



ONOTA TOWNSHIP MASTER PLAN 2024

Adopted by the Onota Township Planning Commission on: August 13, 2024

7:00 pm, the following motion was of	fered:			
Moved by <u>Erin PutVin</u> following resolution:	_ and seconded by	Mark	Fisher	to adopt the
Resolut	ion #			

During a regular meeting of the Onota Township Planning Commission on August 13, 2024, at

WHEREAS, The Michigan Planning Enabling Act, PA 33 of 2008, provides that the Planning Commission may prepare a Master Plan and accompanying maps for the use, development and preservation of all lands in the township; and

Onota Township Master Plan Adoption

WHEREAS, In September 19, 2023, the Planning Commission notified each municipality contiguous to the township, the County Board, each public utility company and railroad company owning or operating a public utility or railroad within the township, and other agencies for purposes of notification, of its intent to draft and adopt a Master Plan and accompanying maps; and

WHEREAS, The Planning Commission encouraged public participation during the planning process via a survey that was sent to every household in Onota Township and regular and special Planning Commission meetings that are open to the public; and

WHEREAS, The proposed Master Plan and accompanying maps were submitted to Township Board, who authorized distribution of the proposed plan on June 3, 2024; and

WHEREAS, The proposed Master Plan and accompanying maps were distributed to each municipality contiguous to the township, the County Board, each public utility company and railroad company owning or operating a public utility or railroad within the township, and other agencies who responded to the notice of intent for purposes of notification, for review and comment; and

WHEREAS, On August 12, 2024, after proper public notice, the Planning Commission held a public hearing on the proposed Master Plan and accompanying maps, during which members of the public were given the opportunity to comment on the proposed Plan and comments received were discussed; and

WHEREAS, The Planning Commission has determined that the draft of the Master Plan and accompanying maps represent the long-range vision of the township.

THEREFORE BE IT RESOLVED, The Onota Township Planning Commission hereby approves and adopts the Master Plan and accompanying maps, as per the requirements of the Michigan Planning Enabling Act, PA 33 of 2008 and recommends adoption of the Master Plan by the Onota Township Board.

Roll call vote:	YES	NO Din Buelo
Brian Bresette	▼	But
Brian Mahoney	×	Brun Marthin
Erin Potvin Putvin	X	□ Erin g. gul
Mark Fisher	K	- Smart Joseph
Mike Tarr	₽	
Vickey Ray	Ø	- Val. Ry
Fred Ivers	No.	☐ Fred Ivers

MOTION CARRIED.

I certify that the above is a true and complete copy of a resolution passed by the Onota Township Planning Commission at a meeting on August 13, 2024.

Ву:

Planning Commission Secretary

RESOLUTION OF FINAL ADOPTION OF THE ONOTA TOWNSHIP MASTER PLAN

WHEREAS, The Onota Township Board of Trustees approved the distribution of the Draft Onota Township Master Plan and executed their option to adopt or not adopt the Draft Onota Township Master Plan on June 3, 2024; and

WHEREAS, The Onota Township Planning Commission conducted a public hearing on August 13, 2024 to take public comments on the Draft Master Plan, then closed the public hearing and adopted a resolution to approve the Master Plan and recommend the Onota Township Board of Trustees adopt the final draft of the Onota Township Master Plan per the requirements of the Planning Enabling Act, PA 33 of 2008; and

THEREFORE, BE IT RESOLVED, The Onota Township Board of Trustees hereby adopts the Onota Township Master Plan 2024.

	Yes	No	Absent
Cheryl Lane	<u>/</u>		
Terry Pihlainen			1
Brian Bresette	V		
Jennifer Hough			

MOTION CARRIED

I certify that the above is a true and complete copy of a resolution passed by the Onota Township Board of Trustees on October 7, 2024.

By: Vanely Simmes
Onota Township Clerk

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Chapter 1

What is a Master Plan?

A Master Plan is a document developed by communities and their planning commissions to guide current and future land use decisions. Cities, counties, townships, and villages derive their authority to develop a Master Plan through the Michigan Planning Enabling Act 33 of 2008 (MPEA). All meetings subject to the MPEA are to be conducted in compliance with the Open Meetings Act and all Master Plan-related written material are available to the public in compliance with the Freedom of Information Act.

Local units of government that regulate land use through zoning, such as Onota Township are required to have a current Master Plan developed per the MPEA. The Master Plan should be a living document that is evaluated and updated annually for its ability to address evolving land use issues in Onota Township thus making it a reliable document that informs land use decisions.

A Master Plan developed in accordance with the MPEA will promote the current and future needs of Onota Township regarding public health, safety, morals, order, convenience, prosperity and general welfare. A Master Plan can project 20 years into the future and must include a Future Land Use Map and a Future Land Use Plan that will guide Onota Township toward its desired future.

If a Master plan is going to be an effective and reliable tool for the Planning Commission to address land use challenges it must be reviewed and understood by the residents of Onota Township. The Master Plan development phase is an excellent opportunity for the residents of Onota Township to attend Planning Commission meetings, request materials and information about the draft plan and provide their comments and opinions.



Chapter 2

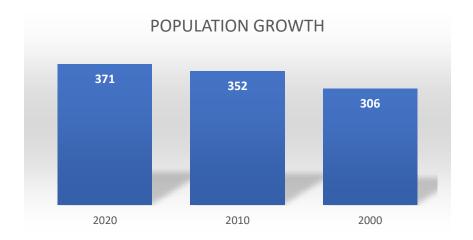
Population and People

The population of any community is a direct result of births, deaths, in-migration, and outmigration. Similar to national statistics, Onota Township has low birth rates as fewer couples are having children or chose to only have one or two children. According to the ACS 5-Year Estimates, the average family size is 3.07. Lower birth rates relate to higher death rates in communities where there is negative or very low population growth. If a community is seeing measurable growth in its population, it is likely due to in-migration.

Onota Township is about 103 square miles. About 87.7 square miles are land and about 15.9 square miles are water and wetlands. Approximately 32% of the 87.7 square miles of land is owned by the National Forest Service leaving about 60 square miles for land uses regulated by the Onota Township.

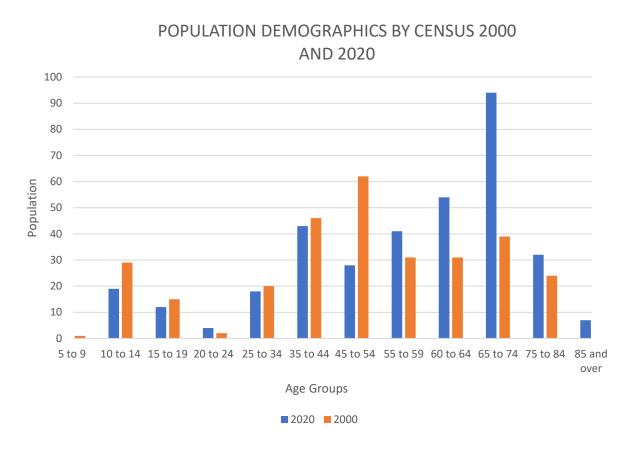
Onota Township has always been a rural township. Population growth has been steadily increasing very slowly over the past 20 years. Yet, as of the 2020 Census, the population is only 371, with a population density of about 6 people per square mile. As demonstrated by the number of responses in the Onota Township Master Plan survey in 2022, the property owners of Onota Township value the Township's rural quality of life and want the Township to remain rural.

The chart below shows a steady increase in population of about 65 people over the past 20 years. The small but steady increase in population is likely the result of in-migration as birth rates have remained low over the past 20 years.



Source: DEC Census 2000, 2010, 2020

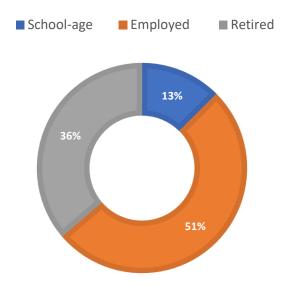
The Township's quiet lifestyle is attractive to individuals that want more space and less government influence over how to manage their space. Onota Township is ideally located between the City of Munising and the City of Marquette and the working population of 51% or about 188 people are used to commuting about 24 minutes (2021 ACS) a day in either direction to jobs outside of the Township or they work from home.



Source: 2020 DEC Census

The chart above shows the shift in the number of 65- to 75-year-old residents of Onota Township from 2000 to 2020. This demographic trend has been occurring on the national scale for several decades as people are having smaller families or no children. Rural Townships such as Onota will be significantly affected by this trend as the retirees age even further and there are fewer people to replace them.

POPULATION BY LIFE STAGES



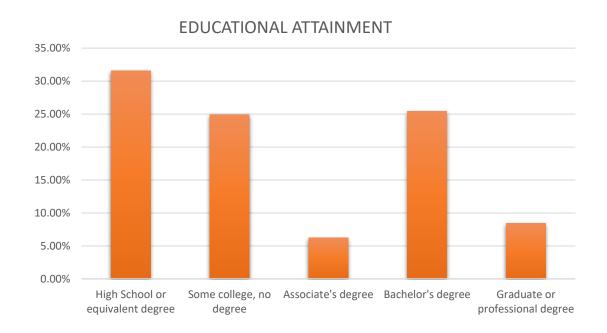
Source: 2020 DEC Census

Age ranges within a population define the types of services that will be desired by the local population, so it is helpful to understand the population by life stages. The chart below confirms there are fewer school-age children or children between the ages of 5 to 19 in Onota Township. The chart also shows that 51% of the population is within the age range of 19 and 64 years of age which is the typical age range for employment. The remaining 36% or 65 years of age and older are in the range of retirement. In small communities with an aging population like Onota Township, the retired population contributes greatly to the community through their involvement in local government and other community services compared to the working population. Retirees have more free time to volunteer, can offer the expertise they gained during their careers and are devoted to their community and want to see it continue to be a desirable place to live. Aging populations also grow in their need for services as they continue to age.

Education

Educational attainment is measured by the percentage of the high school graduate population or higher of Onota Township's population that is twenty-five (25) years of age and older. Locations where most of the local population has a higher education are considered desirable due to workforce availability and quality of life. Employers seek locations where there is an educated workforce that will support the demands of their business. Higher educational attainment is also considered a strong indicator of the local schools' quality of education. Quality schools play an important role in attracting future residents that value higher education

for their children because higher educational attainment is linked to greater incomes and a better quality of life. The chart below demonstrates the educational attainment in Onota Township for the population twenty-five (25) years and older. The charts show us that most of the 25+age population is very well educated with nearly 50% of the select population having a post-secondary education and over 25% of that group having a bachelor's degree or higher.



Source: 2020 DEC Census

Issues and Opportunities

Issue 1:

Slow or very low population growth can have long-term economic impacts on a community, such as a reduction in school-age children and less representation at the county and state level for other services such as funding for roads or other types of infrastructure that may be of value to the community.

Opportunity 1:

Slow growth allows the Township to maintain the quiet quality of life most residents are accustomed to.

Issue 2:

Onota Township is experiencing higher growth in the aging population and less growth in school-age children. An aging population requires special services in transportation and housing.

Opportunity 2:

Onota Township benefits from having a population of individuals with the time to volunteer their expertise by serving the Township's governmental and community needs.

Chapter 3

Employment, Labor Force and Income

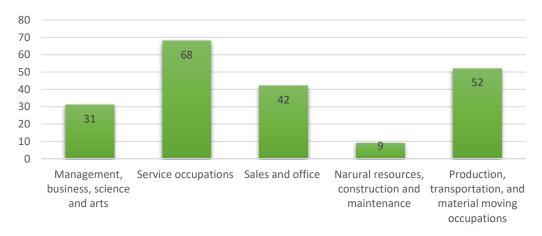
Employment and Labor Force

Employment and labor force information gathered for Onota Township evaluates the sum of civilian employment and unemployment. The civilian labor force is defined as individuals 16 years and older that are not active-duty military personnel or institutionalized individuals such as prisoners, patients in mental hospitals or nursing homes.

The total civilian labor force in Onota Township is 216. There are 202 individuals employed and 14 unemployed (2021 ACS 5-year estimates).

The 216 labor force participants in Onota Township work in a variety of occupations such as management, business, science, and the arts, service occupations, sales and office work, natural resources, construction and maintenance, and transportation and material moving occupations. The chart below shows the number of civilian labor force by each set of occupations.

OCCUPATIONS OF THE CIVILIAN LABOR FORCE



Source: 2021 ACS 5-year estimates

The chart above shows occupations in service are the most prominent in Onota Township and align with the strong local demand for service workers in hospitality and tourism as Alger County continues to see growth in tourism.

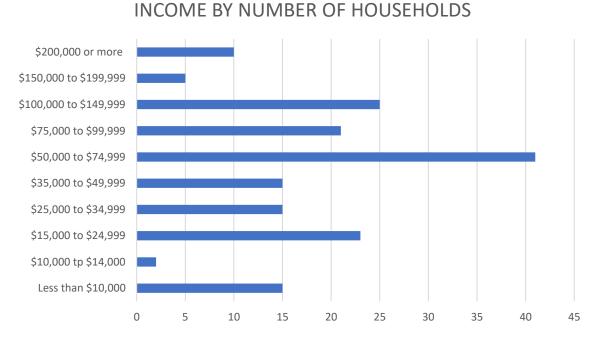
Another way of evaluating the civilian labor force is by the Class of Worker. Information that categorizes workers by class refers to the type of ownership of the employing organization such as government, private sector, or self-employed. In Onota Township about 89% work for the private sector, 7.4% work for the government and about 3% are self-employed.

Income and Earnings

The median household income in Onota Township is much higher at \$68,750 (2021 ACS) than all of Alger County at \$48,822. The median income for families in Onota Township is about \$74,097 and \$82,188 for married-couple families. Poverty is low at only 9.8% compared to Au Train Township at 18.1% and Alger County at 11.2%. Also, only nine (9) out of twenty-four (24) students at the Au Train-Onota Public School are eligible for the free lunch program.

Income by Household and Families

Incomes and benefits to households by 2021 inflation-adjusted dollars are demonstrated in the chart below.

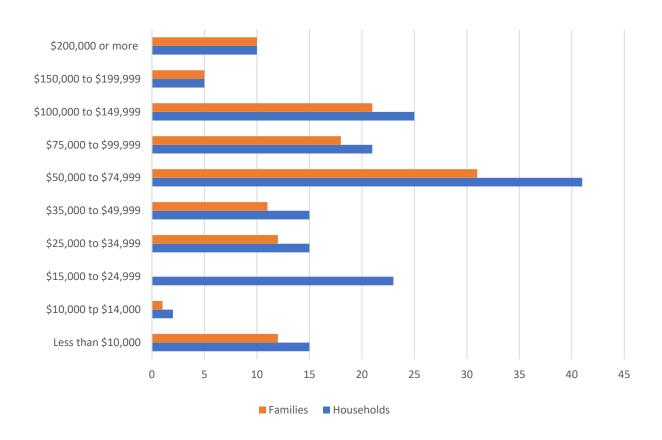


Source: 2021 ACS 5-year estimates

The chart below shows the distribution of incomes among the Townships households with the majority of households earning between \$15,000 to \$149,999 per year (2021 ACS 5-year estimates).

Families are a subset of the total household count. It is important for community leaders to know how well families can financially sustain living in Onota Township as families are important to every thriving community and healthy families lead to individuals who are a contributing part of society.

COMPARISON BETWEEN HOUSEHOLD AND FAMILY INCOME



Source: 2021 ACS 5-year estimates

There are 172 households in Onota Township. One hundred and twenty-one (121) of the households are families. The chart above compares the financial distribution between households and families. The largest difference between the two data sets is the absence of families that have an annual income between \$15,000 and \$24,999. This could be an indication that families making less than \$15,000 per year are struggling to rise to the next level. Yet, the median family income in Onota Township is \$74,097 with an average family income of \$89,549 demonstrating that the majority of families in Onota Township are financially secure.

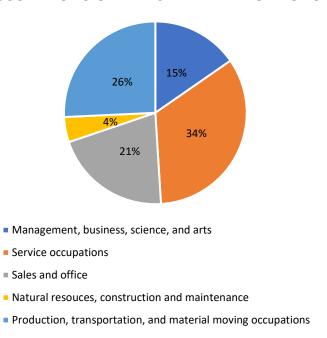
Another way to explore the financial health of households and families is to apply the living wage model. The living wage model is based upon geographic specific expenditures that a family is likely to incur such as food, childcare, health insurance, housing, transportation and other basic necessities. Values are reported in December 2022 dollars as an hourly rate of one person working 2080 hours per week.

LIVING WAGE MODEL FOR ALGER COUNTY

	1 Adult			
	0 Children	1 Child	2 Children	3 Children
Living Wage	\$15.03	\$34.09	\$46.79	\$62.46
Poverty Wage	\$6.53	\$8.80	\$11.07	\$13.34
Minimum Wage	\$10.10	\$10.10	\$10.10	\$10.10
	2 Adults (1 working)			
	0 Children	1 Child	2 Children	3 Children
Living Wage	\$25.00	\$29.90	\$34.75	\$37.86
Poverty Wage	\$8.80	\$11.07	\$13.34	\$15.61
Minimum Wage	\$10.10	\$10.10	\$10.10	\$10.10
	2 Adults (both working)			
	0 Children	1 Child	2 Children	3 Children
Living Wage	\$12.50	\$19.04	\$25.55	\$31.20
Poverty Wage	\$4.40	\$5.54	\$6.67	\$7.81
Minimum Wage	\$10.10	\$10.10	\$10.10	\$10.10

Source: https://livingwage.mit.edu/counties/26003

OCCUPATIONS OF THE CIVILIAN LABOR FORCE



Source: 2021 ACS 5-year estimates

The chart above shows that about 34% of the civilian workforce in Onota Township is employed in the service industry. The service industry in Alger County is travel or tourism-based. According to ZipRecruiter, the hourly rate paid for travel and tourism jobs ranges between \$15.72 to \$17.45 per hour in Michigan with very little variation based on location within the state.

Issues and Opportunities

Issue 1:

Onota Township currently has a thriving civilian workforce but as more individuals retire, there will be fewer people to replace them.

Opportunity 1:

Welcome families to Onota Township and consider land use decisions that will make it easier for families to settle in Onota Township such as making smaller, more affordable lots available.

Issue 2:

Not all families in Onota Township are thriving financially. There are some that lack the resources to improve their quality of life. This is common in rural communities where impoverished families did not gain the marketable skills needed to earn their way out of poverty.

Opportunity 2:

Onota Township volunteers can assist by being sensitive to the challenges those families have by helping them to overcome barriers to educational resources and supporting any self-employment initiative they conduct such as carpentry or auto mechanics.

Chapter 4

Local and Regional Economy

At one time the economic base of Onota Township was logging and the manufacturing of charcoal. Today, Onota Township has little or no manufacturing of significant scale. In rural townships where there is not a local economic base, the factors that affect their economy extend beyond their borders. As noted earlier, Onota Township is uniquely located between the Marquette and Munising areas where there are strong economies in tourism, recreation, health care, logging, mining, manufacturing, transportation, and education.

The City of Munising has seen a significant increase in tourism due to its proximity to the Pictured Rocks National Shoreline. The Pure Michigan campaign introduced the untouched, unique and special beauty of the area. As such, the number of visitors continues to climb into the millions each year creating some positive economic impacts and some negative environmental impacts in Onota Township.

The demand for prime real estate, particularly along the shores of Lake Superior, and the demand for short-term rentals as an investment opportunity, are examples of a strong tourism-based economy. Residents who do not own a business or property dependent on tourism often feel inconvenienced by the increase in the tourist population, but tourism is keeping their property values high and increasing their wealth by building equity in their homes.

In 2011 the Township's total state equalized valuation was \$57,362,873 with a taxable value of \$34,243,032. Residential properties made up 97% of the total assessed value. Commercial properties made up 3% of taxable value with an accessed value of \$1,502,600.

Twelve years later in 2023, the total state equalized value is \$68,348,500, a difference of \$10,985,627 to the positive with a total state equalized value for residential properties at \$65,932,500 and the total state equalized value for commercial properties of \$1,972,300. The percent of residential to commercial properties remains at 97% to 3% and there are no industrial or agricultural classed properties for either year cited.

The local businesses that do exist in Onota Township are tourism-based and are an important part of the community fabric. Kimar's Resort in Shelter Bay has been offering their guests cabins and fishing charters since 1940.



The Brown Stone Inn, built in 1946, recently reopened and is now owned by a successful entrepreneur from the City of Munising who owns multiple food and beverage establishments in the area. The Brown Stone Inn's history is rich and valuable to the residents of the Township. Seeing the business reopen and thrive is a testament to the robust tourism-based economy and local support.



Other small businesses in Onota Township include the Rock River Cabins, The Pine Wood Lodge, and the Laughing Whitefish Lodge

Issues and Opportunities

Issue 1:

Onota Township's economy is shaped by past land-based industries and impacted by current tourism-based industries that are occurring outside their boundary.

Opportunity 1:

Onota Township's position on tourism is to plan for the residents of the Township first.

Opportunity 2:

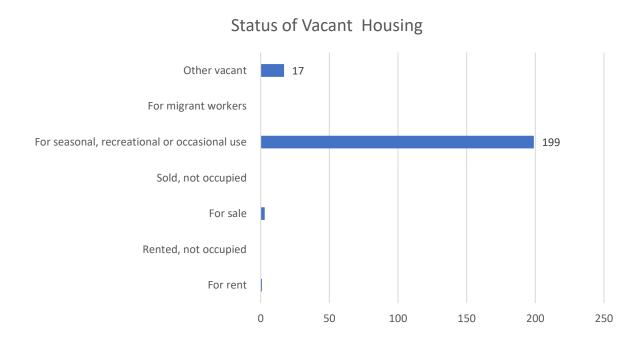
Support the creation of responsible new industries in the region that encourage responsible tourism.

Chapter 5

Housing

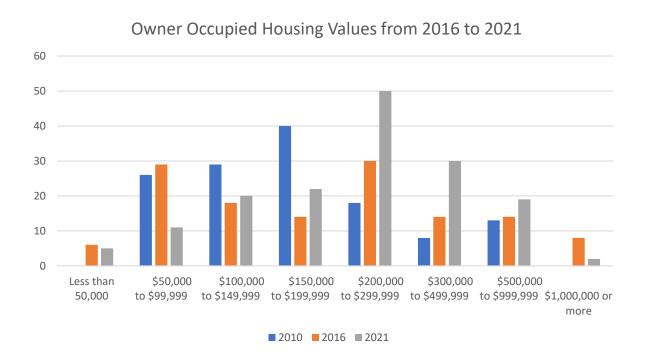
The importance of housing cannot be overstated. Everyone needs a place to live and ideally, there are a variety of housing types available to meet the needs and incomes of the Township's population. Many of the homes along the coast of Lake Superior are higher-end or more expensive houses. Further inland, and throughout the rest of the township, more typical housing exists. Out of the 407 houses in Onota Township, about 187 are occupied by year-round residents and 220 are considered vacant. According to the US Census, a house is considered vacant if no one is living in it at the time of the interview unless its occupants are only temporarily absent. In addition, a vacant unit may be occupied by persons who have a usual residence elsewhere at the time of the census count.

Below is the status of the 220 vacant houses showing most of the vacant houses in Onota Township are second homes used for seasonal or recreational purposes. The second largest group is "other vacant". This category is year-round housing that may be in foreclosure, or vacant due to the owner's preferences or personal situation such as staying with family or in an assisted living facility. This also can include houses that are dilapidated but are not currently being repaired or renovated.



About 92% of the occupied housing is owner-occupied and the housing type is single-family. Onota Township has one unit available for rent at the time of the 2020 census count. Having more rental housing available would allow younger people and families that are not prepared to buy a house or can't afford to buy a house, to settle in Onota Township. Rental housing will become more important to have as housing prices and interest rates make homeownership cost-prohibitive for many moderate to lower-income households.

As of 2021, the median value of owner-occupied housing units in Onota Township was \$256,800, an increase of nearly 62% since 2010 with the largest increase occurring between 2016 to 2021. To further analyze the rate of growth that is occurring, between 2010 and 2016, a period of 6 years, the median value of owner-occupied housing increased by \$33,900. From 2016 to 2021, a period of 5 years, the median value of owner-occupied housing increased by \$63,800.



ACS, years 2010, 2016,2021

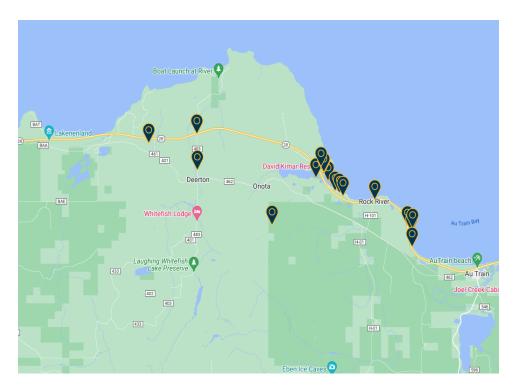
A recent online survey of land and houses available for sale supports the ACS data above showing rather high land and housing prices. The table below shows land and housing prices are higher along the Lake Superior shoreline. Vacant land prices on Lake Superior continue to rise from nearly \$5,000 to over \$6,000 an acre. Whereas the houses available for sale are all higher priced housing that would not be affordable for the median household income residents in Onota Township.

House, 2 bed, 2 bath	Not on Lake Superior	360 acres	\$1,850,000
House, 2 beds, 2 baths	Not on Lake Superior	6.29 acres	\$325,000
House, 3 beds, 3 baths	On Lake Superior	15.24 acres	\$1,100,000
Land	Not on Lake Superior	40 acres	\$48,800
Land	On Lake Superior	8.75 acres	\$40,000
Land	On Lake Superior	25 acres	\$157,000

Google, 2023

Short-Term Rentals

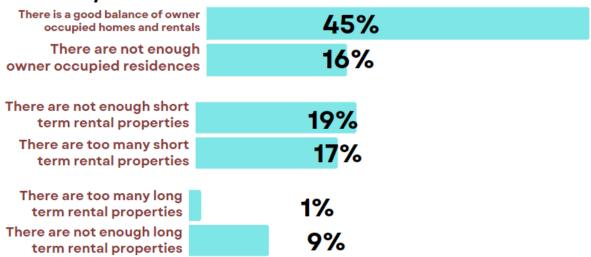
A short-term rental is defined as a commercial use of a residential property for a period of less than 30 days. Short-term rentals are popular for their ability to offer the traveler a unique stay not found in hotels and motels. According to a Google search on vacation rental websites, there are about twelve vacation or short-term rentals in Onota Township or about 6% of the vacant housing used seasonally for recreation. Allowing vacation rentals in Onota Township provides an opportunity for some property owners to increase their incomes by renting out their seasonal dwelling(s) on a short-term basis. The local economy in Onota Township is limited to natural resource production and tourism making short term rentals a viable, and sustainable business. However, If the short-term tenants are noisy and disrupt the neighborhood, complaints occur forcing local leaders to assess if short term rentals should be regulated beyond what they currently are. Currently vacation rentals are only regulated by use and conditional use in certain zoning districts. The Township does not have a rental ordinance and there are no permitting requirements for rental units of any type whether long-term or short-term rentals.



Google, 2023

The Onota Township Master Plan (2020- 2021) survey specifically asked the property owners of Onota Township how they felt about the proportion of short-term rentals to long term-rentals and homeowner occupied residences. Below is an excerpt from the survey results.

How do you feel about the proportion of short-term rentals to longterm rentals and homeowner occupied residences within the community?



Those who wrote in a response to this question were largely mixed in their approval, disapproval, or ambivalence towards short-term rentals. Several respondents related that they did not have enough information on the number or availability of rentals in the community.

Issues and Opportunities

Issue #1.

Housing prices in Onota Township are rising faster than median household incomes.

Opportunity #1

Support the development of senior supportive housing. Capturing the housing needs for the older population will free up some of the single-family housing stock as they move to supportive housing that is available in their community.

Issue #2

There are not enough long-term rentals available to support a younger population that would like to live in Onota Township but can't afford to buy a house.

Opportunity #2

Support long-term rental housing as a means of providing housing to those that want to live in Onota Township but cannot afford to buy a house or they are not ready to buy a house.

Issue #3

There is a perception that there are too many short-term rentals in Onota Township that are threatening the character of the Township.

Opportunity #3

Regulating the location of short-term rentals is important for retaining the character of the Township.

Chapter 6

Community Facilities and Services

Community facilities and services are described as buildings or facilities that are available for the use and enjoyment of the residents of a community for the purposes of assembly, culture and recreational activities. This chapter also includes community services that are provided to support the health, safety, education and general well-being of the residents of Onota Township.

Onota Township Owned Facilities and Services

The most prominent community facility is the Onota Township Hall located in the unincorporated Deerton location. The original portion of the Township Hall is over one hundred years old. An addition in 1979 included a kitchen area, two restrooms and a meeting area. The most recent upgrades to the building in 2011 included a front entrance and an ADA accessible ramp. The Onota Township Board, Planning Commission and the Zoning Board of Appeals conduct all of their regular meetings at the township hall and it is the township's only voting precinct. The Onota Township Hall is available for use by the residents of Onota for free, but users are responsible for the cleanup.

Onota Township Fire Hall and Fire Department

The Onota Township Fire Hall is located next to the Onota Township Hall. Onota Township has a volunteer fire department of 7 members trained in firefighting and emergency medical services so they are qualified to respond to medical calls, vehicle accidents, and other emergencies.

When the Onota Township Volunteer Fire Department was organized in 1980, there were 17 members. The State of Michigan and rural America in general are seeing the number of individuals willing to serve as volunteer firefighters decline. When asked "would you be willing to serve on the Volunteer Township Fire Department or EMT" on the Onota Township Master Plan survey, 90% of the respondents replied "No". Being a volunteer firefighter and EMT is physically and emotionally challenging. The occupational challenges exceed the capabilities of most elderly individuals so it is understandable that Onota Township, where over 59% of the population is of retirement age, would not be willing to serve. Fortunately, Onota Township maintains mutual aid agreements with the local Alger County Fire Department, Chocolay Township, Au Train Township and the Michigan Department of Natural Resources. Operations and equipment for the fire department are supported in part by an extra millage of 1.4562 mills in 2022.

Township-owned firefighting equipment includes:

- 1995 Kodiak 2000-gallon tanker
- 2001 Pierce pumper

Generator to support building

Three dry hydrants exist in the township:

- On the Laughing Whitefish River at the Deerton-Sand Lake Road bridge, near the township hall and fire department.
- At Kimar's Resort on M-28 near Deer Lake. The dry hydrant is on the stream flowing from Deer Lake into Lake Superior
- Au Train boat launch

Deerton Cemetery

The Deerton Cemetery in Onota Township dates back to 1903. The cemetery is well maintained by the Township in accordance with the Deerton Cemetery Ordinance. The Township Clerk is responsible for selling gravesites and the part-time sexton is responsible for the opening and closing of the graves. In 2012, the Onota Township Board was able to purchase additional land adjacent to the original cemetery as space was becoming limited. The Onota Township Cemetery Ordinance can be found on the Onota Township website at https://www.onotatownship.org/. For those interested in local history or genealogy, additional website information includes a grave records book, a list of grave names and locations, and details for genealogical research.

Public Safety and Emergency Response

Public safety in Onota Township is served by the Alger County Sheriff's Office. Services provided include road patrol, jail operation, E911 dispatch, ambulance, dive team, community correction, snowmobile patrol, rescue, and emergency management. Michigan State Police Post #81 in Negaunee provides coverage throughout Marquette and Alger Counties.

Ambulance service is provided by the Alger County Ambulance Service as part of the Alger County Sheriff's Department. One mill is levied in the County to support the operations of the department and was last renewed in 2020. The county maintains four ambulances, two Advanced Life Support transporting ambulances and one Basic Life Support transporting ambulance based at the Sheriff's Department in Munising. Depending on the nature of the call and who may call for service, advanced life support from UP Health System - Marquette Hospital may respond.

Local emergency response systems for disasters such as flooding, forest fires and extreme weather events are planned and prepared for through the Local Emergency Planning Committee (LECP) and through the development of the Alger County Hazard Mitigation Plan per guidance by FEMA and the Michigan State Police Emergency Management Division. The most recently adopted Alger County Hazard Mitigation Plan can be found at the following link: https://cuppad.org/wp-content/uploads/2023/02/Approved 2022-Alger-County-Hazard-Mitigation-Plan.pdf.

Hospital and Healthcare

The Munising Memorial Hospital is the only hospital in Alger County and the Bay Care Medical Center has locations. The hospital is a non-profit Michigan corporation whose purpose, according to their bylaws, is "to provide acute and ambulatory healthcare services to the sick and injured and serve as an element in the quality of life in Alger County." Munising Memorial Hospital provides urgent care, short term care rehab or swing bed, and lab and radiology services. The bay Care Clinic, an affiliate of Munising Memorial Hospital, provides a variety of services including general office visits, yearly physicals and more. The Bay Care Clinic also provides specialty services in dermatology, Ear Nose and Throat, and substance use disorders.

Education

The AuTrain Onota Public School provides education for about 24 children in the district from pre-kindergarten to eighth grade. The AuTrain Onota Public School is reported to be a very good school that offers a variety of educational experiences, and the student-to-teacher ratio is about 5:1. Beyond eighth grade, Onota Township students attend the Marquette Senior High School which has an enrollment of about 968 students making it the largest high school in the Upper Peninsula or the Munising Senior High School that has 334 students in grades 6-12 with a student-to-teacher ratio of 19:1. Busing to and from the township to the Marquette and Munising High Schools can take about one hour each way.

The Munising School Public Library is the only public Library in Alger County. They are affiliated with the Superiorland Public Library which means they are part of a larger cooperative of local libraries in the region that supports new innovative ways to provide sustainable library services. The Munising School Public Library serves thousands of cardholders across Alger County.

Assisted Living Facilities

Senior care facilities are limited across the Upper Peninsula, but the demand will continue to grow as baby boomers age and fewer people are available to care for the elderly. Aging in one's home is not always possible and living alone can become dangerous for the elderly who want to stay in their homes as they age. Alger County has one assisted living facility in Munising called Harbour View that has 17 assisted living units designed to accommodate their residents with a range of services as they are needed. In Chatham there is an Adult Foster Care Home called Whispering Pines that can accommodate 6 seniors at one time and the Medilodge of Munising is a skilled nursing facility that has 90 beds.

Additional Senior care facilities are available in Marquette County. Assisted Living Facilities include Brookridge Heights Assisted Living Facility, High Street Assisted Living, Teal Lake Senior Living Community and Mill Creek Memory Care Community. Nineteen Adult Foster Care Homes operated by Adult Learning Systems U.P. provide care assistance to the physically and developmentally disabled. They emphasize individual choice, a homey atmosphere centered around individual needs and personal preferences, 24-hour personal care, and guidance to obtain

financial independence through community employment and government entitlements. Nursing Homes include the Eastwood Nursing Center, D.J. Jacobetti Home for Veterans, Mission Point of Ishpeming, Marquette County Medical Care Facility, and the Norlite Nursing Center.

Building and Construction Services

The Alger County Building and Soil Erosion Department https://www.algercounty.gov/departments/building_codes.php provides building permits and describes all other permits and approvals that will be required, and the agencies and people responsible for providing the information. Anyone considering building a structure in Alger County should access the above link or visit the Alger County Courthouse for more information.

Internet Services

Internet service continues to be poor in Onota Township. According to the Onota Township Master Plan survey, the majority of the respondents rated this question as "poor". When asked if high-speed internet services were available, would you be willing to pay for it, 82% of the respondents said "yes". The state of Michigan has received an unprecedented amount of funds to build an internet infrastructure system across the entire state of Michigan but it is unknown when that will occur in Onota Township.

Cell Phone Coverage

Cell phone coverage is also lacking in Onota Township. Version and AT&T are the two providers but cell phone towers are limited and the topography is variable creating dead zones throughout the township.

Solid Waste Management / Materials Management

Onota Township has a voter-approved mileage of 1.9828 mils for solid waste collection services. Curbside trash pickup is limited to residents living on Primary County Roads and along M-28. Currently., the contracted hauler does not pick up recyclables. Residents who choose to recycle must collect their recyclables and deliver them to active recycling drop-off sites in Alger County such as the Wood Island Landfill in Munising Township or take them to a recycling drop-off site in the City of Marquette. For the disposal of large household items, the township sponsors a roll-off dumpster event in the early fall of each year. The dumpsters are intended for household trash only and the residents are respectful of the rules associated with the site.

Amendments to Michigan's solid waste statute was signed into law in December 2022 which will create a transition from solid waste management to materials management. Materials management intends to divert materials away from landfills to secondary markets where they can be repurposed and reused.

New Materials Management Plans are officially underway for each county in the State of Michigan that will collectively create a materials management system that protects our environment and contributes to the state's economy.

Electricity, Liquid Propane, and Renewable Energy Systems

Reliable energy systems are important for the residents of Onota Township. The residents are completely dependent on propane and wood for their home heating fuel and on the Alger Delta Cooperative Electric Association for their electricity needs. A such, access to electricity and propane to maintain their homes should be secure, reliable, consistently affordable, and environmentally safe. Yet the energy service systems they rely on are being challenged by changing climate conditions that include more frequent and intense storm events and aging infrastructure.

Electric services provided by the Alger-Delta Cooperative Electric Association are valuable for bringing electricity to rural areas but the Alger Delta Cooperative does not generate its own electricity so there are limitations in its ability to provide substantial savings to homeowners through a net metering program. Homeowners who would like to decrease their dependency on fossil fuels and lower their electric bills through the generation of renewable energy benefit from a net metering program because it allows them to sell excess energy back to the utility companies for credit which is applied to their monthly energy bill at the retail rate.

Net metering can significantly reduce electricity costs for residents who have solar or wind energy systems installed to heat their homes and accessory buildings. The savings in electricity costs promote the growth of solar and wind energy by incentivizing homeowners to invest in renewable energy installations.

Natural Gas service is not available in the township. Most of the residents of Onota Township rely on liquid propane or wood to heat their homes. The threat to the production and distribution of propane is of real concern for UP residents yet there is little redundancy in long-term reliable heating systems leaving residents vulnerable to liquid propane availability.

Propane prices fluctuate based on supply and demand. Supply can be limited due to prolonged periods of cold weather, interruptions in production. Demand increases when winter temperatures are low for prolonged periods or sever storm interrupt the transportation of propane to the property owner.

Issues and Opportunities

Issue #1

Residents should be encouraged to fill their propane tanks during off-peak seasons to avoid an impact on the supply of propane available in the Upper Peninsula.

Issue #2

Electric Cooperatives such as Alger Delta are important to the electrification of rural areas in the central region of the Upper Peninsula. They are a private non-profit, owned and operated by its members living in their service area but they do not offer a net metering program that supports energy cost savings for residential scale renewable energy systems.

Opportunity #2

As solar becomes a more desirable option for energy diversification in rural locations, Alger Delta should be contacted to discuss how their electric service can respond to future renewable energy systems.

Issue #3

Onota Township has an aging population that will find it more difficult to heat their homes with wood as they age.

Opportunity #3

Township volunteers may want to consider collecting and storing firewood for use by the residents that need it.

Chapter 7

Natural Resource Preservation and Recreation

Onota Township is rich in untouched natural resources ideal for low-impact outdoor recreation activities that preserve the natural beauty of the area. The dramatic terrain with rock outcroppings, lush forests, abundant rivers and streams with rapids and waterfalls, and 22 miles of Lake Superior coastline provides unsurpassed beauty all four seasons of the year. It is the desire of Onota Township residents to preserve and protect these natural systems through little or no development and allow limited access through unimproved roads and limited signage.

The Harry and Hattie Hanford Memorial Nature Sanctuary pictured below is held by the Michigan Nature Association. This is a 40-acre site with about 1270 feet of Lake Superior coast located 10 miles north of the Laughing Whitefish Falls State Park and directly west of the state-owned Laughing Marsh and river mouth. The site can be accessed via the Malette Point Trail, and it has a marked trail to the rocky shoreline.



The Rock River Canyon Wilderness is a 4,640-acre area within the Hiawatha National Forest in Onota Township. This is a remote waterway where the Rock River and Siver Creek flow through 150-foot-deep canyons. The two canyons are separated by a broad, flat ridge and surrounded by relatively flat uplands. During the spring, the rivers crest over the Rock River Falls into Ginpole Lake bordered by canyon walls.

During the winter months, the Rock River Canyon Wilderness becomes the Eben Ice Caves by ice stalactites that form over the entrance to the bedrock undercuts. To access the ice caves,

one must park on private property and walk across private property to get to the cave sites. The private property owner allows parking and access to the caves. The Rock River Canyon Wilderness area is the highest level of protection granted to federal lands. The Eben Ice caves are heavily visited during the winter months and are frequently used by ice climbers. Also, the North Country Trail runs through the Rock River Canyon Wilderness.



The Laughing Whitefish Falls State Park is a 960-acre area located along the Laughing Whitefish River in Onota and Rock River Townships. The recreation facility has a parking area and a gentle half mile trail through a beech and maple tree forest. The trail leads to the top of the Laughing Whitefish Falls that cascade down a fanning 100-foot escarpment. A series of well-constructed stairs and platforms allow visitors to walk down to the base of the waterfalls for a full visual effect.

The Laughing Whitefish Falls is also a popular winter destination for ice climbers.



Onota Township is rich in remnants from its history in logging during the turn of the twentieth century. Large kilns were built in 1879 to produce charcoal for the iron furnaces in Marquette. These kilns were huge and used nearly an acre and a half of hardwood with each firing that lasted a week and a half. Eventually, all of the hardwood was harvested and the kilns were closed in 1896. Below is a photo of one of the remaining kilns. The kilns are located on private property and are not available for public viewing.



Tyoga Settlement Trail and Campsite

Tyoga was a thriving logging town in Onota Township for a brief period from 1905 to 1907. The story of that settlement is told along a beautiful two-mile interpretive trail that meanders along the Laughing Whitefish River.



There are four rustic campsites that include fire rings and picnic tables near the trailhead and a port-a-john that serves all four campsites. The trail and campsites are the result of a cooperative effort between Onota Township volunteers and the Michigan Department of Natural Resources Park and Recreation Division under the Van Riper State Park System.



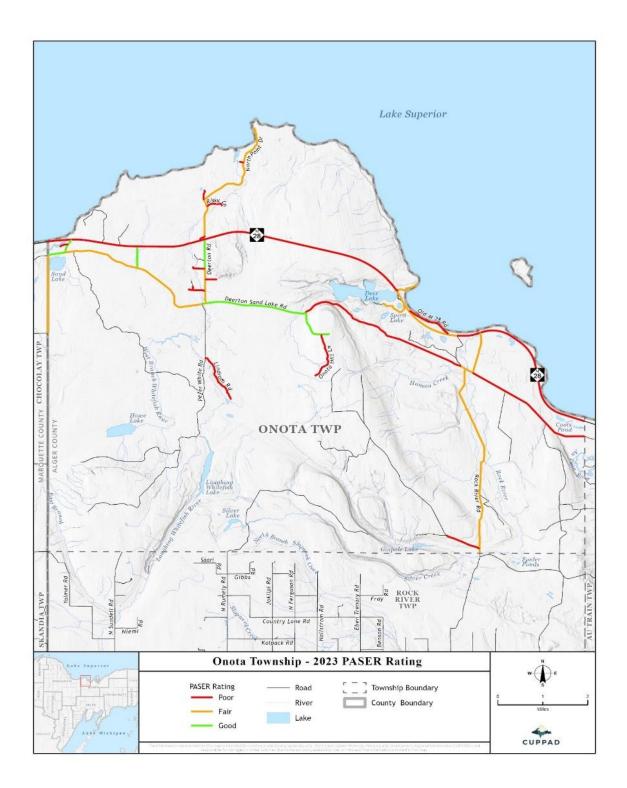
Chapter 8

Transportation

Michigan Act 51 of 1951 requires that all counties and incorporated cities and villages establish and maintain road systems under their jurisdiction. Roads within the Township, classified under Act 51, are identified on the map below. Counties, cities and villages receive approximately 61 percent of the funding allocated through Act 51 for local roads. State highways under the jurisdiction of the Michigan Department of Transportation receive the remaining 39 percent. Road funding allocations are determined by a formula that includes mileage.

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

County primary roads aid the movement of traffic from smaller population centers to larger population centers. County primary roads are the road network to the state trunklines.



County local roads have the lowest level of traffic yet make up the most miles of roads in the township. County local roads are frequently referred to as township roads even though the county road commission has jurisdiction over all of the county's local roads in the townships. The cost of maintenance is shared between the township and the county road commission. If the Township cannot meet the matching fund requirements, the road improvement project does not go forward. For this reason, townships frequently request the voters to approve a road millage. Onota Township currently does not levy a road millage to support the cost of road improvements. Road improvements in Onota Township are matched with general fund dollars paid by tax collected from property owners in Onota Township. The road system and the number of miles in Onota Township are in the table below.

Road System	Miles within Township	Pavement
County Primary	10.10	1.5 miles
County local	28.19	No
M-28	14	Yes
Federal	23	No

Road Condition Assessment Process

The Transportation Asset Management Council (TAMC) was formed under Public Act 499 of 2002 as an organization made up of professionals from road agencies, cities, township officials, regional planning organizations, and state transportation department personal. TAMC reports directly to the Michigan Infrastructure Council and functions as a resource for State Transportation Commission. TAMC 's mission is to collect the physical inventory and condition data in all roads and bridges in Michigan. PA Act 51 requires each local road agency and the Michigan Department of Transportation to report the road and bridge conditions to the TAMC annually. Regional Planning Agencies such as CUPPAD, have been given the responsibility for gathering and reporting local road conditions according to TAMC guidelines based on a pavement surface rating and evaluation system (PASER) that ranks the pavement conditions on a scale for 1 to 10 and is reported as Good, Fair or Bad. Below is a map of the Onota Township 2023 PASER Rating.

Public Transportation

Public Transportation in Alger County is available through Altran. The Altran office and their fleet of buses are located in the City of Munising. Altran provides on-demand bus services throughout Alger County Sunday through Saturday from 6:00 AM to 2:00 AM but service becomes less efficient when service is requested in the less populated areas of the County. According to the Altran website, "Outlying areas require a 48-hour notice when scheduling rides and are subject to availability."

Besides their regular demand-response services Sunday through Saturday, Altran offers transportation to and from the City of Marquette for Alger County residents. Every Monday through Friday the Altran buses leave Munising at 6:15 a.m, 11:15 a.m, and 3:15 p.m. and leaves Marquette from the Spring Street Station at 8:00 a.m, 1:00 p.m., and 5:00 p.m.. This type of regular, reliable scheduling provides transportation services for medical appointments, shopping, work, or school that people can rely and depend on.

Private Roads

There are a few residential areas served by private roads in Onota Township. Private roads are maintained solely by the residents who either do the work themselves or contract the maintenance to a private contractor. If not regulated by the Township, the condition or location may affect the ability of firetrucks, and ambulances to gain access. The Road Commission does not provide any maintenance on private roads, but the Township can regulate road construction standards for all newly developed private roads and enforce setback requirements on structures being built.

Trail Systems

Onota Township has multiple trail systems that traverse across the entire Township plus the many trails systems and forest roads in the Hiawatha National Forest. The Michigan Department of Natural Resources works with the local snowmobile and ORV clubs and local landowners to maintain a well-established network of snowmobile trails and ORV trails across the Upper Peninsula. Snowmobile Trail #417 is located south of M-28 and runs east to west across Onota Township and into Marquette County. ORVs up to 65 inches wide are allowed to ride on Snowmobile Trail #417 during the ORV season from April to November. The trail is considered restricted because it does not support ORVs wider than 65 inches.

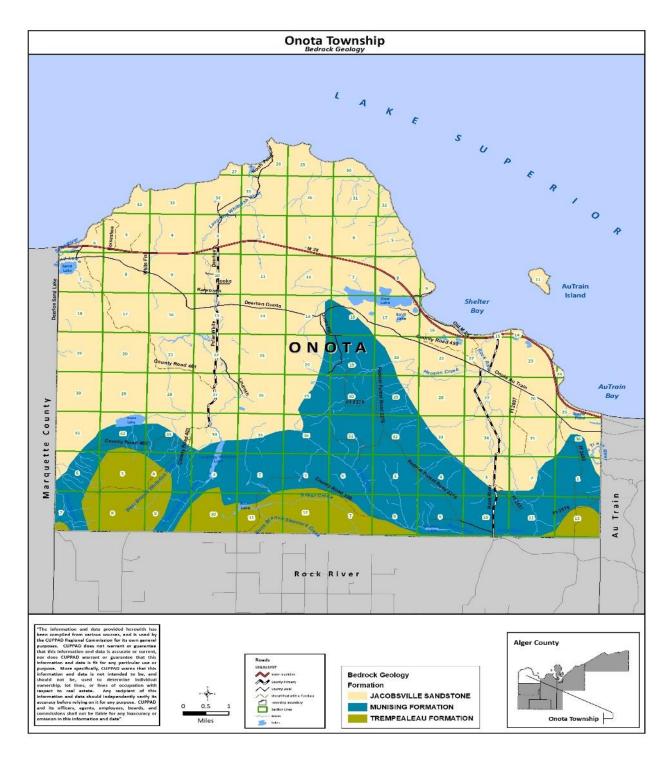
The North Country Trail System also crosses Onota Township entering from the Sand River Road from Marquette County down to the Laughing Whitefish Falls State Park and up to Rock River Canyon and over to Au Train Township.

Chapter 9

Natural Features

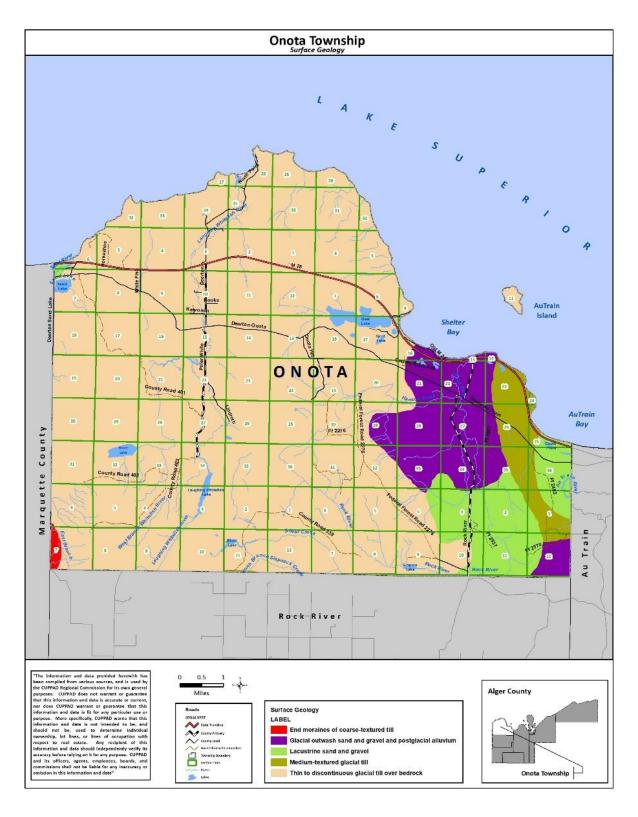
Natural features are the landforms and ecosystems that make Onota Township geographically unique. Bedrock and surface geology affect the ability to supply ground water especially along the Lake Superior coast and many of the soils are poorly rated for septic tank absorption fields because of higher water tables or low depth to bedrock. Understanding the limits of these natural features will help the Township plan for areas suitable for development and areas that should be preserved.

The bedrock in Onota Township is predominantly Jacobsville Sandstone (map, page 34 which is very dense with low permeability. This bedrock is often near the surface and is not sufficiently porous enough to allow water wells to produce at rates sufficient for communities. In addition, Jacobsville Sandstone is considered to have favorable characteristics for containing uranium minerals which is believed to be carcinogenic. The map below shows that a vast amount bedrock in Onota Township is Jacobsville Sandstone.



The surface geology is the rock formation and other features below the topsoil. Categories of surface geology are based on the material content and formation process of the various deposits, as shown on the map below. Glacial deposits occur as a result of surface water, by moving streams or outwash, or by lake deposits.

Beaches ridges and dunes are found along Lake Superior at the eastern and western boundaries of the Township. These areas are characterized by ridges parallel to the shoreline. Dunes are both active sand and vegetated. Dune sand has a very high permeability. These areas are located



above the water table, which makes them an unlikely source of water. However, their high filtration capacities mean they serve as an important avenue for groundwater recharge.

Lacustrine deposits are sedimentary rock formations that formed at the bottom of ancient lakes. This surface geology can be found in the southeastern part of the Township along the Rock River where there are channels that have been cut by the melting of glacial water. The deposits are sand, silt, and clay which determines the permeability and water availability. Concentrations of more than 25 percent silt or clay slow the drainage process and result in swampy or marshy areas. If silt and clay are not present in high concentrations, the deposits are usually moderately to highly permeable. Highly permeable soils allow surface waters to drain quickly entering the water table before filtering contaminants that may exist on the surface. Rapid permeability is also a concern where the glacial till or deposits are thin over hard bedrock. Unfiltered or contaminated water drains to the bedrock surface and travels the path of least resistance to lakes and rivers. It is estimated that about 90 percent of the total township area has thin to intermittent glacial till over bedrock.

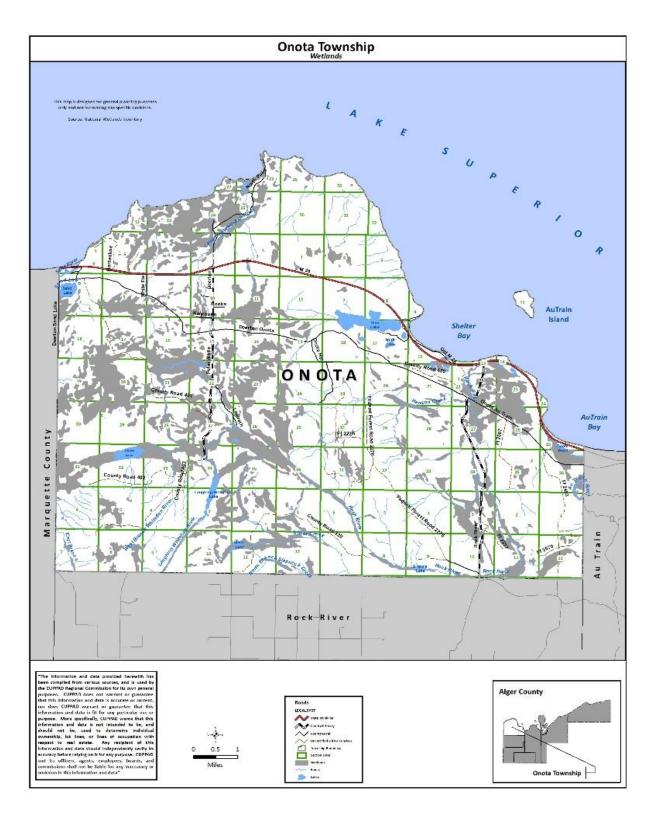
Shallow to moderately deep sandy glacial deposits and loamy till overlying sandstone bedrock is known as a bedrock-controlled moraine. These deposits will not yield supplies of water adequate for most uses. Medium-textured glacial till is composed of poorly sandy clay and boulder till of low permeability, generally a thin veneer over bedrock. This deposit is found in the eastern portion of the township. These deposits will not yield supplies of water adequate for most uses. Many wells in these areas fail because of the impermeable drift or bedrock at a shallow depth.

Thin to discontinuous glacial till dominates the western portion of Onota Township. Surface runoff is filtered through the soil and other materials that overlay bedrock. When bedrock is close to the surface and the filtering layer is thin, the opportunity for polluted runoff to enter the groundwater table is increased. Glacial outwash sand and gravel and postglacial alluvium are found in the northeast section of the township. Outwash deposits areas of stratified sand and gravel, which are left over from the glacial meltwater streams. This type of deposit contains little or no clay or silt which makes it the most permeable of the glacial drift deposits in the township. There are three soil associations throughout the Township, each with properties that make the Township poorly rated for septic absorption fields. For that reason, most drain fields utilize a mound system. Mound systems are used frequently for properties along the lakeshore, depending on the elevation and there are areas along the lake shore in the shelter bay area where the water must be treated.

Wetlands, Floodplains and Protected Areas

There are about 6,800 acres of wetlands in the Township according to data from the Michigan Resource Information System (MiRIS). Wetlands cover about 12 percent of the Township's land area. The map provides generalized wetland areas according to the federal Natural Wetland Inventory. Development in wetlands is prohibited by Michigan's Department of Environment, Great Lakes and Energy (EGLE. Michigan is only one of three states to have received

authorization from the federal government to administer the federal wetland program. Because of this approval process wetlands, lakes, and streams permits issued by EGLE under state law also provides federal approval.



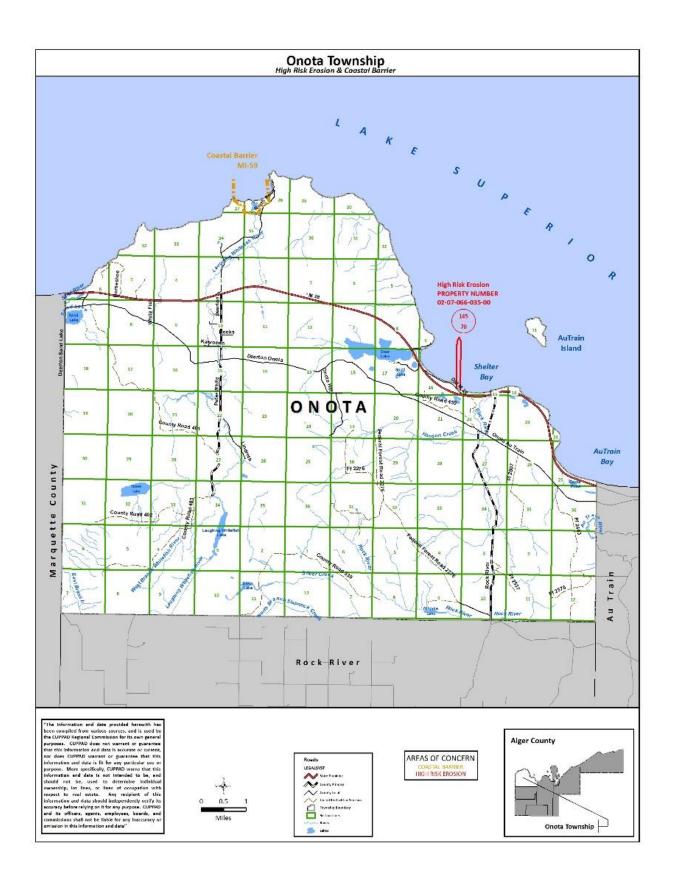
A wetland area may be referred to as a swamp, bog or marsh and is normally characterized by the presence of water at a frequency and duration sufficient to support wetland vegetation and aquatic life. Wetland areas help to improve water quality by filtering pollutants and trapping sediments.

The Federal Emergency Management Agency (FEMA determines flood hazard zones that describe the flood risk for a particular area, and those flood zones are used to determine insurance requirements and costs through the National Flood Insurance Program. Moderate to low-risk flood areas are designated with the letters B, C, and X on FEMA flood maps. In these areas, the risk of being flooded is reduced, but not completely removed. High-risk flood areas begin with the letters A or V on the FEMA flood maps. These areas face the highest risk of flooding. Property owners who want to develop in a high-risk zone and have a federally-backed mortgage are required to purchase flood insurance as a condition of that loan.

Currently, Onota Township does not participate in the National Flood Insurance Program. This has not prevented township homeowners from qualifying for flood insurance. Flood Insurance remains available to homeowners who submit a survey of their property to the mortgage lenders.

High-Risk Erosion areas have been identified in Onota Township by the EGLE under the state's Natural Resource and Environmental Protection Act and are shown on the map. These are areas where active erosion has been occurring on a long-term average rate of one foot or more per year. The erosion is the result of several factors, including high water levels, storms, wind, groundwater seepage, and surface runoff.

Onota Township also has property that is regulated by the Coastal Barrier Resource Act. The Coastal Barrier Resources Act (CBRA) of 1982 established the John H. Chafee Coastal Barrier Resources System (CBRS) defines a set of relatively undeveloped coastal barrier units located along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. Coastal Barrier units. These areas are delineated on a set of maps that are enacted into law by Congress and maintained by the Department of the Interior through the U.S. Fish and Wildlife Service. The purpose of the Coastal Barrier Resources Act is to recognize and preserve the ecological value of these habitats for migratory birds and other wildlife by restricting federally funded development within an identified coastal barrier unit.



Issues and Opportunities

Issue #1.

Development in Onota Township is limited by its natural features. The bedrock limits access to water-producing wells, surface geology limits the availability of potable water and the soils limit the development of septic systems.

Opportunity #1

These natural limitations to the development of any density will allow Onota Township to remain rural and naturally beautiful.

Issue #2

Onota Township, like many townships in the Upper Peninsula, has several landowners that store large amounts of vehicles and boats on their property. Due to the high permeability of the soils, shallow glacial till and bedrock with low permeability, this should be considered a future health hazard. As the vehicles continue to deteriorate, highly toxic mechanical fluids will be released into the soil and will drain into the water systems including aquifers, rivers and streams, and Lake Superior.

Opportunity #2

Compliance for clean-up should be enforced and framed as reducing a future health hazard. Most residents of a community understand the importance of clean water.

Chapter 10

Energy Systems

Reliable energy systems are important for residents in Onota Township as the residents are completely dependent on propane and wood for their home heating fuel and on Alger Delta Cooperative Electric Association for their electricity needs. Access to electricity and propane to maintain their homes should be secure, reliable, consistently affordable and environmentally safe. Yet the energy service systems they rely on are being challenged by changing climate conditions that include more frequent and intense storm events and aging infrastructure.

Recognizing the unique energy challenges in the Upper Peninsula of Michigan, the UP Energy Task Force was formed through Executive Order No. 2019-14. The purpose of the UP-Energy Task Force was to assess the UP's overall energy needs and how they are being met; and formulate

alternative solutions for meeting the UP's energy needs with a focus on security, reliability, affordability, and environmental soundness and identify and evaluate potential changes that could occur to the energy supply and distribution in the UP.

Part I of the UP Energy Task Force Committee Recommendations were published in 2020 and include the following observations and steps that could be explored to minimize a disruption in the delivery and cost of propane.

- Increase Storage Capacity Michigan has some of the highest propane storage capacity in the nation but most are in lower Michigan. The Upper Peninsula's capacity is about 9 million gallons. However, the Upper Peninsula consumes about 34 million gallons of propane per year and about 78% of that is for residential purposes. In extreme weather, residential use can increase by 20%. Encouraging residential and commercial tanks to be filled at the beginning of the heating season would increase the propane reserves in the UP. Propane storage capacity could also be expanded by creating an incentive program that would encourage retailers and wholesalers to create more propane storage.
- Improve rail infrastructure to make the propane supply more resilient during potential disruptions. Challenges include upgrading existing rail systems to be approved for hazardous substances and have offloading capabilities. Both rail and trucking have their limitations especially during extreme weather events. There are benefits to multiple modes of propane transport, but implementation would require time.
- The MSCP should identify and monitor factors that contribute to a propane shortage and make recommendation for action by the Legislature.
- Support access to propane through assistance programs that off payment for heating fuel, electricity and home repairs that address energy waste reduction measures including homes fueled by propane.
- Explore State contracting for propane to see if other benefits can be added such as additional storage capacity or bill payment assistance for low-income residents.
- Michigan's consumer protection laws should be revised to ensure that the prices charged to customers reflect the actual costs incurred by propane providers especially during times of an emergency.

Part II evaluates the U.P.'s energy needs over the long term and explores various factors that are contributing to higher energy costs for the Upper Peninsula and makes recommendations for improved energy reliability and cost.

Promote coordinated planning for U.P. energy providers by encouraging all U.P. electric
providers to participate in a region-wide electric plan. The plan should focus on electricity
demand vs generation, grid reliability, the mapping of utility service areas and identifying

opportunities and incentives for collaboration. UP investor-owned utilities should be encouraged to develop distribution plans. The MPSC has limited authority over municipal and electric cooperatives which serve nearly half of all UP customers.

- Expand opportunities for energy waste reduction through utility companies, electric cooperatives and the Propane Commission. Expand access to revolving loan funding to enable customers/homeowner to obtain financing for substantial upgrades that reduce energy consumption.
- Support renewable energy development.

Chapter 11

Goals and Strategies

Throughout the master plan, information has been gathered and presented covering all aspects of Onota Township. The information in this plan is intended to be a resource for the Onota Township Planning Commission as they make land use recommendations for the health, safety and wellbeing of Onota Township. The residents of Onota Township also had an opportunity to weigh in on how they would like to see the Township develop through survey responses gathered at the start of the master plan development process. The valuable input provided is at the basis of each goal and strategy in this chapter. Master Plan implementation will be met by making sure future land use decisions align with the goals and strategies outlined in this plan.

Population and People

Onota Township is uniquely located between the cities of Munising and Marquette where tourism is booming. Onota Township is experiencing a slow but steady growth in its population from people moving into the township. While the population of Onota Township is aging, the retires have more time to contribute their expertise to the Township's quality of life.

Goal: Population growth should happen slowly so as not to conflict with the natural environment or place pressure on the Township for the provision of additional services.

- **Strategy 1.** Watch for ownership changes in large tracks of land.
- **Strategy 2.** Seek land use controls that add layers of protection over sensitive natural systems.
- **Strategy 3.** Maintain a rural culture that is not influenced by economic development opportunities that do not complement or align with current local businesses.

Employment, Labor Force and Income

Onota Township hasn't had a local economy that supports its residents since the turn of the twentieth century so the workforce is accustomed to traveling outside the Township for employment. The few businesses that do exist are tourism-based. Economic growth in the township is not a priority for the residents of Onota Township as most of the population is retired and wants a rural lifestyle. The overall income of the residents in Onota Township is higher than other townships in Alger County but some families do live in poverty and lack the resources to change their economic conditions.

Goal: Ensure there are employment and financial opportunities where reasonable while retaining the rural quality of the Township.

- **Strategy 1.** Support local and home-based businesses when possible.
- **Strategy 2.** Inform the community about special programs or services that may assist with food or housing costs and reduce home energy expenses.

Local and Regional Economy

Onota Townships local economy is dependent on the economic viability of communities outside of their boundaries.

Goal: Remain a small bedroom community to the City of Marquette and the City of Munising.

Strategy 1. Pay attention to economic growth in the neighboring communities and consider the impacts it can have on the Township.

Strategy 2. Seek ways to avoid commercialization and support local, home-based businesses.

Housing

Onota Township has some of the most beautiful, remote coastal locations that attract individuals who want to develop a second home. The demand for prime real estate will continue to drive up the cost of housing in the Township making it difficult for families and young professionals to afford even the most basic home.

Goal: Onota Township will have a variety of housing options that will meet the needs of all household incomes.

- **Strategy 1.** Support opportunities to preserve older existing homes.
- **Strategy 2.** Consider working with the Alger County Land Bank on any tax-reverted properties in the Township and seek cleanup and redevelopment program grants that will create affordable housing.
- **Strategy 3.** Limit single family housing to areas in the township that are served by roads that are open and maintained year-round and are located in proximity to where other houses exist.

Community Facilities and Services

Goal: Always maintain and improve the Township's facilities, and infrastructure and provide cost-effective services

- **Strategy 1.** Continue long-term capital improvement planning as a budgeting tool
- **Strategy 2.** Expansion of facilities and/or services should be based on the Township's ability to sustain operational and maintenance expenses.
- **Strategy 3.** Continue to encourage residents to utilize the annual dumpster roll-off to dispose of large household waste items.
- **Strategy 4.** Pursue the development of a hazardous waste drop-off with other Alger County communities.

Strategy 5. Ensure the Township Hall and other infrastructure and equipment are well maintained.

Natural Resource Preservation and Recreation

Onota Township is rich with natural areas that provide outdoor enthusiasts an opportunity to visit and appreciate. Preserving those special areas are important to the Township so they remain special and untouched for generations.

Goal: Always preserve the natural areas in the Township and protect them from over tourism

- **Strategy 1**. Do not exploit natural areas as locations where tourists should go.
- Strategy 2. Encourage visitors to tread lightly and to leave no trace when they do visit.

Transportation

Maintaining some of the roads in the Township is a priority, but paving every road in the Township is not. Paved surfaces on roads are expensive and so is the maintenance. Ideally, the residents of Onota Township live where road systems can support residential traffic, or they accept responsibility for the inconvenience of living on a gravel road where there is less traffic and more privacy and seclusion.

Goal: Provide safe, well-maintained roads where needed in the Township

- **Strategy 1.** Work with the Alger County Road Commission to make sure Onota Township's County roads are in good condition.
- **Strategy 2.** Encourage development where roads receive the greatest amount of maintenance so emergency responders can access residents in need of assistance.
- **Stategy 3.** Support the development of trails for motorized and non-motorized use.
- **Strategy 4.** Discourage or minimize the placement of billboards along M-28.

Strategy 5. Continue the practice of review by the Planning Commission of proposed names for private drives before approval by the Township Board.

Natural Features

Goal: Always protect the Township's Natural Features including the surface and ground water

Strategy 1. Utilize zoning and other land use controls to minimize the ecological disturbance of natural features and maintain the area's rural character.

Strategy 2. Require that rezonings consider soil conditions, surface water proximity and parcel size.

Strategy 3. Consider the protection of ground and surface water for any type of development.

Energy Systems

Renewable energy systems are being encouraged through state and federal policy and funding as a response to changing climate conditions. As more energy related options become available for homeowners, Onota Township will want to be aware of how they may affect local land use decisions.

Goal: Support energy systems that are resilience, sustainable, efficient and affordable for the residents of Onota Township

Strategy 1. Be aware of rapidly evolving energy systems and how they may impact Onota Township's residents and the Township's rural character.

Strategy 2. Deploy methods of assistance to residents in need should current energy systems begin to escalate in price.

Strategy 3. Utilize zoning and other land use controls to regulate where large scale renewable energy systems should or should not be located.

Strategy 4. Protect the Township from incurring any financial expenses or experiencing a reduction in revenue from taxes from the development and future decommissioning of any renewable energy system.

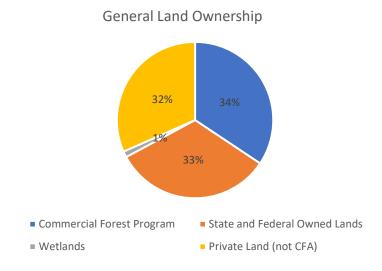
Chapter 12

Future Land Use

The analysis of current and future land uses, a zoning plan and a future land use map are required components of all master plans according to the Michigan Planning Enabling Act of 2008. This chapter addresses current land uses, considers natural limitations in development, and makes recommendations for land use looking 20 or more years into the future.

The Planning Commission and the Township Board should always refer to the information in this chapter when considering all zoning amendments and refer to the Future Land Use Map to make sure any map amendment requests are consistent with this Master Plan's adopted Future Land Use Map.

The chart below shows that approximately 68% Onota Township land is currently undevelopable because it is either owned by the state or the federal government, is used for timber production as prescribed by the Commercial Forest Program or there are wetlands that restrict development.



Land uses in Onota Township will likely stay the same given the Township's forestry-based land ownership, and natural limitations for commercial and residential development of any scale plus the large amount of land in the Township that is owned by the State of Michigan and the Hiawatha National Forest. Additional large private land holdings are predominantly held by timber companies and that is likely to stay given the desirable tax incentives from the Commercial Forest Program (CF. Most of the timber companies participate in the Commercial Forest Program (CF. The Commercial Forest Program is a voluntary program that provides tax incentives to private landowners to retain and manage their forestland for long-term timber production. The participating landowners do not pay an ad valorem general property tax. Instead, they pay a specific tax and the current specific rate for 2022 – 2026 is \$1.35 per acre. CF land must be devoted to commercial forest management and open to the public for access by foot to hunt, fish, or trap. CF lands cannot be used for agriculture, mineral extraction, grazing, industry, recreation development, housing, or commercial development. The CF program is administered by the Michigan Department of Natural Resources.

Should any of the timber companies decide to sell a portion of their landholdings in Onota Township to a residential developer, under current zoning, the developer could build "single-family dwellings including mobile homes, recreational structures, and agricultural production operations including crop cultivation, pastures, orchards, farmstead and similar uses, except intensive agricultural activity" as these are permitted principle uses in the current Timber Production and Resource Production zoning districts in the Onota Township Zoning Ordinance.

With the Township's proximity to commercial services in Alger and Marquette County, there will be little or no need to develop businesses that compete with what is already available down the road in either direction. The Township's biggest challenge will likely be the demand for prime real estate. Even properties that are naturally restricted with steep slopes and soils and bedrock that limit water and septic systems can be mitigated with enough resources from determined landowners. Overlay zones that restrict all development regardless of mitigation strategies are an option the Planning Commission may want to consider in the future for highly sensitive areas, and they should consider eliminating residential and recreational development as a permitted principal land use in the timber production district. Also, future residential development should be regulated to road systems that are engineered to sustain access by large emergency vehicles such as fire trucks.

Other land use challenges include changing the culture of accumulating large amounts of vehicles that will eventually poison the Township's soils and water systems. Residents should be reminded to remove all of the toxic fluids from their vehicles before retiring them indefinitely and to have their well water analyzed regularly. Perhaps a hazardous waste collection site can be set up at the Township Hall to support voluntary compliance.

Chapter 13

Zoning Plan and Future Land Use Map

Current Zoning Districts and Schedule of Regulations

Zoning decisions in Onota Township have shaped the Township's land use patterns over time. Each zoning district is specifically intended to provide a desired outcome. Below are the current zoning districts from the Onota Township Zoning Ordinance and their intent to protect the public health, safety and general welfare throughout each district.

District R: Residential

To establish and preserve quiet residential neighborhoods free from other uses except those which are both compatible with and convenient to the residents of the district.

Permitted Principal Use: Detached single family dwellings and recreational structures affixed to a permanent foundation that are compatible with other dwellings in the vicinity.

District R-5: Residential Five

To establish and maintain low intensity recreational and single-family residential use and occupancy, in areas where the natural characteristics of the environment may restrict accessibility. Essential government services may not be provided in this district.

Permitted Principal Use: Single family dwellings and recreational structures affixed to a permanent foundation.

District LS&R: Lake Shore and River

To establish low intensity recreational and single-familly residential use in areas with frontage on lakes and rivers. Areas restricted by natural characteristics may not receive essential governmental services.

Permitted Principal Uses: Single family dwellings and recreational structures affixed to a permanent foundation.

District TD: Town Development

Establishes and preserves a town district for single-family dwelling units, mobile homes and for retail commercial use that are compatible with a small-town setting and serve the residents and tourists. This district is designed for small-unincorporated town areas where a mix of residential and retail commercial is consistent and compatible with established patterns of use and the needs of nearby residents.

Permitted Principle Uses: Churches; detached single-family dwellings; homes on individual lots; recreational structures; hotels; lodges; resorts; youth camps; vacation rentals; bed and breakfast establishments; general retail establishments under 5,000 sq. ft. and no hazardous material that are designed to serve nearby residents and tourists and include such establishments as offices, clinics, grocery, drug, gift, hardware, or sporting goods stores, art and crafts studios, and other retail and personal service establishments.

District RP: Resource Production

To establish and maintain for low intensity use those areas which because of their location, accessibility, soils, drainage, and other characteristics are suitable for a wide range of agricultural, forestry and recreational use.

Permitted Principal Uses: Single-family dwellings, recreational structures, the growing and harvesting of timber and related activities, agricultural production operations including crop cultivation, pastures, orchards, farmstead, and similar uses, except intensive agricultural activity.

District TP: Timber Production

To maintain for timber production purposes and recreational use, those lands, because of their soil, drainage and other characteristics, are especially suited for timber production.

Permitted Principal Uses: The growing and harvesting of timber and related uses and single-family dwellings including mobile homes, recreational structures, and agricultural production operations including crop cultivation, pastures, orchards, farmstead and similar uses, except intensive agricultural activity.

District I: Industrial

To establish and preserve areas for necessary industrial and related uses of such a nature that they require isolation from many other kinds of land uses.

Permitted Principal Uses: Manufacturing, mineral extraction, and processing subject to the requirements of Section 4.17, processing, warehousing, auto body and paint shops, sawmills, research labs, contractor yards and shops, and construction and farm equipment sales. Outside storage shall be screened from adjacent properties of a higher use classification and public rights-of-way.

SCHEDULE OF REGULATIONS								
District	Minimum Lot Size (square feet)	Minimu m Lot Width (feet)	Minimum Setbacks Main Structure A	Maximum Height Main Structure	Minimum Setbacks Accessory Building/Structure A	Maximum Height Accessory Building/Struct ure		

	Permitted	Permitted	Front	Side	Rear	Height	Front	Side	Rear	Height Max.
	Use	Use								D
R	40,000	100	30	15	35	30	30	6	25	14
R-5	5 Acres	250	30	30	30	30	30	15	20	14
LS&R	1 Acre	120	30	15	40	30	30	10	20	14
TD	1 Acre	120	30	10	35	30	30	6	15	14
TP	40 Acres	660	35	35	40	30B	30	30	35	30B
RP	10 Acres	330	30	30	40	30	30	25	35	30
1	1 Acre	150	40	С	20	В	40	6	20	В

^{*}The maximum lot depth to width ratio shall be no greater than 4:1, except along the Lake Superior shoreline where the maximum lot depth to width ratio shall be no greater than 7:1.

A. Waterside minimum setback shall be 50 feet for main structures and 30 feet for accessory structures.

- B. Not to exceed the horizontal distance to any lot line.
- C. No minimum side yard required, however, a minimum thirty (30) foot wide clear and unobstructed access way and/or easement shall be provided to the rear yard of each lot or parcel. Setbacks from existing residential parcels shall be: 50 feet for all buildings: 25 feet for driveways, entrances or exits: and 10 feet for parking areas.
- D. Measured at sidewall.

Zoning Plan

Renewable Energy system

Renewable energy systems such as solar and wind are becoming more affordable as federal and state funds become available to assist homeowners and businesses with the cost of reverting their current heating and cooling systems to renewables. The Onota Township Zoning Ordinance allows for freestanding solar energy systems to be regulated as accessory buildings. Structurally attached solar panels are also regulated as accessory buildings with regulations on the panels extending beyond the peak of sloped roofs or more than 5 vertical feet on flat roofs. Section 4.27 of the Onota Township Zoning Ordinance already includes very comprehensive language on sound, lighting safety and abandonment of wind energy systems for Onota Township but does not include the same or similar consideration for Solar Energy Systems.

Large solar energy systems and Utility Grid Wind Energy Systems require significant acreage and may even cover hundreds of acres of land. It is not unusual for local elected officials and planning commission members' properties to be included in a project. The Onota Township Planning Commission Ordinance, adopted on September 9, 2012, and the Onota Township Planning Commission bylaws also adopted on October 8, 2012 carry specific language that addresses conflicts of interest and the limitations of voting members within the bylaw's description of a what constitutes a conflict of interest.

Solar Energy Systems

Solar energy systems are frequently preferred as a renewable energy system over wind energy systems for several reasons: the cost of solar technology is declining, Michigan is considered to have plenty of sun for solar energy use, and utility companies are required to plan for and commit to a certain percentage of their energy as coming from renewable sources by given dates. Solar, similar to wind energy systems, are available at various scales and configurations. It is important for Onota Township to understand the differences in land use impacts and plan for locations where solar is best suited within the township and require a land use permit before installation. As stated for wind energy systems, the Onota Township Planning Commission should require a decommissioning plan and repowering plan in Article IV Section 4.01 of the Onta Township Zoning Ordinance for all solar energy systems in the Onota Township Zoning Ordinance that exceed the definition of an accessory use. The Onota Township Planning Commission should require the solar energy developer to determine the projected cost for the removal of the solar installation and soil stabilization and provide a method or ensuring the funds will be available in the form of a surety bond, irrevocable letter of credit or a cash deposit. The Township should hire a third-party company to review the original cost estimate every three to five years to ensure the amount secured for decommissioning is adjusted to cover the current costs.

The Scale of Solar Energy Systems

Power generated by solar energy systems is often measured in megawatts hours. One megawatthour is equivalent to 1000 kilowatt-hours. It takes approximately 33.33 megawatt-hours to power a home for a month. The amount of power generated by solar panels depends on factors such as the amount of sunlight received, the efficiency of the solar cells and the size of the installation. As surprising as it may seem to most Michiganders, a solar panel in Michigan can produce about 70% of the amount of energy as a solar panel in Arizona.

Solar energy systems vary greatly in size, covering as little as an acre to thousands of acres. Because of this variation in the size and impact on a site, many communities may choose to distinguish between small and large principal-use solar energy systems in their ordinances as there is no established definition of "small" or "large," and for other industry or taxation purposes, large- and small-scale distinctions may differ. In assisting a community in making a distinction between scales of solar energy systems based on size the table below illustrates common solar energy systems outputs measured in megawatts (MW) of direct current (DC) and the average acreage of land required to host a solar energy systems of that output. Larger projects require more land per megawatt (5-10 acres per MW DC), depending on how many parcels are involved and the layout of solar panels within them.

COMPARISON OF MEGAWATT OUTPUTS TO ACREAGE NEEDED

Megawatts (DC)	Acres		
1 MW	5-10		

2 MW	10-20
20 MW	100-200
100 MW	500-1,000
200 MW	1,000-2,000

<u>Roof-Mounted</u>- roof-mounted solar energy systems can be included in all zoning districts where a structure of any sort is allowed. The Onota Township Planning Commission may want to allow roof mounted solar energy systems as a permitted use in all districts. This would provide greater energy savings for the residents and an overall benefit to the environment.

<u>Ground-Mounted</u> —are similar to roof mounted systems but are mounted next to the building rather than located on the roof. These are smaller installations that can be regulated by height and setback requirements as an accessory structure located in the side or rear yard. Given the rural nature of Onota Township, a ground mounted solar energy system should not infringe on neighboring properties when regulated by height and setback requirements as an accessory structure. A ground mounted solar energy system could also be a permitted use in all zoning districts in Onota Township.

<u>Large Solar Energy Systems</u> - should be regulated by setbacks, fencing, screening, sound, and ground cover by additional language in Article IV; Section 4.29 Administrative Standards that address specific siting requirements in the Onota Township Zoning Ordinance. Section 4.29 should include the requirements of a decommissioning plan and repowering plan for large solar energy systems by the solar developer upon application of a conditional land use permit. New standards specific to large solar energy systems should be included in the Onota Township Zoning Ordinance along with specific site plan requirements regardless of the zoning district when large solar energy systems are being proposed.

PROPOSED SOLAR ENERGY ZONING DISTRICTS

Zoning Districts	Roof Mounted	Ground Mounted	Large Solar Energy Systems
R, R-5	х	Х	
TD	Х	X	
RP	х	X	Х
TP	х	X	Х

Below are recommended zoning amendments that will align the Onota Township Zoning Ordinance with the updated Onota Township Master Plan.

Include specific solar energy guidelines in Article IV-General Regulations including detailed site plan review requirements and a decommissioning plan that must be submitted at the time of application.

The decommissioning plan shall include the following details:

- 1. The anticipated manner in which the project will be decommissioned including what will be removed, retained such as fencing and access drives or restored for viable reuse of the property consistent with the zoning district.
- 2. The projected decommissioning costs for the removal of the renewable energy system including the salvage value in current dollars and soil stabilization.
- 3. The method of ensuring that funds will be available for site decommissioning and stabilization in the form of a surety bond, irrevocable letter of credit, or cash deposit with the Township and
- 4. A review of the amount of the performance guarantee based on inflation, salvage value and current removal costs shall be completed every three to five years.
- 5. Decommissioning must commence when the soil is dry to prevent soil compaction and must be complete within 18 months.
- 6. A renewable energy system that has not produced electrical energy for 12 consecutive months shall prompt an abandoned property hearing.

The site plan requirements for large scale solar installations shall include the following:

- 1. A stamped, engineered site plan at the scale of 1"= 200 feet that includes the location of the installation, the setbacks, width of the arrays and the distance between the arrays plus the total height and height to the lowest edge above grade, ancillary structures and electric equipment, utility connections and dwellings on the property within 150 feet, participating and non-participating lots, existing and proposed structures, buried or above ground wiring, temporary and permanent access drives, fencing detail, and screening and landscape detail.
- 2. Plans for land clearing and or grading required for the installation of the system and plans for ground cover establishment and management.
- 3. Sound modeling including sound isolines extending from the sound source(s) to the property lines of adjoining non-participating lots.

Additional zoning amendment recommendations include removing single-family dwellings including mobile homes, recreational structures, and agricultural production operations including crop cultivation, pastures, orchards, farmstead and similar uses, except intensive agricultural activity from the Timber Production District's Permitted Principal Uses.

It is not necessary to include those as primary uses as they are already permitted in all districts except Industrial. Additionally, removing those permanent development uses from the Timber Production District will reduce the chances of property within the Timber Production District from changing ownership and undergoing residential development.

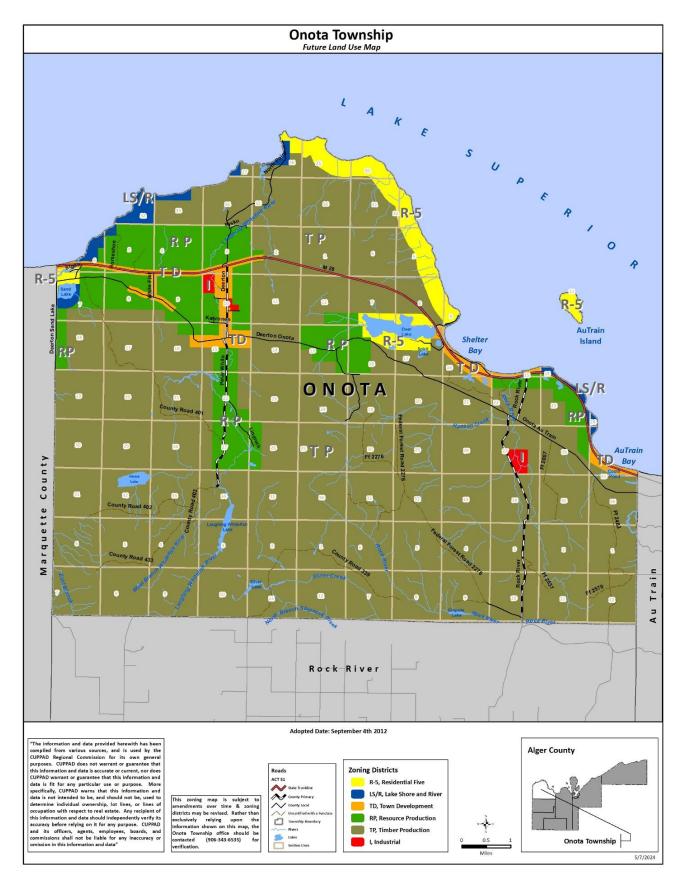
Future Land Use Map

The future land use in Onota Township will protect the natural environment from too much residential growth and protect the water systems from the improper storage of vehicles.

Commercial growth will also be limited due to naturally occurring limitations in water availability and soil suitability.

Onota Township's tax base will not increase rapidly as there are few locations available for development, few housing types that support a transient population to move into the Township and the residents that live in the Township intend to stay. As such, it is important for the Township to not invest in infrastructure beyond replacing what currently exists to avoid future maintenance and replacement costs.

Land use designations in the Onota Township Zoning Ordinance have formed the current land use patterns which has become the basis for the Onota Township Future Land Use Map (FLUM. The FLUM Map looks very similar to the Township's zoning map, but it is not used the same way. The Future Land Use Map has been simplified to reflect basic land uses that currently exist and reflects the types of land uses the Township wants into the future. The FLUM should be used by the Planning Commission when they are considering proposed zoning map amendments. Ideally any proposed zoning map amendment would be reviewed for consistency with the Goals and Strategies of the Master Plan and the FLUM.



Chapter 14

Master Plan Implementation

The Onota Township Master Plan is a living document that shall be reviewed annually by the planning commission to determine if the master plan remains a useful resource for the planning commission or if the information no longer adequately addresses the current land use issues of the time. The planning commission shall act in the form of a motion to accept the master plan for year it is reviewed or motion to amend the master plan in the future. Record the action taken and state the reason if a proposed amendment is recommended. The Planning Commission shall also maintain records of zoning ordinance amendments.

At least 5 years after the adoption of the master plan the planning commission shall review the master plan and determine whether to commence with the procedure to amend the master plan, adopt a new one or consider the existing plan still valid. The review and its findings shall be recorded in the minutes of the planning commission's meeting.