

Economic Analysis of Chippewa County, Michigan

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Executive Summary

Chippewa County is located in the eastern Upper Peninsula of Michigan and includes 1 city, 1 village, and 15 townships. It covers 2,698 square miles, 42% of which is water. The county seat is Sault Sainte Marie, the oldest community in Michigan, founded in 1668. The population is declining and aging. 2012 survey results show the citizens value education, the environment, and economic diversity.

Key Demographic Facts

- 2020 Population: 36,785, population density: 25 person/square mile
- Median Age: 40.5, largest cohort: 55-64
- Racial composition: 67% White, 15% American Indian, 9% Two or More Races, and 6% African American or Black

Key Economic Facts

- Median income: \$46,486
- Labor force: 17,000
- Unemployment rate: fluctuates seasonally between 3.5% and 9% in a single year
- Top employment sectors: Public Administration, Arts, Entertainment, and Recreation, Agriculture, Forestry, Fishing and Hunting, and Mining, and Retail Trade
- Employment growth: -2.76%, well below national level of 7.08%
- Largest Employers: Sault Ste. Marie Tribe of Chippewa Indians, War Memorial Hospital, Kinross Correctional Complex, Bay Mills Resort and Casino, Lake Superior State University, and U.S. Coast Guard
- Proven track record of economic resiliency and national model for how a community recovers from a major military base closure

Resources

- [Chippewa County Economic Development Corporation](#)
- [Eastern Upper Peninsula Regional Planning & Development Commission](#)
- [Sault Ste. Marie Economic Development Corporation](#)



Background and Demographics

Chippewa County is located on the southern shore of Lake Superior in the eastern Upper Peninsula (U.P.) of Michigan, Figure 1. The county covers 2,698 square miles, has 456 miles of Great Lakes shoreline, and contains nearly 458,000 acres of public recreation land. Chippewa County was organized in 1827 and is the second-largest county in Michigan. Sault Saint (Ste.) Marie is the county seat. It is the oldest city in Michigan, and among the oldest cities in the United States. Over 2,000 years ago, Native Americans started to gather here for the abundant fishing and fur that existed along the river that links Superior to Huron, they called the area “Bahweting” or “The Gathering Place”. In the 1600’s the French arrived and renamed the settlement Sault Ste. Marie. “Sault” means to jump and probably refers to the perilous rapids that cascade 21 feet from the level of Superior to the lower Huron. The Soo Locks were built in the 1850’s. Administered by the Army Corp of Engineers, the locks are the busiest in the world and include the largest lock in the Western Hemisphere. Nearly a million visitors each year come to marvel at one of engineering’s greatest feats. The International Bridge connects I-75 to the Trans-Canada Highway via Sault Ste. Marie, Ontario, population 78,159 (Statistics Canada, 2016). Chippewa County is a wonderland of unspoiled natural beauty, world renowned landmarks, and over a thousand years of Native American history (CCEDC, n.d.).



Figure 1: Location of Chippewa County, Michigan in yellow

Preliminary 2020 U.S. Census Bureau data lists Chippewa County’s population at 36,785. Table 1 shows the population as compared with Michigan and the nation. The county’s population declined by 4.5% since 2010. Population Density for the county is 24.7 person/square mile, Figure 2. The highest concentrations are in the city of Sault Ste. Marie and Kincheloe. Kincheloe was originally Kincheloe Air Force Base. It has since been converted to the Chippewa County International Airport, two large prisons, manufacturing, and housing.

	Chippewa County			Michigan			Unites States		
	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change
Total Population	38,520	36,785	-4.5%	9,883,638	10,077,331	2.0%	308,745,392	331,449,281	7.4%
Population Density	24.7	23.6	-4.5%	174.6	178.0	2.0%	87.4	93.8	7.4%

Table 1: Population, % Change of Population, and Population Density since 2010. Source: U.S. Census Bureau

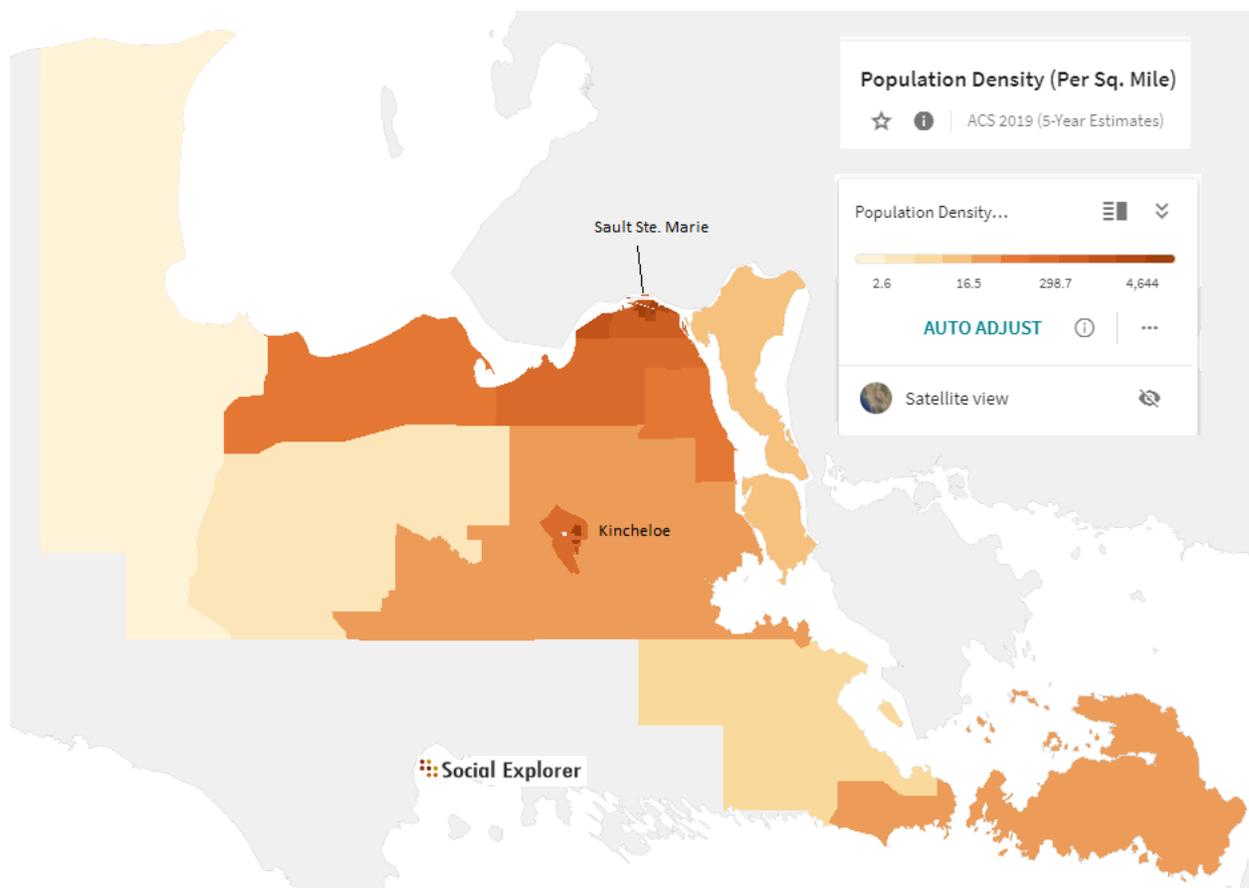


Figure 2: Population Density (per sq. mile) of Chippewa County. Source: Social Explorer/U.S. Census Bureau

The median age is 40.5 with the largest age cohorts 55 to 64 years and 45 to 54 years. Population according to race is shown in Figure 3. The county is home to two Native American tribes, the Sault Tribe of Chippewa Indians and the Bay Mills Indian Community, resulting in a high American Indian and Alaska Native percentage of 15.4% as compared to 0.6% and 1.1% for Michigan and the U.S., respectively. 51.1% of the county’s population lives in an urbanized cluster and 48.9% rural. The dominant lifestyle segment or “tapestry profile” via ESRI is Salt of the Earth described as:

Residents entrenched in their traditional, rural lifestyles. Citizens here are older, and many have grown children that have moved away. They still cherish family time and also tending to their vegetable gardens and preparing homemade meals. Residents embrace the outdoors; they spend most of their free time preparing for their next fishing, boating, or camping trip. The majority has at least a high school diploma or some college education; many have expanded their skill set during their years of employment in the manufacturing and related industries. They may be experts with DIY projects, but the latest technology is not their forte. They use it

when absolutely necessary but seek face-to-face contact in their routine activities (ArcGIS BAO, 2021).

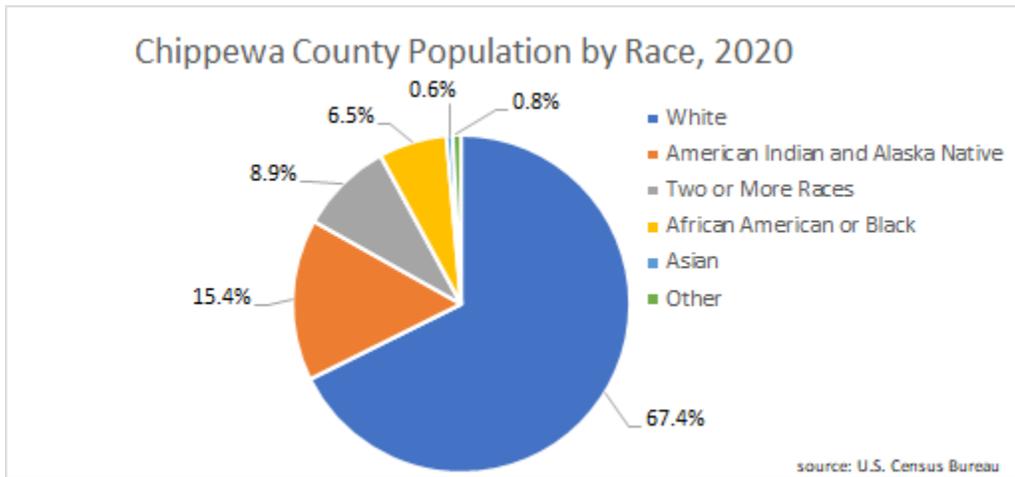


Figure 3: Chippewa County Population by Race, 2020



Economic Conditions

This section examines income, unemployment, education, housing, and poverty as they are related to Chippewa County’s economic condition and potential. The significance of the data is discussed along with the planning implications.

Income

Income is fundamental to people’s feelings of security and is an important predictor of health, education, and life satisfaction outcomes. Median Household, Family, and Per Capita Income data over time for Chippewa County, Michigan, and the nation are shown in Table 2. Income levels are below the state and national levels. The 2019 Median Household Income was \$46,486. This relatively lower level needs to be considered in light of area’s cost of living. According to the 2021 SmartAsset cost of living calculator, the cost of living in Chippewa County is 3% lower than Wayne County, MI and 9% lower than in Lake County, CA, both of which have a similar Median Household Income to Chippewa County according to the ACS 2019. The Median Household Income adjusted for inflation from 2000 shows that consumers in Chippewa

County have seen a loss of buying power of 10% since 2000. This is better than the state which saw a loss of 16%. It is important for planners to understand their constituent’s income levels. It would be a bad idea, for example, to try to attract a high-end store like Neiman Marcus to come to Chippewa County.

	2000			2010			2019		
	Chippewa	Michigan	US	Chippewa	Michigan	US	Chippewa	Michigan	US
Median Household Income	\$ 34,464	\$ 44,667	\$ 41,994	\$ 40,194	\$ 48,432	\$ 51,914	\$ 46,486	\$ 57,144	\$ 62,843
Median Family Income	\$ 41,450	\$ 53,457	\$ 50,046	\$ 54,066	\$ 60,341	\$ 62,982	\$ 57,256	\$ 72,600	\$ 77,263
Per Capita Income	\$ 15,858	\$ 22,168	\$ 21,587	\$ 20,309	\$ 25,135	\$ 27,334	\$ 25,086	\$ 31,713	\$ 34,103
MHI Inflation Adjusted	\$ 34,464	\$ 44,667	\$ 41,994	\$ 43,642	\$ 56,561	\$ 53,176	\$ 51,167	\$ 66,315	\$ 62,346

Table 2: Median Household Income, Median Family Income, Per Capita Income, and Median Household Income Inflation Adjusted from 2000. Source: U.S. Census Bureau, usinflationcalculator.com

Unemployment

Unemployment is an important macroeconomic indicator, it means labor is not being used efficiently, so production of goods and services are not maximized. Unemployment doesn’t just impact those who are jobless. Unemployed workers spend less, which can lead to even more unemployment, a sluggish economy, and low moral. Chippewa County’s Unemployment Rate for Civilian Population in Labor Force 16 Years and Older is shown in Table 3. The county had unemployment rate of 8.9%, higher than Michigan and the nation. Further investigation reveals that Chippewa County’s unemployment rate is extremely seasonal, Figure 4, with highs (peaks) every February and lows (valleys) every October in a very repeatable sawtooth pattern each year, only the Covid spike disrupts it in April 2020. There is an overall trend which tracks with Michigan and the nation if one averages out the cycles. The difference between peaks and valleys is about 5.5%. Within 2019 the unemployment swung from 8.9% to 3.3%. Further research is needed to understand the cause of cycles, but it may have something do with the weather, tourism, or the fact that shipping stops mid January and resumes March 25. Neighboring Mackinac County shows the clear pattern of tourism with low rates, 2%, in May through October and drastically higher rates, 21%, December through April in sine/square-wave pattern. Understanding the unemployment situation allows for planners to be able to target

and entice new businesses and retain and expand existing businesses.

	2000			2010			2019		
	Chippewa	Michigan	US	Chippewa	Michigan	US	Chippewa	Michigan	US
Civilian Labor Force	16,675	4,922,453	137,668,798	17,719	4,938,337	154,037,474	17,043	4,948,824	163,555,585
% Employed	90.0%	94.2%	94.2%	88.1%	88.5%	92.1%	91.1%	94.1%	94.7%
% Unemployed	10.0%	5.8%	5.8%	11.9%	11.5%	7.9%	8.9%	5.9%	5.3%

Table 3: Unemployment Rate for Civilian Population in Labor Force 16 Years and Older. Source: U.S. Census Bureau

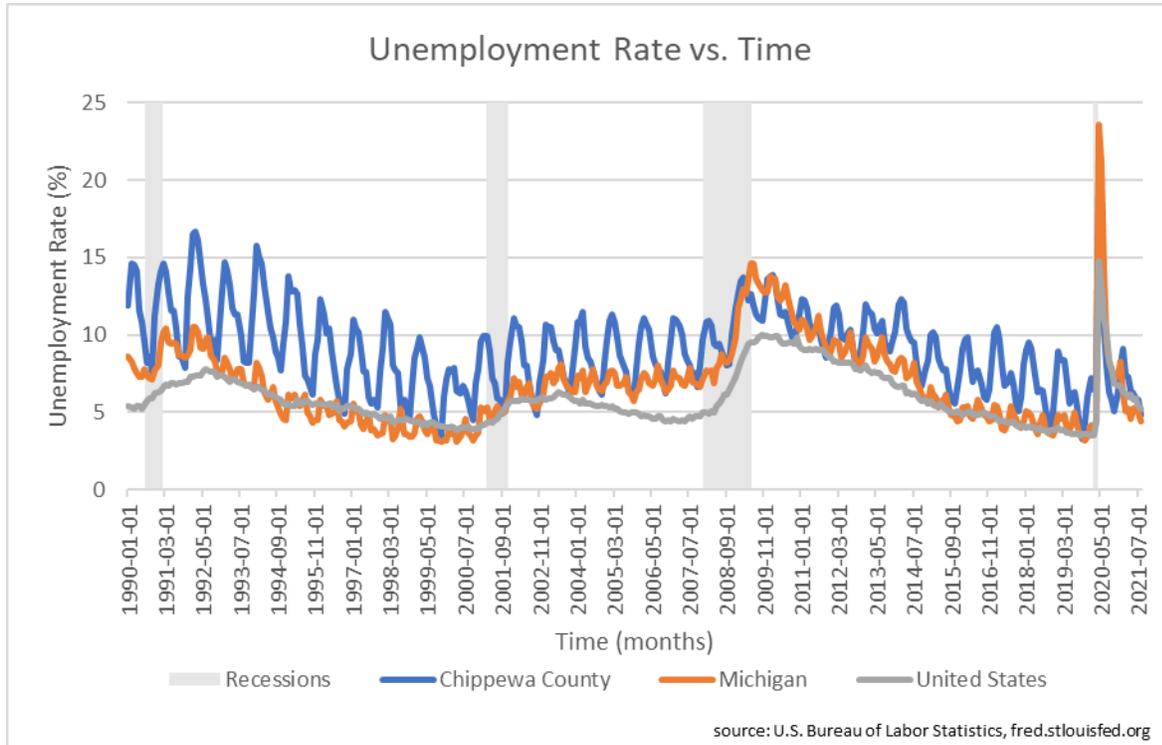


Figure 4: Unemployment Rate of Chippewa County, Michigan, and United States by the month

Education

Education is important to a region’s economic development as it raises productivity and creativity and promotes entrepreneurship and technological advances. It is also important role in advancing social progress and improving income distribution (Ozturk, 2008). One measure of educational attainment of a population is the % of Population Over 25 with Bachelor’s Degree or Higher. Table 4 shows this metric for Chippewa County, the state, and the nation. All three regions are increasing in education over time and all three are increasing at the same rate. When analyzed by county, Figure 5, Chippewa County, at 21.3%, is 32nd out of Michigan’s 83 counties. The highest percentage of educational attainment was Washtnaw at 55.9%. The

lowest was Oscoda County at 10.6%. Lake Superior State University (LSSU) is located in the county and provides undergraduate degrees in 45 areas of study. An interesting fact about LSSU is that it is the first university in the country to completely eliminate out-of-state tuition, every student in North America is charged the same rate. This “One Rate at Lake State” policy has enabled LSSU to attract students and talent from a much broader pool which certainly contributes to the county’s above average rank.

A well-educated workforce is the key to prosperity. Major findings of a report by the Economic Policy Institute have found 1) high-wage states are states with a well-educated workforce, 2) providing access to high quality education will expand economic opportunity for residents and likely do more to strengthen the overall state economy than anything else a state government can do, 3) cutting taxes to capture private investment from other states is a race-to-the-bottom economic development strategy that undermines the ability to invest in education, 4) states can increase the strength of their economies and their ability to grow and attract high-wage employers by investing in education and increasing the number of well-educated workers, and finally 5) investing in education is good for state budgets in the long run, since workers with higher incomes contribute more through taxes over the course of their lifetimes (Berger & Fisher, 2013). These are findings a planner must deeply consider as they prepare their strategies.

	2000	2010	2019
Chippewa	15.0%	18.0%	21.3%
Michigan	21.8%	25.0%	29.1%
US	24.0%	27.9%	32.2%

Table 4: % of Population Over 25 with Bachelor’s Degree or Higher. Source: U.S. Census Bureau

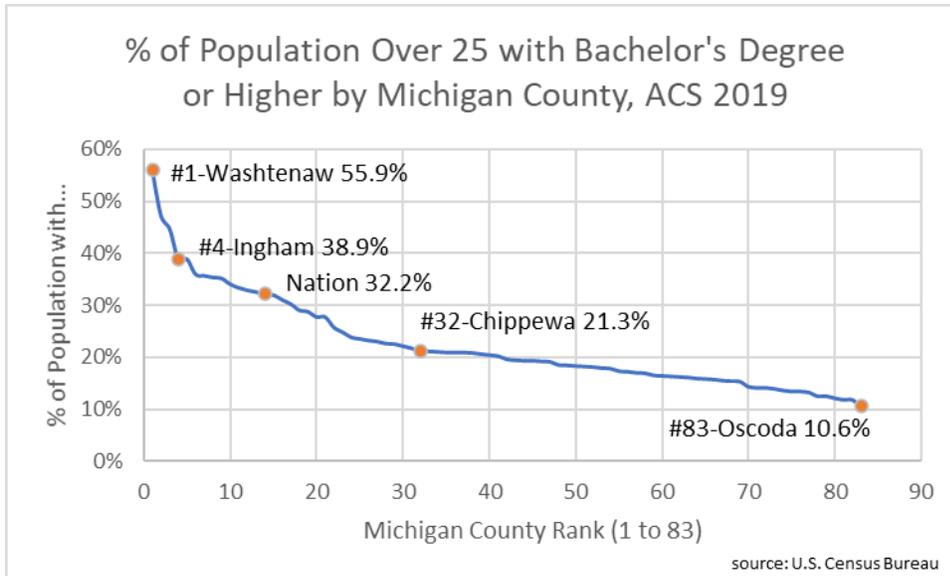


Figure 5: % of Population Over 25 with Bachelor's Degree or Higher by County

Housing

Housing is one of the 3 basic needs (food, clothing, and shelter) of mankind. It is also an important component of investment and many peoples' largest component of wealth. A well-functioning housing sector is crucial to the overall health of the economy. Adequate housing facilitates labor mobility and helps economies adjust to adverse disturbances. Table 5 shows the Median Home Value, Median Gross Monthly Rent and corresponding values with inflation considered. Home values are less than the state and nation and have maintained their value over time as demonstrated by comparing the Inflation Adjusted Median Home Value with the actual value. Rents are perfectly in step with inflation in the county and in Michigan as a whole. 67.6% of residents own their own home and 32.4% rent. Housing in the county is quite affordable, ranking at 171 on the ESRI Housing Affordability, where 100 means a median income can buy a median priced home and values greater than 100 indicate increasing affordability (ArcGIS Business Analyst, n.d.). The affordability of housing is a major reason for Chippewa County's low cost of living. Ensuring adequate housing is a key issue for planners and positive housing conditions can be used by planners to entice new businesses and people to the area.

	2000			2010			2019		
	Chippewa	Michigan	US	Chippewa	Michigan	US	Chippewa	Michigan	US
Median Home Value	\$ 75,800	\$ 110,300	\$ 111,800	\$ 103,100	\$ 144,200	\$ 188,400	\$ 119,100	\$ 154,900	\$ 217,500
Median Gross Monthly	\$ 426	\$ 546	\$ 602	\$ 541	\$ 723	\$ 841	\$ 674	\$ 871	\$ 1,062
Inflation Home Value	\$ 75,800	\$ 110,300	\$ 111,800	\$ 95,985	\$ 139,672	\$ 141,571	\$ 112,539	\$ 163,757	\$ 165,984
Inflation Gross Rent	\$ 426	\$ 546	\$ 602	\$ 539	\$ 691	\$ 762	\$ 632	\$ 810	\$ 894

Table 5: Median Home Value, Median Gross Monthly Rent. Source: U.S. Census Bureau

Poverty

Poverty is linked with negative conditions such as homelessness, food insecurity, lack of access to health care, increased crime, and under-resourced schools. Poverty rates are related to the overall health of the economy, as the economy grows so usually does employment and income grow. Table 6 shows the Percent of Population Segment Living in Poverty over time. In 2000, Chippewa County poverty rates were similar to the nation's however while both Michigan and the nation slowed their increase and then started to decrease after 2010, Chippewa County's 17 and under continued to rise. This high childhood poverty rate is a serious concern. 18-64 follow the Michigan trend but are consistently higher by about 3% to 5%. The 65 and over group is comparable to the nation and remains steadily around 10%. The county's 2019 poverty rate was 18.4%. It is important for planners to not just consider economic effects of poverty but also social inequality it generates.

	2000			2010			2019		
	Chippewa	Michigan	US	Chippewa	Michigan	US	Chippewa	Michigan	US
17 and under	16.2%	13.9%	16.6%	23.0%	20.5%	19.2%	28.8%	19.9%	18.5%
18-64	12.1%	9.6%	11.1%	17.8%	14.0%	12.6%	17.6%	14.0%	12.6%
65 and over	9.6%	8.2%	9.9%	9.7%	8.3%	9.5%	10.0%	8.4%	9.3%

Table 6: % of Population Segment Living in Poverty. Source: U.S. Census Bureau

Location Quotient

A location quotient (LQ) is a statistic that measures a region's industrial specialization relative to a larger geographic unit, the nation in this case. It is computed as an industry's share of a regional total divided by the industry's share of the national total. The formula is $(e_i/e_r)/(E_i/E_T)$ where e is the regional data, E is the national data, and subscripts represent the employment in a specific industry (i) and the employment total of all industries (T). An LQ

greater than 1.0 indicates that a specific industry cluster is more dominant locally than nationally and vis-versa.

March Employment LQ for 2021 first quarter at the NAICS sector level for Chippewa County using data from the Bureau of Labor Statistics (BLS) is shown in Figure 6, raw data link in Appendix. LQs were computed from two other sources, ACS 2019 Employment Status for Total Population 16 Years and Over and ESRI ArcGIS Business Analyst Online (BAO) Civilian Labor Profile, in order to get a better picture of the situation, especially in light of the highly seasonal unemployment and the fact the BLS suppressed certain important industries (Forestry, Fishing, & Related Activities, Mining, Utilities, Wholesale Trade, Management of Companies, Administrative & Waste Services) clumping them into “Unclassified”. Figure 7 shows that, in March 2021, Retail Trade was the highest sector followed by Unclassified and Accommodation & Food Services. Figure 8 shows the ACS 2019 LQ results, note the different industry categories. The ACS 2019 results cover data collected over a 5-year period from 2015 to 2019. Public Administration emerges as the strongest followed by Arts, Entertainment, & Recreation, and Accommodation & Food Services then Agriculture, Forestry, Fishing & Hunting, & Mining, and Retail Trade in 4th. Finally, Figure 8 shows the 2021 ESRI LQ results with even more industry classifications. Arts/Entertainment/Recreation and Public Administration are the strongest by far, Retail Trade dropping to 5th place, outperformed by Mining/Quarrying/Oil & Gas and Accommodation/Food Services.

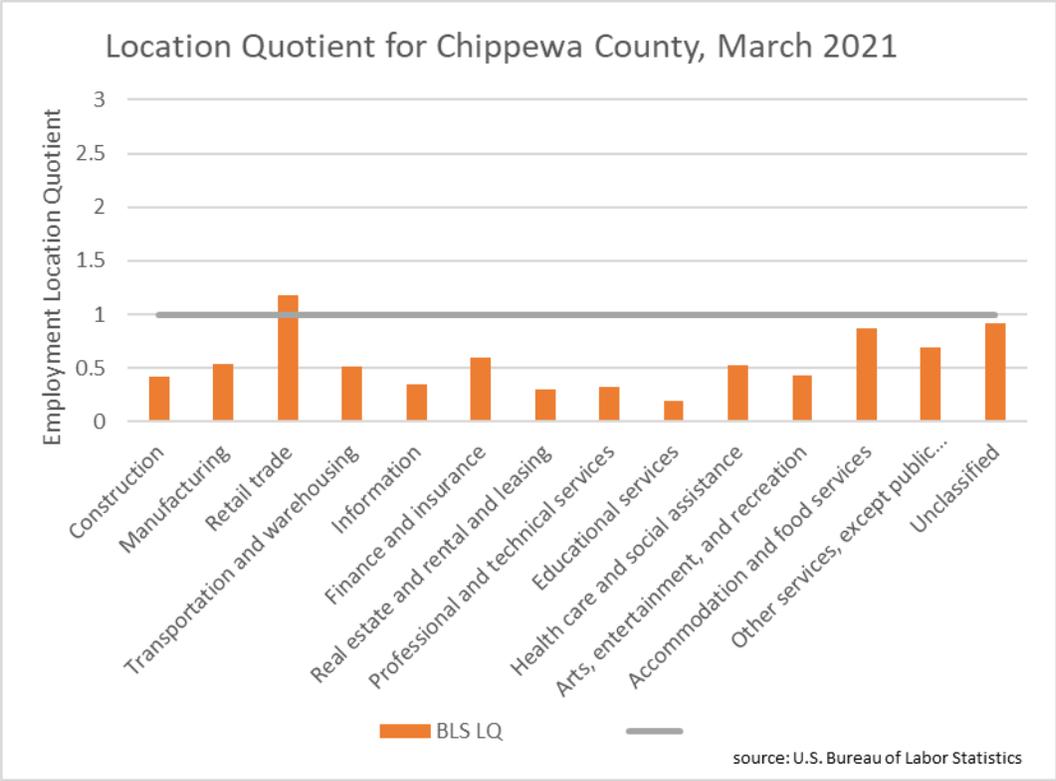


Figure 6: Location Quotient for Chippewa County using BLS data

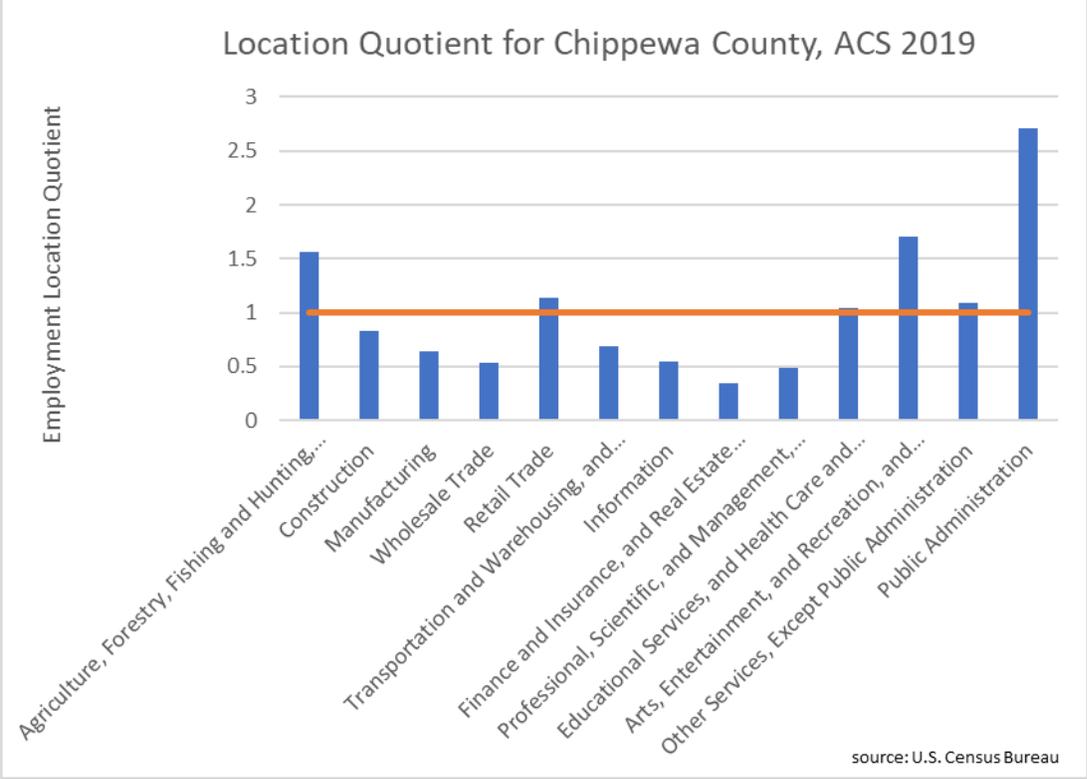


Figure 7: Location Quotient for Chippewa County using ACS 2019 census data

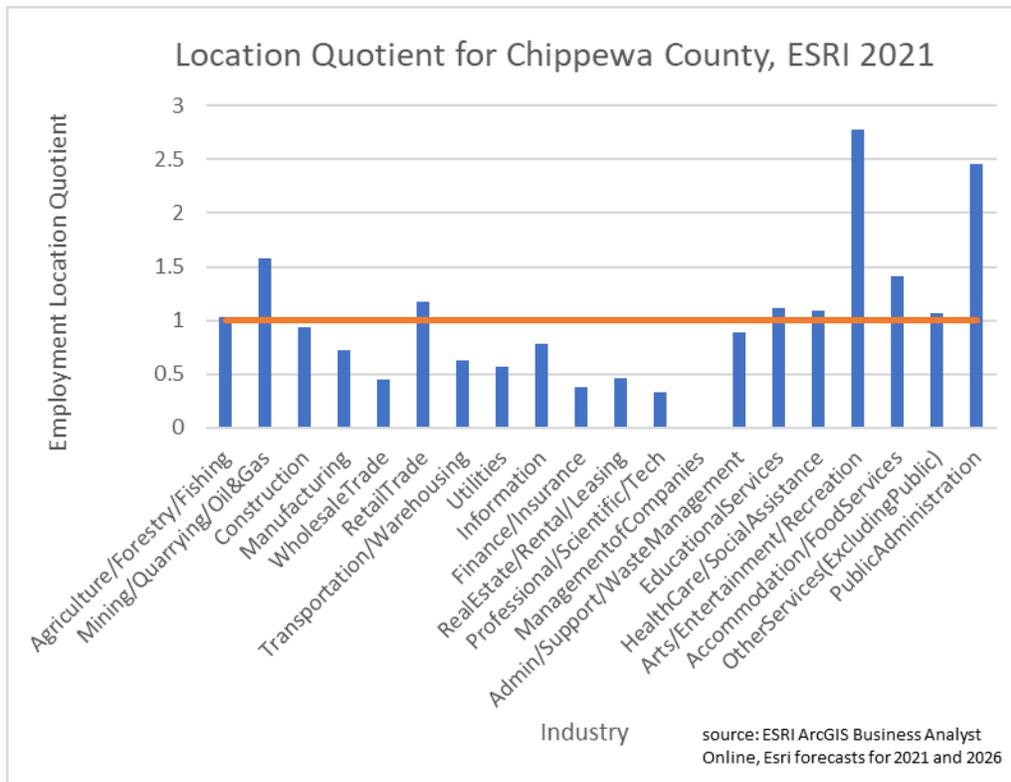


Figure 8: Location Quotient for Chippewa County using ESRI BAO Civilian Labor Profile data

Next the NAICS Sub-Sectors for Chippewa County, Michigan, 2021 First Quarter were evaluated to identify five target sub-sectors for future development. Table 7 lists the five sub-sectors chosen, see Appendix for link to full data. Professional and technical services, LQ = 0.32, is a good target sub-sector to pursue because of the high salaries associated with them and also for the fact that they are amenable to remote working. Interconnected with attracting the professional and technical sub-sector is making sure there is adequate internet access and support services and this means boosting the Telecommunications sub-sector, current LQ=0.51. County internet and cell connectivity, as measured by download speeds, is well above the FCC minimum standards (Guequierre, 2020). But support can be an issue when something goes wrong, often service technicians must travel from the lower peninsula. A pool of local support is important to maintaining a smooth functioning system. Three sub-sectors with LQs >1 were chosen as targets. Nursing and residential care facilities, LQ=1.11, because of the aging population. Social assistance, LQ=1.2, because of the high poverty rates. Accommodation, LQ=1.55, because of its untapped potential.

**Private, NAICS Sub-Sectors, Chippewa County, Michigan
2021 First Quarter, All establishment sizes**

Source: Quarterly Census of Employment and Wages - Bureau of Labor Statistics

NAICS Sub-Sector	Quarterly Establishments	January Employment	February Employment	March Employment	Total Quarterly Wages	Average Weekly Wage	March Employment Location Quotient	Total Quarterly Wages Location Quotient
NAICS 517 Telecommunications	4	31	27	28	371,282	\$996	0.51	0.36
NAICS 541 Professional and technical services	40	243	258	251	2,477,550	\$760	0.32	0.18
NAICS 623 Nursing and residential care facilities	10	280	275	276	1,665,767	\$463	1.11	1.18
NAICS 624 Social assistance	15	370	383	382	2,165,545	440	1.2	1.62
NAICS 721 Accommodation	31	143	165	159	772,594	\$382	1.55	1.37

Table 7: 5 Target Sub-Sectors for Chippewa County, 2021 First Quarter

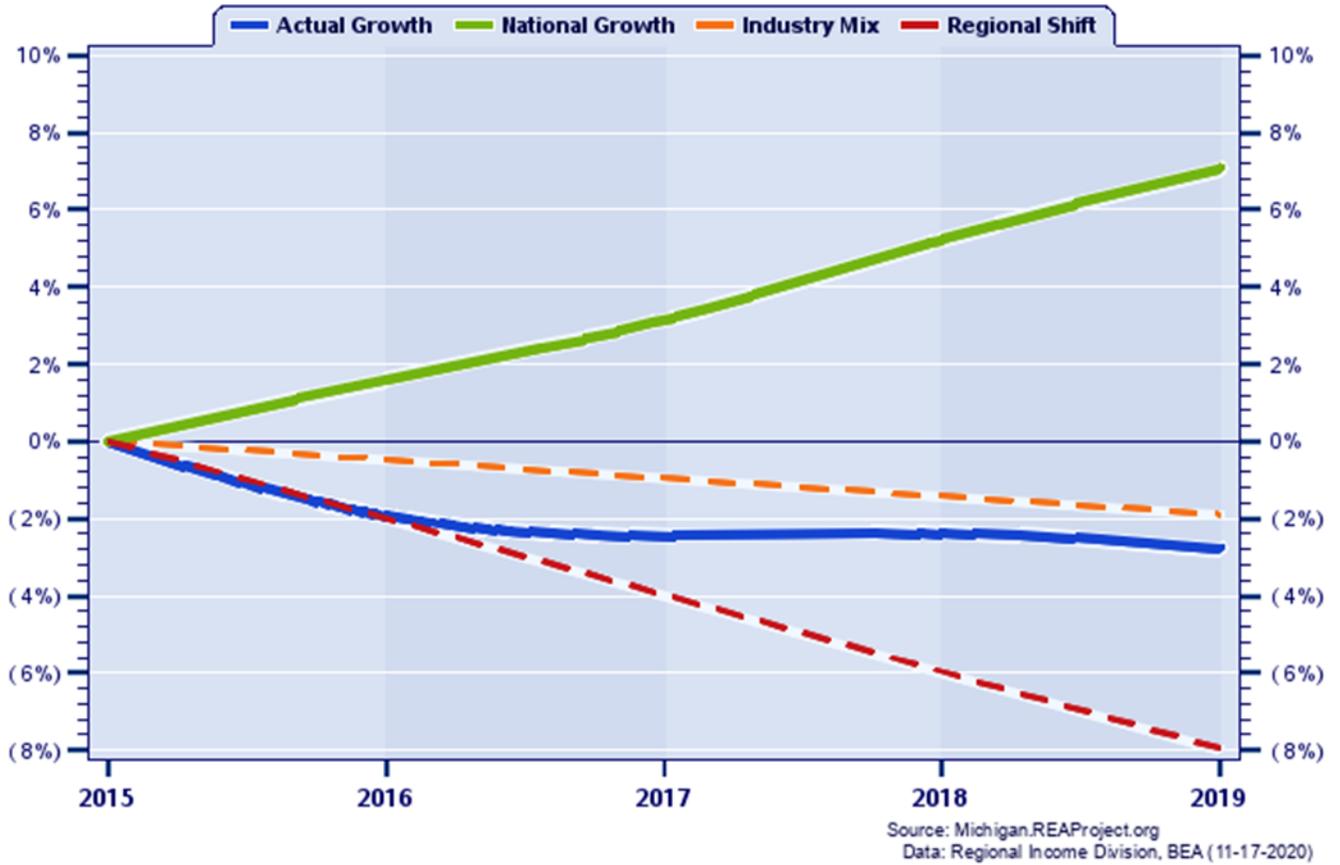
Shift-Share

Shift-Share is an indicator to show how a local economy, Chippewa County, fares in comparison to a larger economy, the nation, over time. It tells which industries are competitive in the local area. Shift-Share shows the national growth of a particular industry and based on this it calculates how much the industry is likely to grow in the local area then compares this estimation with how much the industry actually grew (Mason, 2020). If an industry grows at the same rate as it did nationally, it might not be a special advantage to the local area because it may simply be growing everywhere. But if it grew more than the national level then this means the industry grew due to strengths of the local area. Actual Growth = National Growth + Industry Mix + Regional Shift. The National Growth is the amount of growth expected from the national economy growth, if the nation grows, the local area should grow at the same rate. The Industry Mix is the advantage or disadvantage of the mix of industries in the local area, is there a concentration of shrinking industries for example. Finally, the Regional Shift is how well the industries in the local area are performing compared to the nation. An industry can be growing

in the local area but if it is not growing as fast as that industry is growing nationally then there is still a disadvantage (Wilson, 2021).

Shift-Share analysis was performed for Chippewa County for the 5-year period of 2015 to 2019 using the Michigan Regional Economic Analysis Project (REAP) online report, link in Appendix. Figure 9 shows the analysis results for the four components discussed above. Chippewa County is not keeping pace with the national economy growth. The county's employment change over 2015 to 2019 was -2.76%, trailing the national growth of 7.08% by -9.84%. This was due to an industry mix inclined toward slow growing industries, Industry Mix = -1.89%, along with the fact that a large share of the local industries underperformed their counterparts nationally, Regional Shift = -7.95%. Chippewa County had 4 industries which outperformed their national counterparts. Manufacturing grew 13.17% in the county compared to 3.76% nationally. Finance and Insurance grew 15.52% in the county compared to 11.31% nationally. Federal Civilian grew 3.81% in the county compared to 2.46% nationally. Military grew 2.17% in the county compared to -0.56% nationally. Professional, Scientific, & Technical Services, Other Services (except Public Administration), and Local Government grew locally but not at the rate it should have to keep pace with the national growth. All others either shrunk when the national rate grew or shrunk more than the national rate shrunk.

A Graphical Summary of Shift-Share Analysis Results Chippewa County Employment Change Over 2015-2019



Actual Growth		National Growth		Industry Mix		Regional Shift
-2.76%*	=	7.08%	+	-1.89%	+	-7.95%
(-467)		(1,199)		(-320)		(-1,346)

* Percent growth figures may not add due to rounding by a factor of ± 0.01%.

Figure 9: Shift-Share Results



Economic Development

This section reviews the survey data from “Public Opinion of the New Economy, Placemaking and Economic Development Strategies for Michigan”, looks at the five largest employers in the county and their expectations for the future, and then discusses the local government websites available and the information they provide for economic development.

Survey Data

The survey report “Public Opinion of the New Economy, Placemaking and Economic Development Strategies for Michigan” asked Michiganders questions related to the New Economy. New Economy refers to a “global, entrepreneurial, and knowledge-based economy where business success comes increasingly from the ability to incorporate knowledge, technology, creativity and innovation into products and services” (Borowy, et al., 2012). The survey was performed on a regional level, not county level. In order to determine if the results from the Upper Peninsula (U.P.) region properly represent Chippewa County, some key factors were compared, Table 8. The comparison shows the county is quite similar to the U.P. in most categories so the survey results should be reasonably representative of Chippewa County.

	Median Age	Median Household Income	Per Capita Income	Median Home Value	Employment White Collar	Employment Blue Collar	Employment Services	Bachelor's or higher	Unemployment Rate
Chippewa County	41.2	\$ 47,487	\$ 23,554	\$140,649	57%	22%	20%	22%	3.70%
Upper Peninsula	45.6	\$ 49,604	\$ 26,990	\$140,365	58%	27%	15%	25%	2.90%

Table 8: Key Facts Comparison for Chippewa County to Upper Peninsula. Source: ESRI BAO

The U.P. citizens, aka Yoopers, more than any other region believe that “Michigan’s future economic success depends on having a large portion of the population with a post-high school degree.” 96.8% agreed and only 3.2% disagreed with this statement, Statement 3. When one thinks of Yoopers, highly educated intellectuals do not come to mind but actually Marquette County, Houghton County, and Keweenaw County are in the top 15 of all 83 Michigan counties for % of Population Over 25 with Bachelor's Degree or Higher. Chippewa County ranks 32/83 and Delta County ranks 36/83, for a total of 7 out of 15 U.P. counties in the

top 43% of Michigan's counties for % of Population Over 25 with Bachelor's Degree or Higher. Chippewa County residents recognize the need for post-high school education in the emerging New Economy.

Yoopers also overwhelmingly agreed with Statement 7, "it is important that the state recognize its natural assets, such as farmland, forested land, lakes and streams, and develop sustainable economic development strategies around them." People in the U.P. and Chippewa County have strong ties to nature and have relied on it for a living for as long as people have inhabited the region.

The statement with next highest consensus among Yoopers was Statement 4 "Michigan's future economic success depends on having a diversified economy." Chippewa County, particularly, learned this lesson in a very hard way. In 1977 Kincheloe Air Force Base closed removing 10,000 military personnel and their dependents (27% of the county's population), 700 civilian jobs, and a total payroll of \$28 million. The county's stubbornly high unemployment rate soared to over 23%. Schools, hospitals, and clinics closed, and scores of support businesses collapsed. It was a crippling loss, but with aggressive local leadership, hard work, and foresighted planning, within 12 years several prisons were installed at the base along with industrial companies, retail businesses, an airport, schools, and housing. The local tax base had doubled, and the civilian payroll created by the new ventures reached \$110 million (Strategic-Air-Command.com, n.d. and Nauss, 1993). It is no surprise that economic diversification is important to the people of Chippewa County.

Major Employers

The largest employer in Chippewa County is the Sault Ste. Marie Tribe of Chippewa Indians. The tribe employment is not concentrated in one industry sector. They own and run casinos, golf courses, convenience stores, property management companies, schools, and health centers. The next five largest employers are War Memorial Hospital, Kinross Correctional Complex, Bay Mills Resort and Casino, Lake Superior State University, and U.S. Coast Guard (EUP-planning, 2020 and Operation Action U.P., 2021).

War Memorial Hospital will continue to be a major employer in the future even though county population is declining. It serves the entire eastern U.P region and is key infrastructure.

Kinross Correctional Complex employment will follow the prison population, if it increases so likely will it, and vis-versa however it is also at the mercy of the state budget. Bay Mills Resort and Casino surely took a hard hit with Covid. But they should bounce back even stronger with the recent legalization of online gambling in Michigan. Bay Mills operates DraftKings, one of a select set of online gambling platforms allowed in Michigan. Sault Ste. Marie Tribe of Chippewa Indians operates WynnBET (Reindl, 2021). In addition, Bay Mills is also expanding into the cannabis industry. Lake Superior State University has seen unprecedented growth, unique in higher education across the state and nation. Applications are up more than 9% and admitted students are up 24% over fall 2020 (Worsham, 2021). The stability and growth can in part be attributed to the unique “One Rate at Lake State” program and their first in the nation Cannabis Chemistry and Cannabis Business majors. Thanks to forward thinking and good decision-making LSSU will remain a key part of Chippewa County’s economy indefinitely. The U.S. Coast Guard employment should sustain, if not grow. Shipping traffic should increase once the construction of the new lock is finished. Currently, 85% of commodity tonnage traveling through the Soo Locks is restricted by vessel size to the Poe Lock. The new lock will be as big as the Poe and is scheduled to open by fall 2023 (U.S. Army Corps of Engineers, 2021).

Government Websites

There are several websites available to promote economic development in the county, the city, the region, and so on. [Sault Ste. Marie EDC](#), [Chippewa County Economic Development Corporation \(CCEDC\)](#), [Eastern Upper Peninsula Regional Planning & Development Commission \(EUPRPDC\)](#) are 3 of the best that offer information and assistance for current and new businesses and aren’t “member” sites.

For entrepreneurs, the Sault Ste. Marie EDC site is a great resource. They have startup resources, office space options, available properties. The site is easy to navigate. Here I learned that Sault Ste. Marie is one of Michigan’s SmartZones. A SmartZone is a hub of technological development and entrepreneurship. It fosters collaborations between business owners, universities, government entities, industry, and the community. The SmartZone is a collaborative partnership between the City of Sault Ste. Marie, Lake Superior State University, and the Michigan Economic Development Corporation.

The Chippewa County EDC website has available properties, information about the county including a detailed County Profile useful to businesses thinking of relocating there. The CCEDC was formed after the closure of the Kincheloe Air Force Base and was key in the economic success story which followed that disruption (Nauss, 1993). CCEDC manages the Chippewa County International Airport. The site is basic and a bit stodgy looking but informative.

EUPRPDC has the most detailed information on individual municipalities within the county. It gives a nice summary of the township/village, populations since 2010 and all documents such as Master Plan, Zoning Ordinance, Land Use Plan, etc. are available for download. The Data Center section is full of socio-economic data for the region useful to local units of government, grant-writers, residents, students, and businesses. There's loads of information here, up to date and graphically appealing with a clean modern style.



Recommendations

When devising economic development strategies, one needs to leverage one's strengths and recognize one's weaknesses. Chippewa County strengths include an abundance of public recreation land, hundreds of miles of Great Lakes shoreline, 3 islands, a rich history and culture, the Soo Locks, Tahquamenon Falls, an international city and airport, a university and community college, a Michigan SmartZone, farming and agriculture base, good internet and cell service, fresh water, resorts, affordable housing and low cost of living. The county's challenges are harsh winters, remoteness, a declining and aging population, lower educational attainment levels, cyclic unemployment, and elevated poverty rates.

A possible economic development strategy for Chippewa County could be developing a niche in the cannabis industry. The opportunity for agglomeration exists between LSSU, Bay Mills, farmers, and local EDCs. Incentives to retain LSSU grads and entice experience from climate ravaged California could be offered along with creating a stigma-free welcoming

atmosphere in the county. Imagine cannabis tours akin to the wine tours in Traverse City or the craft brewery sensation in Grand Rapids, a Potpalooza festival with music, vendors, and food, and world class growing facilities and production.

The accommodation sector has traditionally been strong in the county but is becoming outdated. The county is covered in resort cabins, most run by older folks unfamiliar with technology and the online tools like AirBNB, Vrbo, Instagram, or Facebook necessary to bring in new, younger clientele. They need assistance with learning how to use the short-term rental platforms, taking attractive marketing photos, and promoting their resorts using social media. Imagine a “Resort Extension Agency”, which could help owners list their rentals, provide marketing advice and photographers, manage social media, grow support services such as laundry (many resorts require guests bring their own linens because of lack of laundry facilities), grocery delivery, and other experience enhancing services. Imagine having your freshly caught Whitefish cooked by a professional chef or learning how to smoke it in the traditional Ojibwe manner.

Chippewa County, and indeed all of Michigan should be planning for economic and population shifts due to changing climate conditions. “Available evidence indicates that as an end-of-century destination, the Great Lakes will be among the most ecologically attractive North American destinations” (Schneider, 2021). Access to fresh water and moderate temperatures are the key factors. While it seems uncomfortable to advertise the county as “climate change proof”, the fact is it is in a much better position than many other regions of the country dealing with horrendous wildfires, tornadoes, drought, hurricanes, and severe flooding.

Sometimes just one economic development idea can transform a region, Fogo Island and Columbus, IN are proof of this and sometimes that one idea can transform the world, a single engineer’s call to his country’s economic minister spawned the Taiwan semiconductor industry. Chippewa County is not unfamiliar with reinventing itself; it has done it before, and it will do it again as it moves toward the future with resilience, adaptability, and optimism.

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<https://newjourneys.ca/en/articles>

Appendix: Links to raw data used in this report

Demographics & Survey

<https://www.socialexplorer.com/tables/C2020/R12918480> 2020 and 2010 Population, Race
https://www.socialexplorer.com/tables/ACS2019_5yr/R12938973 ACS2019 Age, Median Age
<https://bao.arcgis.com/esriBAO/index.html#> Key Facts, Executive Summary – Call Outs,
Demographic Summary, Dominant Tapestry Profile
<https://datausa.io/profile/geo/chippewa-county-mi>

Economic Factors: Income, Unemployment, Education, Housing, and Poverty

2000 <https://www.socialexplorer.com/tables/C2000/R12937289>
2010 https://www.socialexplorer.com/tables/ACS2010_5yr/R12937287
2019 https://www.socialexplorer.com/tables/ACS2019_5yr/R12937286,
https://www.socialexplorer.com/tables/ACS2019_5yr/R12921993
2021 <https://bao.arcgis.com/esriBAO/index.html#> Civilian Labor Force Profile

Chippewa Unemployment vs Time <https://fred.stlouisfed.org/series/MICHIP3URN#0>

Michigan Unemployment vs Time <https://fred.stlouisfed.org/series/MIURN>

US Unemployment vs Time <https://fred.stlouisfed.org/series/UNRATE>

Location Quotient

Private, NAICS Sectors, Chippewa County, Michigan, 2021 First Quarter, All establishment sizes
https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm?type=6&year=2021&qtr=1&own=5&area=26033&supp=0

Private, NAICS Sectors, U.S. Total, 2021 First Quarter, All establishment sizes
https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm?type=6&year=2021&qtr=1&own=5&area=US000&supp=0

Private, NAICS Sub-Sectors, Chippewa County, Michigan, 2021 First Quarter, All establishments
https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm?type=7&year=2021&qtr=1&own=5&area=26033&supp=0

Industry by Occupation for Employed Civilian Population 16 Years and Over

https://www.socialexplorer.com/tables/ACS2019_5yr/R12920676

Civilian Labor Force Profiles <https://bao.arcgis.com/esriBAO/index.html#>



Civilian Labor Force Profile

Chippewa County, MI
 Chippewa County, MI (26033)
 Geography: County

Prepared by Esri

2021 Labor Force						
Age Group	Population	Employed	Unemployed	Unemployment Rate	Labor Force Participation Rate	Employment-Population Ratio
16+	32,075	14,940	570	3.7%	48.4%	47
16-24	4,629	2,368	123	4.9%	53.8%	51
25-54	15,068	9,527	352	3.6%	65.6%	63
55-64	5,212	2,227	85	3.7%	44.4%	43
65+	7,166	818	10	1.2%	11.6%	11

Economic Dependency Ratio	
Total	123.6
Child (<16)	38.5
Working-Age (16-64)	43.9
Senior (65+)	41.2

Industry	Employed	Percent	US Percent	Location Quotient
Total	14,940	100.0%	100.0%	-
Agriculture/Forestry/Fishing	201	1.3%	1.3%	1.00
Mining/Quarrying/Oil & Gas	94	0.6%	0.4%	1.20
Construction	991	6.6%	7.1%	0.89
Manufacturing	1,073	7.2%	9.9%	0.68
Wholesale Trade	167	1.1%	2.5%	0.44
Retail Trade	1,877	12.6%	10.7%	1.30
Transportation/Warehousing	478	3.2%	5.1%	0.68
Utilities	76	0.5%	0.9%	0.56
Information	211	1.4%	1.8%	0.78
Finance/Insurance	296	2.0%	5.2%	0.41
Real Estate/Rental/Leasing	130	0.9%	1.9%	0.43
Professional/Scientific/Tech	406	2.7%	8.3%	0.33
Management of Companies	0	0.0%	0.1%	0.00
Admin/Support/Waste Management	490	3.3%	3.7%	0.85
Educational Services	1,540	10.3%	9.3%	1.06
Health Care/Social Assistance	2,422	16.2%	14.8%	1.07
Arts/Entertainment/Recreation	622	4.2%	1.5%	2.62
Accommodation/Food Services	1,245	8.3%	5.9%	1.48
Other Services (Excluding Public)	717	4.8%	4.5%	1.04
Public Administration	1,904	12.7%	5.2%	2.65



Civilian Labor Force Profile

United States
 United States (01)
 Geography: USA

Prepared by Esri

2021 Labor Force						
Age Group	Population	Employed	Unemployed	Unemployment Rate	Labor Force Participation Rate	Employment-Population Ratio
16+	269,252,347	157,284,361	10,474,107	6.2%	62.3%	58
16-24	38,687,068	19,540,375	2,412,745	11.0%	56.7%	51
25-54	129,653,947	99,770,948	6,083,635	5.7%	81.6%	77
55-64	43,258,842	26,068,996	1,451,039	5.1%	65.5%	62
65+	57,652,490	11,104,042	526,688	4.5%	20.2%	19
Economic Dependency Ratio						
Total						110.2
Child (<16)						41.1
Working-Age (16-64)						39.7
Senior (65+)						29.4
Industry	Employed	Percent	US Percent	Location Quotient		
Total	157,284,361	100.0%	100.0%	-		
Agriculture/Forestry/Fishing	1,973,200	1.3%	1.3%	1.00		
Mining/Quarrying/Oil & Gas	705,964	0.4%	0.4%	0.80		
Construction	11,127,591	7.1%	7.1%	0.96		
Manufacturing	15,526,471	9.9%	9.9%	0.93		
Wholesale Trade	3,934,179	2.5%	2.5%	1.00		
Retail Trade	16,064,485	10.7%	10.7%	1.10		
Transportation/Warehousing	8,044,029	5.1%	5.1%	1.09		
Utilities	1,412,381	0.9%	0.9%	1.00		
Information	2,846,142	1.8%	1.8%	1.00		
Finance/Insurance	8,123,688	5.2%	5.2%	1.06		
Real Estate/Rental/Leasing	3,044,245	1.9%	1.9%	0.90		
Professional/Scientific/Tech	13,005,287	8.3%	8.3%	1.01		
Management of Companies	116,402	0.1%	0.1%	1.00		
Admin/Support/Waste Management	5,887,329	3.7%	3.7%	0.95		
Educational Services	14,629,096	9.3%	9.3%	0.96		
Health Care/Social Assistance	23,217,292	14.8%	14.8%	0.98		
Arts/Entertainment/Recreation	2,388,480	1.5%	1.5%	0.94		
Accommodation/Food Services	9,207,610	5.9%	5.9%	1.05		
Other Services (Excluding Public)	7,014,785	4.5%	4.5%	0.98		
Public Administration	8,215,705	5.2%	5.2%	1.08		

Shift-Share

<https://michigan.reaproject.org/analysis/shift-share/tools/260033/2015/2019/>