CHAPTER 2.0-POPULATION

2.8 Issues and Opportunities continued

- The Median Age of Humboldt Township residents in 2015 was 47.0 years. The age composition and distribution within Humboldt Township indicates a much older population base than the County, State and the National average.

- Baby Boomers account for about 27 percent of Humboldt Township's population, Gen Xers make up about 10 percent and Millenials comprise about 15 percent of the Township's population.

- Nearly 23 percent of Humboldt Township's population was over the age of 65 in 2010. An aging population requires diversified services. Nearly 40 percent of the Township's population over 65 reported having a disability. By 2015, 27.4 percent of the Township's population was 65 and older.

- Humboldt Township reports high school graduation rates higher than that of the State and Marquette County. Humboldt Township also reports that 13 percent of its residents have a bachelor's degree or higher. By 2015, this had moderated to 12.4 percent.

- The moderately large shift from Family Households to Non-Family Households between 2000 and 2010 indicates a change in the type of housing and other services demanded within Humboldt Township. In this period, the most significant is the increase in the number of non-elderly persons living alone. By 2015, these short-term trends were largely reversed. However, the increase in the 65 or Over population continued.

- Humboldt Township's Population Density of 5.0 persons per mile is the third lowest of the surrounding townships and it is believed to reflect the sizeable amount of land held in the Escanaba River State Forest and the large extent of corporate and private land holdings in Humboldt Township.

- It was anticipated that Humboldt Township would likely experience an increase in population, due to the proposed reuse of the Humboldt Mine/Mill by Eagle Mine, a subsidiary of Lundin Mining Corporation. By 2015, this increase had occurred.

CHAPTER 3.0-ECONOMIC BASE

3.1 Introduction

Community growth and stability are directly linked to the local economic base. Two major sectors make up an economy: one that provides goods and services for markets outside the community (basic or export sector) and one that provides goods and services for local consumption (non-basic sector). Economic vitality and balance rely heavily on the creation and retention of local basic sector jobs. The factors that affect the economic base in a community extend beyond its boundaries; increasingly so as they realize the effects of the global economy. In this chapter, data for Humboldt Township, the Marquette County area, the Region and State are presented for analysis and comparison.

Much of the economic information presented is available only at the County level. The high degree of personal mobility may affect the accuracy of some information regarding the local economy. Humboldt Township has limited commercial development, mainly due to a lack of residents and limited infrastructure available to support large scale commercial and/or industrial activity. Eagle Mine, a subsidiary of Lundin Mining, invested $275 million in the site clean up, environmental reclamation and equipment upgrades for the Humboldt Mill. This has had a positive economic impact on Humboldt Township. County Road 595, was proposed to run north from US-41 through a four-mile wide corridor, and located within two miles of either side of County Road FY. However, the new county road was not approved by the Michigan Department of Environmental Quality (MDEQ) based on objection from the U.S. Environmental Protection Agency (EPA).

3.2 Area Economy

Humboldt Township is located in western Marquette County, west of the Marquette-Negaunee-Ishpeming urban area; Humboldt Township also borders Dickinson County to the south. This urban area contains the majority of Marquette County's commercial and industrial development. A significant amount of development is located along the US-41/M-28 corridor in Marquette County. Developments are occurring in the cities of Marquette, Negaunee and Ishpeming as well as the adjacent Townships, particularly Marquette, Chocolay and Negaunee Townships.

For most of Marquette County's history, the economy was principally based on the iron ore mining industry. Mining on the Marquette Iron Range in Marquette County dates back approximately 150 years. In the late 1800's and early 1900's, iron ore mining was by far the dominant industry within the County. However, in the latter half of the 1900's, the mining industry lost some of its economic dominance within Marquette County, with the closing of several mines within the Iron Range.

CHAPTER 3.0-ECONOMIC BASE

3.2 Area Economy continued

Cliffs Natural Resources Inc., headquartered in Cleveland, Ohio, is the largest producer of iron ore pellets in North America, and was also a major supplier of metallurgical coal to the global steelmaking industry. Cliffs Natural Resources operates the Tilden mine in Marquette County in Tilden Township. The nearby Cliffs' Empire mine in Richmond Township was closed August 28, 2016, but is currently under consideration for reopening. A competing alternative iron ore mine in Minnesota is also being considered by Cliffs. A decision is expected in 2019.

Iron ore from the mine is shipped via railroad to Presque Isle Harbor in Marquette for loading on lake ore carriers with delivery to various steel mills. Previously, shipment via railroad to an Escanaba port was another option. There are approximately 1,100 individuals currently employed by the mining companies (Cliffs Natural Resources & Eagle Mine). The cities of Marquette, Negaunee and Ishpeming, along with the neighboring townships, function as living areas and retail and service centers for many individuals working at the mines.

Eagle Mine has an administrative office at the Eagle Mine mill site at 4547 County Road 601 (in Humboldt Twp.), Champion, MI 49814. They also have a visitors' center in the City of Marquette. Eagle Mine mines a large, high-grade nickel and copper ore body, located on the Yellow Dog Plains with at 6510 Triple A Road, Michigamme, MI 49861. The initial Eagle Mine operation is projected to continue into 2022. The Eagle East mining operations are projected to allow the extension of the overall mining at least into August 2025.

The long-term future of the mining industry within Marquette County is somewhat uncertain. It will depend on a number of concerns, including the national and worldwide demand for nickel, copper, steel and steel products, popularity of steel substitute materials, international competition, federal governmental trade policies, labor productivity, availability and price of electric power and the other energy sources, environmental constraints and financial considerations. However, in the immediate and foreseeable future, iron ore and potentially other mining will continue to have a large impact on Marquette County's economy.

The City of Marquette, along with the Cities of Negaunee and Ishpeming, serve as the retail trade and service centers for Marquette County and nearby communities outside of the County. Significant retail trade has been developed along US-41 in Marquette Township in recent years as well. Many residents in the outlying areas of the County, including Humboldt Township, work in the retail trade and service center, but choose to live in a more rural setting. The service and retail trade sectors are the strongest industries at the County level and have experienced the greatest growth in the number of jobs in recent decades. Much of this growth can be attributed to an increase in the number of visitors to the Marquette County area and the promotion of tourism has been the focus point for many businesses and governmental units within the region.

CHAPTER 3.0-ECONOMIC BASE

3.2 Area Economy continued

Tourism is a growth industry in the area that has become much less seasonal in nature. This is due, in part, to the growing population of retirees who travel extensively. Besides traditional summer vacationing, the autumn color of the northern hardwood forests and winter sports, especially snowmobiling (Michigan leads the nation in the number of snowmobiles licensed) attracts thousands of visitors to the area. The Lake Superior Community Partnership works with local communities throughout Marquette County to serve as a business, visitor and economic development partner. The Greater Ishpeming-Negaunee Chamber of Commerce opened offices in the Ishpeming Ski and Snowboard Hall of Fame. The chamber of commerce is responsible for promoting and unifying western Marquette County businesses.

Tourism and recreation have increased over the years as transportation means have increased personal mobility. Today's tourists are more likely to travel frequently, take shorter trips and stay closer to home. Heritage-tourism and eco-tourism have increased in popularity. Heritage-tourism draws those interested in the historic and cultural offerings of a community or institution. With the paving of a part of the regional, multi-use Iron Ore Heritage Trail between Ishpeming and Negaunee in 2008 and within the City of Ishpeming in 2010, heritage tourism has come to the forefront in Marquette County. Eco-tourism has gained popularity among those wanting to experience nature through activities such as bird watching, hiking, horseback riding and kayaking. The term "tourism" is comprehensive and includes a range of activities associated with natural and man-made attractions such as products and services for leisure and recreational pleasure.

3.3 Cliffs Natural Resources

In 1847, a group of men from the Cleveland area pooled their money and their minds to create the Cleveland Iron Company. Their objective was to explore for minerals in the remote wilderness of the Upper Peninsula; just three years after iron ore was discovered near what is now Negaunee, Michigan, in 1844. The articles of agreement to form this new company were drawn up on November 9, 1847, and the first stock in the new venture was issued on November 27, 1847.

Reborn as Cleveland-Cliffs Inc. in the mid-1980s and subsequently as Cliffs Natural Resources in 2008, the company has remained in the forefront of the North American iron ore business since opening its first mine in the Upper Peninsula of Michigan in 1850, achieving longevity by successfully adapting its operations to major changes that drove many competitors out of business. Cliffs is now an international mining and natural resources company. Cliffs is the largest producer of iron ore pellets in North America, a major supplier of direct-shipping lump and fines iron ore out of Australia and a significant producer of metallurgical coal. While the heart of its operations remains North America, Cliffs continues to explore opportunities for expansion globally.

CHAPTER 3.0-ECONOMIC BASE

3.3 Cliffs Natural Resources continued

The Tilden Mine is located on the Marquette Iron Range in Michigan's Upper Peninsula approximately five miles south of Ishpeming, Michigan. The Tilden Mine has been in operation since 1974. Over a five-year period, the Tilden Mine produced between 5.6 million and 7.9 million tons of iron ore pellets annually. In 2017 it produced 7.7 million tons. The Tilden Mine has a rated annual capacity of 8 million tons. Cliffs owns 100 percent of Tilden, after purchasing the remaining 15 percent minority interest owned by U.S. Steel Canada September 29, 2017. Cliffs owns all of the ore reserves at the Tilden Mine and leases them to Tilden. The Tilden facility continues to produce both hematite and magnetite iron ore pellets. Magnetite production was added to the facility in 1989. Producing magnetite pellets utilizes different methods and equipment than processing hematite ore. The Empire Mine previously produced only magnetite ore.

In 2003, the Tilden and Empire mines were combined to operate under one management structure to improve efficiencies and reduce costs. This alliance, called Cliffs Michigan Mining Company, utilized the mining sections of both mines and both processing plants but had a combined management, which reduced manpower through job consolidation and attrition. The Lake Superior and Ishpeming (LS&I) Railroad is also part of this jointly managed operation. Cliffs has implemented and continued to develop other consolidations and cost-saving plans that take advantage of the synergy of the combined operation.

Cliffs continues to look at ways to extend the ore reserves at the Tilden mine and increase the life span of the mine. Production levels were listed at 5.6 million tons for the Tilden Mine in 2009. In 2010, Cliffs invested approximately $5 million to repair one of the iron ore pellet kilns at the Tilden Mine. Cliffs continues to perform and evaluate studies on whether to resume production at the Empire mine.

Source: Cliffs Natural Resources Website, http://www.cliffsnaturalresources.com/Pages/Home.aspx, Cliffs Natural Resources Press Kit, http://www.cliffsnaturalresources.com/media/presskit/Pages/Home.aspx, 2010.

CHAPTER 3.0-ECONOMIC BASE

3.4 Civilian Labor Force Characteristics

The civilian labor force consists of persons currently employed and those currently seeking employment, excluding persons in the armed forces and those under the age of 16 years. Shifts in the age and sex characteristics of residents, seasonal changes, and employment opportunities can all cause fluctuation in the number of persons in the labor force. Throughout the chapter, the term "Labor Force" will refer to the civilian labor force. With the closure of the K.I. Sawyer Air Force Base in September 1995, the armed forces labor force is significantly smaller in the County with only 131 individuals (0.4 percent); there are zero (0) residents identified as being in the armed forces in Humboldt Township.

For 2006-2010, the percentage of persons within Humboldt Township age 16 and older who were in the Labor Force (Labor Force Participation Rate) was 53.4 percent. In 2015 it was 47.9%. Marquette County's Labor Force participation rate was 61.3 percent for 2006-2010. In 2015 it was 56.9 %. The Labor Force Participation rate at the State level during the period 2006-2010 was 63.1 percent. By 2015, it had changed to 61.3%. Comparative employment information is provided in Table 3-1.

Table 3-1
Employment Status of Civilian Labor Force, Selected Areas, 2006-2010 & 2015

Characteristics	Humboldt Township		Marquette County		State of Michigan	
	2006-2010	2015	2006-2010	2015	2006-2010	2015
Population 16 years and older	380	411	55,573	56,706	7,836,314	7,925,988
In Labor Force	203	197	34,073	32,259	4,944,003	4,855,005
Civilian Labor Force	200	197	33,975	32,128	4,938,337	4,851,264
Employed in Labor Force	165	179	31,463	29,522	4,369,785	4,373,518
Unemployed in Labor Force	35	18	2,512	2,606	568,552	477,746
Armed Forces	3	0	98	131	5,666	3,741

Sources: U.S. Bureau of the Census, American Community Survey Estimates 2006-2010, Table DP03.
U.S. Bureau of the Census, American Community Survey Estimates 2011-2015, Table DP03.

The U.S. Bureau of the Census reports employment information by broad economic division, with the categories listed in Table 3-2 below. For the 2006-2010 period, the top three employment divisions for Humboldt Township were: educational, health and social services; agriculture, forestry, fishing, hunting and mining; professional, scientific, management and administrative services. By 2015, these had changed to arts, entertainment, recreation and food services; educational, health and social services; administrative services; and construction. Over 25 percent of Humboldt Township residents were employed in the educational, health and social services division, which changed to a high of nearly 18% in arts, entertainment, recreation and food services. This was slightly lower than Marquette County as a whole (29.1 percent) and higher than Michigan (23.2 percent). About 14 percent of Humboldt Township residents were employed in the agriculture, forestry, fishing, hunting and mining division, compared to 5.1

CHAPTER 3.0-ECONOMIC BASE

3.4 Civilian Labor Force Characteristics continued

percent for the County and 1.3 percent for the State. Humboldt Township exhibited a high rate of employment in this division, due to the close proximity of the Tilden Mines. By 2015 these areas of employment shifted to (1) Arts, entertainment, recreation and food services, (2) Educational, health and social services (but less), and (3) other services.

Table 3-2
Employment by Broad Economic Division, Selected Areas, 2006-2010 & 2015

Broad Economic Division	Humboldt Township				Marquette County		State of Michigan	
	Number		Percent		Percent		Percent	
	2006-2010	2015	2006-2010	2015	2006-2010	2015	2006-2010	2015
Agriculture, Forestry, Fishing, Hunting and Mining	**23**	**12**	**13.9**	**6.7**	5.1	5.1	1.3	1.3
Construction	**10**	**18**	**6.1**	**10.1**	5.3	6.2	5.3	4.8
Manufacturing	**18**	**5**	**10.9**	**2.8**	5.3	5.0	17.6	17.8
Wholesale Trade	**0**	**5**	**0.0**	**2.8**	2.6	1.7	2.8	2.4
Retail Trade	**11**	**16**	**6.7**	**8.9**	13.7	11.9	11.6	11.4
Transportation, Warehousing and Utilities	**4**	**14**	**2.4**	**7.8**	4.0	4.6	4.2	4.2
Information	**2**	**0**	**1.2**	**0.0**	2.7	1.5	1.9	1.6
Finance, Insurance, Real Estate, Rentals and Leasing	**4**	**2**	**2.4**	**1.1**	4.2	4.5	5.7	5.4
Professional, Scientific, Management, Administrative Services	**19**	**15**	**11.5**	**8.4**	5.9	6.7	8.9	9.3
Educational, Health and Social Services	**42**	**25**	**25.5**	**14.0**	29.1	30.0	23.2	23.9
Arts, Entertainment, Recreation and Food Services	**4**	**32**	**2.4**	**17.9**	11.9	12.1	9.1	9.5
Other Services (except public administration)	**18**	**24**	**10.9**	**13.4**	4.5	5.3	4.7	4.7
Public Administration	**10**	**11**	**6.1**	**6.1**	5.7	5.4	3.8	3.6
TOTAL (Number employed age 16 & older)	**165**	**179**	100.0	100.0	100.0	100.0	100.0	100.0

Sources: U.S. Bureau of the Census, American Community Survey Estimates 2006-2010, Table DP03.
U.S. Bureau of the Census, American Community Survey Estimates 2011-2015, Table DP03.

3.5 Employment by Place of Work

According to 2006-2010 American Community Survey Estimates, 89.4 percent of Humboldt Township's working age population who commuted to work was employed in Marquette County. Of the nineteen individuals who are working outside of Marquette County, none of the individuals found employment in a different state. Residents who worked outside of Marquette County likely found employment in neighboring Alger or Dickinson Counties, with most employment found within the Marquette-Negaunee-Ishpeming urban area. Place of employment for Humboldt Township residents is noted in Table 3-3.

CHAPTER 3.0-ECONOMIC BASE

3.5 Employment by Place of Work continued

Table 3-3
Residents Aged 16 Years or Older by Place of Work, Humboldt Township, 2005-2009 & 2015

Characteristics	Number		Percent	
	2005-2009	2015	2005-2009	2015
Workers 16 and Over Commuting to Work	180	174	100.0	100.0
Worked in Michigan	180	171	100.0	98.3
Worked in Marquette County	161	160	89.4	92.0
Worked Outside of Marquette County	19	11	10.6	6.3
Worked Outside of Michigan	0	3	0.0	1.7

Sources: U.S. Bureau of the Census, American Community Survey 5-Year Estimates 2006-2010, Table B08007.
U.S. Bureau of the Census, American Community Survey 5-Year Estimates 2011-2015, Table S0801.

Technological advances and economic globalization are having a tremendous influence on the workplace and it has been predicted that fully one-third of the 21st Century workforce will be independent with regard to location; telephone and electrical services will be the only requirements. Places that can offer quality living environments will be the locations of choice for these types of work arrangements.

The personal vehicle is the main mode of transportation for Humboldt Township workers, as well as Marquette County workers. Over 75 percent of Humboldt Township workers drive alone to work as depicted in Table 3-4. According to the 2006-2010 American Community Survey Estimates, 14.8 percent of the commuters are part of a carpool; carpool participation is higher than the County-wide rate. With increasing gasoline prices, future estimates may demonstrate higher rates of carpooling.

Table 3-4
Means of Transportation to Work, Residents 16 or Older, Selected Areas, 2006-2010 & 2015

Means of Transportation	Humboldt Township				Marquette County	
	Number		Percent		Percent	
	2006-2010	2015	2006-2010	2015	2006-2010	2015
Car, Truck, Van-Drive Alone	**118**	**162**	**75.6**	**93.1**	80.9	80.0
Car, Truck, Van-Carpool	**23**	**12**	**14.8**	**6.9**	9.8	8.8
Public Transportation	**0**	**0**	**0.0**	**0.0**	0.4	0.6
Walk	**3**	**0**	**1.9**	**0.0**	4.8	5.8
Other Means	**0**	**0**	**0.0**	**0.0**	1.8	1.5
Worked at Home	**12**	**0**	**7.7**	**0.0**	2.3	3.3

Sources: U.S. Bureau of the Census, American Community Survey 5-Year Estimates 2006-2010, Table DP03.
U.S. Bureau of the Census, American Community Survey 5-Year Estimates 2011-2015, Table DP03.

Commuting times from census data indicates that 31.2 percent of Humboldt Township's working population lives less than 20 minutes from their place of employment (Table 3-5). About 6.3

CHAPTER 3.0-ECONOMIC BASE

3.5 Employment by Place of Work continued

percent travel an hour or more to work, a rate higher than that of the County as a whole. Approximately 7.7 percent of employed persons reported working at home, a percentage higher than that of Marquette County (2.3 percent).

Table 3-5
Residents 16 or Older, Travel Time to Work, Selected Areas, 2006-2010 and 2015

Home to Work Travel Time	Humboldt Township		Marquette County	
	Percent		Percent	
	2006-2010	2015	2006-2010	2015
Less Than 10 Minutes	**11.8**	**31.0**	28.6	31.8
10 to 14 Minutes	**11.1**	**17.2**	21.8	19.0
15 to 19 Minutes	**8.3**	**5.2**	13.4	14.1
20 to 24 Minutes	**11.8**	**5.7**	13.1	11.7
25 to 29 Minutes	**4.9**	**6.3**	5.7	6.2
30 to 34 Minutes	**22.2**	**14.4**	7.7	8.2
35 to 44 Minutes	**8.3**	**8.6**	2.7	2.9
45 to 59 Minutes	**15.3**	**6.9**	3.3	2.9
60 Minutes or More	**6.3**	**4.6**	3.5	3.2
Mean Travel Time to Work	**34.2 minutes**	**22.0 minutes**	17.9 minutes	17.7 minutes

Sources: U.S. Bureau of the Census, American Community Survey Estimates 2006-2010, Table S0801.
U.S. Bureau of the Census, American Community Survey Estimates 2011-2015, Table S0801.

3.6 Unemployment

County unemployment and labor force data are collected and analyzed by the Michigan Department of Labor and Economic Growth. Prior to 1965, United States Bureau of the Census data was used in the computation of unemployment figures. Labor Force and Unemployment, Selected Areas, 1970-2015 is presented in Table 3-6; unemployment data is not available at the sub-county level.

Labor force requirements are determined by economic conditions. The civilian labor force in Marquette County has expanded slightly by 173 since 2000, suggesting a fairly stable economic climate. Unemployment rates for Marquette County in the past increased significantly; unemployment jumped to 10.3 percent in 2009 and then declined in 2010 and 2011 to 8.4 percent for Marquette County. The economic crisis saw unemployment rates skyrocket around the country. The most recent (August 2019) Marquette County average unemployment rate of 4.8 percent is slightly lower than the rate for the Upper Peninsula (4.9%) and higher than the rate for the state of Michigan (4.2%) and the United States (3.7%) as a whole.

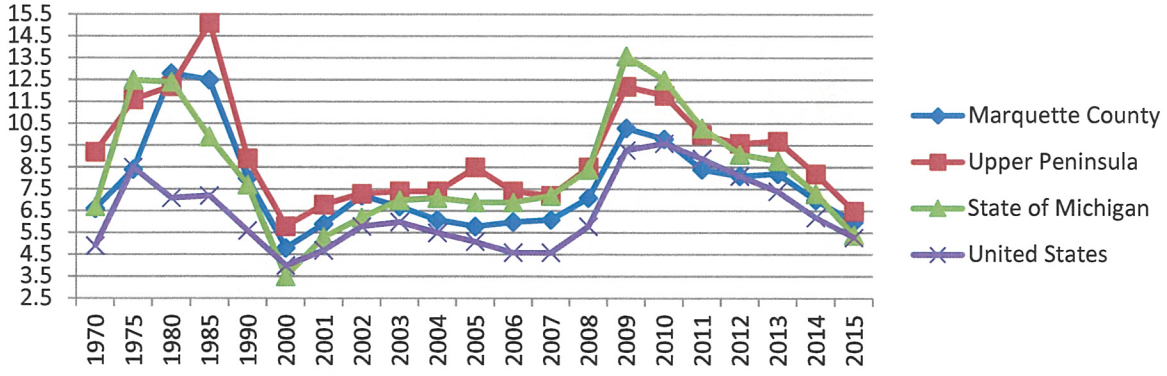
3.6 Unemployment continued

Table 3-6
Labor Force and Unemployment, Selected Areas, 1970-2015

Year	Marquette County Labor Force			Unemployment Percent Rate			
	Employed	Unemployed	Total Labor Force	Marquette County	Upper Peninsula	State of Michigan	United States
1970	20,225	1,425	21,650	6.6	9.2	6.7	4.9
1975	24,775	2,275	27,050	8.4	11.6	12.5	8.5
1980	26,650	3,925	30,575	12.8	12.2	12.4	7.1
1985	24,875	3,575	28,450	12.5	15.1	9.9	7.2
1990	29,552	2,572	32,124	8.0	8.9	7.7	5.6
2000	31,757	1,600	33,150	4.8	5.8	3.5	4.0
2001	31,350	1975	33,325	5.9	6.8	5.3	4.7
2002	30,075	2,325	32,400	7.2	7.3	6.2	5.8
2003	30,675	2,225	32,872	6.7	7.4	7.0	6.0
2004	33,054	2,149	35,202	6.1	7.4	7.1	5.5
2005	33,689	2,064	35,753	5.8	8.5	6.9	5.1
2006	34,001	2,173	36,174	6.0	7.4	6.9	4.6
2007	33,835	2,216	36,051	6.1	7.2	7.2	4.6
2008	33,205	2,548	35,753	7.1	8.5	8.4	5.8
2009	32,483	3,723	36,206	10.3	12.2	13.6	9.3
2010	32,086	3,472	35,558	9.8	11.8	12.5	9.6
2011	32,368	2,971	35,339	8.4	10.0	10.3	8.9
2012	31,240	2,746	33,986	8.1	9.6	9.1	8.1
2013	31,153	2,773	33,926	8.2	9.7	8.8	7.4
2014	31,369	2,365	33,734	7.0	8.2	7.3	6.2
2015	31,325	1,998	33,323	6.0	6.5	5.4	5.3

Source: Michigan Labor Market Information, http://www.milmi.org/cgi/dataanalysis/,2012.

Figure 3-1
Unemployment Rate, Selected Areas
1970-2015



Source: Michigan Labor Market Information, http://www.milmi.org/cgi/dataanalysis/,2012.