New Economy*.

The *New Economy* is a buzz-phrase used to describe the transition from a manufacturing-based economy to a service-based or innovation-based economy. In the *New Economy*, communities and regions are encouraged to build from within, expanding existing businesses and supporting new entrepreneurial enterprises. To rebuild or retain

economic vitality, the experts say, communities will need to attract and retain educated and talented people.

There are a number of things that communities and regions can do to improve their economic outlook. Economic development actions recommended by many experts reflect on the characteristics of the New Economy. For example, the following list presents some of the actions suggested by Michigan State University’s Land Policy Institute (MSU LPI) in a 2010 training course. All of these actions could, if properly focused, increase community resilience.

Actions We Could Take to Restore Prosperity

1. Diversify our economy.
2. Expand our markets.
3. Embrace the Green Economy and its focus on alternative energy.
4. Promote and support entrepreneurialism.
5. Focus on talent retention and attraction.
6. Focus on population retention and attraction.
7. Focus on effective placemaking and place-based strategies.
8. Right-size and maintain our infrastructure.

Climate Change and Variability

Climate and *weather* are directly related, but not the same thing. *Weather* refers to the day-to-day conditions we encounter in a particular place: sun or rain, hot or cold. The term *climate* refers to the long-term patterns of weather over regions or large areas. When scientists speak of global climate change, they are referring to generalized, regional patterns of weather over months, years and decades. Ongoing and predicted climate changes refer to the generalized weather characteristics or averages on a regional basis.

As stated by the *Intergovernmental Panel on Climate Change*, significant changes in the earth’s climate have been observed and thoroughly documented. *Warming of the climate system is unequivocal* and is now evident in average air and ocean temperatures, rising sea levels and the melting of ice. Further, more change is expected.

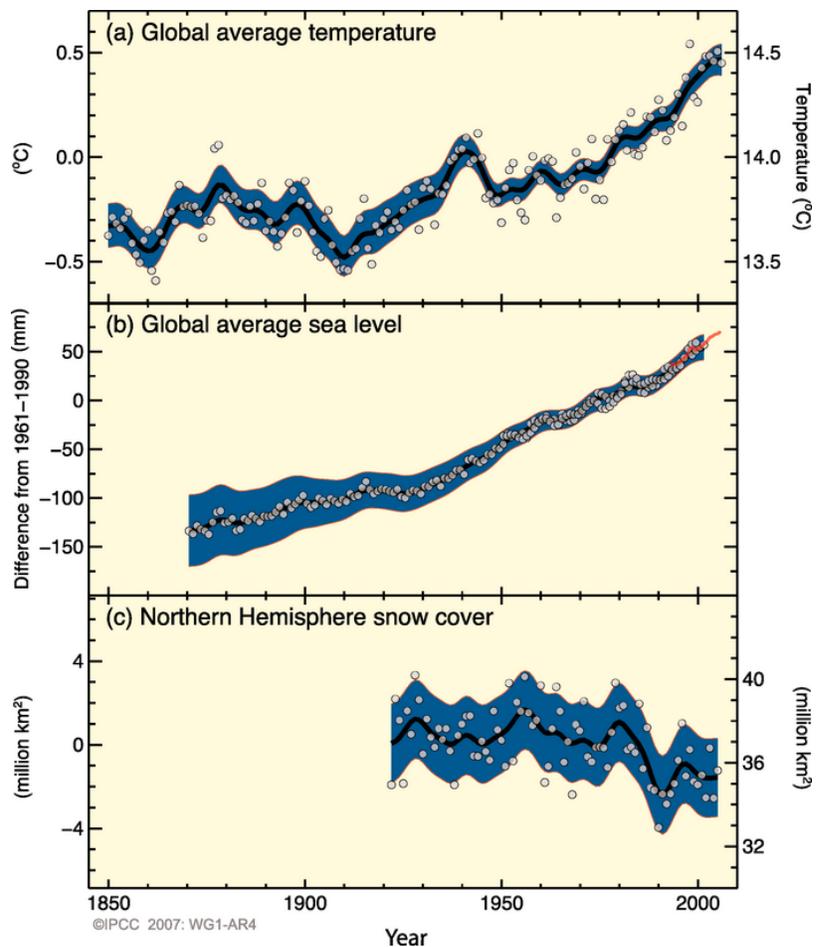
Figure 2 provides a summary of observed changes in several key climate indicators over the last 100 to 150 years, as compiled by the Intergovernmental Panel on Climate Change.

To help predict what the climate will be in the future, scientists are using rapidly improving three-dimensional computer models of the Earth’s atmosphere, oceans and land surfaces to understand and predict large-

scale changes in climate. These General Circulation Models (GCM) have been improved and verified in recent years, resulting in relatively reliable predictions for climate changes over large regions. To help predict climate change at the Earth's surface for smaller regions, scientists apply downscaling techniques.

The Great Lakes Integrated Sciences + Assessments Program (GLISA) is a consortium of scientists and educators from the University of Michigan and Michigan State University that is helping to provide downscaled models for the Great Lakes Region in support of community planning efforts like Resilient Ludington. According to GLISA, the Great Lakes region has already experienced a 2.3° F increase in average temperatures from 1968 to 2002. An additional increase of 1.8 to 5.4° F in average temperatures is projected by 2050. Although these numbers appear relatively small, they are driving very dramatic changes in Michigan's climate.⁴

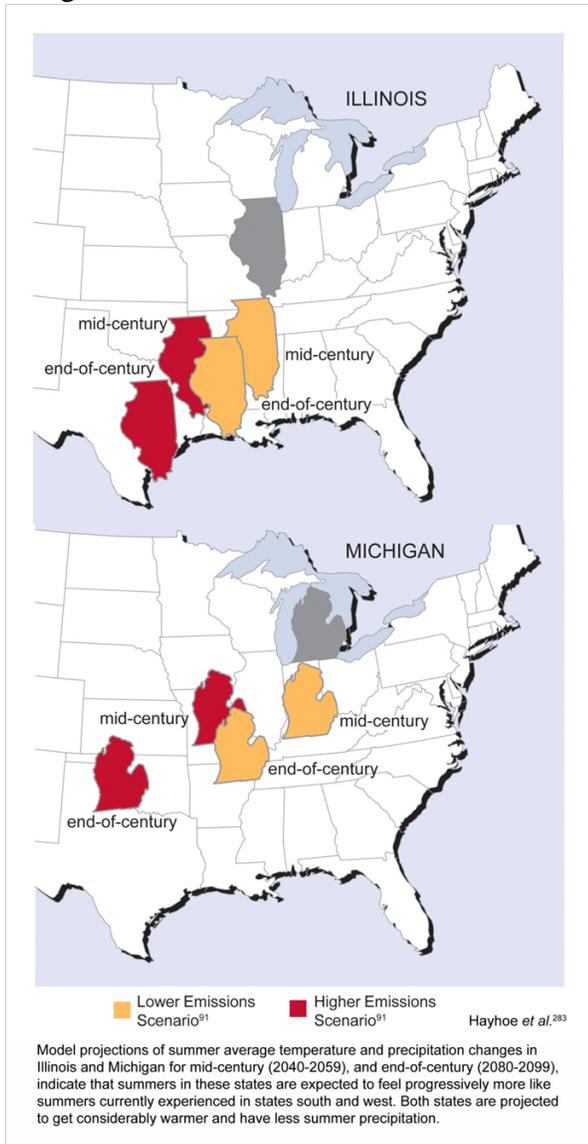
Figure 2



⁴ U.S. Global Change Research Program. *Global Climate Change in the United States, 2009*. Cambridge University Press, Cambridge, MA. <http://www.globalchange.gov/usimpacts>

Based on the most recent models, the climate of Michigan will continue to warm, with greater increases in temperature during the winter months and at night. There are a variety of weather impacts expected with this change in average temperatures. For example, storms are expected to become more frequent and more severe. Some of the potential impacts of climate change for Michigan include:

Figure 3



1. Increases in winter and spring precipitation.
2. Less precipitation as snow and more as rain.
3. Less winter ice on lakes.
4. Extended growing season (earlier spring/later fall).
5. Greater frequency and intensity of storms.
6. More flooding events with risks of erosion.
7. Increases in frequency and length of severe heat events.
8. Increased risk of drought, particularly in summer.

These changes in climate could have a number of both good and bad effects on the greater Ludington area. For example, an extended growing season could help increase crop yields for area farmers. On the other hand, highly variable weather conditions such as severe storms and flooding mixed with summer droughts present big challenges to farming. Additionally, increased summer temperatures and a longer summer season could improve the local tourism economy, but at the same time stormwater contamination of the area's lakes could limit their appeal to tourists.

The National Climate Assessment for 2009 (U.S. Global Change Research Program) includes a number of illustrations that help us understand the extent and character of anticipated climate change impacts. The section on the Midwest includes an illustration of projected summer climate for Illinois and Michigan under two different emissions scenarios (see Figure 3). The higher emissions model refers to the continuation of existing discharge levels. Models indicate that Michigan's

climate will feel more like present-day Arkansas or Oklahoma by the end of the century.⁵

⁵ U.S. Global Change Research Program. *Global Climate Change in the United States, 2009*. Cambridge University Press, Cambridge, MA. <http://www.globalchange.gov/usimpacts>

Responding to the impacts of climate change will challenge many different parts of the Ludington Community, from social services to industrial production. The following is a partial list of climate change impacts on community life as described by GLISA and Michigan’s State Climatologist:

Rivers, Streams and Lakes

- Decline in cold water fish populations – changing fisheries.
- Lower river and lake levels and more frequent lake stratification.
- Increases in pollution from stormwater runoff.

Plants and Wildlife

- Increases in invasive species that damage local trees and plants.
- Changes in tree species able to survive in the new regional climate.

Energy and Industry

- Increases in electrical energy demand due to heat waves.
- Reduced water availability from streams and groundwater.

Transportation

- Increased damage to roads and bridges from flooding and heat waves.
- Additional difficulty for shipping on the Great Lakes due to lower water levels.

Public Health Risks

- Increased risk of illness and death due to high heat and humidity.
- Increased risk of water contamination from flooding events.
- Increased risk of disease spread by mosquitoes, ticks and other vectors.

Moving Forward

The Resilient Ludington planning process resulted in many recommendations and strategies based on best management practices for promoting economic and climate resilience for a healthy, thriving community. These recommendations and strategies are applied, where applicable, within the *Pere Marquette Charter Township Comprehensive Plan*.

THE ORGANIZATION OF THE PLAN

This Plan is organized into three sections. This first Section consists of this introduction which outlines the purpose of the plan and the process for its development. Section II, is the Community Profile. It presents an overview of existing conditions in Pere Marquette Charter Township including:

- Natural Features and the Environment (Chapter 1)
- Population (Chapter 2)
- Incomes, Employment and Housing (Chapter 3)
- Existing Land Use (Chapter 4), and
- Transportation, Utilities and Community Facilities (Chapter 5)

Section III constitutes the Comprehensive Plan. It includes:

- the Township's Goals and Objectives (Chapter 6)
- the Future Land Use Plan and Zoning Plan (Chapter 7)
- Implementation Strategies (Chapter 8)

HISTORICAL CONTEXT

Through much of the 20th Century, Pere Marquette Township enjoyed relatively slow and steady growth. It remained a largely agricultural community with most development in the region occurring in the immediate vicinity of the City of Ludington. Several developments over a period of years began to change the character of the community and to necessitate a more careful and structured approach to land use planning.

The 19th Century logging economy gave way to an agricultural economy in the early part of the 20th Century. The steady growth of the area's industrial base through the last half of the 1900's served to fuel a relatively prosperous local economy. That eventually evolved into an economy based on the chemical industry and tourism. Throughout this evolution, however, the local economy has remained relatively strong.

As energy costs climbed in the 1960s and early 1970s, Consumers Energy Company/Detroit Edison developed the Pumped Storage generation facility on the shore of Lake Michigan straddling the boundary between Pere Marquette and Summit Townships. In addition

to producing electrical energy for peak demands, this facility also pumped needed tax dollars into the local economy.

In 1990, the extension of U.S.-31 as a limited access expressway northward to U.S.-10 has given the Township improved access to markets throughout the Midwest. This, too, has fostered renewed interest in the region and Pere Marquette Township has garnered a significant share of the resulting commercial investment.

SECTION II. COMMUNITY PROFILE

In this section of the *Comprehensive Plan*, a general profile description of Pere Marquette Charter Township is presented. This section is not intended as an exhaustive inventory of all the numerous aspects of the community. Rather, its purpose is to give some general impression of the natural features, demographics, land use patterns, and infrastructure that make up the Township.

CHAPTER 1. NATURAL FEATURES AND THE ENVIRONMENT

Natural features and the environment play a variety of important roles in Pere Marquette Charter Township. The features of the landscape either limit or permit development of the land in various locations while providing a pleasing setting for residents. Soil, water, and topographic resources also provide the basis for much of the Township's business, agricultural, and industrial needs. This chapter provides an overview of the natural and environmental features within the Township.

**Woods and water,
beaches and rivers –
Pere Marquette
Township offers a
variety of settings that
pleases both residents
and visitors.**

Topography

Pere Marquette Charter Township is located in western Mason County, surrounding the City of Ludington. The community is characterized by over six miles of Lake Michigan shoreline and dune areas. In addition, its rolling hills and farmlands, attractive neighborhoods, rivers and inland lakes help to define the Township's character. U.S.-31, which provides expressway access connections to southern Michigan, extends from the southern Township limits north to US-10. U.S. 10 is a 4-to-5 lane highway which runs east and west across the central portion of the Township.

Elevations in Pere Marquette Township vary considerably. In the southwestern portion of the community, high dune bluffs rise over 150 feet above the Lake Michigan shoreline. The southeastern portion of the Township is characterized by gently rolling hills, orchards, and farmlands. In the central portion of the community, the valley and the broad wetlands along the Pere Marquette River lie only a few feet above the elevation of Lake Michigan. A glacial moraine plateau rises in the northern portion of the Township only to fall again to a few feet above lake levels at the Lincoln River.

Deep bedrock formations within the Township provide mineral resources, primarily sodium compounds, which have been tapped by local industry using deep extraction wells.

Soils

Several distinct soil groups characterize soil conditions within Pere Marquette Charter Township. The map on page 20 presents an overview of soils in the Township including the generalized classifications discussed below. Also illustrated on this map are the wetland areas within the Township and local water features.

The northeastern portion of the Township is underlain with Covert-Pipestone-Saugatuck soils. This soils group ranges from moderately well drained to poorly drained. These are relatively flat areas which tend toward higher groundwater levels and high moisture content. These soils are generally poor for agricultural purposes and may have limitations for the on-site disposal of wastewater.

In the far northwestern portion of the Township Dune-Nordhouse-Quartzipsamments series soils are found. These are characterized by widely-varying slopes and excessive porosity. Building limitations may include erosion and instability on slopes.

Through the north and central part of the Township, Gratan-Epworth soils series are found. These are nearly level to rolling, somewhat excessively drained soils which are dominated by idle grassland, pastures, and brush. These soils are well suited for building and septic tank drainfields.

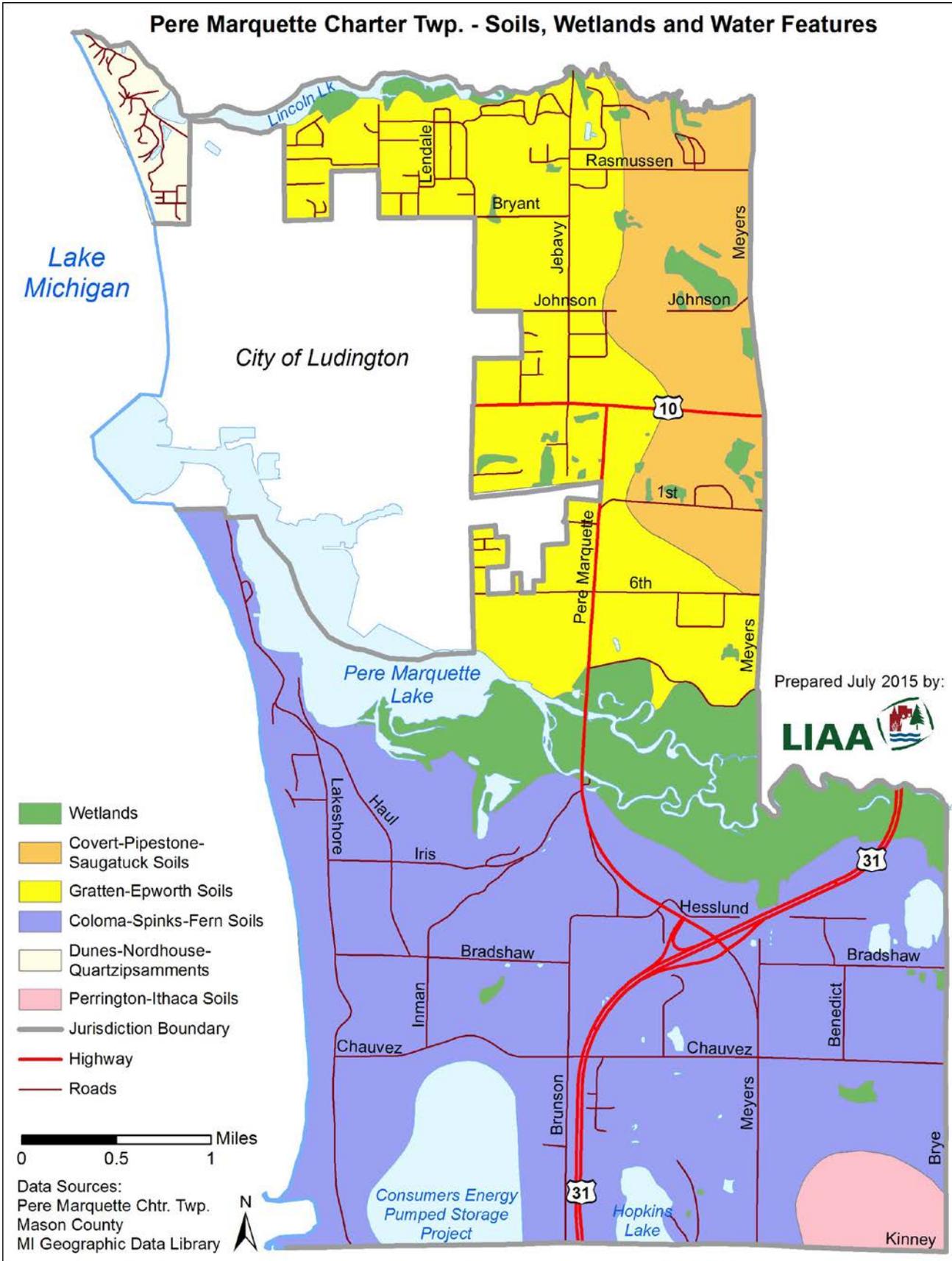
South of the Pere Marquette River estuary, Coloma-Spinks-Fern series soils predominate. These soils range in slope from relatively flat to nearly 45% and are well drained to excessively well drained. Soils in this series may be well suited to crop production.

In the far southeastern portion of the Township are Perrington-Ithaca soils. These soils range from moderately well drained to poorly drained, with significant clayey layers. They also tend to be well suited to crop production.⁶

The remaining soils in the Township are muck - or soils characterized by a high water table and very poor drainage. They are found in level areas and lowlands such as exist along the Pere Marquette and the Lincoln Rivers.

⁶ U.S. Department of Agriculture, *Soil Survey of Mason County, 1992*

Pere Marquette Charter Twp. - Soils, Wetlands and Water Features



Climate

Weather in Pere Marquette Charter Township is strongly influenced by the presence of Lake Michigan. Prevailing westerly winds across the Lake help to moderate seasonal temperature changes resulting in slightly cooler spring and summer months and slightly warmer fall and winter months. In 2000, the average annual temperature in the region was reported as 46.5 degrees Fahrenheit. Over the next decade and a half, average annual temperatures varied, peaking at 49.8 degrees in 2012 before falling to below 45 degrees in 2013 and 2014 due to extremely cold winters in those years.⁷ The Township's frost-free growing season, averaging 139 days, extends from about mid-May to early October. Average annual precipitation has changed from 36.25 inches in 2000 to 39.93 inches in 2014.

Future changes in the climate will impact, positively or negatively, nearly all aspects of the region in some way. It is important that these impacts be considered as the Township plans for its future. Additional detail about how the changing climate impacts the community can be found in Section I of this plan and in the Resilient Ludington Community Vulnerability Assessment (Appendix D).

Water Resources

In addition to its six miles of Lake Michigan shoreline, Pere Marquette Township has additional riverfront and inland lakeshore properties offering approximately 12 miles of waterfront.

Pere Marquette Township is located within two river watersheds ~ the Pere Marquette River and the Lincoln River. The Pere Marquette River basin drains the southern portion of the Township. Pere Marquette Lake is located on the river near the channel which outlets to Lake Michigan in the City of Ludington. Swanson Creek, Mosquito Creek, and St. Clair Creek are perennial streams which discharge into the Pere Marquette River.

The Lincoln River basin is located along the northern portion of the Township, and serves as the Township boundary with Hamlin Township to the north. The river flows east to west into Lincoln Lake, which ultimately discharges into Lake Michigan.

In addition to these rivers, the Township includes within its boundaries the southern portion of Pere Marquette Lake and the northern portion of Hopkins Lake. Squaw Bay is a part of the Pere Marquette River estuary located adjacent to the Dow Chemical settling ponds at the east end of Pere Marquette Lake. Another significant water feature is the man-made Consumers Energy Company/Detroit Edison Pumped

⁷ NOAA Annual Average Temperature Data, Michigan Climate Division 5. <http://www.ncdc.noaa.gov/cag/time-series/us>. (Accessed July, 2015).

Storage Reservoir located along the Lake Michigan shoreline in the southwestern portion of the Township.



The Pere Marquette River provides a variety of benefits to Township residents and visitors, including recreational opportunities.

Wetlands predominate along the Pere Marquette River, which is nationally-designated as a Wild and Scenic River, east of Pere Marquette Highway. The broad estuary wetlands of the Pere Marquette River that cross the mid section of the Township provide an important habitat for waterfowl, deer, and other native wildlife. These wetlands cover about 950 acres and constitute about 10% of the Township's land area.

Groundwater

Because of the glacial history of the Township, groundwater conditions are not uniform from one area to the next. As the glaciers receded, they left thick deposits of varying materials, ranging from gravel, to silt, sand, and clay. Within this glacial drift, water can generally be found in quantities sufficient to support domestic wells. However, depth to groundwater, water quantity, and water quality may vary significantly.

Lake Michigan Shoreline

The Lake Michigan Shoreline is a dominant feature of Pere Marquette Township. The high bluff dunes located in Sections 203, 22, 27, and 34 have been designated as "high-risk erosion areas" under the State of

Michigan Critical Dunes program. This program prevents construction activity that may exacerbate the natural erosion and sloughing action associated with these formations.



The Lake Michigan shoreline is a dominant feature in Pere Marquette Township.
Photo source: United States Army Corps of Engineers.

Much of the dunes lie on a narrow peninsula known as the Buttersville Peninsula which separates Pere Marquette Lake and Lake Michigan in the central portion of the Township. Along the length of the peninsula, the dunes fall in height as one travels north. The Township maintains a public park and campground known as Buttersville Park on the Lake Michigan side of this peninsula.

Across Pere Marquette Lake, at the northern end of the Township, Sections 4 and 9 contain Critical Dunes. Lower dunes and grasslands form the margins of the Lake Michigan shoreline. Much of this area is developed in seasonal residential property.

Floodplain

The Federal Emergency Management Agency (FEMA) develops Flood Insurance Rate Maps (FIRMs) for each county in the United States. According to FEMA, the FIRM is “the primary tool for state and local governments to mitigate the effects of flooding in their communities.” The National Flood Insurance Program was created in 1968 to reduce future damage and provide an insurance program that would help protect property owners from losses.

The FIRM shows areas subject to flooding based on historic, hydrologic, hydraulic and meteorological data as well as flood controls. The maps identify a base flood elevation (BFE), sometimes referred to as the 100-year flood zone. These are areas with a 1% chance of flooding in any given year. The maps also identify the areas with a 0.2% chance of flooding in any given year, sometimes called the 500-year flood zone. FEMA points out that these are only probabilities, not forecasts. Therefore, there is a 26% chance of a flood occurring in the 100-year flood zone during a 30-year period, the term of a typical residential home mortgage. The map on the following page shows the 100-year flood zone identified by FEMA in Pere Marquette Charter Township.

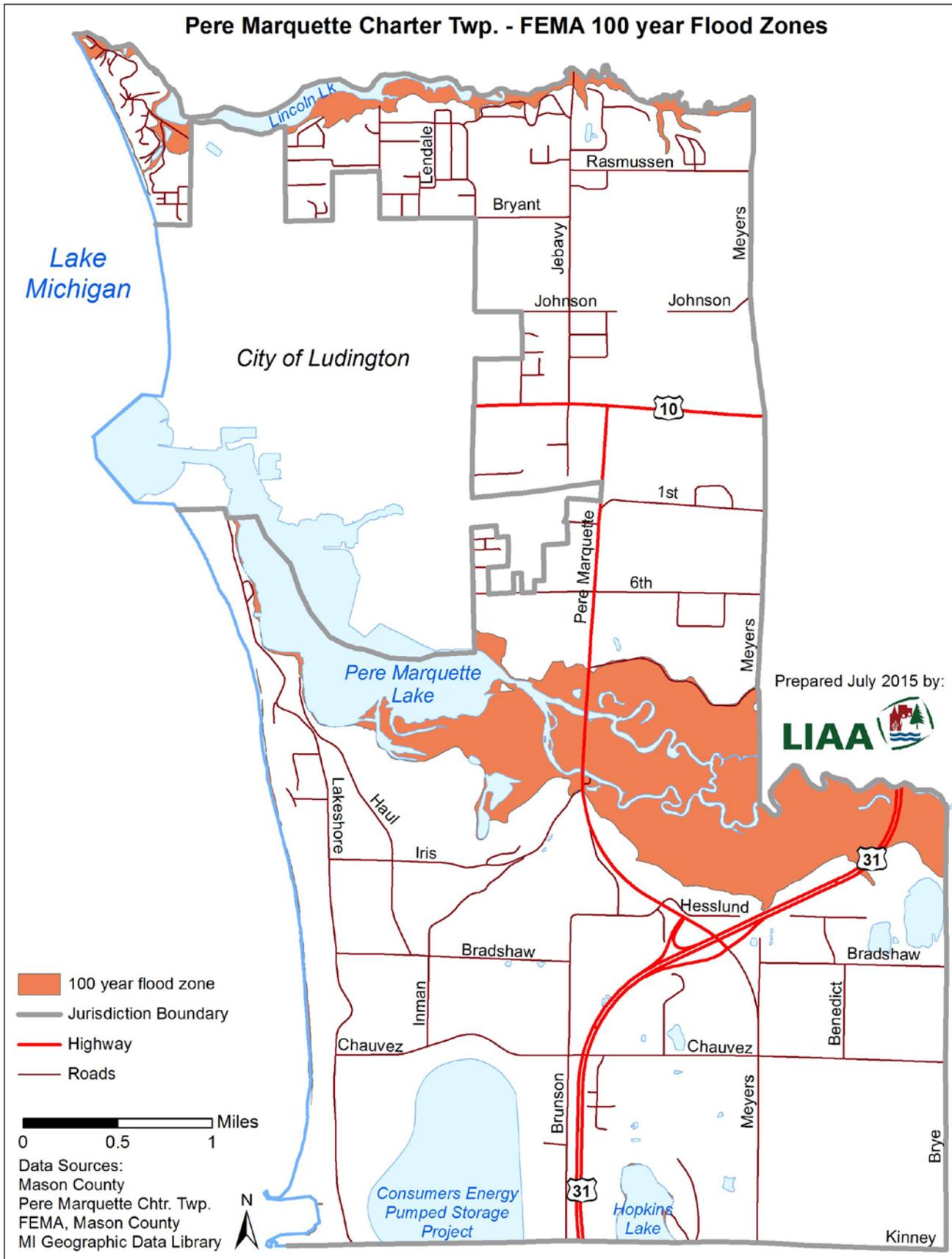
Although flooding events in the community have been infrequent, winter and spring are the most likely flooding seasons. Additionally, flooding due to heavy precipitation events can occur at any time. The *Hazard Mitigation Plan for Mason County* identifies potential riverine and urban flooding as the 10th highest priority natural hazard in the County.⁸

Although traditional riverine floodplain flooding is not as big a concern as other natural hazards, heavy runoff that overwhelms storm-sewer infrastructure can cause flooding in low-lying areas. This type of flooding caused extensive damage to both public and private property in the region during and after a heavy precipitation event in 2008.

As the frequency and intensity of heavy precipitation events increases due to the changing climate, the potential for flooding increases. The Township should evaluate the ability of its existing stormwater control infrastructure to handle increasingly strong storm events and encourage the use of green infrastructure and low impact development (LID) techniques throughout the Township to better accommodate high volumes of precipitation. Additionally, the *Hazard Mitigation Plan for Mason County* suggests that local jurisdictions utilize their planning and zoning policies to direct development away from hazardous areas such as floodplains and wetlands.⁹

⁸ West Michigan Shoreline Regional Development Commission. (2005). *Hazard Mitigation Plan for Mason County*. P.56.

⁹ West Michigan Shoreline Regional Development Commission. (2005). *Hazard Mitigation Plan for Mason County*. P.64.

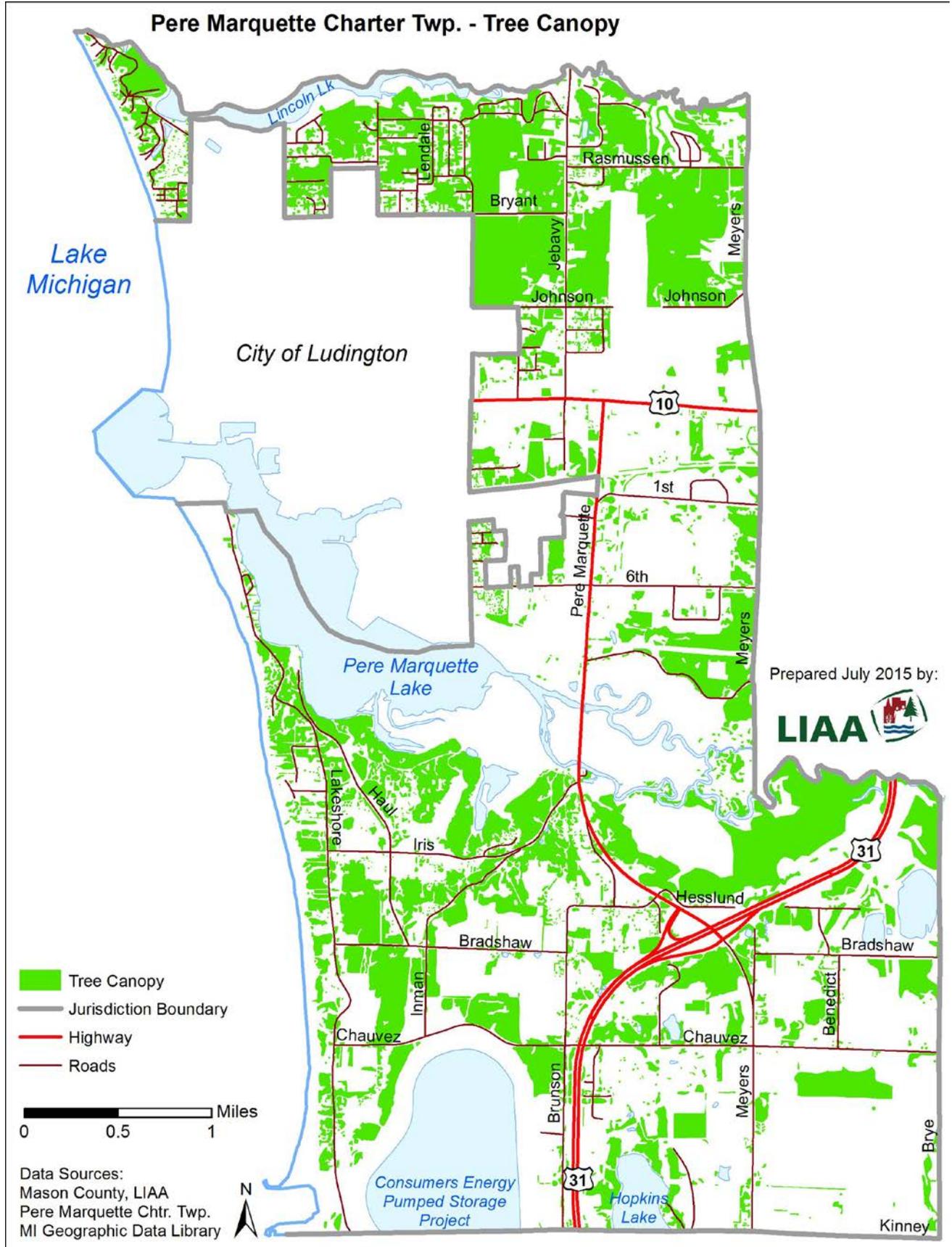


Woodlands and Tree Cover

While portions of Pere Marquette Charter Township are significantly developed at this point in time, there are many locations within the Township that remain wooded. There is also substantial tree canopy present in many established residential areas and parks. Wooded areas and substantial urban tree canopy provide a variety of benefits to communities including:

- Improved natural and aesthetic character;
- Visual barriers between conflicting land uses;
- Reduced erosion and stormwater runoff;
- Reduced air pollution;
- Increased wildlife habitat;
- Reduced temperatures (ground, air, and water); and
- Reduced energy costs through building shading.

Significant wooded areas are located in the northernmost portion of the Township and south of the Pere Marquette River. A map showing the existing tree canopy in the Township can be found on the following page.



Historic Sites

Perhaps most dear to Township historians is the State-recognized historic site honoring the Jesuit explorer and missionary for whom Pere Marquette Township is named. Locally known as “The Cross,” the Pere Marquette Shrine was recognized as a State of Michigan historic site in 1966, and bears an official State plaque to mark its location on the Buttersville peninsula. The landmark of the tall white cross is visible from both Lake Michigan and from Pere Marquette Lake, a tribute to the well-beloved priest. The site has been modestly developed with landscaping and a concrete stairway up the west side of the hill to the Cross itself. The State marker is accompanied by an additional marker placed by the local chapter of the Daughters of the American Revolution. The DAR plaque is believed to have been first placed in 1921 at a more historically accurate site a little further south on the peninsula, and later moved to its present location. Together, these remembrances tell a thumbnail history of Father Marquette’s influence. The east side of the site, facing Pere Marquette Lake, has a small paved parking area and a simple boat launch available to the public.



The Pere Marquette Shrine, located on the Buttersville Peninsula.

Pere Marquette Township also houses an historic settlement known as Historic White Pine Village. This facility is located on South Lakeshore Drive, overlooking Lake Michigan and offers visitors a restored 19th century settlement to explore. Approximately thirty historic buildings have been relocated to the property, including the original Pere

Marquette Town Hall. Attractions include a blacksmith shop, museum of music, an old fashioned ice cream parlor, a trapper's cabin, a restored 1880's farmhouse, a one-room schoolhouse, and a sports Hall of Fame. Mason County's first courthouse – another State-recognized historic site – is also a feature at White Pine Village. A chapel on the Village grounds is made up of antique elements donated by several area churches, and is in regular use for weddings, baptisms, memorial services, et cetera.

Attendance at White Pine Village grew steadily from 11,000 in 1991 to near 17,000 in 1997. The current average attendance is fairly stable at 16,000 to 17,000 annually.

Also along the Lake Michigan shoreline, about three miles south of the Cross and two miles south of White Pine Village, land was set aside in Pere Marquette Township for Phillips Cemetery. When it was established in 1863, it was used exclusively as an Indian burial ground. The burial ground fell into disuse some 40 years later, shortly after the turn of the century.

Mr. and Mrs. Phillips, who donated some of the land for the cemetery, had a daughter, Dora. She was the first Caucasian child to be raised in the area, coming to Mason County with her parents in 1849. As Dora grew up, she became quite an authority on local history. In 1935, at the time of her death, Dora Phillips Hull wanted to be buried in Phillips Cemetery with the native people and the early pioneers.

The cemetery remained open until all the burial spaces were purchased. The Township resumed regular care of the grounds in the 1970's. Today, it remains a peaceful, attractive site along the Lake Michigan coastline. The cemetery was re-opened in 2003 with the addition of a columbarium for cremated remains – the only type of burial now allowed at Phillips Cemetery.

Scattered throughout the Township there are Centennial Farms and other historic buildings, some State-recognized and others only locally appreciated.

PLANNING IMPLICATIONS

A review of the natural features and environmental constraints of the Township suggests several important implications for the future of the community.

- ◆ The Township's natural features, including the Lake Michigan dunes, the Pere Marquette River and its associated wetlands, and Lincoln River, are important elements to the local quality of life. Care must be taken to manage growth and limit the impacts of development to preserve these important features.
- ◆ The rural character and natural beauty of the Township make it a desirable place for future residential development. In order to preserve the character of the landscape that is so important to residents and visitors, the Township must carefully plan for the preservation of open spaces, natural features, woodlands, and agricultural lands.
- ◆ Soils in most areas of the Township can support private, on-site septic systems. This factor reduces the demand for public sewers and, as a consequence, limits the ability of the Township to guide growth with utility extensions.

CHAPTER 2. POPULATION.

Population is among the most important measures to express growth and its likely impact on land uses in a community. Therefore, it is vitally important to achieve an understanding of the Township’s population and its growth trends in order to prepare a meaningful and realistic Comprehensive Plan. In this section, the population of Pere Marquette Township is analyzed and potential future growth trends are discussed.

Population projections referenced in this section were developed by the West Michigan Shoreline Regional Development Commission (WMSRDC). The characteristics of a community’s population can impact its ability to respond to changing circumstances and conditions. For additional information on the vulnerability of the community’s population in relation to changing climatic factors, see Appendix D.

Population

According to data published by the U.S. Census Bureau, the population of Pere Marquette Charter Township in 2010 was 2,366, a 6.2% increase from the year 2000. Over the same time period, the overall population of Mason County grew by 1.5%, while the populations of the City of Ludington and the State of Michigan fell by 3.4% and 0.6%, respectively. The following table shows the population trends from 1990 to 2010 for Pere Marquette Charter Township, the City of Ludington, Hamlin Township, Mason County, and the State of Michigan. Generally, the Township has experienced higher growth rates than its neighbors, and the state in general, over this time period.

Population Trends 1990-2010					
Community	1990	2000	Percent Change 1990-2000	2010	Percent Change 2000-2010
Pere Marquette Charter Township	2,065	2,228	7.9%	2,366	6.2%
City of Ludington	8,507	8,357	-1.8%	8,076	-3.4%
Hamlin Township	2,597	3,192	22.9%	3,408	6.8%
Mason County	25,537	28,274	10.7%	28,705	1.5%
State of Michigan	9,295,297	9,938,444	6.9%	9,883,640	-0.6%

It should be noted that the seasonal population is not counted in the Census figures. The summer population of the Township is higher than the year-round population, and since many summer residents live on or near the water, they have the potential to have a greater environmental impact than year-round residents.

The West Michigan Shoreline Regional Development Commission (WMSRDC) developed population projections for Pere Marquette Charter Township through the year 2040. While it is impossible to predict population growth with absolute certainty, it is important to consider these forecasts when planning for the future. The population projections created by WMSRDC in 2011 indicate that the Township population will continue to grow, but at a slower rate than recently experienced. According to WMSRDC, these population projections were developed using the traditional cohort survival technique and historical trends.¹⁰ The following table shows the WMSRDC population projections for the Township through 2040.

Pere Marquette Charter Township Population Projections				
	2010	2020	2030	2040
Population	3,408	3,460	3,513	3,566
Percent Change (as compared with 2010)	0.0%	1.5%	3.1%	4.6%

An Aging Population

The age distribution of the population within a community can help identify social trends and the potential for future service needs. The following table shows the age distribution of Pere Marquette Township’s population from 2000 to 2018.

Population by Age - Pere Marquette Charter Township				
Age	2000 Percent	2010 Percent	2018 Percent	2000-2018 Percent Change
0 to 4	5.0%	6.2%	5.4%	-12.9%
5 to 9	7.5%	7.2%	5.4%	-25.0%
10 to 14	7.9%	5.9%	5.8%	-1.7%
15 to 24	11.0%	10.0%	9.2%	-8.0%
25 to 34	8.8%	8.6%	9.0%	4.7%
35 to 44	15.1%	11.7%	9.5%	-18.8%
45 to 54	15.9%	14.8%	13.1%	-11.5%
55 to 64	12.8%	15.0%	17.0%	13.3%
65 to 74	9.1%	12.0%	14.4%	20.0%
75 to 84	5.5%	6.4%	7.8%	21.9%
85 +	1.3%	2.2%	3.3%	50.0%

The 2000 and 2010 age distribution data was published by the U.S. Census Bureau, and the 2018 age distribution projections were developed by ESRI, a geographic mapping and data services company.

¹⁰ West Michigan Regional Development Commission, October 2011, *Demographic and Economic Projections*, p.1

In 2000, the percentage of Township residents aged 65 and older was 15.9%. According to the U.S. Census Bureau, that number had risen to 20.6% in 2010. Additionally, population projections estimate that 25.5% of Pere Marquette Township's population will be 65 or older by the year 2018. Recent trends show significant increases in the total percentage of Township population for residents aged 55 and above, with reductions in total percentage of Township population for residents between the ages of 5 and 54. Age distribution projections indicate that these trends will continue in the near future with additional growth in Township population for those ages 55 and above by 2018. The Township population is comparatively older than those of Mason County and the State of Michigan, with 42.5% of Pere Marquette Township's population aged 55 and over in 2010 compared with 34.5% of Mason County and 26.4% of Michigan in the same year.

The higher concentrations of older age groups in the Township's population could be a result of older individuals moving into their vacation homes or cottages on a full-time basis following retirement. An aging population presents challenges to the Township as it considers how to plan for the future. The quality of life for seniors can be improved by providing a range of housing options that allows for aging in place, accessible transportation options, and a variety of social services.

Smaller Households

The average household size in Pere Marquette Charter Township is shrinking. According to the U.S. Census Bureau, the average Township household size in 2010 was 2.50 persons per household. This represented a decline in the average Township household size from 2.60 in 2000. Household size also declined in the decade prior to 2000, falling from a household size of 2.69 persons per household in 1990. Household sizes can be expected to stay near current levels or shrink further as the Township's population continues to age and fewer families with children live in the Township.

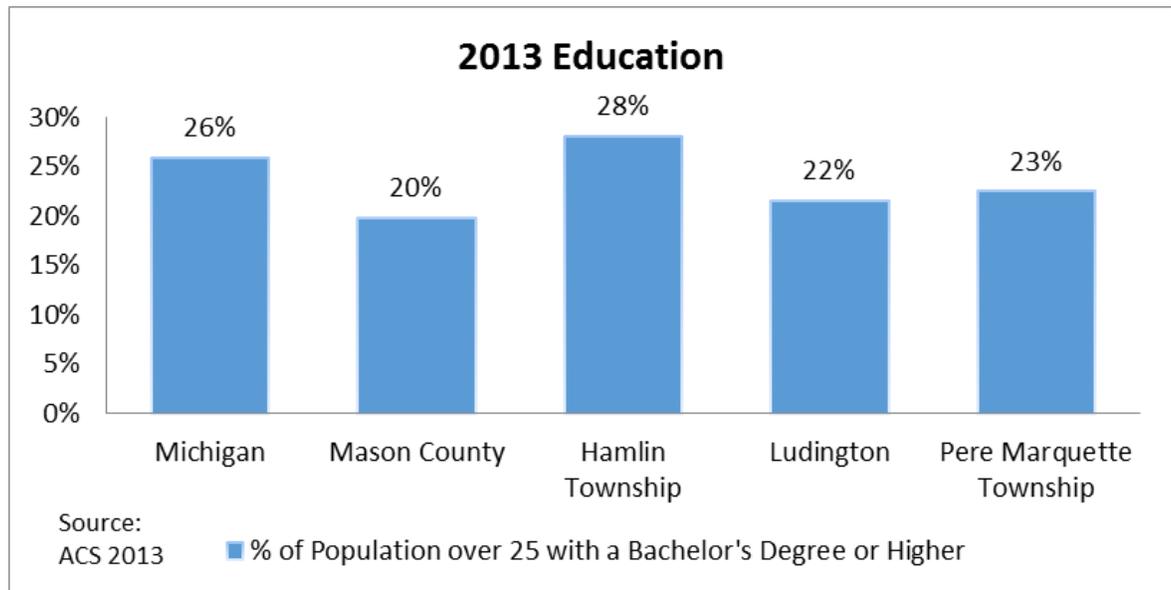
Educational Attainment

Educational attainment levels are increasing in Pere Marquette Charter Township. Between 2000 and the time of the U.S. Census Bureau's 2009-2013 American Community Survey, the percentage of the Township's population that did not graduate from high school fell by 1.3%. Over the same time period, the percentage of the population who had graduated from high school fell while the percentage who had attended some college or held an associate's degree rose. While the

percentage of the population that held a bachelor’s degree or higher fell slightly between 2000 and 2013, trends indicate that more of the Township’s population is attending college and it can be expected that higher percentages of the total population will hold a bachelor’s degree or higher in the future. Generally, higher levels of educational attainment correlate with higher incomes.

Educational Attainment - Pere Marquette Charter Township			
Level of Educational Attainment	2000	2009-2013 ACS	Change 2000-2013
Less Than High School Graduate	9.8%	8.5%	-1.3%
High School Graduate	34.4%	29.8%	-4.6%
Some College/Associate's Degree	32.2%	39.2%	7.0%
Bachelor's Degree or Higher	23.6%	22.5%	-1.1%

The following chart compares the percentage of the population over 25 with a bachelor’s degree or higher in the City of Ludington, Mason County, Hamlin Township, Pere Marquette Charter Township, and the State of Michigan.



PLANNING IMPLICATIONS

A review of the population and demographic trends apparent in the Township suggests several important implications for the future of the community. The nature of population change within the community will clearly impact land use decision-making through the planning horizon of this document. Some key implications follow:

The Township remains dedicated to providing quality services and responsive approaches to serving its residents as the complexion of the Township population shifts.

- ◆ Although the total population of Pere Marquette Charter Township is expected to grow slowly over the next few decades, it is important to consider how the changing characteristics of the population will impact the community. An aging population will require additional services, different housing types, and additional transportation options. Accommodating the demand for condos, multiple-family units, and senior housing as well as additional public transportation services should be addressed in future Township decisions and planning efforts.
- ◆ The projected rate of growth in the Township is relatively modest when compared to the amount of available land to accommodate it. While the pace of growth clearly is not a cause of alarm, there is a potential that the general population may become indifferent about efforts to guide that growth since change is occurring at a relatively modest pace. It should be borne in mind that most fundamental changes in land use occur incrementally and their implications are seldom understood or appreciated until after the fact.

This Plan provides a general guide for growth management in Pere Marquette Charter Township. Even though the pace of growth will likely remain modest, the Planning Commission and the Township Board must take care to remain alert and foresightful regarding growth patterns that depart from the Plan.

CHAPTER 3. INCOMES, EMPLOYMENT, & HOUSING.

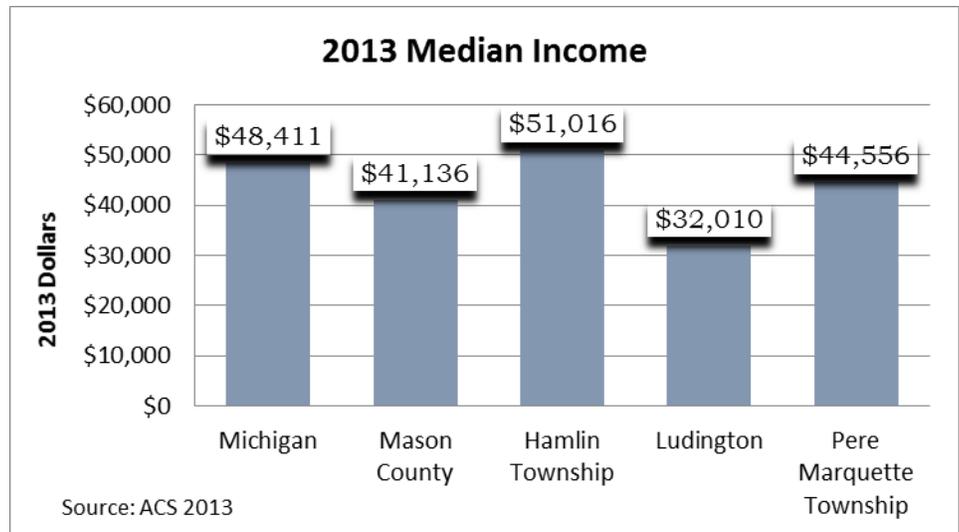
This chapter reviews current indicators of growth in the Township relating to incomes, employment, and housing development. Housing growth generally parallels the expansion of the local population, however housing *values* continue to increase more rapidly than incomes. In terms of economic development, job growth and investment in new plants and equipment among local industries continue to be strong. A primary challenge to the Township will be the impact of current growth on its infrastructure, roads, and on the local quality of life.

Income and Poverty

Income levels in Pere Marquette Charter Township are higher than those in Mason County as a whole. According to the U.S. Census Bureau’s 2009-2013 American Community Survey, estimated median household income in the Township was \$44,556, compared to \$41,136 in Mason County. These values represent increases of 0.3% and 18.5% in median household income since 2000 in the Township and County, respectively.

Median Household Income 2000-2013			
Jurisdiction	Median Household Income 2000	Median Household Income ACS 2009-2013	2000-2013 Percent Change
Pere Marquette Charter Township	\$44,432	\$44,556	0.3%
Mason County	\$34,704	\$41,136	18.5%
State of Michigan	\$44,667	\$48,411	8.4%

Incomes in the Township are not rising as quickly as they are in the County and State. The chart on the following page compares median household income in Ludington, Mason County, Hamlin Township, Pere Marquette Charter Township, and Michigan.



The percentage of the total population living below the poverty level in the Township rose from 4.5% at the time of the 2000 census to 7.8% at the time of the 2009-2013 American Community Survey estimates. Poverty rates within the Township, while rising, remain significantly lower than those of both Mason County and the State of Michigan. Rising poverty levels, in conjunction with stagnant household incomes and rising property values, can lead to an increased need for affordable housing.

Population Living Below Poverty Level 2000-2013			
Community	Percent Below Poverty Level 2000	Percent Below Poverty Level ACS 2009-2013	Change 2000-2013
Pere Marquette Charter Township	4.5%	7.8%	3.3%
Mason County	11.0%	16.2%	5.2%
State of Michigan	10.5%	16.8%	6.3%

Employment

Consistent with state- and national trends, unemployment levels in Pere Marquette Charter Township increased between 2000 and the time of the U.S. Census Bureau’s 2009-2013 American Community Survey. Over this time period, unemployment rates increased 2.2% in the Township. This rate is lower than the rate of increase in unemployment found in Mason County and the State of Michigan. The overall rate of unemployment in the Township in 2013 (6.3%) was lower than that of the County (11.5%) and entire State (12.7%). The following table shows

unemployment level trends in Pere Marquette Township, Mason County, and the State of Michigan.

Percent Unemployment 2000-2013			
Jurisdiction	Percent Unemployment 2000	Percent Unemployment ACS 2009-2013	Percent Change 2000-2013
Pere Marquette Township	4.1%	6.3%	2.2%
Mason County	7.3%	11.5%	4.2%
State of Michigan	5.8%	12.7%	6.9%

Occupations among Township residents tended to fall most heavily in the “white collar” professions and technical crafts in the 2000 census counts and the 2013 American Community Survey estimates. Positions in these categories tend to be slightly higher paid. This is also consistent with the higher education levels found in the community as compared to the balance of the County.

Occupations of Pere Marquette Township Residents: 2000 Census	
Occupation	Percent 2000
Management and Professional	35.1%
Service	18.0%
Sales and Office	22.3%
Farming, Fishing, and Forestry	1.1%
Construction, Extraction, and Maintenance	7.1%
Production, Transportation, and Material Moving	16.3%

Occupations of Pere Marquette Township Residents: 2013 ACS	
Occupation	Percent 2013
Management, Business, Science, and Arts	32.0%
Service	12.4%
Sales and Office	32.6%
Natural Resources, Construction, and Maintenance	6.5%
Production, Transportation, and Material Moving	16.5%

The “white collar” positions in management, professional services, and sales now account for roughly three-quarters of the occupations of Township residents. Since 1970, employment in manufacturing, retail services, agriculture, and transportation have all declined for township residents. This trend holds when we add the statistics from the 2013 American Community Survey estimates.

While “white collar” jobs are held by a majority of Township residents, it is important to recognize that this does not necessarily indicate that the types of jobs primarily offered within the Township fall into these categories. According to data from the 2008 version of this plan, the major employers in the Township primarily offer jobs in manufacturing, chemical, retail, energy, chemical packaging, and fabricating. With a majority of Township residents holding jobs in other areas, it is clear that there is significant crossover of non-Township residents filling jobs within the Township and Township residents working outside of the Township.

Economic Development

Township officials report that a significant percentage of the jobs in the community are seasonal in nature, focusing on construction trades and tourism-related activities such as lodging and restaurants. A sizable share of employment in services and retail tend to be minimum wage jobs. Nevertheless, the Township is committed to creating additional, higher wage jobs as evidenced by its capital investment in industrial park infrastructure and its use of incentives to foster job growth.

The Township has committed over \$2.1 million to land acquisition and improvements for the Pere Marquette Industrial Park on Sixth Street. With the assistance of grants from the federal Economic Development Agency, the 48 acres of Phase I was dedicated in 1993, and an additional 40 acres for Phase II was opened in 1999. The park has been successful in attracting businesses and has contributed a needed component of economic development in the community.

Encouraged by the success of the Sixth Street Industrial Park, the Township applied for another EDA grant to build a second Business/Industrial park. In 2004, the Township received that grant and immediately took steps to begin development of its First Street Business Park on 77 acres of land purchased in 1998. Sites are prepared with infrastructure, communications capabilities, and class A roads. The first contracts were awarded to winning bidders in February 2006, and the official ground-breaking ceremony was held in April of 2006 in conjunction with the Township’s Sesquicentennial activities.

The total project cost was estimated at 4.79 million dollars. The federal grant for 2.39 million dollars is one of the highest dollar amounts ever awarded to a local government for economic development. The award was based, in part, on the EDA’s satisfaction with the Township’s administration of previous grants and its overall performance in developing its first industrial park, the Pere Marquette Industrial Park,

on Sixth Street. The Township hopes to attract a significant number of small to medium sized businesses to the new park to help diversify the employer base and to help stabilize the area’s economy.

In addition to the development of industrial parks, Pere Marquette Township offers property tax abatements as an incentive to locate in the Township. Abatements are offered in consideration of the businesses’ monetary investment as well as their commitment to provide jobs in the community. Participants in the Resilient Ludington planning process recognized the importance of maintaining existing industry, but also noted a need to diversify the regional economy and concentrate on enhancing the entire community’s sense-of-place and quality of life in order to attract highly educated knowledge workers to the area.

Housing

According to the U.S. Census Bureau, the total number of housing units in Pere Marquette Township decreased between the years of 2000 and 2010. The Census Bureau reported a total of 1,403 housing units in 2000 and 1,317 housing units in 2010. This change was accompanied by a decline in the number of vacant housing units and the number of housing units used for seasonal, recreational, or occasional use. According to 2010 Census figures, approximately one quarter of the housing units within the Township are seasonal, recreational, or occasional-use residences. The following table illustrates the changes in housing tenure in the Township between 2000 and 2010.

Pere Marquette Charter Township Housing Tenure 2000-2010						
	2000 Quantity	2000 Percent	2010 Quantity	2010 Percent	Change 2000- 2010	Percent Change 2000- 2010
Total Housing Units	1,403	100.0%	1,317	100.0%	-86	NA
Occupied Housing Units	858	61.2%	915	69.5%	57	8.3%
Owner Occupied	766	89.3%	796	87.0%	30	-2.3%
Renter Occupied	92	10.7%	119	13.0%	27	2.3%
Vacant	545	38.8%	402	30.5%	-143	-8.3%
Seasonal, recreational, or occasional use	501	35.7%	335	25.4%	-166	-10.3%

The relatively high vacancy and seasonal housing rates are indicative of a sizable population that owns second, or vacation, homes in the

Township. The significant change in the seasonal, recreation, or occasional use figure in the previous table was primarily due to the combining of numerous lots within the Vacation Station RV development.

Housing values throughout the Ludington Community have risen in recent years. The median home value in Pere Marquette Charter Township at the time of the U.S. Census Bureau’s 2009-2013 American Community Survey (ACS) was \$151,900, a 23.2% increase from the year 2000. By comparison, the median home value in Mason County rose by 43.6% over the same time period. The following table illustrates the change in home values in Pere Marquette Charter Township, the City of Ludington, Hamlin Township, and Mason County between 2000 and 2013.

Median Household Value 2000-2013				
Community	Median Household Value 2000*	Median Household Value ACS 2009-2013*	Change 2000-2013	Percent Change 2000-2013
Pere Marquette Charter Township	\$123,300	\$151,900	\$28,600	23.2%
City of Ludington	\$73,000	\$104,100	\$31,100	42.6%
Hamlin Township	\$115,300	\$163,700	\$48,400	42.0%
Mason County	\$81,500	\$117,000	\$35,500	43.6%

*Specified owner-occupied housing units

While housing values in the Township are not rising as quickly as they are in surrounding jurisdictions, the value increase, combined with stagnating income growth for Township residents, creates a concern that affordable housing options in the Township could be limited.

According to the Census Bureau’s 2009-2013 ACS estimates, nearly one quarter of the housing stock in the Township was built prior to 1940. The largest building boom in the City between 1940 and today occurred between 1970 and 1979, with 228 housing units built. The following table illustrates the age of the housing stock in the Township.

Housing Age - Pere Marquette Township	
Year Structure Built	Quantity
2010 or Later	4
2000-2009	135
1990-1999	140
1980-1989	177
1970-1979	228
1960-1969	133
1950-1959	107
1940-1949	50
1939 or earlier	298

Source: US Census Bureau, 2009-2013 American Community Survey

PLANNING IMPLICATIONS

The following are the key planning implications drawn from the preceding profile of the incomes, employment, and housing within Pere Marquette Charter Township:

- ◆ Increasing home values paired with stagnating income growth can lead to a need for additional affordable housing in the community. The Township should consider implementing programs or incentives to promote the development of housing that is affordable to a wide range of income levels.
- ◆ Pere Marquette Township and Mason County have had a significant degree of success in retaining higher wage manufacturing jobs while diversifying the job base into professions and services. If the community can continue this trend, its long term economic viability should be assured.
- ◆ Pere Marquette Township comprises a disproportionate share of the tax base in the County and most of that is concentrated in a few industrial properties. This situation would usually call for concern about vulnerability in the case of economic downturn. Fortunately, the highest concentration of tax base in the Township is in the utilities sector and is uniquely insulated from most of the effects of economic fluctuations.

CHAPTER 4. EXISTING LAND USE

The total land area of Pere Marquette Township is about 15 square miles or 9,626 acres. The Township virtually encloses the City of Ludington. It adjoins Hamlin Township to the north, Amber and Riverton Townships to the east, and Summit Township to the south.

A wide variety of land uses exist within the Township, ranging from low-density residential and agricultural uses to higher intensity commercial and industrial development. This chapter provides an overview of the existing land uses within the Township.

More intense development of all types can be found in portions of the Township north of the Pere Marquette River.

Generally, more intense residential, commercial, and industrial uses can be found in the northern portions of the Township where public utilities are available. The southern portions of the Township are primarily used for less intense residential and agricultural uses. The Pere Marquette River and Pere Marquette Lake act as a natural divider between the lower and higher intensity development. Traditionally, the Township has promoted new development north of the river and lake around the City of Ludington, near major transportation facilities, and where utility services can support higher densities and more intense uses.

Throughout the Resilient Ludington planning process, participants expressed a desire to preserve rural character, valuable natural areas, and viable agricultural lands within the region.

Residential Uses

Residential development predominates in the northern portion of the Township near the City of Ludington. Adjacent to the long-established neighborhoods of Juniper Hills and Pleasant Ridge, additional development has continued along the Lincoln River in the northeast corner of the Township. The remainder of the residential development occurs primarily in the form of lower density, single-family housing scattered throughout portions of the Township south of the Pere Marquette River and Pere Marquette Lake. Higher concentrations of homes are located near Hopkins Lake on the southern end of the Township, and along its western border, overlooking Lake Michigan.

Agricultural Uses

In the southeast portion of the Township, significant tracts of farmlands remain. These areas adjoin comparable agricultural acreage

in the northeastern portion of Summit Township, which borders to the south. Much of this farmland is characterized by Perrington-Ithaca soils types which typically offer higher crop yields than many of the other soils types in Pere Marquette Township.



Agricultural uses are primarily located in the southern portions of Pere Marquette Township.

Over the past few decades, residential development has steadily pushed into formerly agricultural lands. While the proximity of residential development to agriculture has yet to generate significant conflicts, changes in farm practices, including trends toward increased mechanization to improve crop yields, may result in conflicts in the future. The Township would do well to monitor that relationship.

Commercial Uses

Commercial activity within Pere Marquette Township primarily consists of strip mall-style development, big box retailers, and other freestanding automobile-centered commercial uses along the U.S.-10 corridor. Additional commercial development exists along the portions of Jebavy Drive and South Pere Marquette Highway nearest to U.S.-10. Commercial development in these areas consists mostly of buildings set back from the roadway with large parking lots in front and to the sides of the structures. Additionally, two large RV park campgrounds exist behind other commercial uses off of the U.S.-10 corridor.

Industrial Uses

Industrial areas in the Township are primarily located along South Pere Marquette Highway north of the Pere Marquette River, within the

Township industrial parks east of South Pere Marquette Highway, and at the Consumers Energy/Detroit Edison Pumped Storage Facility location. The Township's first industrial park, the Pere Marquette Industrial Park, is located on Sixth Street. Due to the nearly full capacity of the first park, the Township created the First Street Business Park for businesses looking to locate in the area. The location of these industrial uses makes use of readily available utilities and access to major transportation corridors within the Township.



Pere Marquette Charter Township accommodates a variety of industrial uses in its dedicated industrial parks.

Public and Institutional Uses

Public and institutional uses are scattered throughout the Township and include the Township Hall on South Pere Marquette Highway; other governmental offices; the Mason County Airport and the Mason County Fairgrounds on the north side of US-10; and parklands. Additional information about these uses can be found in Chapter 5 of this plan.

PLANNING IMPLICATIONS

The land use patterns found in a community create both obstacles for future development and opportunities to either expand on those patterns or alter them to achieve local goals. The following are some of the key implications of the current land use patterns in the Township.

- ◆ The Pere Marquette River and estuary provide an ideal physical barrier through the middle of the Township to contain sprawling growth patterns near the population center. However, this barrier, by itself, will not be sufficient to arrest sprawling, low density development patterns. A combination of utility and roadway policies and careful land use and zoning techniques will be required.
- ◆ The diminished amount of active agriculture in the Township with low density residential development in close proximity may create the potential for land use conflicts in the future. This is especially true given a trend in agriculture toward increased mechanization to increase crop yields. Such practices, while generally permitted under the Michigan Right to Farm Act, can be regulated under the terms of local land use and zoning and the Township should promote a balanced approach that will permit effective coexistence of these uses.
- ◆ The commercial area along U.S.-10 and the northern portion of South Pere Marquette Highway have developed in a typical automobile-oriented pattern. These areas include some very successful land uses as well as several marginal properties. A mix of development styles and aesthetics also mark the area. The Township's challenge is to expand the aesthetic elements of these gateway corridors, integrating landowners' established efforts and assisting the routes to evolve into attractive and welcoming entries to the Ludington area.

Among the desirable changes are improved pedestrian access, improved internal circulation patterns, shared access off the right-of-way, and improved aesthetics.

CHAPTER 5. TRANSPORTATION, UTILITIES, AND COMMUNITY FACILITIES

Transportation linkages between Pere Marquette Township and the remainder of the state are quite good. A variety of transportation options are available to Township residents, workers, and visitors. Water and wastewater utilities are available in portions of the Township and a variety of public facilities and services are available.

This chapter provides an overview of the transportation networks, utilities, and community facilities and services within the Township.

TRANSPORTATION

Road and Highway Network

With the improvement of U.S.-31 to a rural expressway cross section in 1990, the community gained high-speed connections to the Interstate system to the south. In addition, U.S.-10 provides a connection east and west, terminating at the ferry docks in downtown Ludington. This route was upgraded in the early 1990's to a five-lane highway from Jackson Road east nearly to Scottville. This encompasses the entire stretch of U.S.-10 which runs through the Township.

U.S.-10 and U.S-31 are major highways that provide connections between the Township and the greater state-wide highway network.

The arterial road network is laid out in a traditional grid pattern on section and half-section line intervals, interrupted by such natural features as the rivers and wetlands. Internal circulation within subdivisions and residential neighborhoods is generally accomplished on paved and fully improved streets. Most of the county arterial roads in the Township are paved.

The South Pere Marquette Highway interchange with U.S.-31 lies within the Township in section 36. In addition, the northern terminus of the limited-access expressway portion of U.S.-31, occurs at U.S.-10 in Amber Township, not quite a mile east of the Township limits.

In many past planning efforts and throughout the Resilient Ludington process, concerns about traffic, safety, and access along the U.S.-10 corridor were a major topic of discussion. Additionally, Resilient Ludington participants noted a need for aesthetic improvements to the U.S.-10 and South Pere Marquette Highway corridors as they serve as the major gateways into the community. As a part of the Resilient

Ludington process, a Corridor Planning Charrette focusing on the U.S.-10/U.S.-31 corridor between Ludington and Scottville was conducted. The three-day Charrette identified a variety of issues along the corridor and resulted in a series of recommendations for improvements within the corridor. The common themes that emerged during the Charrette were:

- The lack of pedestrian and bicycle access,
- Excessive parking lots along the corridor,
- The lack of streetscaping,
- The negative appearance of overhead utilities,
- Access management issues and the large number of curb cuts along the corridor,
- Inconsistent signage,
- Inconsistent building design, and
- The lack of a sense of place.



The Resilient Ludington U.S.-10/U.S.-31 Corridor Charrette addressed a variety of transportation and aesthetic issues along the busy corridor.

For additional information about existing conditions along the corridor, the Charrette process, and recommendations for corridor improvements, see the U.S.-10/U.S.-31 Corridor Charrette Summary (Appendix C).

Public Transportation

The Ludington Mass Transit Authority (LMTA) has provided public transportation to Mason County since 1979. LMTA provides bus transportation services within the cities of Ludington and Scottville as well as Pere Marquette Township through a demand-response (dial-a-ride) system. LMTA operates 22 vehicles that are all equipped with lifts to allow for the boarding of those who need physical assistance and provides approximately 175,000 rides to area residents each year. A majority of LMTA riders are area workers and school children who use the bus services to travel to and from work and school, respectively. About one quarter of the total ridership is made up of senior citizens.



Bus service is provided to area residents and workers by the Ludington Mass Transit Authority.

The nearest commercial air transportation is available through Manistee Blacker Airport in Manistee County and through the Muskegon County International Airport located about 60 miles south. The Mason County Airport, located in the Township, provides general aviation services and private and charter services. The facility includes a 5,000 foot paved runway, and a new visitor's center which houses both the Ludington Area Chamber of Commerce and the Convention and Visitors' Bureau.

Railroad freight service is provided by Marquette Rail. The nearest rail passenger service is available in Grand Rapids and Holland.

Seasonal passenger and car ferry service across Lake Michigan to Manitowoc, Wisconsin is provided the Lake Michigan Carferry Service. This service is available from May through October. The deep water port in the City of Ludington serves the Great Lakes shipping industry with freighter services generally to meet the needs of local companies and industries.

Non-motorized Transportation

There are relatively few dedicated non-motorized transportation options available within the Township. The need for better non-motorized transportation route connectivity within the Ludington

community was frequently mentioned by participants in the Resilient Ludington planning process. One way to address the need for improved non-motorized transportation options would be to adopt a Complete Streets resolution to declare support of Complete Streets policies and design considerations in future transportation projects. The Township adopted its Complete Streets Resolution in August 2011. “Complete Streets” are defined as “roadways planned, designed, and constructed to provide appropriate access to all legal users, whether by car, truck, transit, assistive device, foot or bicycle,” by Public Act 135 of 2010.¹¹ Additionally, the Township has been considering ways to improve pedestrian access to businesses and services along the U.S.-10 corridor through the creation of a dedicated sidewalk or shared-use path network.

UTILITIES

Water

Water service is provided in some portions of the Township north of the Pere Marquette River. Township residents not served by public water rely on private wells. The Township maintains two water systems: the Pere Marquette Purchased Water System; and the Pere Marquette Ground Water System. The Township has an agreement with the City of Ludington through which the City supplies water for the Township Purchased Water System. The City of Ludington draws water from a lake-bed intake in Lake Michigan, and they maintain a treatment facility and distribution system. The Township’s Ground Water System is sourced by water supplied by Township-owned wells. The Township maintains its own treatment facility, elevated storage and distribution lines. Pere Marquette Township also has an agreement with Amber Township to supply water service to some properties located in Amber Township. A map of the Township water distribution system can be found on page 52.

Wastewater

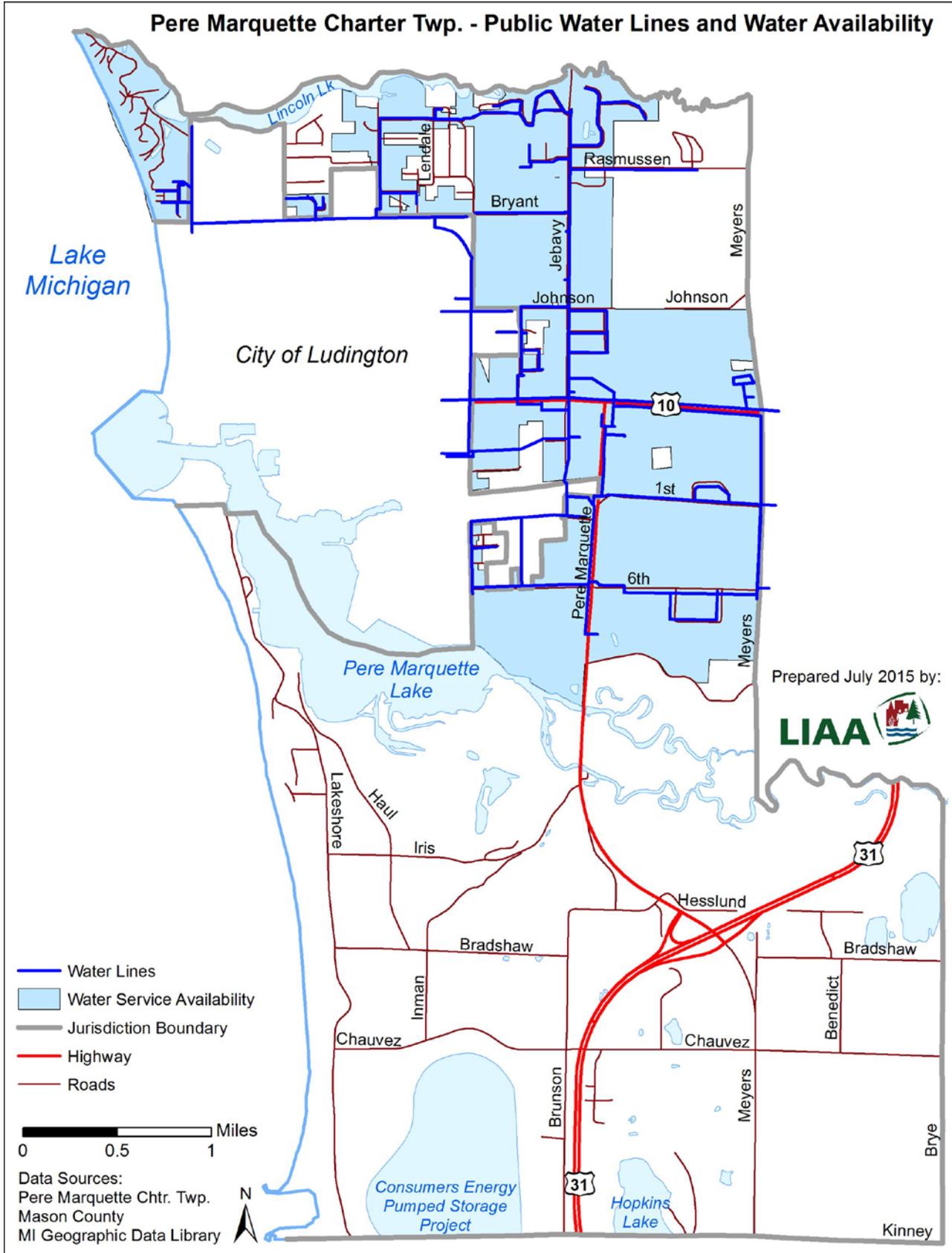
Most areas of the Township are served by private on-site wastewater disposal systems, using septic tanks and drain fields. The City of Ludington’s Wastewater Treatment Plant is located in Pere Marquette Township, in section 24 between First and Sixth Streets. Under an agreement between the City and the Township, wastewater services are provided to a significant portion of the northern half of the Township. As growth demands it, services will be extended in the area north of the Pere Marquette River. Since the City’s Wastewater Treatment Plant

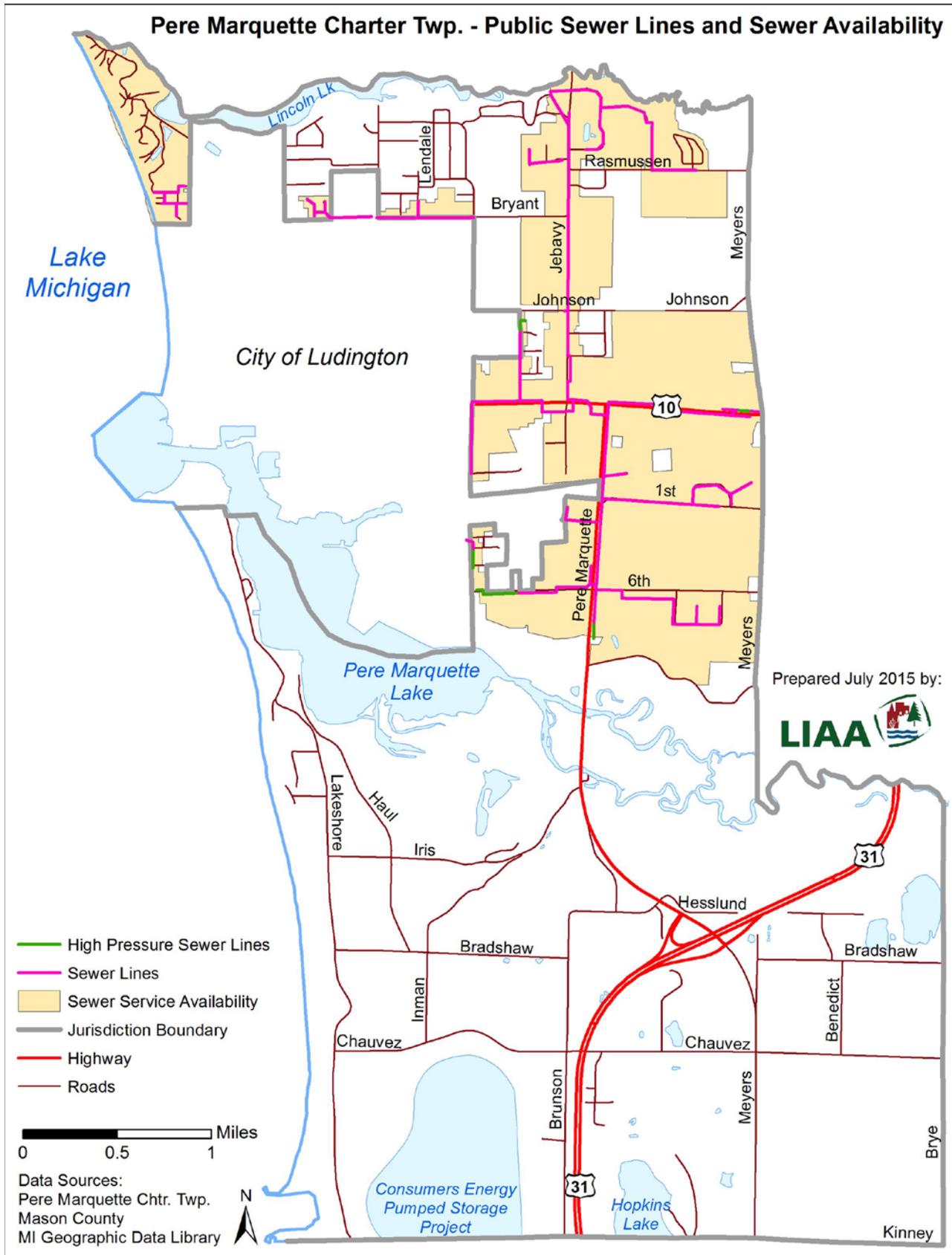
¹¹ Public Act 135 (Complete Streets Legislation) Sec. 10 p.1

is operating at about 50% capacity, availability of wastewater services is not considered a constraint on further development of the Township. A map showing areas of the Township in which wastewater disposal service is available can be found on page 53.



The Pere Marquette Township water tower on West 6th Street.





COMMUNITY FACILITIES

Pere Marquette Charter Township owns and operates a number of public facilities, and a variety of public services are made available to citizens by governmental and other entities.

Parks and Recreation

Pere Marquette Township is served by several parks and recreation facilities. In addition to the natural feature amenities, publicly and privately owned recreational facilities include Buttersville Park Campground, Suttons Landing Park, Memorial Tree Park, and the Pere Marquette Shrine site - all of which are owned, developed, and maintained by the Township. The Consumer's Energy Pumped Storage Campground and picnic area, Lakeside Links Golf Course, and two disk golf courses are among the public recreational features located within the Township. Additionally, walking and biking trails are located on the Ludington School Forest property off Jebavy Drive.



Public parks in Pere Marquette Township provide a variety of recreational opportunities and access to natural resources like the Pere Marquette River.

Looking beyond the Township borders, one finds several additional golf courses in the County: Lincoln Hills in western Hamlin Township on Lake Michigan, and the Hemlock course located on the north edge of the Lincoln River in Hamlin and Amber Townships. West

Michigan is rich with golf courses, with more than a dozen more courses in an easily travelable distance of Pere Marquette Township.

Township parks include Buttersville Park, located on the Lake Michigan shoreline, an 18.5 acre, state-licensed campground providing 60 individual campsites, restrooms, a shower facility, and electricity to the campsites. Just north of Buttersville Park is the Pere Marquette Shrine, a 2.4 acre site that memorializes the spot where the French Jesuit explorer Father Jacques Marquette died in 1673. The site includes approximately 400 feet of frontage on Pere Marquette Lake with a boat launch and parking facility to improve small boat access to the Pere Marquette Lake and Lake Michigan. The launch site provides seasonal access to move ice shanties onto the lake during the winter months.

The Township owns, operates, and maintains a number of well-used parks that provide a wide variety of recreational amenities.

Sutton's Landing Park is a 34 acre parcel maintained by the Township, and is located across Iris Road from the Township Hall. It runs along the southern bank of the South Fork of the Pere Marquette River and includes approximately 425 feet of river frontage. It is used by about 7,500 fishermen annually and it includes small boat launch facility. The Commission received a grant from the Great Lakes Fishery Trust in 1998 which improved the existing boat ramps, added a boardwalk along the river bank, extended the building and rest rooms; electrical service, parking lot lighting, as well as extended driveway paving to include the parking lot and enhanced area landscaping. The facility is open year-round, and the shelter building is available by reservation.

Memorial Tree Park is located in the northern portion of the Township and is a 27 acre, all season park that includes an athletic field, a well-equipped playground, and picnic areas. It has several picnic shelter buildings, nature trails, and riverfront views along the Lincoln River.

Also located in the Township, but not a Township property, is the Pumped Storage Park and Campground, a 65 acre facility maintained by the Mason County Park Commission. It straddles Chauvez Road immediately north of the Consumers Energy Pumped Storage project. The 30 acre park includes a disk golf course, fully equipped playground and picnic area. The facility includes a 35 acre, state-licensed campground that provides 49 sites.

There are several RV parks and private campgrounds in or near the Township – too many to list individually. However, they provide much sought-after weekend accommodation for enthusiastic campers.

In an effort to provide public recreational facilities that are attractive to the greater community and to area visitors, the Township recognizes the importance of cooperation and complementary planning among local governmental entities and within the private sector. This cooperation will best provide a wide range of diverse recreational opportunities for the community. Additional information about recreational opportunities in the Township and greater community can be found in the *Pere Marquette Charter Township Parks & Recreation Plan*.

Township Hall and Other Buildings

The 5,000 sq. ft. Township Hall located on S. Pere Marquette Highway houses the Township's administrative offices. Pere Marquette Township keeps regular business hours to provide the public with easier access to Township services, officials, and staff. The Township Hall features a fully accessible, 1,900 sq. ft. meeting room which is available to Township residents and groups on a rental basis.

Police and Fire Departments

The Township maintains a volunteer Fire Department consisting of approximately twenty firefighters, most of whom are trained as medical first responders and certified as emergency medical technicians. Since 1999, the Township's single fire station has been located on S. Pere Marquette Highway just south of Sixth Street. This 8,000 square foot steel building houses the Township's fire trucks, a meeting room for the Fire Department, and recuperative facilities for the volunteer firefighters.

The Department is one of three constituting the Western Mason County Fire District Authority which is responsible for coordinating emergency response back-up procedures; standardizing and funding equipment purchases and conducting joint training. Operationally, the Authority functions as a single entity in dealing with major emergency incidents. Other member entities are Hamlin Township and the City of Ludington.

Based on the location and density of fire hydrants in the northern half of the Township the community qualifies as a National Fire Protection Association (NFPA) Class 6 district for insurance purposes.

The Township is one of fifteen townships forming the jurisdiction of the Mason County Sheriff's Department. The Department maintains road and security patrols throughout the county, and operates the

county jail which underwent a major upgrade and expansion in early 2000.

The Mason County Sheriff's Department also shares traffic management over state and federal highways with the Michigan State Police operating out of the Hart post. In the Spring of 2001, Pere Marquette Township and the Michigan State Police worked together to establish a State Police Satellite office in the Township Fire Department building. This office, which in 2006 became a full sub-station of the Hart MSP Post, provides Troopers with a convenient location within the County to hold interviews and meetings, complete reports, and conduct other business. The arrangement saves time and costs for the Troopers as well as provides more efficient State Police coverage for Mason County.

Spectrum Health Ludington Hospital

This community health care facility serves a market area that includes Mason, Oceana, Lake, and Manistee Counties. The facility is located in both the City of Ludington and Pere Marquette Charter Township. With over 500 full-time equivalent employees, the hospital offers a broad range of medical, surgical, diagnostic and outpatient medical services, including a new Hematology and Oncology clinic. In addition to providing health care and medical treatment, the Hospital annually contributes to numerous local community organizations.

Education

Pere Marquette Charter Township is served by one Public School District and one parochial school. The Ludington Area School District provides public elementary and secondary education through three elementary schools, one Middle School, and one High School. The total system enrollment is about 2,200 students.¹²

In addition, the Ludington Area Catholic Schools serves students in the Kindergarten through 6th grade levels.

The map on page 59 illustrates the location of public, municipal, and recreational lands in the Township.

¹² Michigan Department of Education. Student Count Snapshot – Ludington Area School District: 2014-15. Retrieved from <https://www.mischooldata.org/>

PLANNING IMPLICATIONS

The transportation and utility system in a community can serve as an important platform for further development. It may also serve as an important mechanism to guide and direct growth. The following summarizes the important planning implications relevant to the infrastructure in Pere Marquette Charter Township.

- ◆ The Township is postured to establish future land use patterns to avoid the undesired pattern of sprawl as well as degradation of its environment and natural features. Most importantly, the Township already has the tools and facilities in place to manage future land use. Public water and wastewater can be effective tools to manage growth. However, in order for this technique to be effective, the limited capacity in both systems must be allocated to areas where growth is desired.
- ◆ The primary entryways into the Greater Ludington Area are along U.S.-10 and South Pere Marquette Highway. The aesthetics of these corridors are poor and the Township should consider efforts to improve both the visual impact and the range of land uses along them.
- ◆ A lack of alternative transportation options within the Township limits access to those who cannot, or choose not to, drive an automobile. Increasing the number of pedestrian, bicycle, and public transportation options within the Township can help provide greater access to neighborhoods, services, and businesses as well as provide additional recreational opportunities.
- ◆ As additional regional-scale commercial development occurs along the U.S.-10 corridor, traffic levels are likely to increase. Appropriate access management and congestion mitigation techniques need to be considered as development occurs to ensure that the safety and function of the roadway are maintained. Specifically, curb-cut reduction and access management policies should be considered, and solutions for congestion surrounding the Jebavy Drive and South Pere Marquette Highway intersections should be further investigated.

SECTION III. COMPREHENSIVE PLAN

This section of the Plan is the culmination of the entire planning process. Chapter 7 sets forth the Future Land Use Plan for Pere Marquette Charter Township. In Chapter 8, the *Comprehensive Plan* offers a framework for the implementation of the Plan. The current Plan takes into account the goals established in previous planning efforts, the Township’s accomplishments toward those goals, and modifications or extensions of the goals and their implementation.

CHAPTER 6. GOALS AND OBJECTIVES.

Over the course of the Resilient Ludington planning process, area citizens, leaders, and officials identified many community-wide issues for the consideration of the Community Planning Committee (CPC). Following the conclusion of the Resilient Ludington public input process, the Pere Marquette Charter Township Planning Commission discussed the applicability of these issues to the *Township Comprehensive Plan* update. After reviewing these community-wide issues, topics presented by the project team, and the goals of previous Township planning efforts, the following list of guiding principles was developed. These guiding principles inform the creation of goals and objectives for the future development of the Township and the remainder of the *Comprehensive Plan* update.

- Preserve and enhance natural features, the environment, and agricultural lands.
- Manage growth in areas of the Township south of the Pere Marquette River.
- Limit more intense development to areas of the Township north of the Pere Marquette River, where public utilities are available.
- Provide for the creation of quality, affordable housing for all members of the community.
- Retain the existing economic and employment base while considering ways to diversify the local economy.
- Improve aesthetic character, safety, and vehicular access along major highway corridors.
- Address the lack of non-motorized transportation options within the community and along the U.S.-10/U.S.-31 corridor.
- Maintain, improve, and enhance existing infrastructure.

The following goal and objective statements have been developed to provide a general policy foundation for this Plan. Each goal statement is intended to describe the Township in the near future (i.e., about twenty years) and each is intended to describe a positive and attainable status toward which the Township may strive. Many of the goals and objectives from the previous *Comprehensive Plan* are applicable to future development within the Township and have remained within this chapter or been modified to better reflect current community conditions.

Objective statements are also stated for each of the goals. These may be regarded as milestones or sub-elements of the broader goal.

Generally, the goal statements have some measurable aspect. The goals and objectives have been organized into eight categories that generally parallel the land uses and services in the community.

GENERAL DEVELOPMENT

Goal

Land uses in Pere Marquette Charter Township will be arranged to protect and preserve the natural features of the area with efficient and attractive development formed around a strong core.

Objectives

- A. The key natural features, including surface water features, wetlands, dune areas and woodlands, of the Township will be identified and specific strategies to protect endangered areas will be developed.
- B. The Township will utilize land use regulatory measures that promote the protection of natural features, in conjunction with local zoning and State regulatory agencies.
- C. Development will be encouraged in areas served or to be served with public utilities.
- D. The Township will foster the recognition, development, and preservation of local historical sites.
- E. Development techniques that retain large, unfragmented parcels will be encouraged.
- F. Within developed areas, the Township will implement programs to eliminate or reduce the effects of incompatible land uses.
- G. Maintain and improve communication and cooperation with adjoining jurisdictions and regional entities on planning, development, and land-use issues that impact the regional community.

RESIDENTIAL DEVELOPMENT

Goal

There will be an adequate supply of housing available in the Township to serve a broad spectrum of preferences and income levels, located within attractive and well-preserved neighborhoods, served by public utilities and flexibly developed to preserve and enhance the area's natural beauty.

Objectives

- A. Pere Marquette Charter Township will plan land uses and infrastructure to provide an adequate supply of housing for the projected growth of the community.
- B. The Township's housing supply will accommodate the shelter needs of the entire spectrum of township residents in terms of income levels, housing and tenure types.
- C. Housing will be carefully and thoughtfully located in respect to natural features, public utilities, and neighborhood needs.
- D. Programs to preserve and enhance existing neighborhoods and housing stock will be continued and expanded.
- E. Controls will be established to encourage development techniques that promote the rational use of land and the preservation of natural features.

COMMERCIAL DEVELOPMENT

Goal

Pere Marquette Township will strive to provide commercial development that will be attractively arranged to serve residents, visitors, and the local community.

Objectives

- A. Land use patterns will be developed to encourage the strengthening of the Township's commercial core through the

thoughtful clustering of compatible and symbiotic business types.

- B. Promote mixed-use and small-scale, service commercial development to serve neighborhoods in areas of existing residential development.
- C. Collaborate with other jurisdictions and business organizations to identify current economic conditions and needs and develop a comprehensive local economic strategy or plan.
- D. Site development standards will be implemented to improve the aesthetic appeal and efficiency of the community's commercial areas in harmony with the natural features of the area.
- E. Commercial land uses will be arranged to provide safe and efficient automobile, public transportation and pedestrian linkages to one another and to residential areas.
- F. In areas of the Township with adequate public infrastructure, in-fill development will be encouraged to promote the most efficient utilization of commercial areas and to discourage the development of isolated commercial areas.
- G. Within the commercial entry ways into the community, the Township will keep regulatory measures to improve and enhance the aesthetics and attractiveness of the community.
- H. The Township will work with surrounding communities to make the area attractive to business, including ongoing improvements to roads, corridors, facilities, and services.

INDUSTRIAL DEVELOPMENT

Goal

Pere Marquette Charter Township will include clean and attractive industrial areas that are well served with efficient roadways, pedestrian connections, and public utilities with adequate space for further development to provide high quality work environments for the community.

Objectives

- A. The Township will reserve sufficient lands and utility capacity to accommodate the likely industrial development needs of the area.
- B. Industrial land uses will be clustered to promote the efficient use of infrastructure, to minimize conflicts with other land uses and to discourage isolated industrial land uses.
- C. Land use policies will encourage industries that offer maximum employment opportunities and a diverse range of industrial types.
- D. Site development standards will be implemented to improve the aesthetic appeal and efficiency of the community's industrial areas in harmony with the natural features of the area.
- E. The Township will specifically develop and promote its Industrial Park sites.
- F. The Township will work to accommodate technology-based businesses and entrepreneurs, specifically through the promotion of the Business-Technology-Industry zoning district as it offers a leading-edge environment.

AGRICULTURE

Goal

Pere Marquette Township will be the home of viable agricultural operations located on suitable soils and protected from encroachment from more intense development.

Objectives

- A. The Township will work with local resource groups to distribute information and promote planning issues, regulations, and land preservation programs for the education of residents.
- B. The Township will identify the highest quality and most productive agricultural areas and work with land owners to

develop feasible mechanisms to preserve those areas for farming purposes.

- C. Land division regulations in the Township will be implemented to discourage the fragmentation of viable agricultural lands.
- D. The Township will establish standards within agriculturally zoned areas that provide additional income opportunities or reduce costs for local farmers by permitting additional agriculturally related activities such as farm markets and stands; farm tours; civic, private, and promotional events; value-added agricultural enterprises; and wineries, breweries, and distilleries.
- E. The Township will encourage the growth and development of agricultural-related industries.
- F. The Township will develop incentives and related mechanisms to enable viable farming operations to remain active.

RECREATION, OPEN SPACE, NATURAL AREAS, AND THE ENVIRONMENT

Goal 1

The water quality of Lake Michigan and the Township's inland lakes, rivers, and streams will be protected from degradation.

Objectives

- A. Encourage proper riparian land management practices within the Township to reduce non-point source pollution into bodies of water.
- B. Encourage the use of Low Impact Design (LID) stormwater control techniques like rain gardens, bio-retention areas, and bioswales in new developments.
- C. Consider establishing shoreline protection standards, like required greenbelts and vegetative buffers, for waterfront properties.
- D. Consider establishing impervious surface reduction standards for development within the Township.
- E. Encourage tree canopy coverage within the Township by planting street trees within the right-of-ways of public streets, implementing a tree-planting program for public properties, and require the planting of trees as a part of the site plan review process.

Goal 2

The sensitive natural areas and open lands of Pere Marquette Charter Township will be carefully preserved.

Objectives

- A. Continue measures to protect such sensitive natural features as critical dunes, wetlands, woodlands, and shoreline.
- B. The Township will identify and prioritize environmentally sensitive areas of the Township for preservation, including shorelines, drainage ways, steep slopes, and wetlands.
- C. Work with local resource groups to educate residents on the importance of conservation and specific opportunities for conservation of lands within the Township.
- D. Consider adopting a “no-net loss of wetlands” policy for the Township and adopt a local wetlands protection ordinance.
- E. Consider participating in the Michigan Department of Environmental Quality’s wetland banking program.

Goal 3

The recreational amenities and opportunities of the community will be expanded and improved to serve the needs of residents and visitors alike.

Objectives

- A. Coordinate improvements to public and private sector recreation facilities and services to meet the needs of residents and visitors to the area.
- B. Township plans and procedures will seek to minimize land use conflicts between recreation facilities and residential areas.
- C. Investigation of the expansion of both indoor and outdoor recreational facilities to further the quality of life for Township residents and others in the local community.

TRANSPORTATION

Goal 1

The transportation system of Pere Marquette Charter Township will be designed to effectively serve the community's land use and growth objectives, providing residents, businesses and visitors with safe and efficient linkages within the community and to the broader region.

Objectives

- A. Road improvement decisions will be made in accord with the Township's *Comprehensive Plan*.
- B. Encourage effective access management procedures to maintain efficient traffic flow along arterials.
- C. Encourage land uses and site design configurations that provide efficient on-site circulation for both pedestrian and vehicular traffic.
- D. Encourage the continued operation of the Mason County Airport as an important part of the area's economic development plans.
- E. Encourage the continued provision of public transportation out, into and throughout the Township.

Goal 2

Improve the function, safety, and aesthetics of the US-10 and Pere Marquette Highway corridors.

Objectives

- A. Work with the Michigan Department of Transportation (MDOT) and the Mason County Road Commission to identify ways to reduce traffic congestion on US-10, specifically near the Pere Marquette Highway and Jebavy Drive intersections.
- B. Work with Mason County to develop common development standards along the US-10 corridor that address sidewalks and landscaping.
- C. Consider adopting access-management standards for the US-10 and Pere Marquette Highway corridors that address site access and driveway quantity and location.

- D. Consider the creation of a corridor improvement authority to fund safety and aesthetic improvements, such as sidewalks, crosswalks, decorative lighting, streetscape elements, and burying of overhead utilities along US-10 and Pere Marquette Highway.

Goal 3

Improve pedestrian and bicycle routes and connections between neighborhoods, parks, commercial areas, and neighboring jurisdictions.

Objectives

- A. Work with adjoining jurisdictions and Mason County to create a multi-use path from Ludington to Scottville.
- B. Investigate the potential for the creation of continuous sidewalks and safe street crossings along US-10 to increase pedestrian and bicycle safety and access.
- C. Work with the Mason County Road Commission to provide safer conditions, such as widened shoulders, for bicyclists and pedestrians along rural roads within the Township.
- D. Consider requiring integrated pedestrian access and connections to neighboring areas in new developments.
- E. Consider adopting a Complete Streets resolution that promotes streets that are safe, comfortable, and convenient for travel by automobile, foot, bicycle, and transit for those of all ages and abilities.

UTILITIES AND COMMUNITY SERVICES

Goal 1

The public facilities of Pere Marquette Charter Township will be located and designed in accord with local development plans, and system improvements will be coordinated on a rational and efficient service-area basis.

Objectives

- A. Make water and wastewater improvement decisions in accord with the Township's *Comprehensive Plan*.

- B. Assure adequate water and wastewater capacity to efficiently meet the residential, commercial and industrial land use needs of the Township.
- C. Manage storm water runoff to minimize impacts on streams and wildlife habitat and work with the County Drain Commissioner to establish consistent guidance for storm water management.
- D. Continue to expand and improve the municipal water system both as the needs demand it, and as the Township sees it will be needed in the future.
- E. Consider implementing a groundwater protection standard as well as wellhead protection standards.

Goal 2

The Township will continually work to maximize the safety of residents by collaborating with the Mason County Emergency Management Office to identify and respond to potential hazards.

Objectives

- A. Maintain communication with the Mason County Emergency Management Office to identify ways that the Township can be prepared to better respond to potential hazards.
- B. Coordinate and host informational presentations on emergency preparedness to better inform residents of potential hazards and how to respond to them.

IMPLEMENTATION TABLE

The table in Appendix A identifies the priority levels and general implementation timing for the objectives for each goal in this chapter. Each objective has been assigned a priority of low, medium, or high importance. The objectives have also been assigned a timeframe for completion. Objectives are either identified for completion in the short term (within the next five years) or over the long term (five years or more in the future). If an objective is something that should be addressed in the short term, but work will continue for a period of time longer than five years into the future, the objective is considered “ongoing.”

CHAPTER 7. FUTURE LAND USE PLAN AND ZONING PLAN

Two important components of any master planning effort are the development of a Future Land Use Plan and a Zoning Plan. The Pere Marquette Charter Township Future Land Use Map was developed based on stakeholder input at public meetings, feedback from the Township Planning Commission, and goals and objectives developed throughout the Resilient Ludington planning effort. The Zoning Plan reflects the Future Land Use Plan and should be used as a guiding document when updating the Zoning Ordinance.

FUTURE LAND USE PLAN

The *Pere Marquette Township Comprehensive Plan* establishes general patterns of land use to guide the Township's growth and development for the next twenty to twenty-five years. Periodic updates of the Plan extend it into future years so the vision is always about two decades hence. The intent is to foster orderly patterns of development that preserve the community's important natural features, promote high quality and appropriately-scaled residential, commercial, and industrial development, provide efficient transportation connections, and enhance quality of life for local residents. These goals must be accomplished while accommodating additional housing units, new businesses, and advancing technology.

In all cases, the official Zoning Ordinance takes precedence if there is a question between the Ordinance and the *Comprehensive Plan*. Working in concert with the Zoning Ordinance, this *Comprehensive Plan* and the efforts of many dedicated men and women guide the orderly growth and development of the Township.

Toward this end, the Planning Commission has established a general limit for growth which is defined by the Pere Marquette River estuary and the limits of efficient wastewater service. This future land use plan will seek to promote efficient and aesthetic growth north of River and estuary, an area of about 2,500 acres adjoining the City of Ludington.

By encouraging most development within the growth boundary (i.e. north of the Pere Marquette River), in the vicinity of existing development and utility systems, the Township will be able to accommodate the anticipated growth while maintaining high quality residential and commercial development. This goes hand in hand with the concept of restricting growth in order to maintain and regulate

desired densities. The area south of the Pere Marquette River is one where intensive growth and development would be limited.

The Future Land Use Map, found on page 78, shows generalized locations for the broad future land-use areas described below.

Low Density Suburban Residential

This designation is characterized by single-family residential uses and is intended to provide for suburban-style neighborhoods in areas suitable for development, primarily north of the Pere Marquette River. Schools, neighborhood parks, churches, and other similar uses should also be considered in these areas. Residential development in these areas should be scaled primarily for passenger car travel and be suitable for families with school-age children. A network of sidewalks and shared-use pathways should link neighborhoods and surrounding uses. Cluster developments that preserve open space should be encouraged.

Low Density Suburban Residential areas are primarily found in the northern portion of the Township, near Lincoln Lake and the Lincoln River. Smaller pockets of this designation are located in other portions of the Township where suburban neighborhood development currently exists.

Medium Density Residential

The Medium Density Residential designation is intended to support human scale, walkable neighborhoods in close proximity to commercial and recreational services with high-quality amenities and attractive design. The primary uses in these areas should include attached single-family homes and apartments as well as related institutional uses. Innovative design techniques that accommodate a mix of uses that complement each other should be considered. Development in these areas should be served by public utilities, provide non-motorized transportation connections, and be designed to provide increased density, maintain an attractive aesthetic character, and be harmonious with the natural environment.

This designation is located in areas of the Township north of the Pere Marquette River, in close proximity with the City of Ludington, and near busier roadways.

Buttersville Peninsula Residential

The Buttersville Peninsula Residential designation is intended to provide for lower-density, single-family residential uses on the waterfront lots of the Buttersville Peninsula and foster the protection

of shorelines, dunes, and other important natural features. Development in this area should be designed to limit impacts on the natural environment by utilizing appropriate setbacks, impervious surface limitations, and carefully planned construction.

Epworth Heights Residential

The purpose of the Epworth Heights Residential designation is to provide for the continuation of the existing resort residential uses within the Epworth Heights area. Primary uses will include single-family cottages and resort homes as well as related resort uses that serve the Epworth Heights community. Development in this area should complement the existing historic character of Epworth Heights.

Linlook Park Residential

The Linlook Park Residential designation is intended to provide for single-family residential uses and foster the protection of the Lake Michigan shoreline and other important natural features. Primary uses within this area are single-family homes on smaller lots. Development within the Linlook Park Residential designation should complement the existing cottage community character and be designed to limit impacts on the natural environment.

Agricultural Residential

The primary purpose of the Agricultural Residential designation is to address the need for scattered single-family residential development in relatively rural, low-density patterns. Uses in these areas will include single-family residential homes built on large lots or in conservation clusters that result in the preservation of significant open lands. Agricultural operations, landscaping operations, and similar uses should be considered in this designation as well. Public parks and natural land conservancies are also encouraged in these areas. The desired character in this designation is for scattered single-family residential homes set amongst preserved open space, farmland, and natural areas.

This designation is located primarily in large portions of the Township south of the Pere Marquette River where existing development densities are low and the desire to preserve open space is high.

Agriculture

The intent of this designation is to promote the continued use of quality farmlands for agricultural purposes and to minimize the potential for conflict with more intense land uses. The primary uses in the Agriculture designation should be farming and related activities.

Field crops, orchards, and livestock operations may be permitted. Residential development associated with farming operations should be anticipated while other single-family housing should be considered either in very low densities or in conservation clusters that preserve quality farmland.

The Agriculture designation is primarily located in the southern portions of the Township where quality farmlands exist.

Neighborhood Commercial

The Neighborhood Commercial designation is intended to create small-scale, pedestrian-oriented commercial nodes that are compatible with surrounding residential neighborhoods. The primary uses in these areas should include retail, commercial service, and office establishments that serve the surrounding residential areas and the Township as a whole. Development in these areas should include pedestrian links to surrounding uses and be scaled to complement the scale and character of the surrounding neighborhood.

Neighborhood Commercial areas are located in small pockets near existing residential neighborhoods in the northern portion of the Township.

Community Commercial

The purpose of the Community Commercial designation is to provide for general retail and commercial development within the Township. Uses within these areas are primarily automobile-oriented and include gas stations, drive-through restaurants, large grocery stores, hotels, and larger-scale commercial uses. Developments may have large footprints and parking lots that serve the needs of businesses, but buildings should be thoughtfully located and designed to maintain the unique character of the Township while providing pedestrian connections to surrounding uses. Mixed-use development and higher-density residential uses are also encouraged in these areas.

Community Commercial areas are located along the U.S.-10 corridor where high volumes of vehicular traffic are conducive to commercial activities.

Professional Services

The Professional Services designation is intended to accommodate the establishment of traditional “white collar” offices and service uses such as health care, accountants, insurance agencies, and other consultants. These office and service establishments will be the primary uses in these areas, with developments designed to provide efficient access for customers but serve a lower-volume clientele than retail locations.

Small areas of this designation are located adjacent to other smaller-scale commercial areas along N. Jebavy Drive and Johnson Road.

Heavy Commercial/Light Industrial Mix

The intent of the Heavy Commercial/Light Industrial Mix designation is to provide for a mix of higher-intensity commercial, service, technology, warehousing, and light industrial uses. Development in this area should balance the needs of businesses with maintaining the unique character of the Township. Larger parking lots and loading areas for trucks may be included, but should be located so that their visual impact along road corridors is minimized.

This designation is located along South Pere Marquette Highway adjacent to industrial designations between First Street and the Pere Marquette River.

Industrial

The Industrial designation is intended to provide employment for area residents and manufactured goods and services to meet the needs of the larger west Michigan region. New development should have a minimal impact on the environment and the surrounding community and may include warehousing, mini-storage, contractor offices and storage yards, and similar uses. The Township will continue to work with existing high-intensity industrial land uses to minimize environmental and aesthetic impact on the community while promoting a healthy economy. Development in these areas should have appropriate utility and transportation connections and be in harmony with the area’s natural features. Truck traffic will be efficiently routed to regional arterials without traveling through residential areas, and significant buffers and setbacks will be implemented to minimize impacts on adjacent properties.

The Industrial designation is primarily located in the middle portion of the Township between First Street and the Pere Marquette River.

Business – Technology – Industry

The Business – Technology – Industry (BTI) designation is intended to promote the development of state-of-the-art business opportunities within the Township. Primary uses in these areas should include technological, business, and light industrial activities involving research, product testing, light machinery, warehousing, and minor assembly. Development in this designation should implement proper screening, open space, and landscaping to limit impacts on adjacent properties and road corridors. Buildings should be constructed with quality materials and be designed to maintain the character of the Township.

Airport

The purpose of this designation is to provide a dedicated area for the continued use of the Mason County Airport. Airport regulations are set by the County and the Federal Aviation Administration. As such, an airport zone will have additional restrictions than the same land would have if there were no airport in the area.

This designation is located in the northern portion of the Township along U.S-10.

Pumped Storage Facility

The purpose of the Pumped Storage Facility designation is to provide a dedicated area for the continued use of the Consumers Energy pumped storage energy generation plant and reservoir.

This designation is located in the southwest corner of the Township.

Conservation

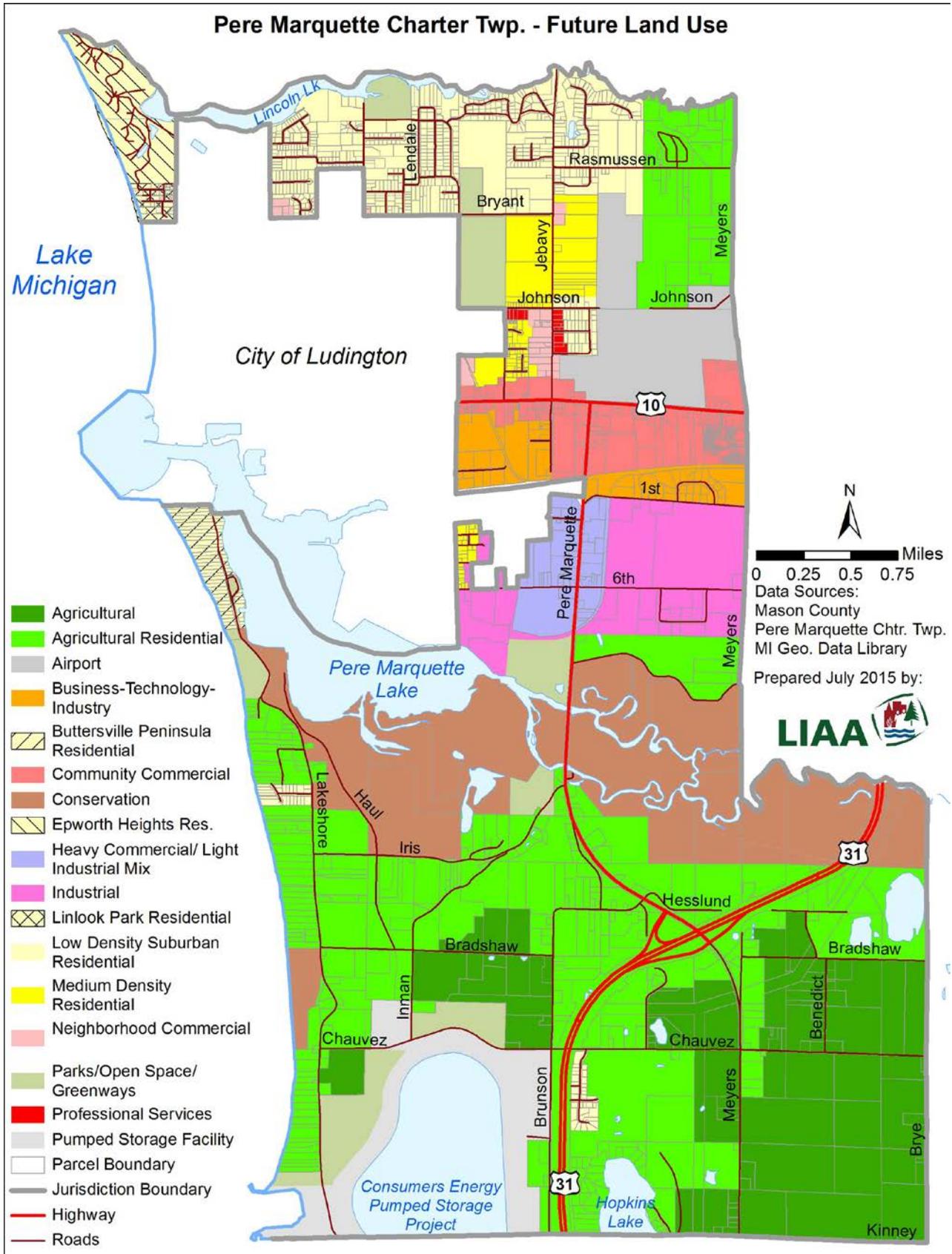
The intent of the Conservation designation is to foster the protection of natural features and important environmental areas with as little disturbance as possible. Development within these areas will be limited to forestry, recreation, farming operations with existing single-family homes, or institutional uses limited to very low densities. These areas should be preserved as large tracts of land that offer the preservation of important shoreline, dunes, wetlands, wildlife habitat, forest lands, and river valleys.

These areas are primarily located adjacent to the south shore of Pere Marquette Lake and along both sides of the Pere Marquette River. Another small Conservation area is located on the Lake Michigan shore in the southern portion of the Township.

Parks, Open Space, and Greenways

The Parks, Open Space, and Greenways designation is intended to identify parkland and open space, and to identify land not owned by the Township for potential acquisition. Primary uses in these areas should include passive and active recreation facilities, open space preservation, and the buffering of valuable natural features. Development in this designation should be compatible with the surrounding landscape and adjacent uses.

Parks, Open Space, and Greenways areas can be found scattered throughout the Township.



ZONING PLAN

According to Section 2(d) of the Michigan Planning Enabling Act (PA 33 of 2008), a master plan shall include a “Zoning Plan” depicting the various zoning districts and their use, as well as standards for height, bulk, location, and use of buildings and premises. The Zoning Plan serves as the basis for the Zoning Ordinance. The following portion of the Comprehensive Plan describes the existing Zoning Districts of the Pere Marquette Charter Township Zoning Ordinance, the regulations of these districts, and potential zoning considerations for the Township.

Relationship to the Comprehensive Plan

The *Comprehensive Plan* describes the vision, objectives, and strategies for future development in Pere Marquette Charter Township. The Zoning Plan is based on the recommendations of the *Comprehensive Plan*. The Zoning Plan is intended to help identify areas where existing zoning is inconsistent with the objectives and strategies of the *Comprehensive Plan* and guide the development of the Zoning Ordinance. The Zoning Ordinance is the primary implementation tool for the future development of Pere Marquette Charter Township.

Residential Districts

The residential zoning districts in Pere Marquette Charter Township are:

- R-1 – Low Density Residential District
- R-2 – Medium Density Residential District
- A/R – Agriculture Residential District

The main purpose of these zoning districts is to provide a variety of housing options within the Township. The R-1 Low Density Residential District is intended to provide areas for single-family residential development and to limit or prohibit business, commercial and industrial use of land in the district, except special land uses that are determined to be appropriate. The R-2 Medium Density Residential District is established to provide higher-density residential development. The purpose of the A/R Agriculture Residential District is to provide areas of both residential and agricultural development.

Commercial Districts

The commercial zoning districts in Pere Marquette Charter Township are:

- C-1 – Light Commercial District

- C-2 – Heavy Commercial District
- C-3 – Commercial District
- PS – Professional Services District

The purpose of the Commercial Districts is to accommodate a variety of commercial and service uses to serve visitors and people residing in the surrounding neighborhoods and region. The purpose of the C-1 Light Commercial District is to provide areas for light retail and service related commercial development. The C-2 Heavy Commercial District is established to recognize and provide areas for more intense retail and service commercial uses. The PS Professional Services District is established to recognize and provide areas for professional service and office facilities. The C-3 Commercial District is established to recognize and provide areas for high-intensity commercial uses and the development of business, industrial, professional, and service operations which strive to foster and promote current and emerging technological advances.

Industrial Districts

The industrial zoning districts in Pere Marquette Charter Township are:

- G-I – General Industrial District
- BTI – Business, Technology, and Industrial District

The G-I General Industrial District is intended to provide areas for industrial development necessary for the economic wellbeing of the Township. The BTI Business, Technology, and Industrial District is intended to provide areas for the development of business, industrial, professional, and service operations which strive to foster and promote current and emerging technological advances.

Agricultural District

The following is the lone agricultural district in Pere Marquette Charter Township:

- A-1 – Agricultural District

The A-1 Agricultural District is established in recognition of the areas in the Township which are used primarily for agricultural activity.

Special Districts

The following are considered “special” zoning districts in Pere Marquette Charter Township:

- CON – Conservation District

- HAR – Harbor District
- AP – Airport District

The CON Conservation District is intended to protect floodplain areas, open land areas, wildlife habitat, areas of scenic landscape, and natural features that are generally considered environmentally important or sensitive. The HAR Harbor District is established to provide areas for the shipping, receiving, and storage of materials at a water port facility. The AP Airport District is established to recognize the present county airport and county fairgrounds.

The following table illustrates the regulations of the existing zoning districts in the Pere Marquette Charter Township Zoning Ordinance.

Pere Marquette Charter Township Zoning District Regulations						
Use	Min. Lot Area (S.F.)	Min. Lot Width (Ft)	Setbacks (Ft)			Maximum Building Height (Ft)
			Front	Rear	Side	
R-1 Low Density Residential						
Single-family dwellings	15,000	80	40	30	15	35
Accessory structures	-	-	40	15	15	35
R-2 Medium Density Residential						
Single- and two-family dwellings	12,000	65	25	25	10	35
Multiple-family dwellings	Varies	100	25	25	20	60
All other uses	5 acres	150	40	40	40	35
Accessory structures	-	-	25	10	10	35
A/R Agriculture Residential						
Livestock farms	10 acres	-	40	40	40	-
General farming	-	-	40	40	20	
Single-family dwellings	43,560	150	40	40	20	35
Cemeteries	5 acres	-	40	20	20	15
Government buildings	43,560	150	40	40	20	35
All other uses	5 acres	150	40	40	40	35
Accessory structures	-	-	40	20	20	-

C-1 Low Density Commercial						
All uses	21,780	100	50	25	15	60
C-2 High Density Commercial						
All uses	21,780	100	50	25	15	60
C-3 Commercial						
All uses	32,670	100	50	25	15	60
PS Professional Services						
All uses	21,780	100	50	25	15	60
BTI Business, Technology and Industry						
All uses	32,670	100	50	25	15	60
G-I General Industrial						
All uses	43,560	100	50	40	30	60
A-1 Agricultural						
Livestock farms	10 acres	-	40	40	40	-
General farming	-	-	40	40	20	-
Single-family dwellings	43,560	150	40	40	20	35
All other uses	5 acres	150	40	40	40	35
Accessory structures	-	-	40	40	20	-
CON Conservation						
All uses	5 acres	-	40	40	40	20
HAR Harbor						
All uses	43,560	-	40	40	40	60
AP Airport						
All uses	43,560	100	50	50	50	60

Opportunities for Rezoning

As development and redevelopment occur within Pere Marquette Charter Township, rezoning requests may be made by property owners and developers. The Township should consider such requests carefully and keep the goals of the *Comprehensive Plan* and desires of residents in mind during the decision-making process. Generally, it is intended that a majority of the land uses within the Township remain organized in a way similar to the current configuration of uses while maintaining the area’s natural beauty and quality of life. However, there are locations within the Township where zoning regulations could be amended to better align with the goals of the *Comprehensive Plan*. In these locations, primarily found south of the Pere Marquette River, the Planning Commission should consider rezoning lands currently zoned as Harbor and Agricultural Residential to districts that better promote the open space, farmland, and natural resource preservation desires illustrated on the Future Land Use Map (e.g., Conservation and Agriculture).

CHAPTER 8. IMPLEMENTATION STRATEGIES

The following strategies and tools can be used to implement the goals and objectives and land use recommendations of this Plan. It is recognized that many strategies will be long-term in nature and that many entities in addition to Pere Marquette Charter Township will need to cooperate in order to fully implement this Plan. In many instances, the Township's role is that of facilitator for some of the strategies listed in this chapter. In some instances, a strategy may relate directly to more than one objective statement.

Zoning Ordinance Standards

The Zoning Ordinance is the primary implementation mechanism for this Plan. The Township Planning Commission should review the Zoning Ordinance to ensure that design and management standards reflect the future vision for the Township and focus on:

- Accommodating desired land uses and development densities in appropriate areas for additional growth,
- Limiting high-intensity uses and development densities in areas where the preservation of rural character and natural features are desired,
- Providing flexible development techniques that help preserve open space, natural features, and agricultural lands,
- Incentivizing the creation of quality affordable housing in appropriate areas of the Township,
- Improving the aesthetic character of development along major highway corridors,
- Creating more walkable, pedestrian-oriented development,
- Providing design guidelines or standards that reflect the desired character of development, and
- Protecting important natural features and the water quality of Lake Michigan and inland waterways.

Identify and Protect Key Natural and Historic Features

A key aspect of the Township's *Comprehensive Plan* is the preservation of the natural beauty and important features of the community. Some of these features are addressed by state legislation and/or by local ordinance. Others, however, are identified in this plan within the Zoning and land use classifications, but only in general terms. The Township should continue to investigate ways to support the protection of valuable natural and historic features through state and local programs or regulation.

Monitor Water and Sewer Policies to Guide Development

The recommendations of the *Comprehensive Plan* generally promote future development in areas of the Township north of the Pere Marquette River and limit high-intensity development in areas south of the River. The Township should ensure that future changes to the plans and policies regarding the provision of sewer and water service consider these desires. Utility service expansion and enhancement in areas where development is desired should be considered. The lower-intensity development that is desired in the southern portions of the Township can generally be served by onsite well and wastewater disposal.

Highway Corridor Improvements

Improving the safety, function, and aesthetic quality of the U.S.-10 and South Pere Marquette Highway corridors will improve the quality-of-life for Township residents and improve perceptions of the entire community. The Township should continue to investigate the implementation of access-management techniques that eliminate excessive curb cuts and provide for better safety and traffic flow along the corridors. Additionally, landscaping, site design, architectural, and streetscape design standards for the corridors should be considered and added to the Zoning Ordinance when appropriate. Additional information regarding aesthetic, access management, and other improvements to the U.S.-10 corridor can be found in the U.S.-10/U.S.-31 Corridor Charrette Summary (Appendix C). The Township could consider creating a Corridor Improvement Authority in conjunction with Mason County to fund and implement corridor improvement projects.

Support the Development of Motorized and Non-motorized Connections

The Planning Commission is fully supportive of the development of both motorized and non-motorized connections. Efforts to provide non-motorized connections between neighboring jurisdictions and across the region will require collaboration by many local units of government, transportation agencies, and advocacy groups. The Township is of a mind to support and cooperate with other municipal entities' efforts in this area.

The Township should continue efforts to provide for pedestrian, or other non-motorized, infrastructure along U.S.-10 and in other areas in order to provide better access to businesses and services for those who do not drive. Additionally, a continuous non-motorized connection

between the City of Ludington and Scottville should be supported. Additional information about non-motorized transportation infrastructure along U.S.-10 can be found in the U.S.-10/U.S.-31 Corridor Charrette Summary (Appendix C).

In less-developed areas of the Township, pedestrian and bicycle access and safety are also important, but may be better facilitated by creating improvements to existing roadways in the form of widened shoulders or dedicated bike lanes. The Township should consider adopting a Complete Streets resolution or policy that encourages the consideration of all forms of transportation in the planning and construction of future road improvements.

Funding for the implementation of non-motorized transportation projects may be available through the Transportation Alternatives Program (TAP). The Transportation Alternatives Program was authorized under Section 1122 of the Federal *Moving Ahead for Progress in the 21st Century Act* (MAP-21). Under this program, each state Department of Transportation is required to allocate 2 percent of its total Federal Highway funds for programs and projects defined as “transportation alternatives.” Examples of transportation alternatives include non-motorized trails, sidewalks, transit stops or stations, and education and safety programs such as Safe Routes to School.

