



City Hall
208 North First Avenue
Alpena, Michigan 49707
www.alpena.mi.us

Planning & Development

AGENDA

City of Alpena Planning Commission

Regular Meeting

Tuesday, May 14th 2019, 7:00 p.m.

Alpena, Michigan

CALL TO ORDER:

ROLL CALL:

PLEDGE OF ALLEGIANCE:

APPROVAL OF AGENDA:

APPROVAL OF MINUTES: Regular Meeting April 9, 2019

PUBLIC HEARING AND COMMISSION ACTION:

BUSINESS:

1. Comprehensive Plan Draft Chapters

COMMUNICATIONS:

REPORTS:

1. Development Update-

CALL TO PUBLIC:

MEMBERS' COMMENTS:

ADJOURNMENT:



MINUTES
City of Alpena Planning Commission
Regular Meeting
April 9, 2019
Alpena, Michigan

CALL TO ORDER:

The regular meeting of the Planning Commission was called to order at 7:00 p.m. by Paul Sabourin, Planning Commission Chair.

ROLL CALL: PLANNING COMMISSION

PRESENT: Sabourin, Lewis, Gilmore, VanWagoner, Austin, Mitchell

ABSENT: Wojda, Kirschner, Boboltz

STAFF: Adam Poll (Director of Planning & Development), Cassie Stone (Recording Secretary).

PLEDGE OF ALLEGIANCE:

Pledge of Allegiance was recited.

APPROVAL OF AGENDA:

Add 23 South Corridor update under the Business section, as number 1. Agenda approved as amended.

APPROVAL OF MINUTES:

Motion made by Mitchell, seconded by VanWagoner, to approve January 8, 2019 and February 20, 2019 Joint CIP Meeting minutes as printed.

PUBLIC HEARING AND COMMISSION ACTION: None

BUSINESS:

1. 23 South Corridor Update.

Larry Clark gave an update on the commercial corridor which runs from Mich-e-ke-wis down to Bear Point Plaza. Clean up and improvements have been underway for many years. This year will mark the 8th annual clean up along 23. Phase One of the improvements are straightening up the twisted bike path that runs in front of Neimans and eventually extending it toward the future 45th Parallel Memorial Peter Pettalia Park with landscaping along the way to enhance the image and make it more user friendly. The proposed location of the park is on a 6.5 private parcel that is located at the southeast corner of South Partridge Point Road and 23. Clark added that other locations have been looked at but this property seems to be the best fit for the park

to be located. Austin questioned what the estimated cost for the park will be. Clark stated about 25 million dollars. The bike path extension will be about 2 million adding that it costs roughly about 1 million dollars to do 1 mile of a bike patch. Grants will be applied for money towards the projects.

2. Medical Marijuana – Potential Zoning Districts if approved.

Poll stated at this point council opted out of recreational marijuana facilities allowed in the City. Council has not opted in to allowing medical marijuana facilities within the City and is seeking the Planning Commission to look at potential locations to allow facilities if Council decides to opt in to allowing medical marijuana facilities in the future. The number of facilities was discussed with Poll adding his recommendation of allowing 2 facilities. (1 per every 5,000 residents). Poll referenced a spreadsheet that was distributed to the Planning Commission that showed other communities choosing to create buffer zones. Poll felt there should be a 1000 feet buffer from any existing school. Additionally a smaller buffer of 250 from protected uses such as daycares, addiction centers and parks. Austin added his brewery had to be 500 feet from a place of worship. Poll felt there shouldn't be any rules regarding places of worship because of the number of them located in the City. It was also discussed that there should be at least 500 feet away from other provisioning centers. Growing facilities can only be allowed in industrial zoning districts as the city does not have an agricultural district. Transporting the product will result in storage overnight which could potentially result in odor therefore the industrial district is recommended. A testing facility could be located in districts where a laboratory environment is allowed. There is only a small amount of testing and it is done in house thus not much attention is brought to it. These districts would include office, general and commercial business and industrial. Industrial districts would be appropriate for processing facilities. Poll stated that DDA (located in the central business district) has not taken any action and should not be included in the districts for allowing a provisioning center at this time. Local business (B-1) should also be excluded from appropriate districts leaving office, OS-1, general business and commercial (B-2, B-3) and commercial corridor (CCD) as well as industrial (I-1 and I-2) as recommended districts. Poll requested feedback on the buffers that are listed below.

- 1,000 feet away from schools
- 250 feet away from addiction centers, parks and daycares
- 2,000 feet from one provisioning center to the next

VanWagoner suggested 250 feet buffer from places of worship should also be added because of children that frequent them for other activities. Lewis and Mitchell felt the distance of 500 feet from one provisioning center to another provisioning center was adequate. Poll also recommended that all of the buffers are special uses in any zoning district that's allowed that way it has to go to the Planning Commission to make sure all requirements are met. Sabourin questioned that it means a special use permit in which Poll verified with Mitchell adding it will then become a public hearing requirement so the public has an opportunity to voice their concerns regardless

of the impact it could have on the matter. To summarize Poll stated that under the special use regulations would be:

- Buffer from protected uses (1,000 feet from schools, 250 feet from addiction centers, parks and daycares and 500 feet from any worshipping center.
- Buffer from other provisioning centers of 500 feet.
- Some type of odor control plan or at least a requirement that you cannot smell it outside of the building (Poll added whatever the attorney recommends).
- Leave sign language in so signs could be regulated, unlike other signage that we cannot regulate until Federal Court changes that.
- Must also follow all state rules regarding marijuana facilities in case they are not then the Planning Commission can reevaluate their special use permit.

COMMUNICATIONS: None

REPORTS:

1. Development Update:

Besser Assisted Living Facility has applied for an abatement because of a storm sewer line that was not properly recorded and needed to be relocated. Construction is moving forward with a new contractor. WG Benjey's rezone for an industrial building was granted and they received an industrial facility tax abatement. Poll also added that the City has a contractor for the EPA Brownfield Assessment Grant, Otwell Mawby, from Traverse City Dry Dock is moving along and should start construction this month. Poll added that there will be 2 more public input hearings on Mich-e-ke-wis Park and if anyone has any ideas for the park to email Steve Schnell at NEMCOG or himself.

CALL TO PUBLIC: None

MEMBER'S COMMENTS: VanWagoner questioned what ever happened to the property by the Ford dealership that was supposed to become a motel. Poll stated he hasn't heard from the guy in years and assumed the deal fell apart. They did purchase the property at some point but he thinks they are marketing the property again. Lewis added that Mike Kendziorski owned the property and sold it to them.

ADJOURNMENT: There being no further business, the meeting was adjourned at 8:42 p.m. by Sabourin, Planning Commission Chair.

Wayne Lewis, Secretary

Chapter 3

Economic Profile

Overview

Since its early years, the economic base for the City rested on its close proximity to abundant natural resources. Strategically sited at the mouth of the Thunder Bay River and along the shores of Lake Huron, it was the optimum location to process raw materials into a marketable product and then ship the product off to distant markets. Resource based industries, starting in the late 1800's, were the driving force of economic growth. Starting around 1980, large employment-based heavy industry underwent a manpower reduction as modern automated systems displaced the workforce.

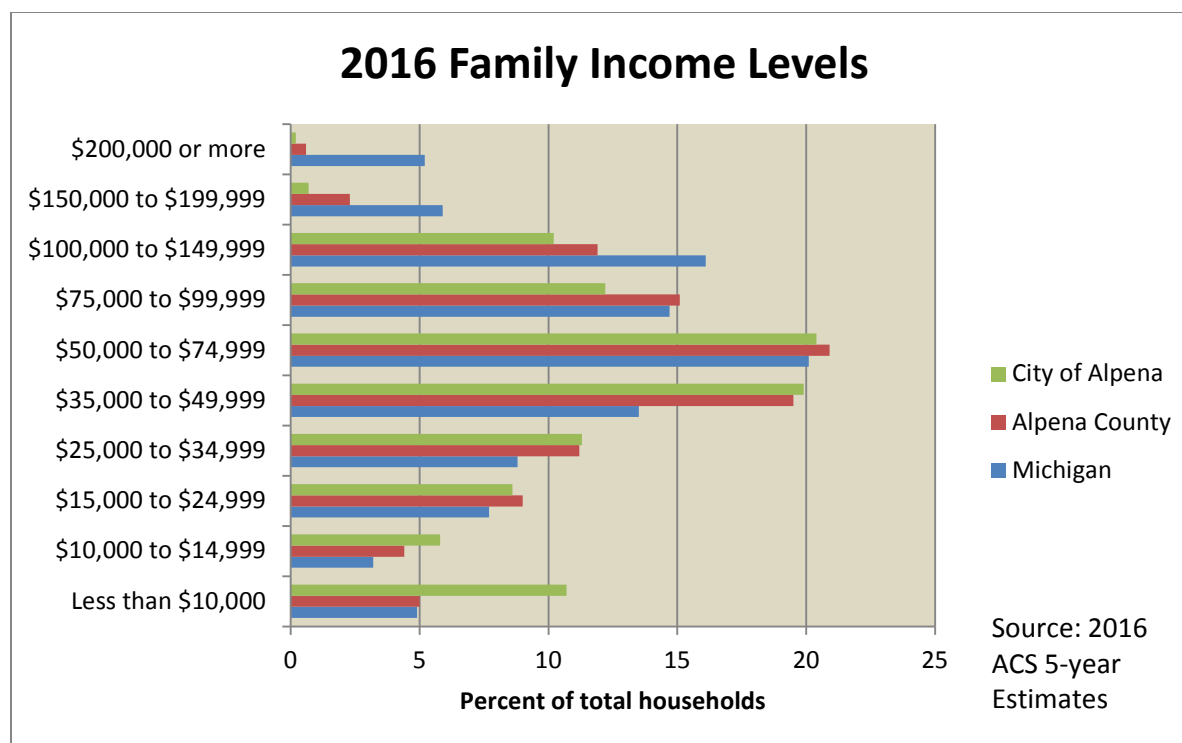
The 1990's saw the community focus on new efforts to diversify the local economy. Today, Alpena serves as the commercial and healthcare hub for a four-county area. National retailers and service providers have opened and created employment. Healthcare services have produced the largest growth. In 2016 the Alpena Regional Medical Center joined Mid Michigan Health and changed its name to Mid Michigan Medical Center – Alpena. The facility has grown from a local primary care County-based hospital into a regional secondary healthcare center. The Medical Center has 139 beds and a medical staff of approximately 100 physicians, 1000 employees and 200 volunteers. The Medical Center has annual operating revenue of over 125 million dollars, providing well-paid and stable jobs. Total annual operating expenses (including salaries, wages, benefits, medical supplies, and other fees) total over 119 million dollars. In 2017 the Medical Center was recognized as a Top Rural Community Hospital and received Michigan's Quality Improvement Organization Governor's Award for Excellence.

Education, small-specialized industries and tourism are other sources of new jobs and economic development. Alpena Community College has averaged 1,972 students since 2000 (peaking at 2,077 students in 2009; with a low of 1,853 students in 2004). Fairly steady enrollment has allowed the college to create more jobs and train many people to take advantage of new technology, healthcare, marketing, and new industrial applications. Likewise, organizations like the Alpena Area Convention and Visitors Bureau, the Alpena Downtown Development Authority, and the Alpena Area Chamber of Commerce have created and promoted many successful tourist events that include the Michigan Brown Trout Festival, Great Lakes Lighthouse Festival, Maritime Festival, and other similar events that attract tourism dollars to the community's motels, eateries and specialty shops. Efforts are being made to attract new technology and specialized industries to new industrial and commercial parks, as well as Renaissance Zones in the City and at the Alpena County Regional Airport.

Local Property Taxes and State Revenue Funds are the primary source of local government revenue. The City of Alpena collects 16.1066 mils for operations, which has been rolled back by the Headlee Amendment from 16.2316. This tax revenue funds a projected budget of \$10.6 million for fiscal year 17-18, with a fund balance of just over \$3 million. The County levies 4.8004 mils, which have been rolled back from 5.4 mils allowed under State Law by the Headlee Amendment. This has limited County government by restricting expansion of non-mandated services, unless provided by voter approval (EMS millage, 911 surcharge, Senior Citizen millages, etc.).

Income and Poverty

The US Census Bureau defines a family as a group of two or more people who reside together and who are related by birth, marriage, or adoption. A household consists of all the people who occupy a housing unit. Over one-quarter (25.1%) of the households in the City of Alpena and 18.4 percent of households in Alpena County earn less than \$25,000 a year, compared to 15.8 percent of households for the State (see **Figure 3.1**). Since the 2011 ACS 5-year family income data, families in the City of Alpena earning less than \$10,000 increased from 6.4% to 10.7%. That's a 67% increase for that share of the City's households.



Median estimated 2016 household income for the City of Alpena is \$35,490, 30% percent lower than the State's average of \$50,803 and 36% percent lower than the national average of \$55,322. Alpena County has the fourth highest median household income in the eight counties of northeast Michigan. Alcona, Montmorency and Oscoda Counties have lower median household incomes. (See **Table 3.1**).

Lower income levels correlate with higher rates of poverty. The estimates for 2016 indicate that about 12% of families live below the poverty line in the State of Michigan, but nearly 20% of families live below the poverty line in the City of Alpena. The Census Bureau uses a set of money income thresholds that vary by family size

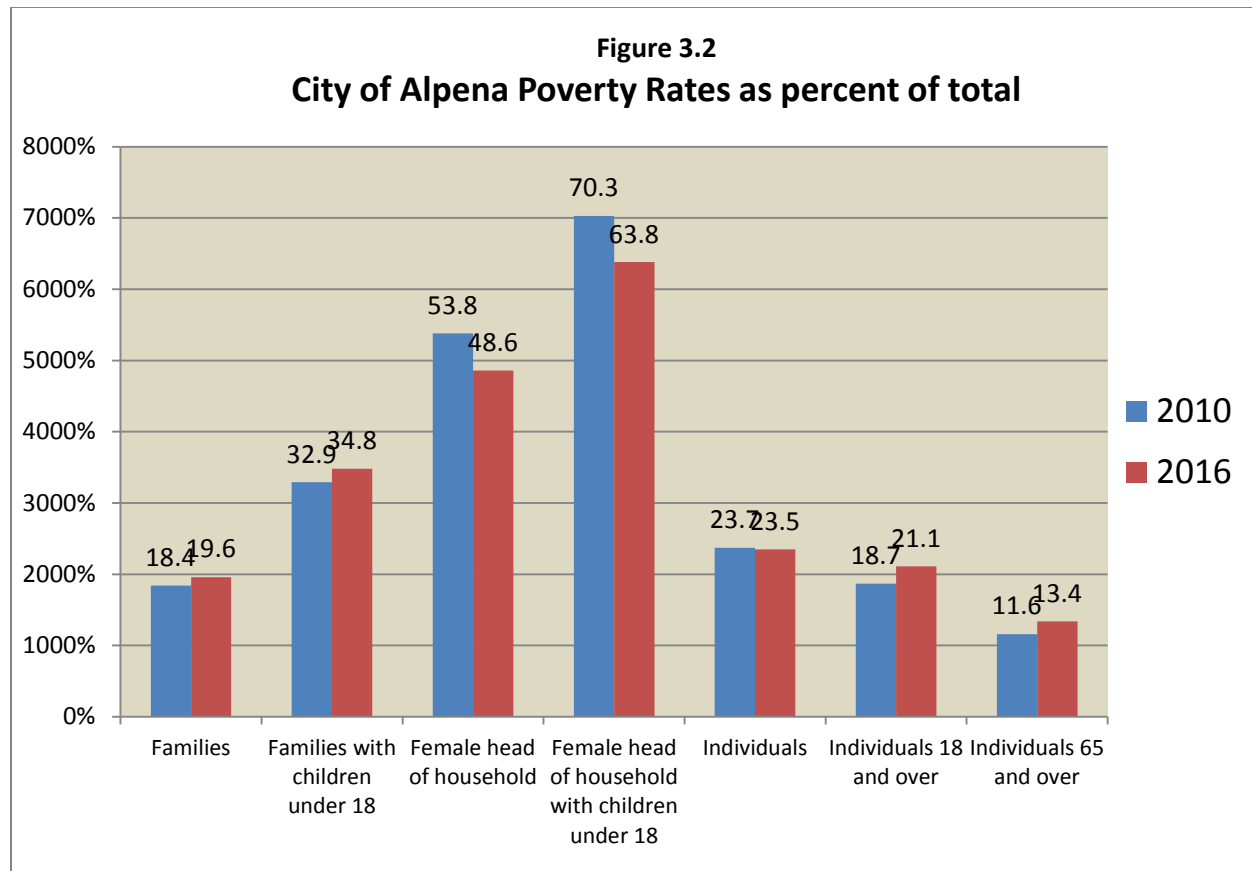
Table 3.1 Median Household Income	
City of Alpena	\$35,490
Alcona County	\$38,160
Alpena County	\$39,832
Cheboygan County	\$41,023
Crawford County	\$41,034
Montmorency County	\$37,145
Oscoda County	\$35,175
Otsego County	\$50,793
Presque Isle County	\$41,570
State of Michigan	\$50,803
United States	\$55,322
Source: American Community Survey 2016 5 –Year Estimate	

and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then all family members or unrelated individuals living in that household are classified as being "below the poverty level."

The U. S. Census Bureau breaks the total number of individuals living in poverty into various categories, such as *Families, Families with Children, or Female Head of Household*. **Table 3.2** shows the percentage each of these categories living under the poverty line by State, County, and City in 2010 and 2016. During the decade from 2000 to 2010 the data clearly showed marked increase in individuals living in poverty. However, there has been a noticeable change to this trend. Although the City of Alpena still has higher rates of poverty than the County and the State, there is no longer such a marked increase. In fact there has been a decrease in poverty rates for households where females are the heads of households including the subgroup of female heads of households with children under 18. The other segments of the population as shown in the following tables continue to increase in poverty rates but the rate of increase has slowed.

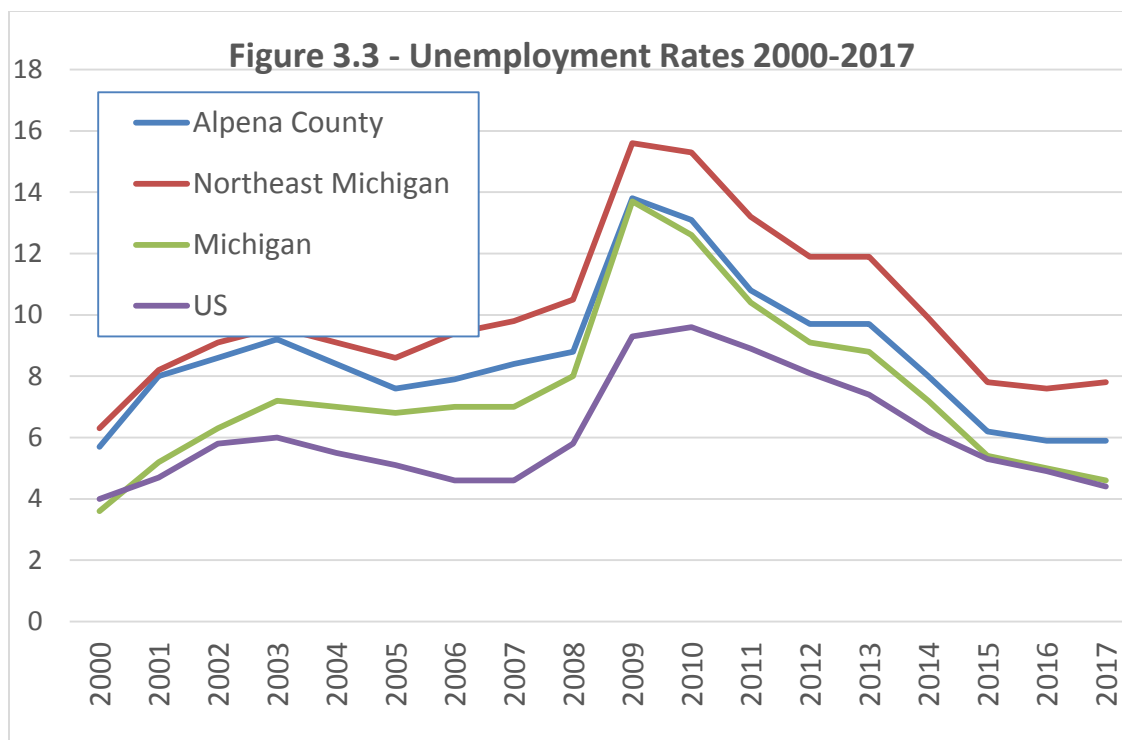
The total number of families living below the poverty line in the City of Alpena was 19.6 percent, an increase of 6.5% since the 2010 Census (**See Table 3.2**). The highest percentage of families living below the poverty line (63.8%) consisted of female heads of households with dependent children under age 18. This figure has decreased since 2010, when 70.3% of those same households were living in poverty. It should be noted that the category "female heads of household with dependent children" has the highest rate of living below the poverty line at the City, County, and State levels; however, the State average is only 44.3 percent. The number of families with dependent children (34.8%) and individuals (23.5%) living in poverty are also higher than those recorded for the State. The largest increase in poverty rates on Table 3.2 is for the elderly population over 65 years of age, which was a 15.5% increase 2010 to 2016.

Table 3.2 Poverty Distribution (as percent of total) – 2016						
	City of Alpena		Alpena County		State of Michigan	
Living Below Poverty Level	2010	2016	2010	2016	2010	2016
Families	18.4	19.6	11.7	12.1	10.6	11.5
With children (under 18)	32.9	34.8	22.5	23.9	17.0	19.4
Female householder, no husband	53.8	48.6	46.3	36.4	31.8	32.9
With children (under 18)	70.3	63.8	62.8	52.5	41.1	44.3
Individuals	23.7	23.5	15.9	16.3	14.8	16.3
18 years and over	18.7	21.1	13.5	14.7	13.0	14.3
65 years and over	11.6	13.4	8.6	9.8	8.3	8.1
Source: U. S. Census Bureau (2010) and American Community Survey 2012-2016						



Labor Force and Unemployment

As can be seen in **Figure 3.3**, Alpena County and all of Northeast Michigan both have had a higher unemployment rates than the State of Michigan for most of the past two decades. Unemployment rates for both the County and the region have been consistently above seven percent since 2001 until 2015 when the county dipped to around 6%, which is higher than the State average for the same time period but better than the region. Rates peaked in 2009, when the region had an average unemployment rate of 15.9 percent; Alpena County peaked the same year at 13 percent. Rates have declined significantly since then. The county was at 5.9% in 2017 and at 7.8 percent regionally (**See Figure 3.3**).



Source: Office of Labor Market Information (*data not available for the City of Alpena*)

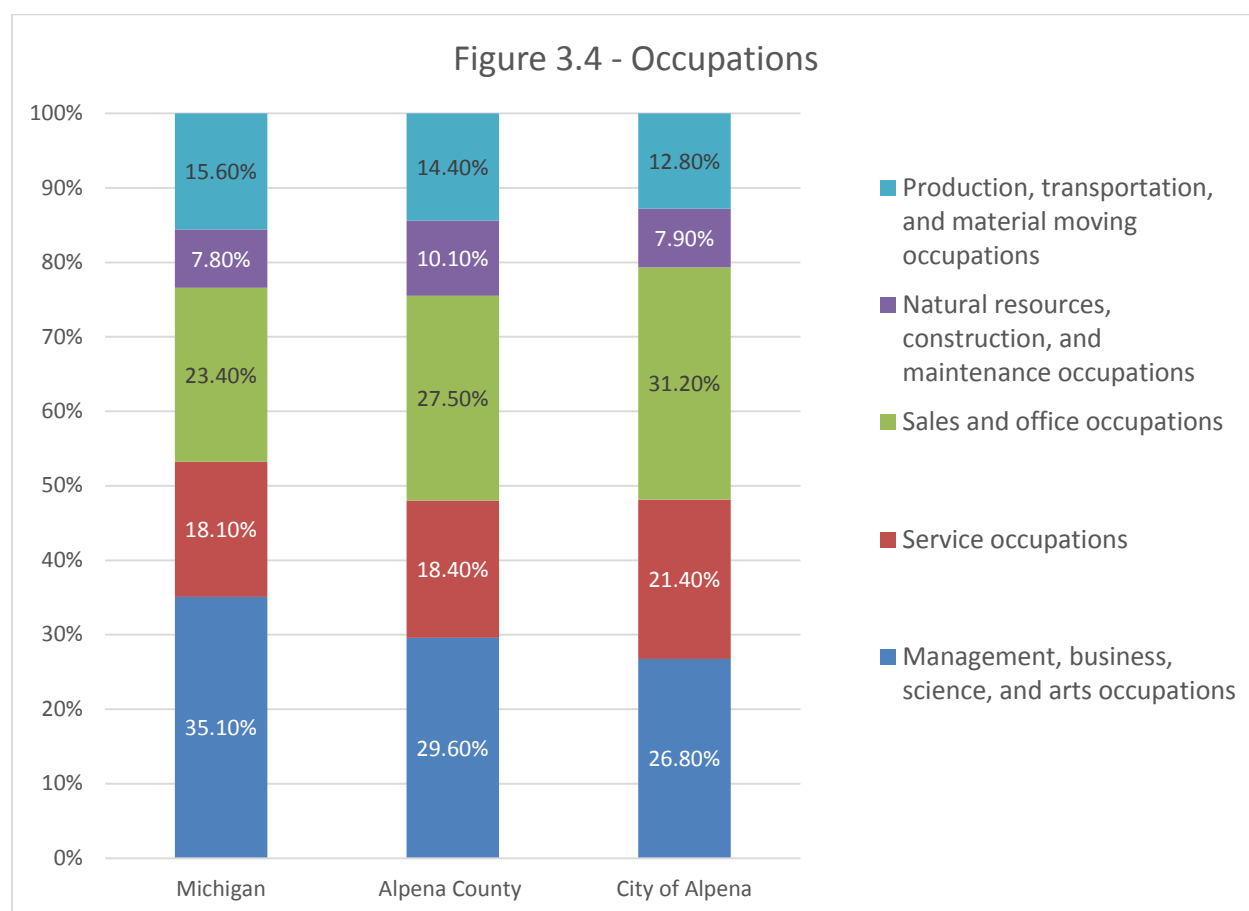
Table 3.3 shows that the percent of the population in the labor force is fairly similar for City and the County (57.8% and 56.5% respectively), but both percentages are somewhat lower than the percent in the labor force (61.2%) at the State level. **Figure 3.4** shows that the percentages of workers in different occupations remain fairly consistent at all three levels but some differences can be noted when the type of work prevalent at State and local levels is taken into consideration. **Figure 3.4** shows management and professional jobs constituted 34 percent of employment for the State of Michigan in 2011. Sales and office occupations (24.9%) and service jobs (18.2%) were the second and third largest employment sectors for the State. It should be noted that service jobs became the third largest occupation sector in the State since the 2000 Census.

Management and professional occupations were also the largest sectors in City (29.6%) and the County (32%). Sales and office occupations were the second largest sectors in both the City (29%) and the County (24.1%) and service occupations were the third largest sector (**See Figure 3.4**).

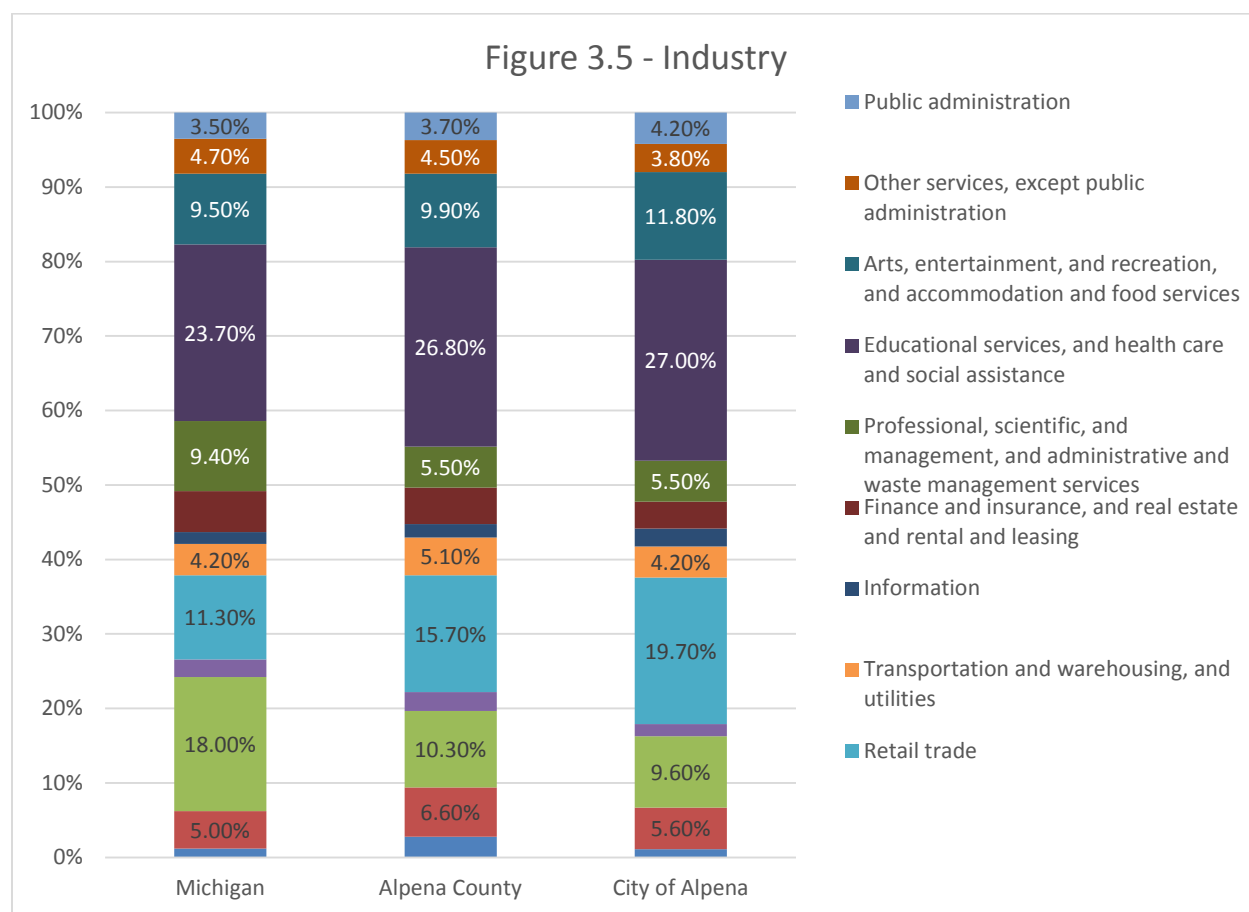
These figures aren't surprising when employment statistics (**Table 3.3**) and the poverty statistics (**Table 3.1**) are taken into consideration. The figures from these tables and **Figures 3.1, 3.2 and 3.3** indicate that economic distress is higher for the City and the County than for the State. This statement can be made for nearly all of the communities of Northeast Michigan.

Table 3.3 Employment Statistics – 2016					
	City of Alpena		Alpena County		State of Michigan
Population 16 years and over	8309	100%	24009	100%	100%
Employment Status					
In labor force	4803	57.8%	13555	56.5%	61.2%
Civilian labor force	4784	57.6%	13521	56.3%	61.1%
Employed	4355	52.4%	12460	51.9%	55.9%
Unemployed	429	5.2%	1061	4.4%	5.2%
Armed Forces	19	0.2%	34	0.1%	0.0%
Source: 2016 American Community Survey 5-Year Estimates					

Figure 3.4 depicts employment statistics by occupation category for the City. This shows that nearly 60 percent of the workforce is employed in management, business, science, and art or sales and office occupations. Generally, these jobs require an advanced degree and provide a higher pay scale than retail, service, and manufacturing jobs. **Figure 3.5** depicts a more detailed breakdown of this information.



Source: 2012-2016 American Community Survey 5-Year Estimates.



Source: 2012-2016 American Community Survey 5-Year Estimates.

Table 3.4 provides employment statistics by class of worker from the 2016 American Community Survey 5-Year Estimate. 82.8% of residents in the City work in the private sector, up from 80.6 percent in 2010. Another 12.2 percent work for a unit of government; up from 11.3 percent. Another 4.7 percent were classified as self-employed; this is also down from 8.1 percent in 2010.

Table 3.4 Employment Statistics for Class of Worker: City of Alpena		
Class of Worker	Number	Percent
Private Wage & Salary Workers	3,608	82.8
Government Workers	542	12.2
Self-employed Workers (not incorporated business)	205	4.7
Unpaid Family Workers	0	0.0
Source: 2016 American Community Survey 5-Year Estimates		

Economic Sectors

Looking at Alpena County as a whole, the major sectors which make up the county's economy are health care, industrial, retail, service, governmental and agricultural. A brief analysis of each of the sectors is found in the following sections.

Table 3.5
Alpena Area Business Patterns

Industry code description	Paid employees	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	10,431	83,585	354,140	780
Agriculture, forestry, fishing and hunting	22	190	660	8
Mining, quarrying, and oil and gas extraction	36	885	1,808	3
Utilities	71	1,133	4,892	6
Construction	444	3,931	15,385	88
Manufacturing	1,272	15,632	67,790	46
Wholesale trade	503	4,786	23,616	34
Retail trade	1,941	11,213	48,303	146
Transportation and warehousing	254	2,069	9,090	27
Information	179	1,523	6,410	15
Finance and insurance	323	3,695	14,808	40
Real estate and rental and leasing	121	533	2,414	20
Professional, scientific, and technical services	227	2,338	12,417	37
Management of companies and enterprises	e	D	D	2
Administrative and support and waste management and remediation services	307	1,510	7,981	34
Educational services	18	100	436	5
Health care and social assistance	2,802	26,621	107,784	82
Arts, entertainment, and recreation	64	363	1,827	10
Accommodation and food services	895	2,848	12,520	67
Other services (except public administration)	508	2,570	11,566	109

Does not include public sector jobs

** Paid employees as of mid-March 2016

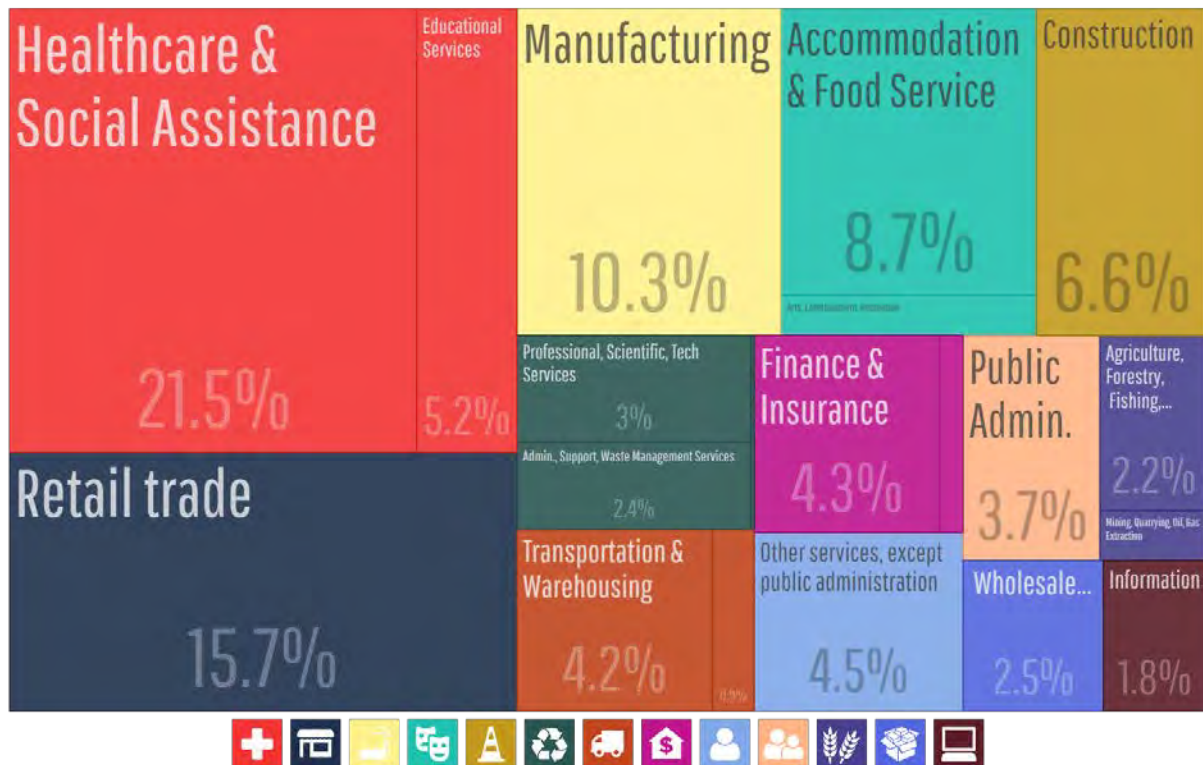
(a) – 0-19 employees

(D) - Information withheld to avoid disclosing information about individual companies

Source: County Business Patterns - U.S. Census Bureau - 2016

Employment by Industries in Alpena County

The closest comparable data for the county of Alpena County, MI is from the public use microdata area of Northeast Lower Peninsula.



Dataset: ACS 5-year Estimate
Source: Census Bureau

DATAUSA

Table 3.6
Alpena Area Business Patterns - % Change 2009-2016

Industry code description	Paid employees	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	8%	22%	17%	-6%
Agriculture, forestry, fishing and hunting				33%
Mining, quarrying, and oil and gas extraction	33%	182%	17%	0%
Utilities	8%	11%	12%	50%
Construction	29%	34%	0%	-2%
Manufacturing	9%	21%	25%	18%
Wholesale trade	11%	14%	27%	-8%
Retail trade	6%	15%	16%	-3%
Transportation and warehousing	-10%	16%	6%	-18%
Information	-9%	10%	3%	-38%
Finance and insurance	-15%	22%	14%	-15%
Real estate and rental and leasing	12%	3%	20%	0%
Professional, scientific, and technical services	8%	47%	70%	-18%
Management of companies and enterprises				-50%
Administrative and support and waste management and remediation services	57%	37%	58%	31%
Educational services	-31%	3%	17%	-38%
Health care and social assistance	-2%	17%	5%	-9%
Arts, entertainment, and recreation	-4%	48%	37%	-23%
Accommodation and food services	-2%	31%	24%	-8%
Other services (except public administration)	-6%	38%	42%	-4%

Health Care & Social Assistance

The Health Care and Social Assistance industry is one of the largest economic sectors in the City of Alpena. Over 2,800 people are employed countywide at 82 establishments, making up a payroll of just over \$107 million, an increase of 5% between the years 2009 to 2016. The number of firms in this sector decreased by 9% during that same time.

Construction

Consolidation of firms was a theme between 2009 until 2016. In the construction sector there was a consolidation of firms (-2%) but an increase in total employees (29%) but essentially no increase in annual payroll (0%).

Industrial Development

Data found in **Table 3.5** shows that, in 2016, the county's manufacturing sector had the third largest number of employees (1,163). Until the middle 1980's the Alpena County economy was centered in the manufacturing sector with a few large industries making up a majority of the industrial base. Although the large industrial plants still are a vital component to the regional economy, the recent trend has been towards the development of smaller businesses with fewer employees. Between 2009 and 2016 the number of manufacturing firms increased by 18%, total employees by 9%, and annual payroll increased by 25%.

The manufacturing sector was made up of 46 separate establishments. In fact, **Table 3.7** shows that 37 percent (17 facilities) of the manufacturing establishments had less than five employees; just under half of the establishments have less than ten employees. This indicates that the area is not dependent on only one or two manufacturers for all of the area's employment in that sector.

In 2012, the \$28-million dollar Alpena Biorefinery, owned by American Process, Inc., was completed in the City of Alpena. The first shipment of cellulosic ethanol was achieved in 2014 and the fuel meets the requirements of the renewable fuel standards. The facility employs 31 people and could be the beginning of an "Island of Biotech" in the city. The plant helps retain 200 jobs at the neighboring mill. The biorefinery utilizes a daily input of 23 dry tons (equivalent) of woodchip waste from an adjacent board manufacturing mill to create value-added products. It has the output capacity to produce 800,000 gallons of cellulosic ethanol and 790,000 gallons of potassium acetate, which can be used to de-ice runways. The plant has been awarded grants from the Michigan Economic Development Corporation and from the Department of Energy. It is one of the only cellulosic ethanol facilities in the U.S. and is garnering national and international attention. Other manufacturers are also expanding including Besser, which is considering diversification and F&T Fur Traders which is headquartered in Ossineke and opened a manufacturing facility in Alpena. If these trends continue, Alpena County may see resurgence in an industrial-centered economy in the near future.

Retail

Alpena County, especially the City of Alpena and Alpena Township, serves as a regional shopping destination for residents of nearby counties. The importance of retail trade on the area's economy is shown in **Table 3.5**. As of 2016, this sector employed 1,941 persons, which is the second largest number of employees by sector. This sector is comprised of 146 establishments. **Table 3.7** shows that 42% (71 retail establishments) employ less than five individuals. However, that's fewer smaller firms as a percentage of

total when compared to 2009 industry data. In 2016, 70% percent of retail establishments employ less than ten individuals.

Government

The government sector makes up another important economic sector of the county. **Table 3.4** shows that governmental employment comprises about 12.2% of total employment, the second largest employment classification. The City of Alpena, Alpena County, and Alpena Township account for the majority of governmental workers within the county. Governmental employees also make-up a large segment of highly-skilled, professional worker category. Engineers, planners, administrators, and information technology workers are examples of the type of governmental worker that constitute the “knowledge worker” classification.

Table 3.7
Alpena Area Businesses by Size of Establishments as of 2016

Industry code description	Total	1 to 4	5 to 9	10 to 19	20-49	50-99	100-249	250-499	500-999
Total for all sectors	780	399	168	114	70	16	9	2	2
Agriculture, forestry, fishing and hunting	8	7	0	1	0	0	0	0	0
Mining, quarrying, and oil and gas extraction	3	0	1	2	0	0	0	0	0
Utilities	6	2	1	2	1	0	0	0	0
Construction	88	67	10	7	3	0	1	0	0
Manufacturing	46	17	5	10	8	3	3	0	0
Wholesale trade	34	8	14	6	4	2	0	0	0
Retail trade	146	61	41	27	12	1	3	1	0
Transportation and warehousing	27	14	5	4	3	1	0	0	0
Information	15	5	4	3	3	0	0	0	0
Finance and insurance	40	22	8	6	3	1	0	0	0
Real estate and rental and leasing	20	16	2	1	0	1	0	0	0
Professional, scientific, and technical services	37	19	10	6	2	0	0	0	0
Management of companies and enterprises	2	0	0	0	1	0	0	1	0
Administrative and support and waste management and remediation services	34	21	4	5	3	1	0	0	0
Educational services	5	4	1	0	0	0	0	0	0
Health care and social assistance	82	32	22	13	8	3	2	0	2
Arts, entertainment, and recreation	10	6	1	2	1	0	0	0	0
Accommodation and food services	67	26	13	11	14	3	0	0	0
Other services (except public administration)	109	71	26	8	4	0	0	0	0

Source: County Business Patterns - U.S. Census Bureau - 2018

Tourism

With over 13,000 acres of lakes, 300 miles of streams and tributaries and 61 miles of Lake Huron shoreline, Alpena County's water resources are a major tourism draw. The tourism sector is a subset of both the retail and service sectors of the county's economy. It is difficult to find exact numbers regarding the impact of tourism on an economy. Fishing and hunting play a vital role in the economy of Alpena County.

In addition to water activities, the City of Alpena offers recreational opportunities in a natural setting, including Island Park and the 350-acre Wildlife Sanctuary. An 18.5 mile Bi-Path travels through the majority of Alpena's scenic parks and beaches as it winds through the City and along the Thunder Bay River and the Lake Huron shoreline. Alpena County also has two state parks, two state forest campgrounds, three county campgrounds and four commercial campgrounds, with a combined total of 412 campsites.

Spending at tourism-related business is at its highest between June and September, peaking in July. Tourism spending declines in the fall and then has a significant increase in December. Receipts are at their lowest levels in January and February and then begin to increase again in the spring.

Golf courses and tennis courts provide outdoor recreation. The Thunder Bay Recreation Center and Northern Lights Ice Arena provide a combination of indoor recreation. Two live performance theatres and two movie theatres, both with multiple screens provide indoor entertainment. The Besser Museum of Northeast Michigan, the Alpena County George N. Fletcher Library, the Thunder Bay National Marine Sanctuary and Underwater Preserve, and the Great Lakes Maritime Heritage Center offer cultural and historical opportunities. Tourists arriving along the City's major corridors will also view historic homes that have been restored and preserved. Many of these homes are typical of the early lumbering era and date back to the 19th century.

Organizations in Alpena County sponsor several annual festivals and other activities. These special events help to attract large groups of tourists to the City. Annual festivals held in the City include the Michigan Brown Trout Festival, Art on the Bay, the Great Lakes Lighthouse Festival, the Alpena Blues Festival, the Maritime Festival, and many others. The Alpena County Fair also takes place within the confines of the City limits at the Alpena County Fairgrounds.

Maritime Heritage Tourism

Maritime Heritage Tourism has become a significant economic driver in the Alpena area. Almost 94,000 people visited the Maritime Heritage Center in 2017. Alpena Shipwreck Tours launched in 2011. Owned by John Madigan of Picture Rocks, Apostle Island, and Sleeping Bear Dunes Boat Tours, the tours were enthusiastically received.

Trails

The North Eastern State Trail (NEST) was completed in 2011. Users can walk, bicycle, horseback ride or snowmobile 71 miles from Alpena to Cheboygan. The trail runs from Woodward Avenue in the City of Alpena to the Lincoln Street in City of Cheboygan where it merges with the North Central State Trail which runs south 45 miles to Gaylord or northwest 16 miles to Mackinaw City. The NEST has a 10' wide packed crushed limestone surface with two foot shoulders, new safety signs, access control features and mile marker posts. The trail use, determined by the DNR, is for all non-motorized users year round and snowmobiles from December 1 through March 31. This project was collaborative between two state departments, local governments and a non-profit organization. The Top of Michigan Trails Council (TOMTC)

led the effort to help assemble a 3.1 million dollar funding package which included gaining 5% of the project costs from local governments, individuals and organizations. The Michigan Department of Transportation completed the engineering and project oversight while the Michigan Department of Natural Resources oversaw the project implementation and will continue to manage and maintain the facility. The trail now creates a link across northeast Michigan on the former Detroit to Mackinaw Railroad connecting Alpena, Posen, Hawks, Millersburg, Onaway, Aloha and Cheboygan.

Other notable trail systems within Alpena County include Norway Ridge Pathway, Rockport Trails, Chippewa Hills Pathway, and a snowmobile trail system throughout the county.

Alpena Area Convention & Visitors Bureau – Official Destination Marketing Organization for Alpena

The Alpena Area Convention & Visitors Bureau is the official tourism destination marketing organization for the Alpena Area, including the City of Alpena. The CVB manages a diverse portfolio of marketing partnerships, advertising programs, and publicity throughout the year for the purpose of increasing business and leisure travel to the Alpena area for the benefit of increased revenue at local restaurants, retail stores, and lodging properties which in turn provides a mechanism for improving local infrastructure and increases tax revenue to local governments. Highlights include the CVB-hosted Major League Fishing television series which aired their early 2018 season filmed in Alpena. This program is America's #1 ranked outdoor sport show on TV and provides the CVB (and Alpena) with the equivalent of \$500,000 in marketing coverage for the community on the Outdoor Channel, CBS, and the Discovery Channel. Alpena was also featured on PBS in the US & Canada, CBS – Chicago market, and various other channels featuring outdoor recreation. Site visits hosted by the CVB for group travel to Alpena were up 66% in 2018. Social media followership increased by 34% in 2018. The CVB pays for many programs that market the Alpena Area including display, digital and video advertising, trade show representation, Pure Michigan cooperative marketing, Michigan DNR partnership program to market fishing and trails, MLive media marketing program; content creation for publication in magazines, newspapers; and interviews for state-wide radio, print, television and podcasts. As a result, the 2018 summer tourism season saw a 14.9% increase in overnight lodging over 2017.

Opportunity Assessment/Branding

In 2011, Destination Development International (DDI) was hired to conduct an Opportunity Assessment product development program to give the community an objective look through the eyes of a visitor. The second phase, Destination BrandCamp, took place in 2012. This program resulted in a specific, identifiable brand and marketing plan to allow the CVB and the community to market the Alpena area more effectively. This brand – Alpena: Sanctuary of the Great Lakes – is now being utilized to identify Alpena as the haven from the stresses of everyday life and a culturally-rich place to relax, rejuvenate, and inspire.

US 23 Heritage Route

The US 23 Heritage Route extends 200 miles from Standish to Mackinaw City and is a tourism-focused promotional program. Each county along the route has an active Heritage Route Team and participates in an overseeing Management Council. The Alpena County Heritage Route Team consists of volunteers interested in tourism and history. Each year, the county teams and the Management Council work toward implementing projects which are stated in the US 23 Heritage Route Management Plan. A landmark project has been the award-winning website www.heritage23.com which provides an interactive one-stop shop of things to see and do along the county-wide Heritage Route corridor. In addition, the Heritage Route publishes maps and brochures highlighting recreational amenities. Therefore, the US 23 Heritage Route program assists with promotion of public and private recreational facilities in the county.

City of Alpena Economic Development Activities

There are a number of economic development activities administered by the City. Staff responsible for these efforts includes the City Manager, City Planning and Economic Development Director and City Engineer. Programs include brownfield redevelopment, renaissance zones, infrastructure improvements, and the use of CDBG grants.

Brownfield Redevelopment

The Alpena City Council established an Authority for Brownfield Redevelopment with the adoption of Resolution 1997-7 on March 17, 1997, pursuant to the Brownfield Redevelopment Financing Act, Michigan Public Act 381. The Council designated its incorporated boundaries as the boundaries of the brownfield zone. The City is considered a “core community” by the State and is able to offer financial assistance through the brownfield program for cleanup and revitalization activities on three categories of eligible property. These categories include: blighted property, contaminated property and functionally obsolete property. Costs associated with cleanup and the redevelopment of an eligible property is funded through Tax Increment Financing.

Alpena developed a Brownfield Redevelopment Plan in 2001. The plan identified eight perspective eligible properties. Projects have been developed for the former Fletcher Paper Mill property at 318 W. Fletcher Street (site of the Great Lakes Maritime Heritage Center project and Fletcher Street Brewing Company project), Lafarge Midwest, Alpena Site at 1435 Ford Avenue, and Dean Arbor Ford on US 23 North. Brownfield Redevelopment activities have yielded tangible successes and supported economic growth in the core of the City, particularly along the waterfront.

Renaissance Zones

At one time there were up to seven Renaissance Zones designated by the State in Alpena County. Although they have all since expired, these were economic development tools utilized to spur growth on particular properties. The Renaissance Zone designation promotes economic development through tax exemptions from State Income Tax, the Single Business Tax, General Property Tax (not including debt retirement and special assessments), and the Education Tax for eligible businesses. Business property owners and residents located in a Renaissance Zone are exempt from State taxes for a period of up to 15 years. Although that time period begins at the time of the State designation, extensions can be requested. The following zones have been designated.

There was one Renewable Energy Renaissance Zone which assists the Alpena Biorefinery, but this was revoked back in 2016 due to compliance issues.

The other sites that utilized this Renaissance Zone program with the city of Alpena were:

- Commerce Industrial Park Sub Zone 1 (expired in 2014), a 21.76 acre light industrial park owned by Target Alpena Development Corporation, a Michigan Certified Business Park.
- Oxbow Park Sub Zone 2 (expired in 2017), a 39.7 acre former City landfill was owned by the City of Alpena but sold to a private developer in 2002.
- National Guard Armory Site Sub Zone 3 (expired in 2017), an historic structure dedicated in the 1920's as Memorial Hall, in honor of the veterans of World War I. In the 1950's, this 0.70 acre site became

a state-owned National Guard Armory Building.

- Southwest Residential Site Sub Zone 4 (Expired in 2014), a city-owned 14.85 acre site originally platted in 1893.

Residential Programs

Alpena has initiated several residential rehabilitation and development programs. MSHDA grants through the Community Development Block Grant (CDBG) program support the Downtown Rental Development Area and Lincoln School Neighborhood Target Area projects. The purpose of the Downtown Rental Development program is to increase the downtown's residential population by creating rental housing units for moderate and market rate income households in vacant or underutilized areas of the upper floors of existing commercial buildings (retail, office or institutional use) within a designated portion of the City's downtown. Increasing residential populations in business districts tends to increase business activity and growth, while creating a healthy, more vibrant downtown.

Under the Downtown Residential Rental Development Program MSHDA provides 70% of the cost, up to \$35,000 to develop new residential rental units in vacant or underutilized downtown buildings. The City applies for funding every two years based on interest of downtown property owners. Thirteen units have been constructed with five more planned.

The City has also established Neighborhood Enterprise Zones under P.A. 147 of 1992. Neighborhood Enterprise Zones promote neighborhood revitalization and encourages owner-occupied housing and new investment in core communities. The revitalization and new construction programs focus on the central business district to encourage a mixed use development pattern.

Fiber Optic Plan – NEMiFC

In January of 2005, the Alpena City Council's Vision Statement and Goals document included the development of a "wired city" and the relocation of all new or reconstructed utilities underground. This led to the development of a plan to develop a fiber optic conduit network that would not only provide the backbone for high-speed telecommunications (voice, video, and data transfer), but would also provide a readymade system within which to place new or relocated aerial utilities.

The City pursued the sharing of these resources within the public/nonprofit sector through the creation of a fiber optic consortium. The City of Alpena, Michigan Works!, Alpena County, Alpena Community College, the Thunder Bay National Marine Sanctuary, Northland Library Cooperative, and Alpena Regional Medical Center were the charter members of this consortium. The consortium's purpose is to enhance voice, video and data communications among all public/non-profit entities and develop a redundant network throughout the greater Alpena area to ensure reliability of service. To further the development of this fiber optic network, the City also adopted a policy to develop this underground conduit system as part of other road construction projects within the City.

To accelerate the development of both the network and the consortium, the City applied for and received a 2006 Center for Regional Excellence designation from the State of Michigan. This designation included a \$25,000 micro-grant, which targeted network development in three key target zones (City Hall/City Marina/Northland Library Target Zone; the Community Development Building Target Zone; the ARMC/Civic

Center Target Zone). All construction projects were completed within one year and educational activities were completed by the end of 2007.

In 2011 the group reorganized under a new name, the North East Michigan Fiber Consortium (NEMiFC). NEMiFC amended its Articles of Association and By-Laws in order to add additional members, gain the ability to own its own fiber optic networks, apply for grant funding and offer more support to its members. NEMiFC also developed a policy by which its members can members install and own fiber and choose to lease dark fibers to other entities to support the maintenance and expansion of the broader fiber network.

Economic Development Organizations

Housed under the umbrella of the Alpena Chamber of Commerce, Target Alpena Development Corporation is the primary economic development organization in the county. The City of Alpena and Alpena Township both also have Economic Development Corporations (EDC), formed under Act 347. Sporadically, issues arise that require tax-exempt bonds and the EDC's are used as the mechanism to obtain them.

The Alpena Area Chamber of Commerce and Michigan State University Extension partner with other organizations to promote general economic development in the area. Other more specialized economic development entities include Alpena's Downtown Development Authority and the Alpena Convention and Visitor's Bureau.

Target: Alpena Development Corporation

Founded in 1989, Target Alpena Development Corporation is a 501(c)3 non-profit corporation that was established for economic development purposes in Alpena County. It is the primary conduit for economic activity in Northeast Michigan including a partnership with Presque Isle County that started in 2014. Target Alpena is supported entirely by voluntary contributions from financial institutions, businesses, individuals, governmental entities, foundations, utilities, and grants. Target Alpena operates in partnership with the Alpena Chamber of Commerce.

North Industrial Park was created by the Greater Alpena Industrial Corporation. In the mid 1990's the corporation was absorbed by Target Alpena which received the assets of the corporation and assumed the responsibility of recruiting business into the industrial park. Since that time, Target Alpena filled eight of the remaining nine lots. In a cooperative effort with the City, Target also developed the Commerce Industrial Park. Development of the park was financed by lot sales in North Industrial Park, a Rural Development grant, and a CDBG infrastructure grant.

Target Alpena activities focus largely on the following areas:

1. Business development and assistance using a regional, collaborative perspective.
2. Job creation through retention and expansion of local businesses, attraction of new compatible businesses, and business start-ups.
3. Providing assistance to governmental entities on issues such as grant programs concerning infrastructure and transportation, revitalization projects and other relevant economic development issues.
4. Ongoing marketing and promotion of Alpena to cultivate growth potential of the Alpena area.

5. Education on current economic trends and policies as they relate to Alpena.
6. Providing financial assistance to area businesses through the Alpena County Revolving Loan Program and the Target Alpena Micro Revolving Loan Program.
7. Linking businesses by facilitating networking.
8. Developing new markets.
9. Liaison to state and federal governments.

Target Alpena's Revolving Loan Fund Programs have played a key role in economic growth in the community. Target's small business loan portfolio coupled with its partnership with the Small Business Development Center has enabled hundreds of new business startups and existing business expansions both in the city and across northeast Lower Michigan.

Alpena Area Chamber of Commerce

The Alpena Area Chamber of Commerce is an organization that serves and represents its business members. It is a 501(c)6 structured to be a lobbying organization. Founded over 90 years ago and officially incorporated in 1947, the organization has a long history of community involvement and creating a stimulus for community growth. Its mission statement is *"by serving our members, the Alpena Area Chamber of Commerce actively champions' economic development and the advancement of the community's quality of life."* The chamber partners with local government, Alpena Community College, Target Alpena, DDA, and Alpena Convention and Visitors Bureau to work towards realizing its mission. Services for members include a group health care plan, reduced credit cards processing fees, insurance discounts for cars and homes, and a small business loan program through a local bank. The Chamber works to create a positive business climate in Northeast Michigan, is a member of the Northern Michigan Regional Chamber Alliance, promotes Alpena, and provides networking and affordable educational opportunities to its members.

The 2012 merging of the Chamber and Target Alpena:

- ◆ presents a stronger relationship with a variety of partners
- ◆ is a full service stop for entrepreneurs and existing businesses looking for assistance
- ◆ has a more streamlined approach to assisting business start-ups and expansions
- ◆ has a combined financial audit
- ◆ builds a stronger effort for economic development in the region
- ◆ has a more efficient system internally

Alpena Downtown Development Authority

The Alpena City Council adopted Ordinance No. 110 on April 21, 1980, creating a Downtown Development Authority (DDA) under Public Act 179 of 1975. The intentions were to strengthen the downtown business district, promote economic growth and revitalization, encourage commercial revitalization, and historic preservation. The DDA provides the community with the necessary legal, monetary, and organizational tools to revitalize economically distressed areas either through public-initiated projects or with private development projects. The initial DDA district covered the core downtown area. Since that time the boundaries have been expanded to include properties along Washington Street, Fifth Street and the old Fletcher Paper Mill site on the Thunder Bay River. In July of 1981, the first Development Plan and Tax Increment Financing Plan were adopted for the DDA. These plans were amended in January of 2005. Traditional brick and mortar projects as well as historic preservation activities have remained key elements of the DDA's initiatives.

In 2013, the DDA was selected as an Associate Member of the Michigan Main Street Program. According to the organization:

The Main Street Four-Point Approach® is a community-driven, comprehensive strategy that encourages economic development through historic preservation in ways that are appropriate for today's marketplace. The four points include:

- *Design: Enhancing the downtown's physical environment by capitalizing on its best assets including historic buildings, and creating an inviting atmosphere through attractive window displays, parking areas, building improvements, streetscapes and landscaping. The Main Street program also focuses on instilling good maintenance practices in the commercial district, enhancing the physical appearance of the district by rehabilitating historic buildings, encouraging appropriate new construction, developing sensitive design management systems and integrating long-term planning.*
- *Economic Restructuring: Strengthening a community's existing economic base while also expanding and diversifying it. By helping existing businesses expand and recruiting new businesses to respond to today's market, the Main Street program helps convert unused spaces into productive properties and sharpens the competitiveness of business enterprises.*
- *Promotion: Marketing a downtown's unique characteristics to residents, visitors, investors and business owners. The Main Street program develops a positive, promotional strategy through advertising, retail activities, special events and marketing campaigns to encourage commercial activity and investment in the area.*
- *Organization: Involving all of the community's stakeholders, getting everyone working toward a common goal and driving the volunteer-based Main Street program. The fundamental organizational structure consists of a governing board and four standing committees. Volunteers are coordinated and supported by a paid program director or Main Street manager. This structure not only divides the workload and clearly defines responsibilities; it builds consensus and cooperation among the various stakeholders.*

The DDA works to promote activities in the business district by selling the image and promise of Downtown to all prospects by marketing the district's unique characteristics to shoppers, investors, new businesses, and visitors. An effective promotion strategy forges a positive image through advertising, retail promotional activity, special events, and marketing campaigns.

The parking committee continues to review the downtown parking plan for all day and two hour parking. The two hour parking zones were established to guarantee a regular turn-over in the most convenient spaces on the streets and in parking lots, so that our visitors can be assured that a convenient parking space will be available when they come to downtown.

In the fall of 2004, the DDA initiated a Façade Grant Program that provides a 50% match up to \$5,000 for exterior renovations of store fronts and backs. Renovations must be made in the historical context of the building. A design committee meets with the landowner to review and approve proposed renovations. The DDA façade grants programs awards grants under the program in any amount requested from a minimum award of \$500.00 up to a maximum award of \$ 5,000.00. Applicants for a

grant must provide a matching amount to their grant request based on a dollar for dollar basis. An applicant's proposed improvement project total can exceed \$ 10,000.00; however the DDA's participation will still be limited to a maximum amount of \$5,000.00.



The DDA worked with the City of Alpena to initiate the Neighborhood Enterprise Zone (NEZ) and the downtown rental rehab grant program. In addition, the DDA offers a downtown business support team and provides a retail incentive program. A program called Downtown Dollars incentivizes gift cards which can be given to promote more downtown shopping.

In the fall of 2017, the DDA completed a Strategic Plan & Market Analysis that included a survey of households as to their shopping activities. The plan indicated the following:

- Overall Economy- natural resource & extraction, wholesaling, transportation & logistics, medical, retail, and recreation & entertainment were all identified as weak sector groups compared to similar communities.
- R&D Potential- Alpena has rich opportunities for wildlife and natural resources research in the area surrounding Thunder Bay River, particularly in relation to the NOAA International Research laboratory and Northern Michigan Unmanned Aerial Systems Consortium. The area's prevalent agricultural sector has potential for an increased R&D sector, particularly in pharmaceuticals and food systems research.
- Housing- While the recession contributed to a significant decline in new housing builds, the majority of those few annual new building permits issued continue to be for single-family dwellings as opposed to attached residential. Without the attraction of one or more large employment generators, major shifts in the current residential permitting pattern remain unlikely. An increasing share of the Alpena area and larger market residents desire a different housing pattern in the future which Downtown can provide. Creating the desired active walkable environment and housing downtown may facilitate the purchase of existing homes by young child-bearing age families elsewhere in Alpena.
- Non-retail Goods & Services Space- In addition to traditional non-retail goods and service related office space, there is untapped potential for new industrial/emerging tech uses that can be safely integrated into a modern living environment. It is anticipated Downtown can capture between 56,000-69,000 square feet of traditional non-retail space by 2020 alone, with as much as double that amount of occupied space through capitalizing on uses associated with emerging technologies.

- Commercial Demand and Retail Spending- market activity is comprised of both locals who live and spend money in the area, and those who live outside the area but choose to spend money here. Downtown Alpena is expected to be able to capture roughly 250,000 square feet of retail goods and related services.
- Entertainment Spending- Area residents spend an estimated \$48 million on entertainment activities annually, roughly 15% of which includes spending associated with food service such as live music performances, smaller clubs, and similar venues.

Redevelopment Ready Community

In June of 2018 the City of Alpena received official designation as a Redevelopment Ready Community (RRC). This program works with Michigan cities, villages, and townships to ensure the city is ready for growth. An RRC certified community attracts and retains businesses, offers superior customer service and has a streamlined development approval process making pertinent information available around-the clock for anyone to view.

Alpena Area Convention and Visitors Bureau

The Alpena Area Convention and Visitors Bureau (CVB) was created in 1984 under Public Act 59 of 1984. The organization is funded primarily from a five percent assessment on rooms in hotels with 10 or more rooms. The organization markets Alpena County and the eastern coastal areas of Presque Isle County to bring visitors into the region. The CVB works with convention groups to provide a “packaged” event experience. Marketing is accomplished through a visitor’s guide, web site, travel writers, participation in the Pure Michigan campaign, and other media. Marketing strategies focus on maritime heritage, parks and trails, and local attractions. The bureau partners with other community organizations such as the Chamber of Commerce and DDA. As the community has expanded its tourism base, the Convention and Visitors Bureau has taken on an increasingly important role in economic development and function as a “Destination Marketing Organization.”

Economic Summary

Summary Statistics from the Edward Lowe Foundation

The Edward Lowe Foundation provides jobs data for counties through the Your Economy website. In the data sets below, it should be noted that “resident” refers to stand-alone establishments in the local area or one that reports to another business in the same region. The resident sector is subdivided into employment stages with the number in () denotes employees. “Nonresident” refers to establishments that are located in the area but are headquartered out-of-region. “Noncommercial” refers to educational institutions, post offices, government agencies and other nonprofit organizations. According to **Table 3.8**, from 2010-2016, jobs in Alpena County increased by 30 percent and sales increased by 33.3 percent.

Table 3.8
Alpena County Jobs Summary
2010-2016

JOB	2010	% of TOTAL	2016	% of TOTAL	% Change
ALL	15,291	100	19,898	100	30%
Self-Employed (1)	342	2.2	455	2.3	33%
Stage 1 (2-9 Employees)	4,267	27.9	6,011	30.2	41%
Stage 2 (10-99 Employees)	6,824	44.6	8,245	41.4	21%
Stage 3 (100-499)	2,908	19	3,337	16.8	15%
Stage 4 (500+ Employees)	950	6.2	1,850	9.3	95%
RESIDENT	10,568	69.1*	14,126	71.0*	34%
NONRESIDENT	2,954	19.3*	3,692	18.6*	25%
NONCOMMERCIAL	1,769	11.6*	2,080	10.5*	18%

During the same timeframe, the total number of establishments increased by 34 percent (**See Table 3.9**). There was growth in all sizes of establishments. The highest levels of growth occurred in Stage 2 companies (37%), except for the very large stage 4, which went from 1 to 2 establishments. The data implies a shift from larger employers to smaller, more locally based employers, which has been a long-term trend.

Table 3.9
Establishments Summary
2010-2016

BUSINESSES	2010	% of TOTAL	2016	% of TOTAL	% Change
ALL	1,794	100	2,405	100	34%
Self Employed	342	19.1	455	18.9	33%
Stage 1 (2-9 Employees)	1,135	63.3	1,556	64.7	37%
Stage 2 (10-99 Employees)	301	16.8	376	15.6	25%
Stage 3 (100-499)	15	0.8	16	0.7	7%
Stage 4 (500+ Employees)	1	0.1	2	0.1	100%
RESIDENT	1,440	80.3*	1,951	81.1*	35%
NONRESIDENT	143	8.0*	192	8.0*	34%
NONCOMMERCIAL	211	11.8*	262	10.9*	24%

This shift is further reflected by analyzing the sales summary for the same timeframe (**See Table 3.10**). Total sales increased by 65 percent. No sector experienced a decline in sales during this time period of 2010 to

2016. The noncommercial sector experienced significantly less growth in sales when compared to commercial sectors (1% and 83% respectively). Stage 3 establishments had sales declines of 63.1 percent. Interestingly, Stage 2 and Stage 4 establishments showed the fewest losses in sales and non-resident establishments showed increasing sales during this timeframe.

Table 3.10
Sales Summary
2010-2016

SALES	2010	% of TOTAL	2016	% of TOTAL	% Change
ALL	\$2.6B	100	\$4.3B	100	65%
Self Employed	\$57.1M	2.2	\$76.4M	1.8	34%
Stage 1 (2-9 Employees)	\$904.5M	34.9	\$1.4B	33.7	55%
Stage 2 (10-99 Employees)	\$1.0B	40.1	\$1.7B	39.3	70%
Stage 3 (100-499)	\$491.4M	18.9	\$860.6M	20.1	75%
Stage 4 (500+ Employees)	\$100.7M	3.9	\$220.6M	5.2	119%
RESIDENT	\$1.9B	72.0*	\$3.0B	70.4*	58%
NONRESIDENT	\$710.9M	27.4*	\$1.3B	29.2*	83%
NONCOMMERCIAL	\$15.0M	0.6*	\$15.2M	0.4*	1%

Breaking down sales per business, the greatest growth from 2010-2016 occurred in the larger Stage 3 businesses (64%). There was essentially no growth in sales by self-employed businesses (0.47%).

Table 3. 11
Sales Per Business
Alpena County 2010-2016

SALES	2010	2016	% Change
SALES PER BUSINESS	\$1,446,192	\$1,780,272	23%
Self Employed (1)	\$167,032	\$167,813	0%
Stage 1 (2-9 Employees)	\$796,957	\$926,915	16%
Stage 2 (10-99 Employees)	\$3,457,425	\$4,472,601	29%
Stage 3 (100-499)	\$32,760,800	\$53,789,938	64%
Stage 4 (500+ Employees)	\$100,700,000	\$110,292,000	10%
RESIDENT	\$1,297,644	\$1,544,938	19%
NONRESIDENT	\$4,971,028	\$6,521,698	31%
NONCOMMERCIAL	\$71,104	\$58,069	-18%

Building Activity

The number of building permits issued in Alpena County took a sharp hit in 2009 but the numbers have recovered to near 2008 levels as of 2016. (See **Figure 3.6**).

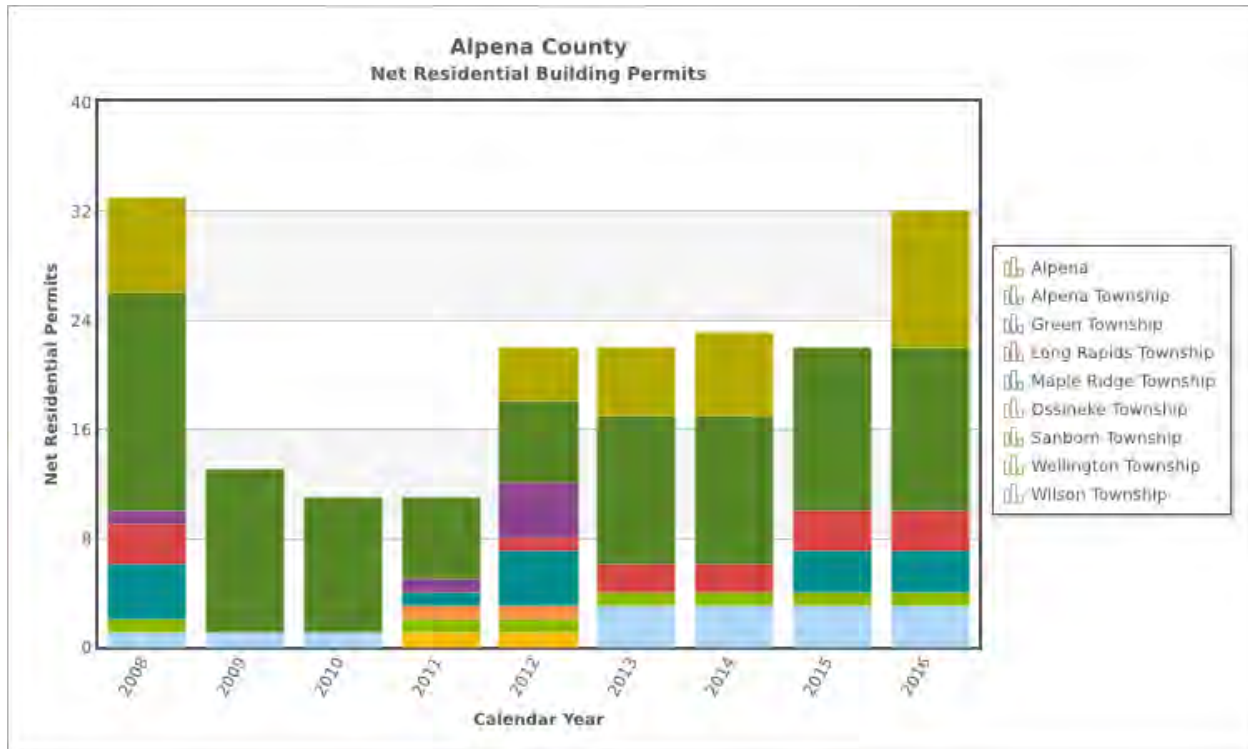
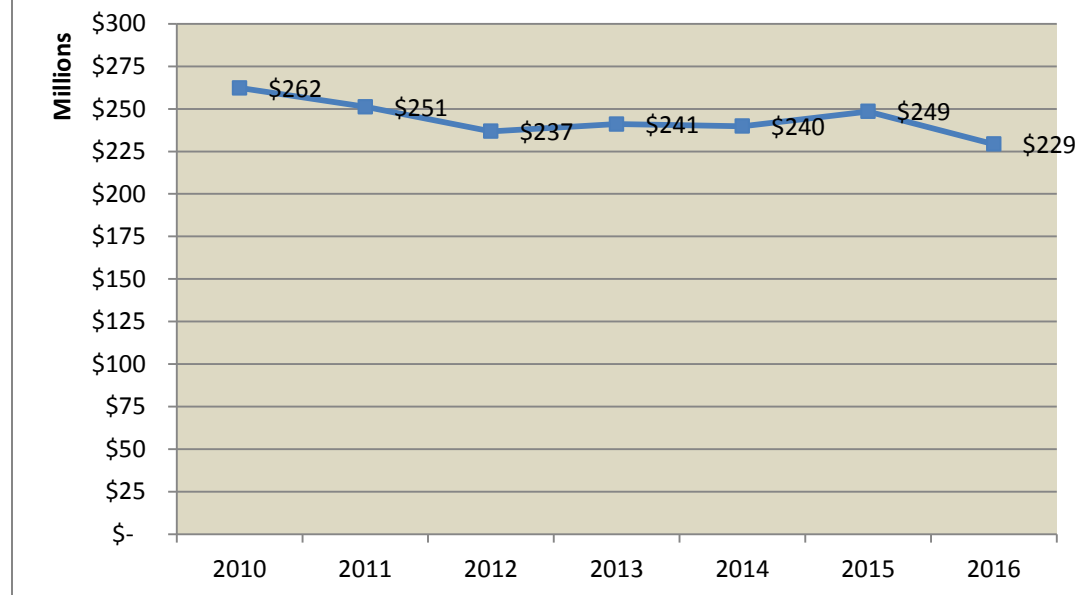


Figure 3.6 - Building Permits

Land Values

The City Assessors Office reports on the taxable values of properties in the community. Taxable value includes real property (land and buildings) and personal property (equipment, furniture and fixtures, etc.) Taxable growth was relatively flat in the 1980's, but showed a steady increase in value from about 1991 to 2002, when there was a loss of taxable value, likely due to plant closings. Growth returned after 2002, but at a lower rate. Since 2010, the City of Alpena taxable valuation has gone up and down but, overall, has decreased by 12.6%. Between 2010 and 2016, the City has lost approximately 19.5% of its taxable valuation and the total taxable valuation for the City is only slightly higher than 1998 levels. **Figure 3.6** illustrates the history of taxable value in the community.

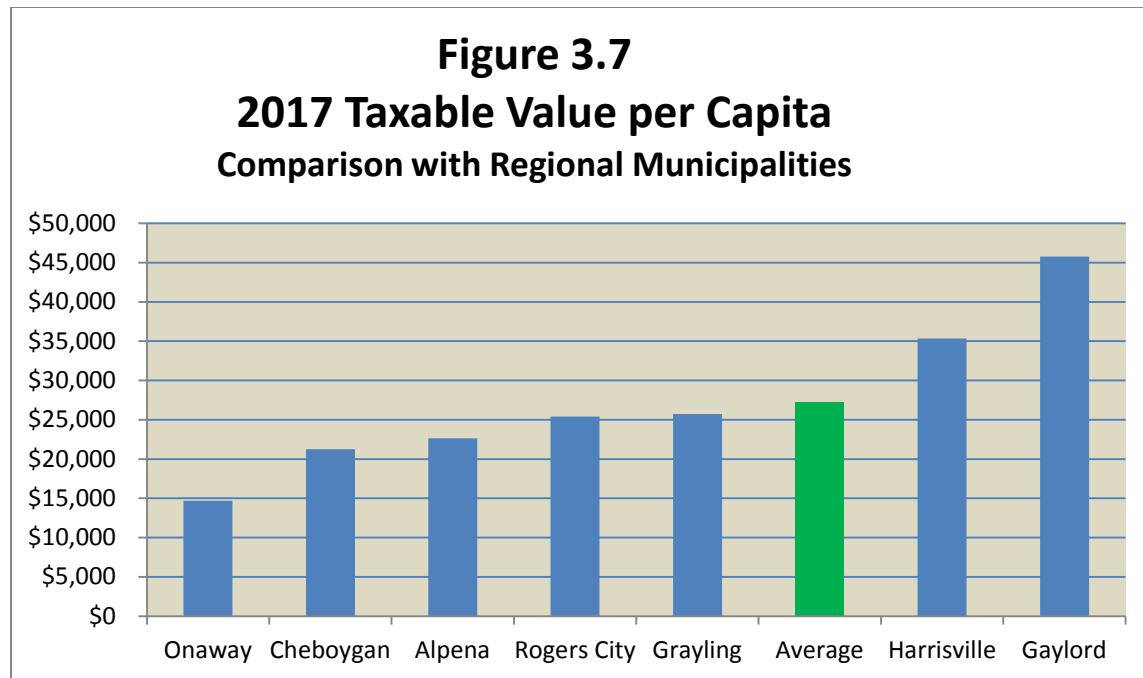
Figure 3.6
Total Taxable Value



State Equalized Value (SEV)

By analyzing the State Equalized Value (SEV), characteristics of property values can be obtained. Compared to other municipalities in the region of Northeast Michigan, Alpena has the largest taxable value. **Figure 3.7** illustrates the regional taxable values for other municipalities per capita for 2017. Alpena is slightly below the average. Gaylord has a taxable value that is significantly higher than other cities in Northeast Michigan.

2017 Taxable Values	
Municipality	Taxable Value
Alpena	\$229,142,231
Gaylord	\$168,873,062
Cheboygan	\$103,374,556
Rogers City	\$68,474,218
Grayling	\$47,244,056
Harrisville	\$16,584,499
Onaway	\$12,229,766



Within the City of Alpena, SEV values between 2012 and 2016 show some interesting trends (**See Figure 3.8**). During this timeframe, Industrial Property values remain generally level. The greatest percentage increase is with commercial valuation (18%). Most of that increase occurs between 2012 and 2013 with an 11% increase in one year. Values in all three categories are higher in 2012 than in 2000. Personal property SEV values, however, crease significantly (-40%) with a significant drop occurring between 2015 and 2016.

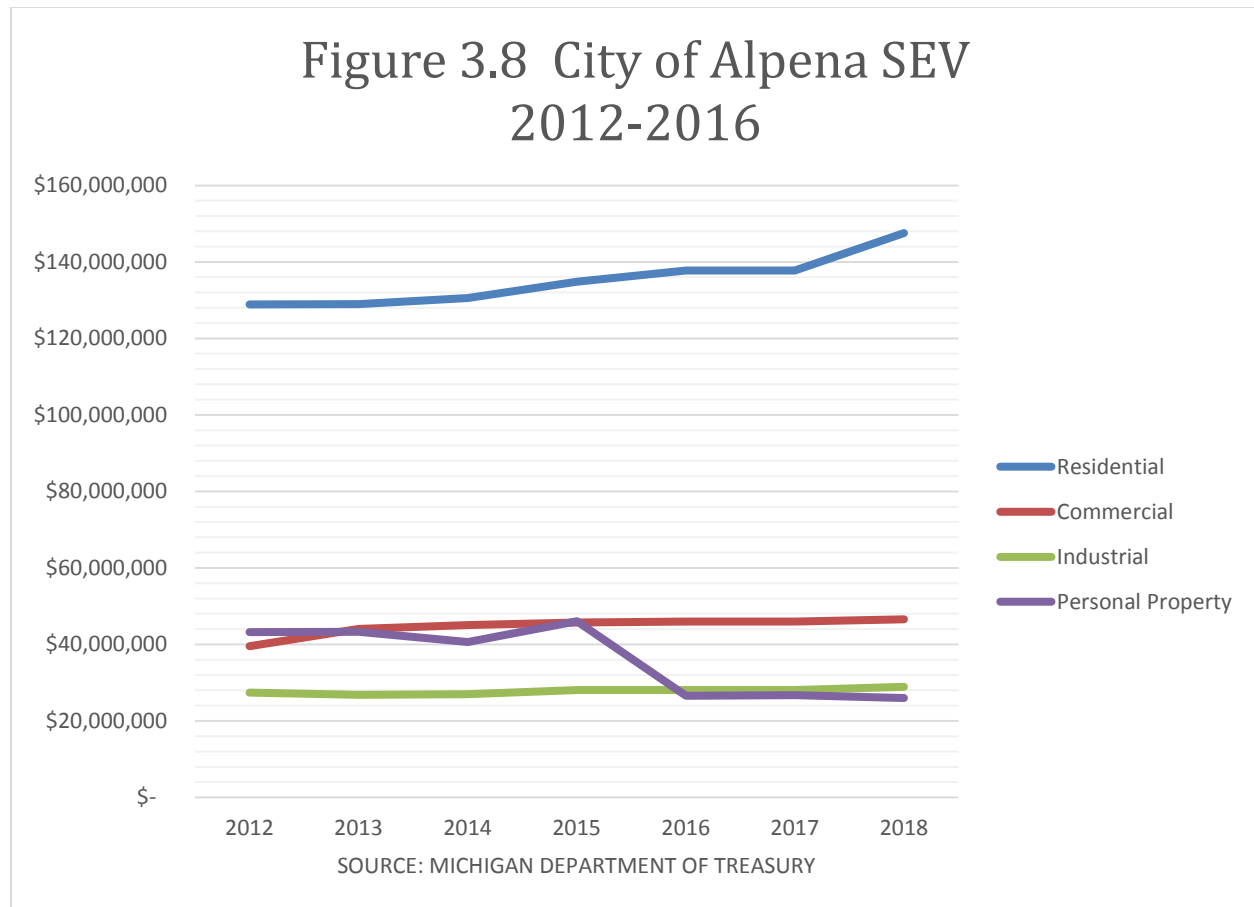
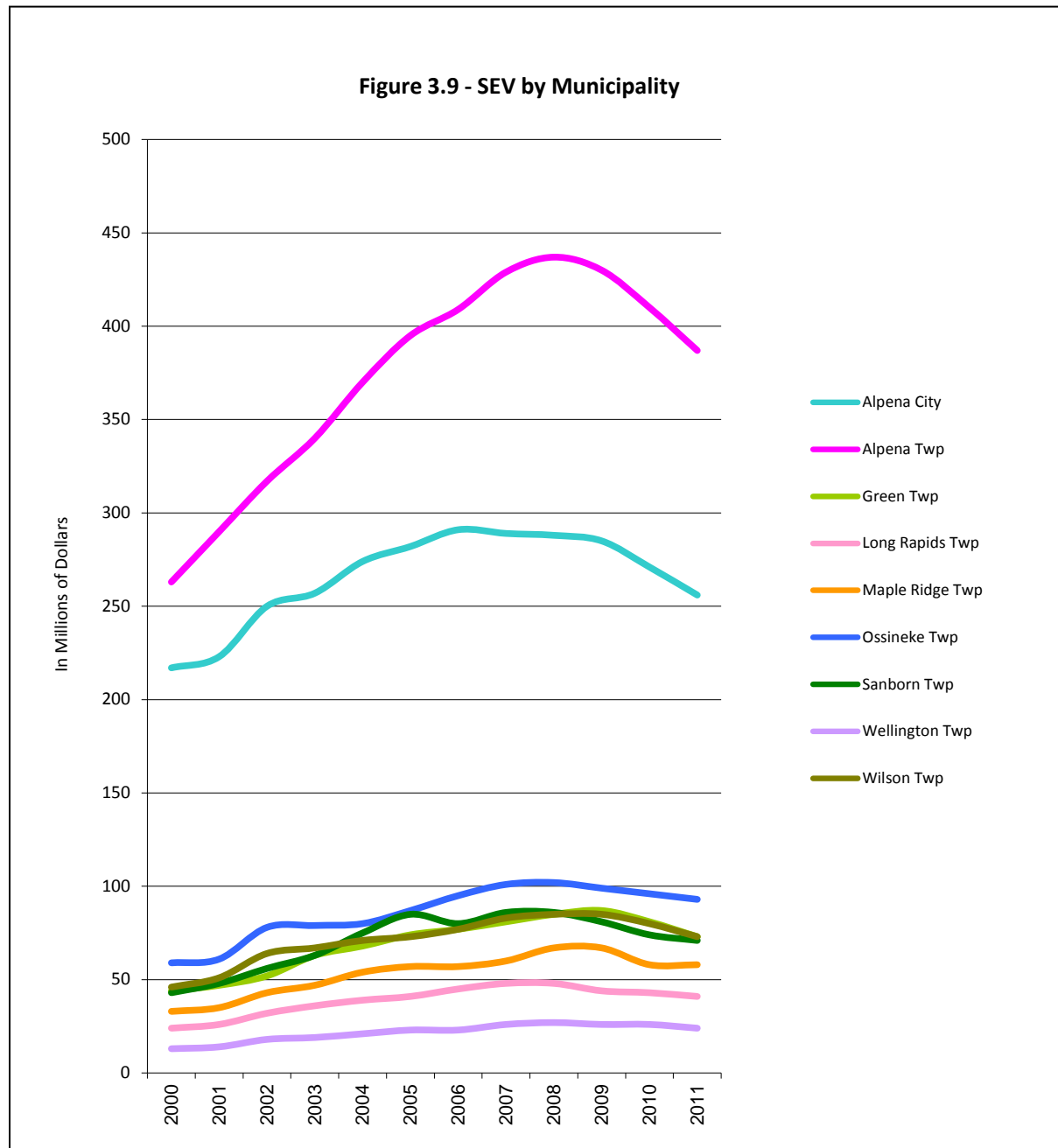


Figure 3.9 illustrates changes in SEV values for all of Alpena County between 2000 and 2011. During this period, Alpena Township experienced the steepest growth in SEV values but also the sharpest decline. SEV values in Alpena Township peaked in 2008; by 2011 values had declined to around 2005 levels.

The City of Alpena followed a similar, but much shallower growth curve. SEV values in the City peaked in 2006 and by 2011 had declined to around 2003 levels. All other communities followed a similar pattern, but on a much smaller scale. **Figure 3.10** also shows the valuations for real and personal property in the City of Alpena over the last decade.



City of Alpena Finances

Information contained in this section was generated from F65 forms that the county files with the State of Michigan each year. The data is available through Munetrix LLC because the Northeast Michigan Council of Governments is a Munetrix subscriber. This section is intended to give a summary of the financial health of the City of Alpena.

Revenue

Revenue is generated from tax dollars received from residents and businesses which are generated from the millage rate multiplied by property valuations. Revenue is also generated from other sources such as State and Federal grants, permits, and fees. **Figure 3.11** shows the sources of revenue for the City of Alpena. The largest revenue source is property taxes, other services, and federal contributions. The “other services” revenue source more than doubled between 2017 and 2016 state contributions, and state revenue sharing. In 2011 and 2012, the “Other Revenue” category became a significant revenue source. Federal contributions were also a much larger source of revenue for the city in 2017 when compared to the previous year.

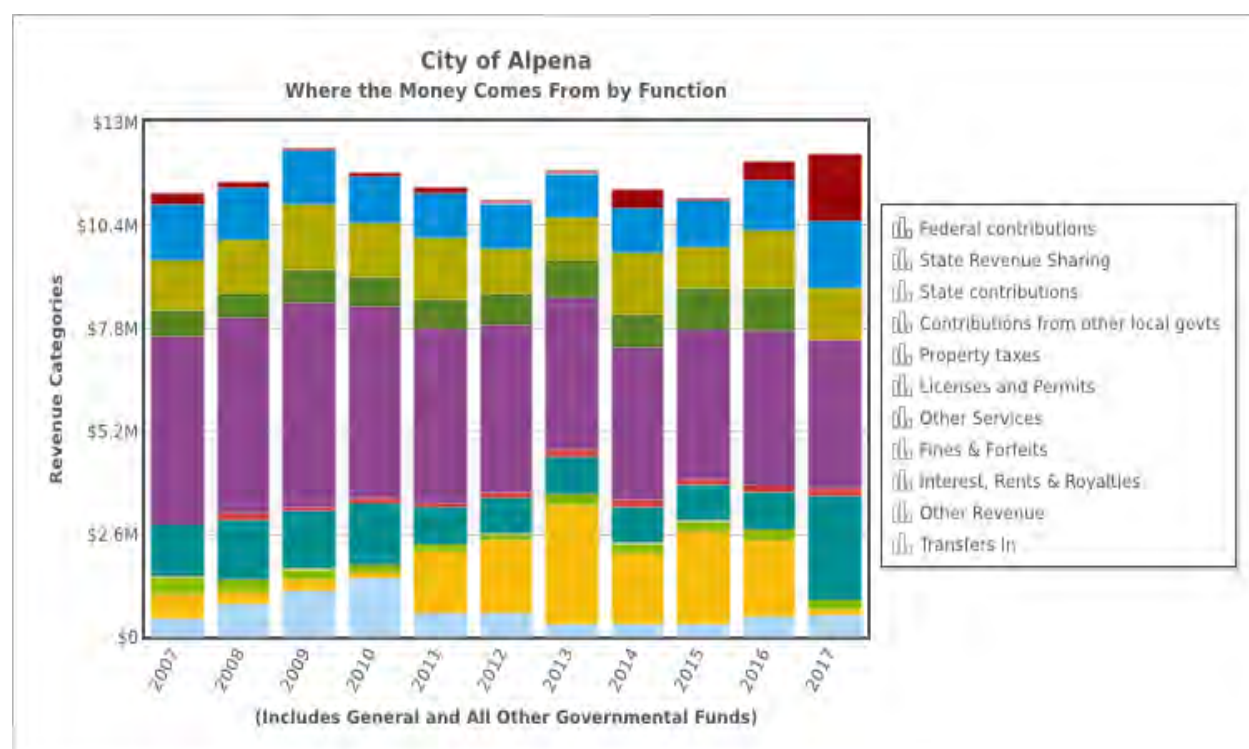


Figure 3.11: City of Alpena Revenue Breakdown

Expenditures

As a service provider for the community, expenses cover the costs associated with operating City government. As seen in **Figure 3.12**, in 2017 General Government, Public Works, Health and Welfare, and the Police Department comprised the largest areas of expenditure. Comparing 2017 to 2010 the debt service expense for the city dropped by 72%. Recreation and culture increased by 44%. Expenses related to Community and Economic Development dropped by half (-52%).

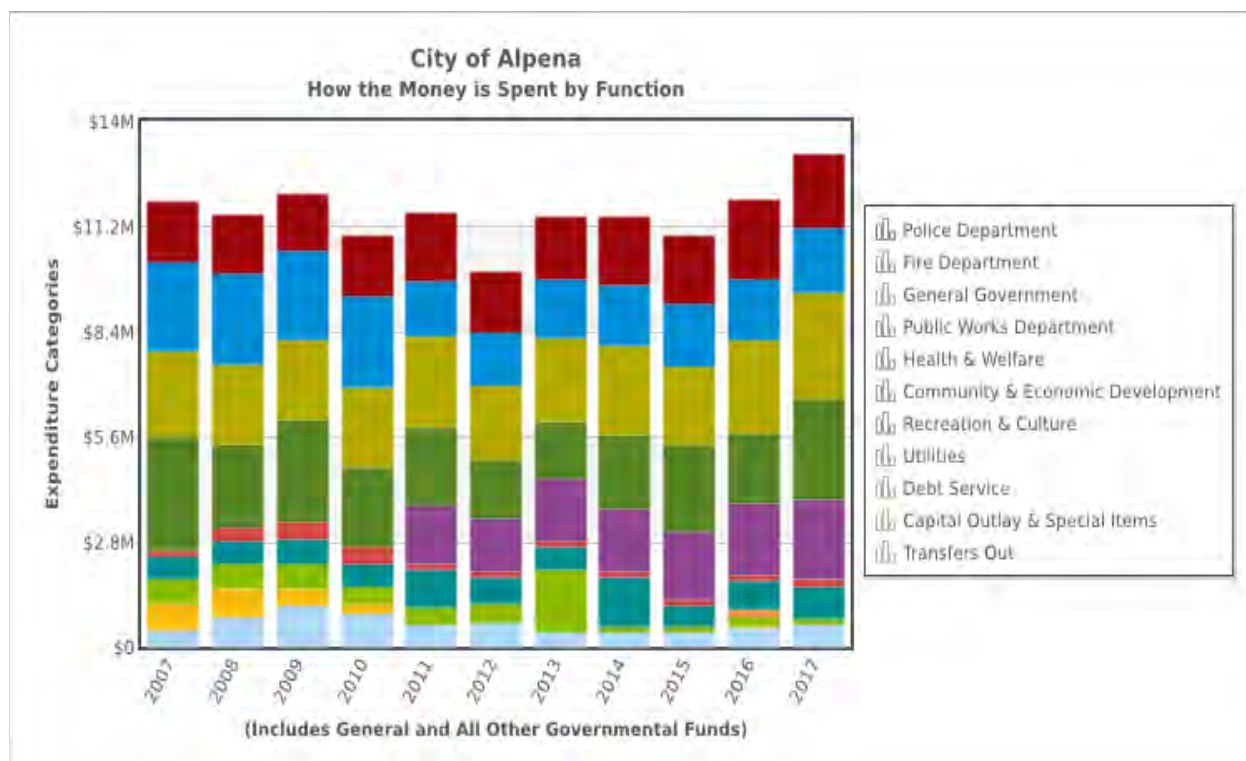


Figure 3.12: Expenditures

Fund Balance

Fund Balance is an accounting term in which total liabilities are subtracted from total assets; the difference is Fund Balance. Fund Balance is not solely cash but can include other assets. **Figure 3.13** shows Fund Balance levels for the City. The fund balance has fluctuated in either direction year to year and is, overall, lower than it was in 2012 but is 12% higher than it was in 2011.

If the city is receiving more revenue than it needs to pay its bills its fund balance (net worth) will increase. If the city is paying out more money on its bills than it is receiving then its fund balance will go down. If the fund balance goes down far enough it creates a negative fund balance called a deficit. Beginning in 2012, accounting procedure changes dictated the categories of fund balance increase from 3 to 5 and the names changed; thus the difference in chart colors.

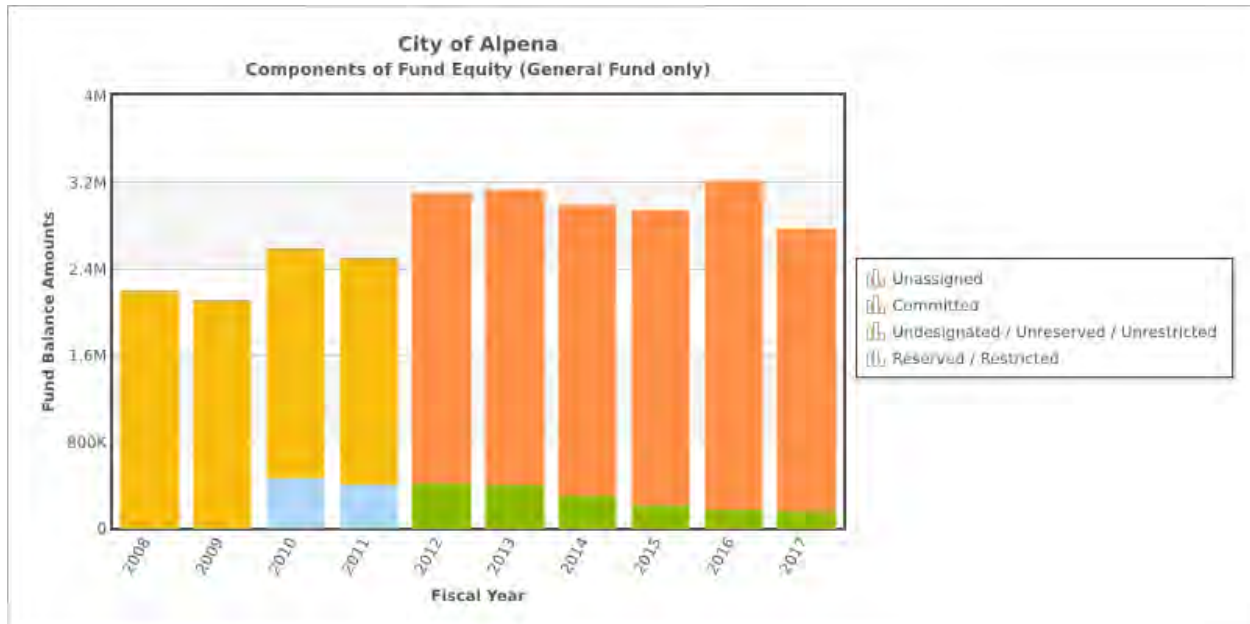


Figure 3.13: Fund Balance

Cash Investments

Another sign of a community's fiscal health is how well it manages its cash reserves and invests these funds. **Figure 3.14** illustrates revenues vs. expenditures vs. fund equity between 2007 and 2017. There were 4 out of the last 11 years where expenditures exceeded revenue. Fund equity remains above what it did in 2011, having remained somewhat consistent between 2012 and 2016, dropping off between 2016 and 2017. In 2017 the city witnessed the highest level of expenditures. Further analysis of **Figure 3.14** suggests that the city remains in generally good fiscal health.

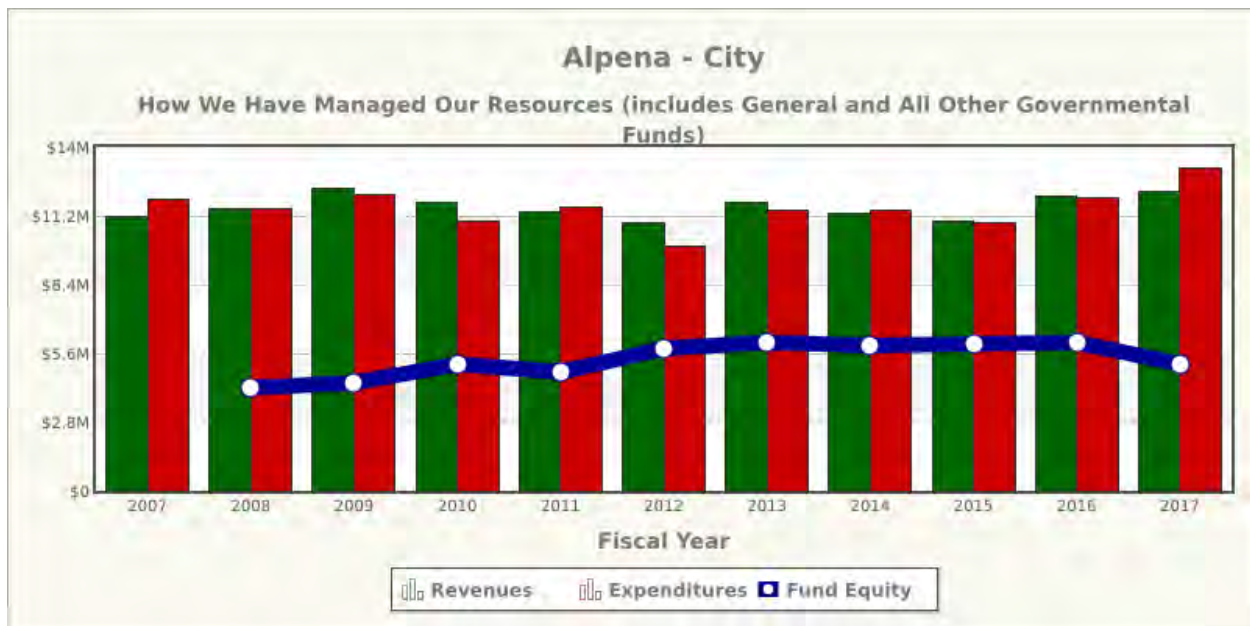


Figure 3.14: Fund Equity

Spending Per Capita

Figure 3.15 shows the spending per capita on services for citizens in selected communities within the NEMCOG region. In 2017, the spending per capita for the City of Alpena was \$1,844 per capita. Three communities (Rogers City, Cheboygan, and Onaway) were below benchmark spending, while three cities (Gaylord, Harrisville, and Grayling) were above the benchmark.

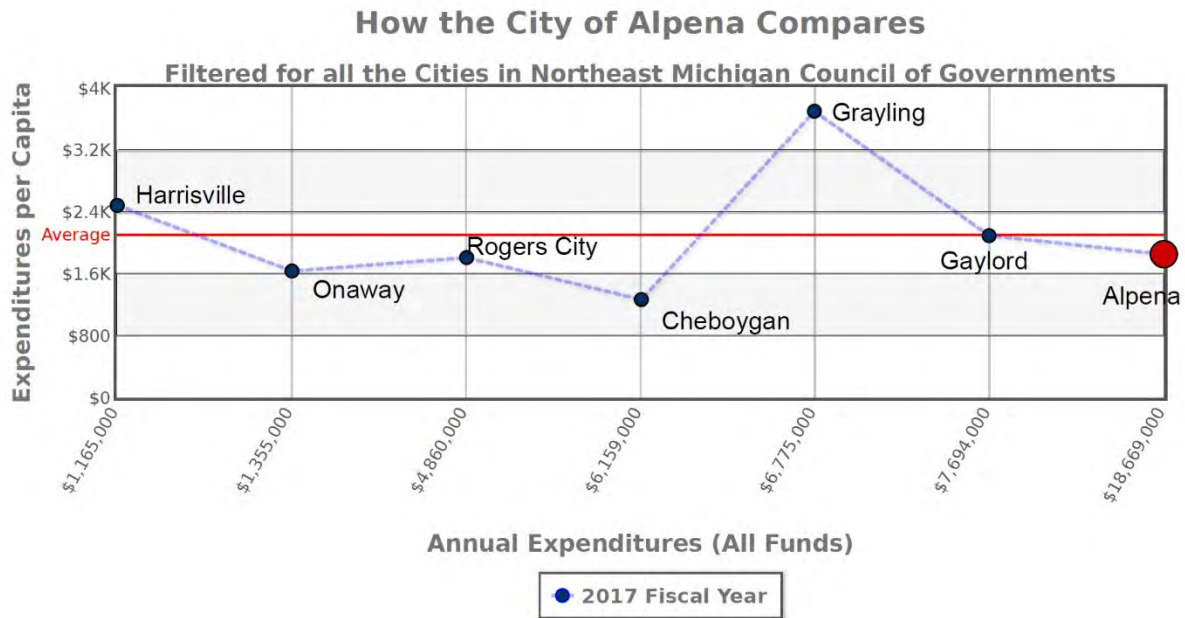


Figure 3.15: Spending Per Capita - 2017

Financial Stress

The "Stress Meter" provides an overview of Indicator Scores used by the State of Michigan to calculate the financial stress of a municipality. The Indicator Score gives an overall picture of the soundness of local governments, the trend of stability over time, and allows the identification of local units that are most in need of help. Scores are generated based on the criteria of population growth, real taxable value growth, large real taxable value growth, general fund

expenditures as a percent of taxable value, general fund operating deficit, prior general fund operating deficit, size of general fund balance, fund deficits in current or previous year, and general long-term debt as a percent of taxable value. The lower the number the more fiscally sound a local unit is determined to be. There are three categories of scores grouped by color; shades of green, blue and red (**Table 3.13**). The State Department of Treasury uses these indicator scores to determine those communities in Michigan which are under the most extreme financial stress. **Table 3.14** shows the fiscal scores for the City of Alpena. As can be seen, the City has never exceeded the *Fiscally Neutral* category and has never achieved a score worse than a 3. **Figure 3.16** shows the indicator scores for all municipalities in Alpena County. The graph shows a rather stable indicator score of low risk.

Table 3.13 State of Michigan Fiscal Distress Indicator System		
Points from Scale	Category	State Action
0-4	Fiscally Neutral	No State action needed
5-7	Fiscal Watch	Unit of local government is notified of its relatively high score and is placed on a watch list for the current and following year.
8-10	Fiscal Stress	Unit of local government is notified of its high score, is placed on a watch list for the current and following year, and receives consideration for review.
Source: Munetrix, 2012		

Table 3.14 City of Alpena Fiscal Indicator Scores	
2016	1
2015	0
2014	1
2013	1
2012	1
2011	1

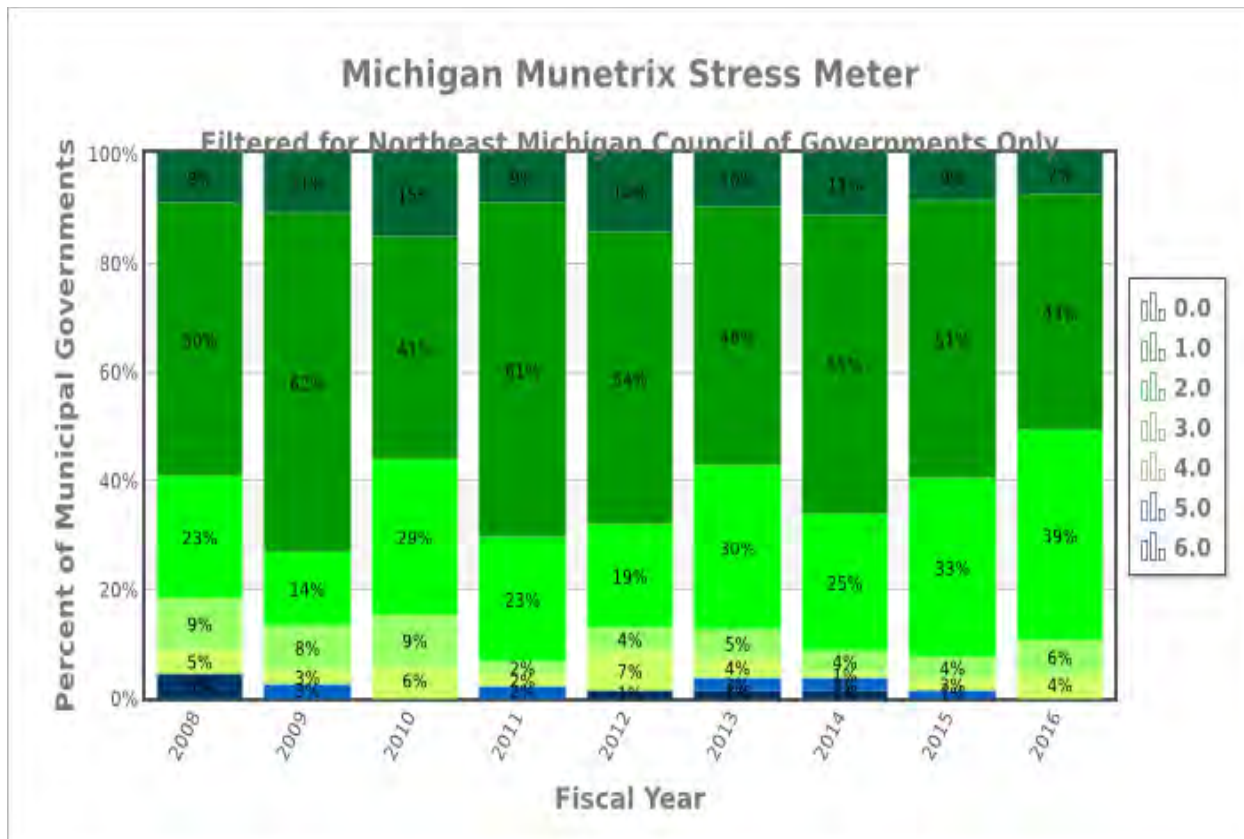


Figure 3.16: Fiscal Stress Meter

Fiscal Distress Indicator Factors

Population Growth

It can be argued there is a correlation between population loss and fiscal problems. Population loss can result in a general weakening of a locality's economy and could be caused by a loss of a major employer, demographic shift or other factors. Local governments are often unable to reduce expenditures to match a growth decline or loss of revenue due to departing taxpayers. This first indicator measures population change. If a unit lost population from the previous year it scores a 1, otherwise it is assigned a 0. **Figure 3.17** clearly shows the City of Alpena's overall decline in population since 2006.

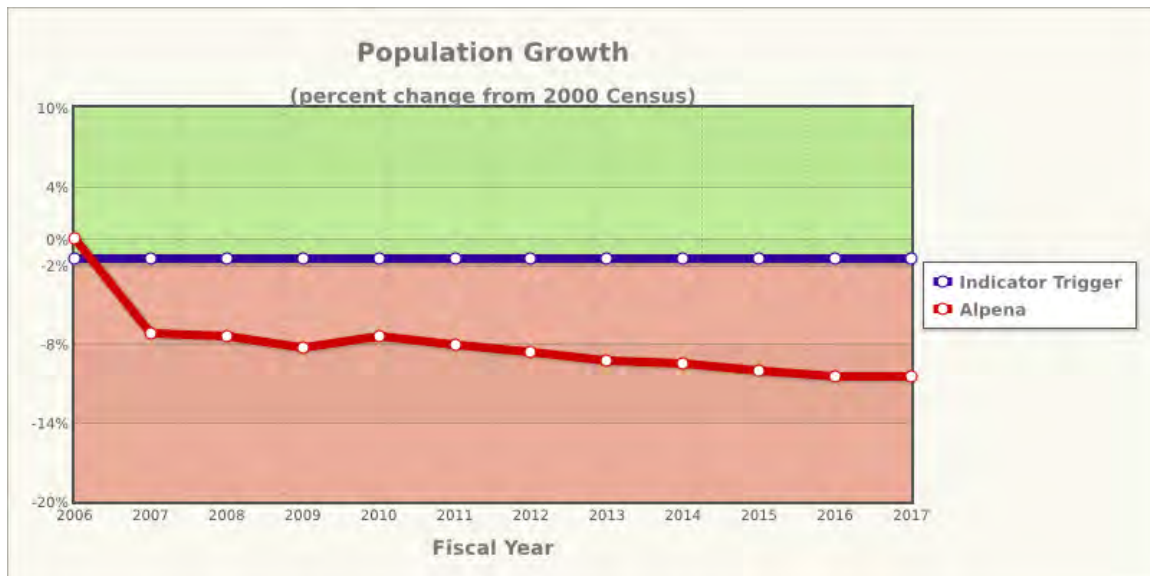


Figure 3.17: Population Growth Indicators

General Fund Expenditures as Percent of Taxable Value

This indicator assesses the size of a unit's public sector relative to its ability to generate revenues. A unit that scores relatively high on this variable indicates a unit that has a large public sector relative to the size of its tax base. Units with high scores on this indicator may wish to decrease this ratio through cutting expenditures, providing more efficient delivery of services, and/or attracting new residents or businesses that will increase the tax base. This indicator has no time lag and deals solely with data from within the same year. **Figure 3.18** suggests that the City of Alpena efficiently utilizes its resources and reflects the increasing expenditures relative to the taxable value.

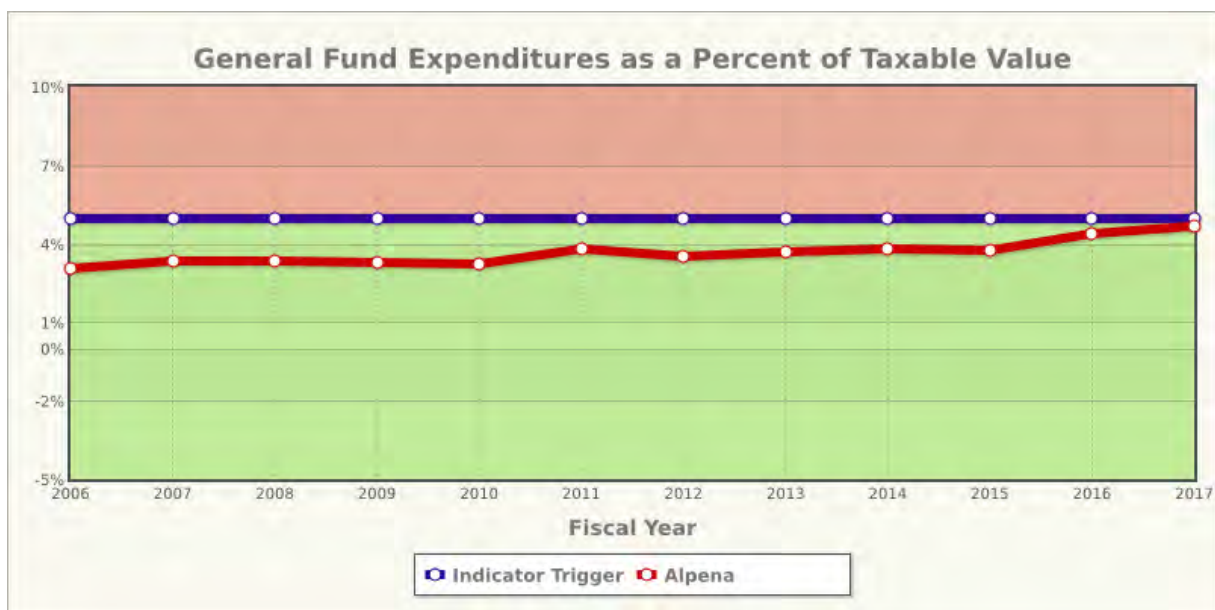


Figure 3.18: Expenditures as a Percent of Taxable Value

Operating Results

This variable is computed by subtracting general fund expenditures from general fund revenues for a given year. This figure is then divided by general fund revenues. If the number that results is less than -0.01, this indicates a unit has a nontrivial operating deficit and this unit received a score of 1. If the unit does not have a general fund operating deficit, or if this deficit is trivial, the unit is given a 0. **Figure 3.19** shows that the City of Alpena does not have issues related to operating deficit but expenditures did exceed revenues in 2017.

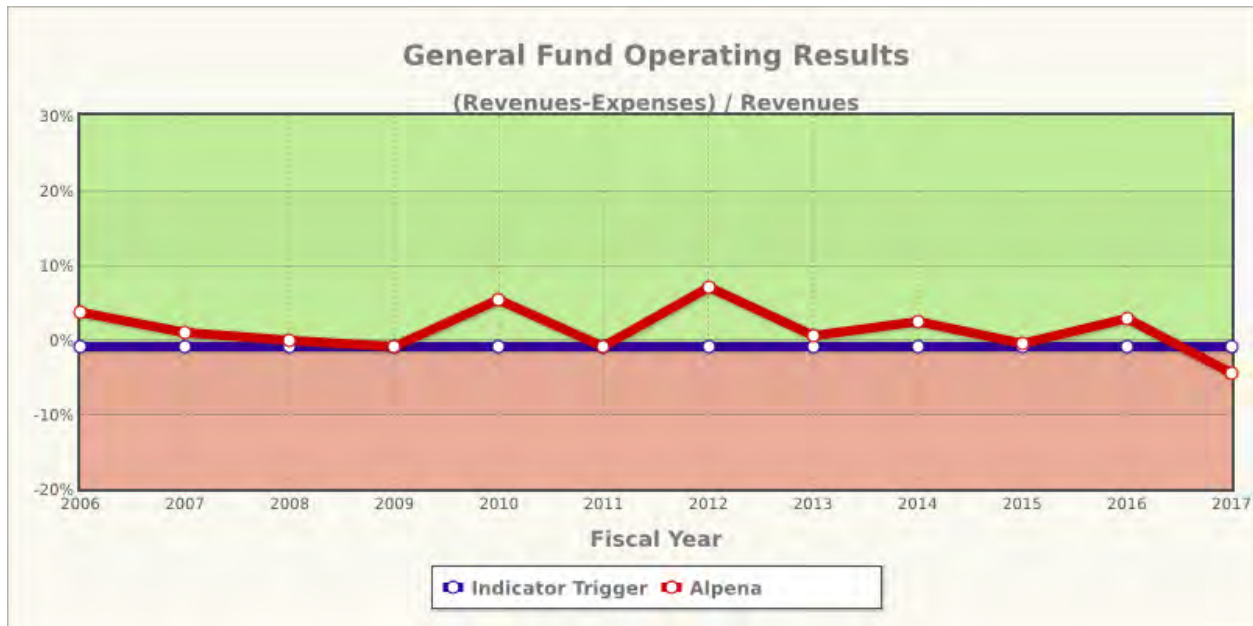


Figure 3.19: Operating Deficits

Size of Fund Balance

Most units maintain a positive fund balance, and it is a sign of fiscal distress if the fund balance is negative. Units typically find it beneficial to keep the fund balance from declining too greatly as this inhibits their ability to cope with unexpected circumstances in either the revenue or expenditure stream. The actual variable constructed for this indicator is the general fund balance as a proportion of general fund revenue. If a unit maintains a general fund balance less than 13 percent of its general fund revenue, it scores a 1. Conversely a general fund balance above the 0.13 level scores a 0. The City of Alpena has an established policy that governs the amount of Fund Balance that must be retained. **Figure 3.20** clearly shows that the City is following this policy and its levels of Fund Balance are adequate.

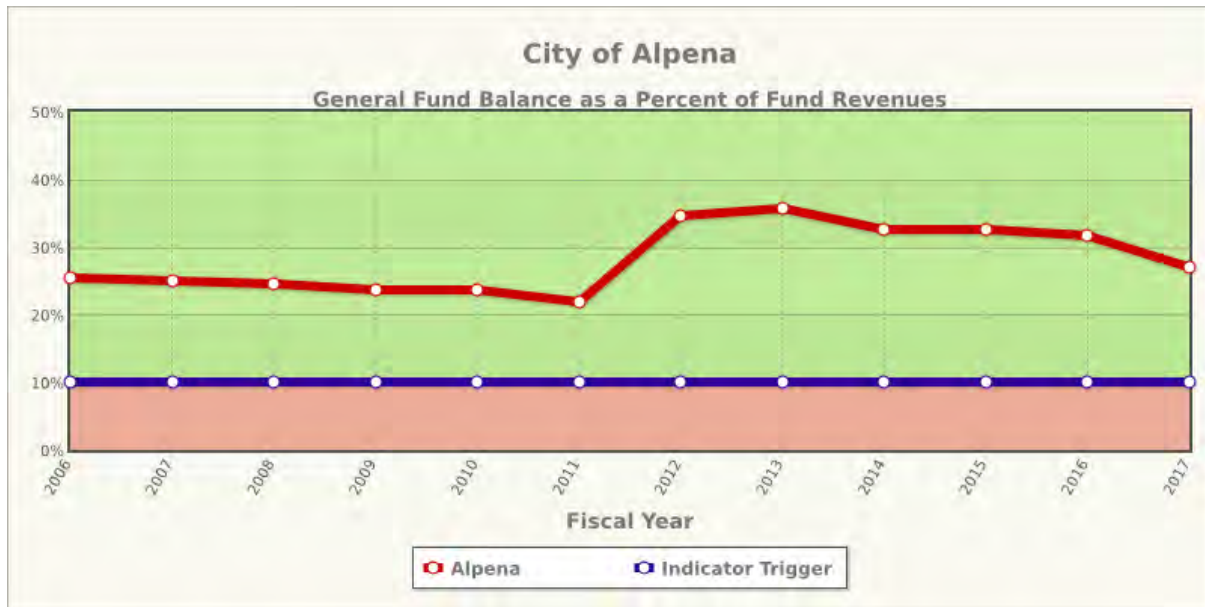


Figure 3.20: Fund Balance as a Percentage of Revenues

Long-Term Debt as a Percent of Taxable Value

Large debt levels relative to the ability of a unit to generate revenue are a clear sign of fiscal distress. This variable is constructed by taking general long-term debt and dividing it by the taxable value of the unit. Any unit with a debt to taxable value ratio above 6 percent is scored a 1 and those beneath it a 0. **Figure 3.21** clearly shows that the City does not have any significant long-term debt issues that will impact its ability to generate revenue.

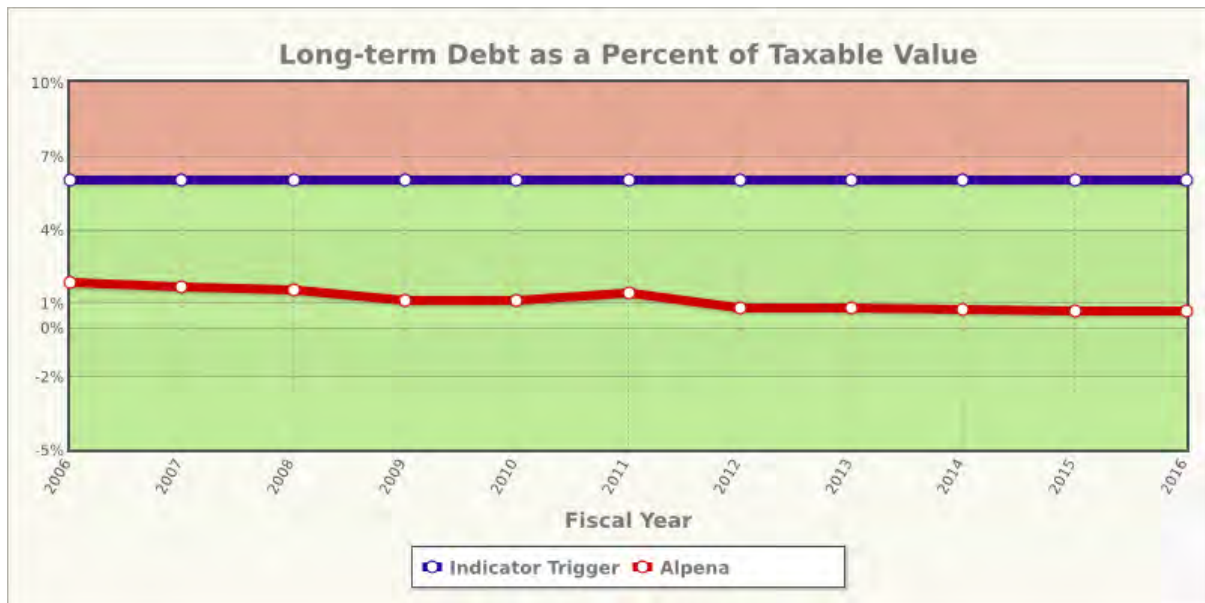


Figure 3.21: Long Term Debt

Public Safety Cost per Resident

The City of Alpena provides services to the community; approved expenses cover the costs associated with running the government, providing services, keeping the community clean, safe and maintaining the quality of life. In most units of government, police and fire services are the most expensive operations to maintain, as both services are very labor and equipment intensive. **Figure 3.22** shows that the cost per resident for police and fire services has remained fairly steady. However, in 2011 the *Per Resident* cost of fire services dramatically fell and has since been lower than that of police services.

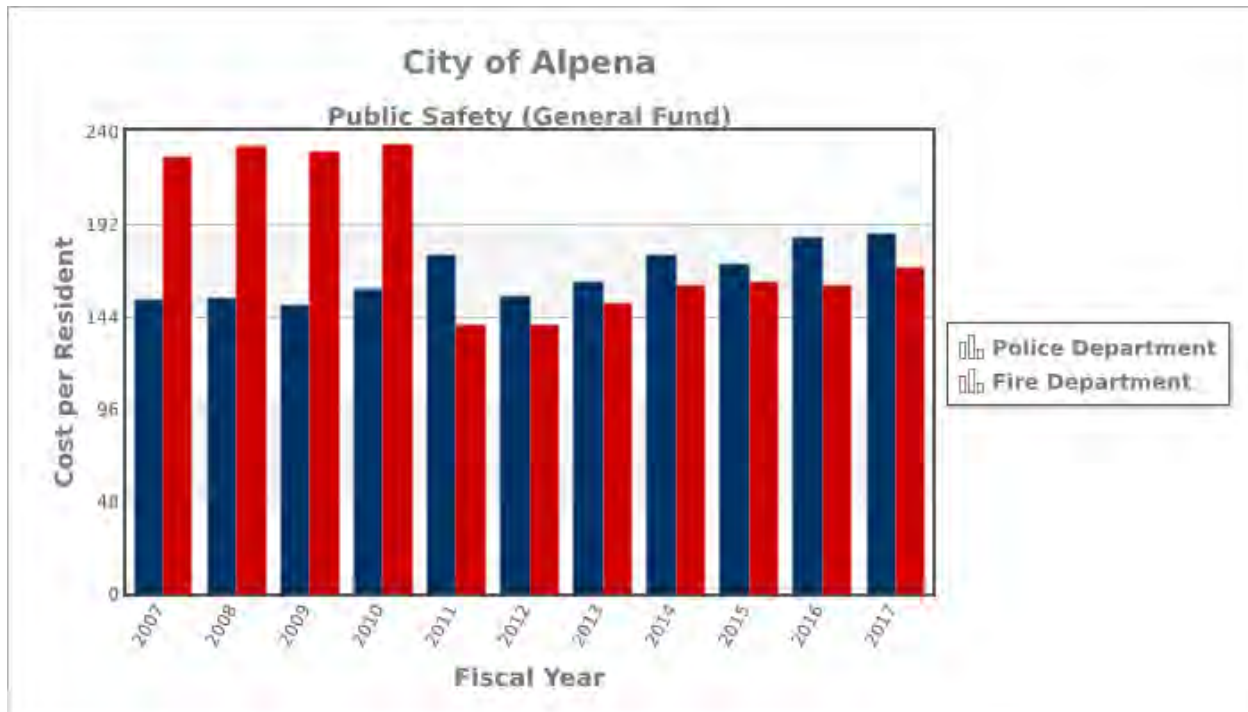


Figure 3.22 Public Safety Cost per Resident

Crime Statistics

Crime statistics provide a measure for the success or failure of certain criminal justice policies. They also provide important information on how best to allocate municipal resources. From a societal perspective, they provide indicators against which to measure criminal justice performance and therefore a way in which accountability can be measured. **Figure 3.23** shows that the overall numbers of crimes has risen recently in the City of Alpena. The most common type of crime has been Property Crimes, which dropped in 2012 and continue to decrease on average and is now lower than the “Other” category of crimes. *Crimes Against Persons* dropped slightly in 2012 and have remained stable over the past few years. Societal crimes were at their highest level in 2016 since 2008.

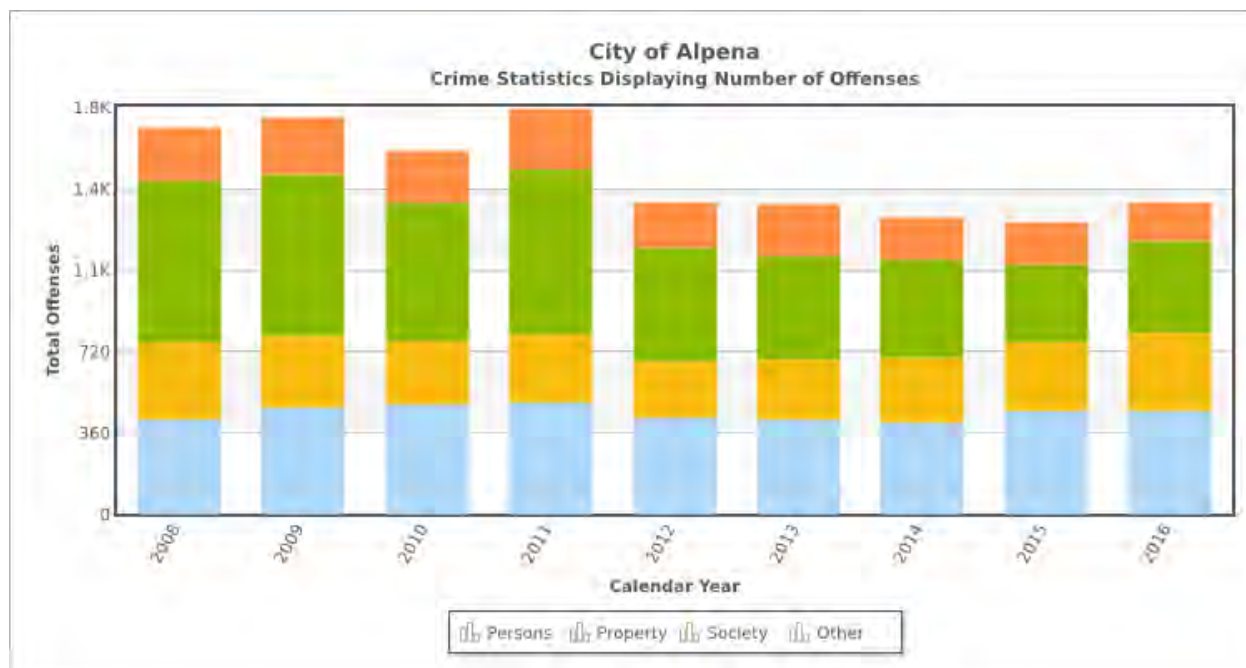


Figure 3.23 Crime Statistics

Chapter 4

Community Services and Facilities

Community services and facilities play an important role in maintaining and improving the quality of life in the City of Alpena. The location and level of some services, such as public water, public wastewater, and fiber optic lines, determine the types and intensities of development within a community. This chapter will provide information on the wide range of community services and facilities available in the City. **Figures 4.2 and 4.3**, found at the end of the chapter, show the locations of community facilities and city-owned lands, respectively.

Educational System

Alpena Public Schools (**Table 4.1**), which serves the entire County and a small portion of Presque Isle County, is part of the Alpena-Montmorency-Alcona Educational Service District; which is comprised of Alpena County, Montmorency County, and Alcona County. According to the “Standard and Poor’s School Evaluation Services” Alpena Public Schools had a 2018 enrollment of 3,937 students and a student to teacher ratio of 19.76. The report also stated Alpena Public Schools had an operating expenditure of \$9,887 per student in 2013. All Alpena Public Schools buildings and facilities are linked by a fiber optic network.

The number of students in the public schools has been declining over the past 32 years. From 1980 to 2018 the total number of public and parochial K-12 students in Alpena County has significantly decreased. Enrollment during this period dropped by 49 percent from 7,655 students enrolled in 1980, to 3,937 enrolled in 2018. The school district enrollment has continued to steadily decrease since 1980 with an addition 313 less students since 2012. Given the current age distribution in Alpena County, the downward trend in school enrollment is likely to continue. The location and enrollment of private schools in the Alpena are shown in **Table 4.2**.

Alternative educational choices are available in the Alpena area. Three private schools are available in Alpena including Immanuel Lutheran School, All Saints School, and Seventh Day Adventist School. Home schooling is another education option that has grown in popularity. Bingham Arts Academy, a no-cost charter school closed in 2014.

The Intermediate School District includes Alpena County, Montmorency County, and Alcona County. Known as the Alpena-Montmorency-Alcona Educational Service District, this agency also oversees the operation of the Pied Piper Opportunity Center.

ACES Academy

ACES Academy (Alternative Choices for Educational Success) is housed in the former Oxbow Elementary School in Alpena. ACES Academy offers adult and alternative education, as well as community education programs. Its Alternative Education component serves students who have difficulty with the regular program at the Alpena High School. The Adult Education program helps adults earn a high school diploma equivalent (GED). In 2015-2016, 121 full and part time high school students were enrolled at ACES.

Table 4.1
Alpena Public Schools

School	School Type	Location	Enrollment 2011-2012	Enrollment 2015-2016
Besser School	Elementary	375 Wilson St – City of Alpena	348	425
Ella White School	Elementary	201 N. Ripley – City of Alpena	402	465
Hinks School	Elementary	7667 U.S. 23 N. – Alpena Twp.	193	156
Lincoln School	Elementary	309 W. Lake St. City of Alpena	162	173
Sanborn School	Elementary	12170 U.S. 23 S. Sanborn Twp.	205	183
Wilson School	Elementary	4999 Herron Rd. – Wilson Twp.	261	225
Thunder Bay Junior High	Middle School	3500 West Third Ave – Alpena Township	995	881
Alpena Senior High	Secondary	3303 South Third St. – City of Alpena	1286	1309
Aces Academy	Alternative	700 Pinecrest Street – City of Alpena	173	121
Pied Piper Opportunity Center	Special Education	444 Wilson Street – City of Alpena	34	23

Source: National Center for Educational Statistics

Table 4.2
Private Schools

School	School Type	Location	Enrollment 2011-2012	Enrollment 201-2016
All Saints School	K-6	500 N. 2nd Ave. – City of Alpena	102	81
Seventh Day Adventist School	K-7	4029 US 23 – City of Alpena	9	6
Immanuel Lutheran School	PreK-8	355 Wilson Street – City of Alpena	102	79

Source: National Center for Educational Statistics

Pied Piper Opportunity Center

Pied Piper Opportunity Center is owned and operated by the Alpena-Montmorency-Alcona Educational Service District. The school serves students who are Moderately Cognitively Impaired, Severely Cognitively Impaired, Severely Multiply Impaired, and Autistic Impaired. Students range in age from 3 to 26 years. Pied Piper, located on Wilson Street, provides individualized instructional programs in personal care, independent living, language, and physical, vocational, academic, and social-emotional education to special needs students. Pupils are served at the center, at home, or in the hospital.

Alpena Community College

Alpena Community College (ACC) is located on 700 acres of land in the City of Alpena. ACC operates two major campuses plus outreach activities in various area public schools. The Main Campus is in the City of Alpena and the Huron Shores campus is located at the former Wurtsmith Air Force Base in Oscoda, Michigan. Founded in 1952, ACC will celebrate its 70th anniversary in the 2022-2023 academic year. Accredited by the Michigan Commission on College Accreditation in 1959, ACC was also awarded full accreditation from the North Central Association of Colleges and Secondary Schools in 1963. It has remained continuously accredited, with ten specific programs in applied science, nursing, and community corrections being accredited.

In 2016, enrollment was 2155 students and 324 students earned degrees. ACC has 50 full-time and 145 part-time faculty. ACC 75 programs of study and offers degree completion programs, vocational training and community enrichment classes to residents of Alpena County and all of northeast Michigan. The Madeline Briggs University Center (MBUC) at Alpena Community College houses offices of accredited four-year institutions that are cooperating with ACC to make completion programs for selected bachelor and master's degrees available in Northeast Michigan. The MBUC houses the offices of Ferris State and Northwood universities. Ferris State University offers a Bachelor of Arts in Integrative Studies, with Organizational Engagement or Social Science Management options. Northwood University has an on-site program center offering a Bachelor of Business Administration programs, with focuses on Accounting, Computer Information Management, Health Care Management, and Management. Collaborative transfer programs with U. of M. Flint Nursing school, Madonna University Social Work, Lake Superior State University Business and Accounting and Eastern Michigan Technology Management provide more opportunities for local students.

Campus services include veteran's assistance, financial aid, a bookstore, The Learning Center, Stephen Fletcher Library, and the Women's Resource Center. The privately owned "College Park Apartments" are located nearby to provide student housing.

Northeast Michigan Career and Technical Education Center

Housed by the Alpena High School, the Tech-Ed Center provides a wide range of career and technical programs to students from Alpena, Alcona, Hillman, Atlanta, Posen and Rogers City high schools and to those from the ACES Academy. Adults may also participate in programs that range from studies in agri-science to computer specialists.

Libraries & Museums

George N. Fletcher Library

The George N. Fletcher Library is centrally located in downtown Alpena. Established in 1967, it serves Alpena County from a facility that was constructed in 1974 and fully remodeled in 1997. In 2002, the library was expanded into an adjacent building. This addition can be accessed from the second floor of the library via an enclosed walkway with surrounding windows, which afford a view of the adjacent street and plaza area below.

Library services include books, magazines, newspapers, compact discs, audiotapes, films, videocassettes, digital libraries and an art lending library. Inter-library loan services and computers with Internet access are available for public use. Programs are offered for both children and adults. Special services include; the READ (adult literacy program), Job Launch (resume writing, etc.), Books and Brown Bags (lunch hour book review), and the Foundation Grants Center. Authors, musicians, artists, and other specialty speakers are featured frequently. Additionally, the library has informational programs on specific topics, Internet training, computer classes and other exhibits. For children, the library offers story hours, a summer book club, and many other individual programs. Visually and physically impaired individuals can be accommodated by the library's special materials circulation.

For the calendar year 2017, the library had 69,000 books, 108 magazine subscriptions, 7 newspaper subscriptions, 1,900 videos, 1,837 compact discs- including audiobooks and music, patrons have access to over 3,000 downloadable audiobooks, 8,000 eBooks, and 130 digital magazine titles. The library provides access to 7 databases for research and educational purposes, in some cases both on and offsite.

Special Collections include the Michigan Room where numerous Michigan reference materials (i.e., law, history, and environment) and general materials (i.e., industry, maritime, sports, and wildlife) are available. In addition, genealogy sources with extensive Alpena County records, as well as records from surrounding counties are also available. The Foundation Center Collection includes private & public foundations listings, grants & funding sources, and how-to books.

In 2004, the Thunder Bay National Marine Sanctuary & Underwater Preserve approved an agreement with the Library to jointly manage the Thunder Bay Sanctuary Research Collection, one of the premiere collections on Great Lakes history in the world. The collection includes over 1,000 published works, 65,000 photographs, 56 linear feet of vertical files, 40 feet of periodicals, 60,000 data cards, 100 navigation charts, and 350 shipbuilding plans. Topics of the collection include wooden shipbuilding technology, Great Lakes ports and waterways, docks, cargoes, ships, shipbuilders, machinery and rigging, notable maritime personalities, and shipwrecks. A special feature of the collection is a card index listing most of the ships on the Great Lakes before the turn of the century, a roster of some 15,000 vessels, complete with descriptive data and highlights of the ships' careers and their ultimate losses. In addition to providing the historical basis for the Sanctuary's archeological research, the collection allows Great Lakes historians and Library patrons' access to documents and photographs not previously available to the public. This collection is available online.

The Stephen Fletcher Library

The Stephen Fletcher Library is located on the campus of Alpena Community College. Offering a full range of library services, it is available to the public as well as to students enrolled at the college. On site computers provide library patrons with Internet access. Inter-library loans offer additional resources for research and other educational purposes.

The Besser Museum for Northeast Michigan

The Besser Museum for Northeast Michigan is the only museum in Northeast Michigan accredited by the American Association of Museums. Located in the north part of the City, it is the regional center for art, history and science in northeast Michigan. The Besser Museum offers changing exhibits, lectures, workshops and classes in art, history and science. Besser Museum's galleries feature artworks by

painters, photographers, potters and other artists drawn from across the area, state and country. Permanent history exhibits include Great Lakes Indian artifacts, lumbering and farming implements, 19th and 20th century decorative arts, an 1890's Avenue of Shops, and 19th and 20th century arts and graphics. The museum has a planetarium, Foucault pendulum, and eight historic structures on the grounds. Guided tours and planetarium programs are available year round.

On the grounds of the Besser Museum is a group of historic buildings that have been developed into an interactive display. These buildings include the Maltz Exchange Bank, Green School, McKay Cabin and Spratt Church. These buildings, all significant to the area's history, are open to the public during special Museum events, such as, the annual Fall Harvest Day, an observance on the first Saturday in October. A 1928 commercial fishing tug, the Katherine V. also graces the grounds. A new interactive exhibit is the Lafarge Fossil Park. The Fossil Park exhibit is a simulated limestone quarry that contains fossil material generously donated by Lafarge Alpena Plant and Specification Stone Products of Alpena. Open to the public, this display allows you to learn about the unique features of rocks and rock formations, plus allows an individual to dig in the exhibit and keep all the Devonian fossils they find.

Thunder Bay National Marine Sanctuary & Underwater Preserve

On October 7, 2000, the Thunder Bay National Marine Sanctuary & Underwater Preserve designation was finalized and it became the thirteenth National Marine Sanctuary in a system that extends from American Samoa to Massachusetts. The Thunder Bay NMS/UP protects a nationally significant collection of over 150 shipwrecks, spanning over a century of Great Lakes shipping history. Thunder Bay NMS/UP represents the first Great Lakes sanctuary, the first fresh water sanctuary, the first sanctuary to focus solely on a large collection of underwater cultural resources, and the first sanctuary located entirely in state waters.

The Thunder Bay National Marine Sanctuary and Underwater Preserve (TBNMS/UP) encompasses 448 square miles of Northwest Lake Huron. The landward boundary of the sanctuary/preserve is marked by the northern and southern limits of Alpena County, and the sanctuary extends east from the lakeshore to longitude 83 degrees west.

Lake Huron's cold, fresh waters have created a remarkable state of shipwreck preservation that is unmatched by the other sanctuaries' saltwater environments. Thunder Bay's collection of shipwrecks represents the diversity of vessels that navigated the Great Lakes in the 19th and 20th centuries. These sunken ships reflect transitions in vessel architecture and construction while conveying stories of Great Lakes transportation and commerce. Documented shipwrecks are located at depths ranging from 12 feet to as deep as 180 feet. Some of the wrecks remain largely intact while other sites are only remnants of vessels' boilers, engines, rudders, windlasses, and anchors. However, the documented wrecks are only a small section of the total wreckage believed to have occurred.

The National Oceanic and Atmospheric Administration and the State of Michigan have established a partnership to cooperatively manage the sanctuary's underwater cultural resources. A 15-member Sanctuary Advisory Council (SAC) representing the local community provides recommendations to NOAA and the State of Michigan concerning sanctuary development. The SAC will continue to advise the sanctuary/preserve manager about management issues. Sanctuary activities will focus on resource protection, education, and research. Priority activities include placing mooring buoys at identified shipwrecks, initiating an inventory and documentation of shipwrecks, and developing a maritime heritage education program.

The Great Lakes Maritime Heritage Center is a 20,000-square-foot facility that highlights the maritime heritage of the Great Lakes and the shipwrecks of Thunder Bay. The facility features a maritime heritage "discovery center" featuring more than 8,000 square feet of exhibits on the Great Lakes, shipwrecks, archaeology, and maritime history.

The Great Lakes Maritime Heritage Center, which also has interpretive shipwreck displays relating to the Thunder Bay National Marine Sanctuary, has been developed in a refurbished building within the old Fletcher Paper Mill property along the Thunder Bay River. The exhibits feature a life-size hand-built replica of a portion of a 1800s Great Lakes schooner, a recreation of a shipwreck site, artifact lab, and hundreds of interpretive learning opportunities.

Cemeteries

Evergreen Cemetery, located on Washington Avenue near the west entrance to the City, was dedicated to the City in September 1859, and is 61 acres in size. The historic entrance gate was constructed in August 1907. Burials in Evergreen Cemetery total 20,000 – 30,000. The mausoleum, built in the 1930's contains 138 burial crypts, all of which are owned. The cemetery averages 83 burials per year. There is enough undeveloped land in the cemetery for future burials to last over 50 years. All developed areas of the cemetery are under irrigation. The Grace Lutheran and Hebrew cemeteries are located within the cemetery grounds and are also operated and maintained by the City.

Holy Cross Cemetery, located across Washington Avenue from Evergreen Cemetery is a Catholic cemetery and is operated and maintained by several area Catholic churches.

Medical Facilities

Mid Michigan Medical Center-Alpena is a 139-bed acute care facility located in the City of Alpena. Mid Michigan Medical Center-Alpena is the federally-designated rural Regional Referral Center for northeast Michigan and part of the University of Michigan Health Systems. The hospital has an emergency department equipped to provide services for minor injuries and illness to trauma. Air and ambulance service is available for patients requiring care not available locally. There are two medical/surgical units that can provide care for adult and pediatric patients. Mid Michigan Medical Center-Alpena and other local medical providers also offer a wide variety of specialized medical services. Examples include a hyperbaric chamber, kidney dialysis, specialized cancer treatments, behavioral treatment, and treatments for sleep disorders, as well as other services. Mid Michigan Medical Center-Alpena has a staff of nearly 100 physicians, over 900 employees, and 300 volunteers.

District Health Department #4 service area includes Alpena, Cheboygan Montmorency and Presque Isle Counties. Services are provided through four major divisions; Personal Health Services; Home Health Services; Environmental Health Services and Health Education. Health Department offices are located in Alpena, Cheboygan, Atlanta and Rogers City.

Northeast Michigan Community Mental Health provides support services to developmentally disabled persons as well as persons needing mental health services. The Northeast Michigan Community Mental

Health service area covers Alpena, Alcona, Montmorency, and Presque Isle Counties. In addition, a VA clinic is located near downtown Alpena which provides primary care to veterans.

Parks & Recreation

The City of Alpena has made it a priority to offer numerous recreational options to its residents and visitors. Alpena boasts 23 city-owned parks and/or pocket parks spanning throughout the city. In addition, other publicly-owned recreational facilities exist within the city limits, including the Alpena County Fairgrounds, Plaza Pool and Tennis Courts, Northern Lights Arena (owned by Alpena County), APlex (owned by the Park Family Foundation), Thunder Bay National Marine Sanctuary and Underwater Preserve, two pocket parks owned by the Alpena Downtown Development Authority, the Alpena Housing Commission's Kurrasch Park and the privately owned Rotary Island Mill Park.

Bay View, Thomson, Blair Street, Starlite Beach, and Mich-e-ke-wis parks are the five City parks located on Lake Huron. Four of the five parks (excluding Bay View) comprise the prime swimming beaches within the City. North Riverfront, South Riverfront, LaMarre, Eleventh Avenue Boat Launch, Water Tower, and Washington Avenue parks are six of the nine City parks located on the Thunder Bay River. North Riverfront Park is a primary boat launch location downstream of the Ninth Avenue Dam, while the Eleventh Avenue Boat Launch is the primary launch site upstream of the dam. South Riverfront Park has deepwater dockage for large boats. Water Tower Park also houses Riverside Skate Park.

Island, Duck, and Sytek parks are three City parks located on the Thunder Bay River. They are collectively part of the Wildlife Sanctuary, a 600-acre natural ponding-area upstream of the Ninth Avenue Dam. Veteran's Park is a small pocket park in the downtown area. Avery Park is a Victorian-style pocket park located in the downtown area across the Second Avenue Bridge. McRae Park is a large neighborhood park on Alpena's "northside." It contains multiple Little League and baseball fields.

The Alpena Bi-Path is an 18.3 mile in city non-motorized trail that connects neighborhoods, commercial area, parks and schools. It also connects directly with the Michigan Department of Natural Resource's (DNR) 70 mile North Eastern State Trail (NEST) that goes to Alpena, improved in 2013 and the 22 mile Alpena to Hillman Trail, phase 1 to M-65 will be improved in 2019. The City recently built a trailhead facility that connects the Bi-Path to the NEST. Both DNR trails allow for snowmobiles from December 1 to March 31. The Maritime Heritage Trail is a history-oriented walking tour along the Thunder Bay River and it utilizes part of the Bi-Path.

Refer to the City of Alpena Parks & Recreation Plan for more detailed descriptions of City parks.

Publicly-Owned Facilities/Land

City Hall

Alpena City Hall was constructed in 1908 and has remained the center of City municipal government ever since. City Hall houses all City services and departments with the exception of the Public Safety and Public Works departments.

Built in a beautiful Georgian architectural style and constructed of Bedford limestone, City Hall was dedicated a State Historic Landmark in 2002. In the 1940's, the cupola, which was part of the original building design was removed.

1908



2002



Public Safety Facility

The Alpena Public Safety Facility opened in 1992 and consolidated all Police, Fire, and Ambulance services into one building. Previously, the City Police Department had been located at Alpena City Hall, while the Fire and Ambulance departments were located at two separate fire stations, located on both sides of the Thunder Bay River. The facility contains vehicle storage bays, administrative offices, training rooms, equipment rooms, interview rooms, equipment and evidence storage rooms, and living quarters for City firefighters.

In 2005, the City purchased an adjacent building next to the Public Safety Facility. This building is now being used as a storage facility for the DARE program and has additional vehicle and equipment storage for both the police and fire departments. The building also houses some switching equipment for the City's computer network.

DPW Service Center

In late 2005, the City of Alpena began operations at a new 32,000 sq. foot Department of Public Works Service Center at its Long Lake Avenue Storage Facility. This new structure replaced the much smaller DPW Garage on Campbell Street that began operation in the late 1940's. The new facility contains administrative offices, a conference room, modern kitchen and locker room facilities; parts storage, a carpenter shop, a modern mechanics bay, and a large vehicle storage area. Extensive improvements were also conducted to the site and other outbuildings.

**Table 4.3
Public Facilities**

Facility	Type of Facility	Location	Ownership
City Hall	Public Building	208 North First Ave.	City of Alpena
Public Safety Facility	Public Building	501 W. Chisholm Street	City of Alpena

DPW Service Center	Public Building	1015 Long Lake Ave.	City of Alpena
Water Treatment Plant	Public Building	1300 State Avenue	City of Alpena
Water Recycling Plant	Public Building	210 Harbor Drive	City of Alpena
City of Alpena Marina	Marina	Lake Huron	City of Alpena
Eleventh Avenue Boat Launch	Recreation	Eleventh Avenue	City of Alpena
Bay View Park	Recreation	State Avenue Lake Huron	City of Alpena
Thomson Park	Recreation	State Avenue Lake Huron	City of Alpena
Blair Street Park	Recreation	State Avenue Lake Huron	City of Alpena
Mich-e-ki-wis Park/Starlite Beach	Recreation	State Avenue Lake Huron	City of Alpena
North Riverfront Park	Recreation	Fletcher Street North side of Thunder Bay River	City of Alpena
South Riverfront Park	Recreation	Water Street South side of Thunder Bay River	City of Alpena
Island Park	Recreation	Long Rapids Road Thunder Bay River	City of Alpena
Duck Park	Recreation	Chisholm Street & Long Rapids Road Thunder Bay River	City of Alpena
Sytek Park	Recreation	Bagley Street Thunder Bay River	City of Alpena
Avery Park	Recreation	Second Avenue	City of Alpena
LaMarre Park	Recreation	Eighth Avenue & River Street Thunder Bay River	City of Alpena
McRae Park	Recreation	North Second Avenue & Hueber Street	City of Alpena
Kurrasch Park	Recreation	Fourth Avenue	Alpena Housing Commission
Water Tower/ Riverside Skate Park	Recreation	Ninth Ave. & Oldfield Street	City of Alpena
Veteran's Park	Recreation	Second Avenue & Washington Avenue	City of Alpena
Chisholm Street Park	Recreation	Chisholm Street	Alpena DDA
Washington Avenue Park	Recreation	Washington Avenue & Eleventh Avenue	City of Alpena
Alpena County Fairgrounds	Recreation	Eleventh Avenue	Alpena County
Alpena Plaza Pool & Tennis	Recreation	Alpena Senior High School (Third	Alpena County

Courts		Avenue)	
A-Plex	Recreation	Woodward Avenue	Park Family Foundation
Northern Lights Arena	Recreation	Woodward Avenue	Alpena County
George N. Fletcher Library	Library	First Avenue & Park Place	Alpena County
Thunder Bay Underwater Preserve & National Marine Sanctuary	Archeological Sites	Thunder Bay	U.S. Government - NOAA
Great Lakes Maritime Heritage Center	Museum	Fletcher Street	U.S. Government - NOAA
Rotary Island Mill Park	Recreation	Thunder Bay River (between Sixth & Seventh Avenues)	Alpena Rotary Club
Evergreen Cemetery	Cemetery	Washington Avenue	City of Alpena
Alpena Civic Theater	Public Building	River Street	City of Alpena
Culligan Plaza	Public Square	Washington Avenue & Chisholm Street	City of Alpena
Alpena County Road Commission Facility	Public Building	Bagley Street	Alpena County Road Commission
Alpena Regional Trailhead	Recreation	Woodward Avenue	City of Alpena
Eleventh Avenue Boat Launch	Recreation	11 th Avenue	City of Alpena
Alpena Youth Soccer Fields	Recreation	Woodward Avenue	Alpena Youth Soccer Association

Source: City of Alpena Recreation Plan, 2010

Is there an updated chart?? Not in the current recreation plan.

Downtown Development Authority

The Alpena Downtown Development Authority was established in 1980, enabled by Michigan Public Act 197 of 1975, City of Alpena ordinance, and governed by bylaws. The DDA is guided by its Strategic Plan which was developed through many months of study and public input sessions. The final market analysis and strategic plan was updated and finalized in 2017 and continues to be the guiding document which guides the DDA when establishing its workplan. The DDA is also guided by its Development and Tax Increment Financing Plan.

The DDA is an authority of the City of Alpena, and works with City Council and City Staff as it establishes and implements its goals, including participating annually in the City's 5 year Capital Improvement Planning process. The DDA also works closely with the City of Alpena, Downtown Alpena Business Association, Alpena Convention and Visitors Bureau, Alpena Area Chamber of Commerce, Target Alpena Development Corporation and many other groups throughout the community to support activities which help grow both downtown and the community.

The mission of the Downtown Development Authority is to correct and prevent deterioration in the established DDA district; to encourage historic preservation; to acquire and dispose of interests in real and personal property; to create and implement development plans in the district; and to promote the economic growth of the district.

City of Alpena is a certified Redevelopment Ready Community (RRC), which is a program of the Michigan Economic Development Corporation. Being a RRC means developers know that the community has best practices to encourage redevelopment.

Public Safety

The City of Alpena Public Safety Department consists of the Police and Fire Department. In 2017, the Alpena Police Department responded to 3,989 complaints. The Alpena Fire Department responded to 1,384 incidents including 1,245 EMS assists and 26 fires, of which 8 were structure fires. During the same period, the Alpena EMS responded to 4,696 incidents.

City of Alpena Public Safety Department

City of Alpena Police Department: The City of Alpena Police Department employs 17 certified police officers who provide law enforcement services for the City of Alpena 24 hours a day, 7 days a week. Two full-time and one part-time clerical employees support the officers. The Chief of Police administers the Police Department and oversees the daily operations. The department is comprised of a Detective Division, a Patrol Division, a Community Services Division, and a Staff Operations Division. In addition to traditional police services, the police department offers a D.A.R.E. program to all in-city public and parochial schools, a school liaison program, a bicycle patrol, and a K-9 unit. The Police Department has eight fully marked patrol vehicles, including a K-9 unit and D.A.R.E. and four unmarked vehicles.

City of Alpena Fire Department: The Fire Department employs 28 full-time fire fighters who provide fire suppression, prevention, and emergency medical services for the City of Alpena 24 hours a day, 7 days a week. The Fire Chief administers the Fire Department and oversees the daily operations. The department is comprised of the Fire Fighting Division and the Fire Prevention Division. The Fire Fighting Division is comprised of three, 8-man shifts. The Fire Prevention Division is staffed by the Fire Marshal. All but one of the fire fighters are Paramedics and the remaining fire fighter is an Emergency Medical Technician Specialist (E.M.T.S.).

The Fire Department provides many services including fire suppression, fire prevention, fire investigation, rope rescue, cold water/ice rescue, confined space rescue, hazardous material mitigation response, and emergency medical services. The department provides emergency and non-emergency ambulance service for the County of Alpena. The department currently has 17 vehicles, including: one aerial tower truck; two fire engine/pumper trucks; one mini pumper truck; one mobile command post bus; two “Echo” paramedic vehicles; seven ambulances; two administrative cars (one for the Fire Chief and the other for the Fire Marshall); and one boat. Additionally, the department has other equipment for confined space entry rescue, ice rescue, rope rescue and high angle rescue, two trailers containing hazardous materials equipment and two small boats.

HUNT

The Huron Undercover Narcotics Team (HUNT) is a multi-jurisdictional narcotics task force serving the Northeast Michigan counties of Alcona, Alpena, Montmorency, and Presque Isle. The team consists of five undercover officers from local police agencies plus two detectives (1 sergeant and 1 lieutenant)

from the Michigan State. The team is dedicated to reducing the trafficking and availability of narcotics in the community, as well as the associated violent crime that often accompanies narcotics activity. The team was formed in 1990, and has since arrested hundreds of criminals, and removed over \$4 million worth of drugs from area communities. In 2016 they investigated 163 complaints region wide.

Michigan State Police Post # 74

The Michigan State Police Post #74 is located in the west portion of the City and works with the other County police agencies to patrol major county roads. Post #74 is part of MSP's District 7, which covers the Northern Lower Peninsula. There are a total of five posts in various communities across this district. Post #74 is responsible for Alpena, Alcona, Montmorency, Oscoda, and Presque Isle counties.

Alpena County Sheriff's Department

The Office of the Sheriff is established by the Michigan Constitution. The Alpena County Sheriff's Department is located in the north portion of the City and services those areas of the County that do not have municipal police coverage. The Sheriff is responsible for the administration of the County jail and patrol of the county roads. The Sheriff is also the court officer of the Circuit Court and serves writs, subpoenas and warrants. The Sheriff's Department employs approximately 10 patrol deputies and 2 sergeants. The current Alpena County Jail has a capacity of 68 beds but in 2017 the citizens of the County voted to fund the construction, furnish, equip and operation of a new County Jail. The new building will have 100 beds and be 38,854 square feet in size, doubling the existing facility. The jail will be located four miles outside the city limits.

Department of Natural Resources

Two Department of Natural Resource Conservation Officers are assigned and living in Alpena County. They are certified law enforcement officers tasked, primarily, with conservation law enforcement. However, they do assist law enforcement agencies within the County on other law enforcement matters and/or investigations.

Combat Readiness Training Center

Located at the Alpena Regional Airport, the Michigan Air National Guard Combat Readiness Training Center (CRTC) provides an integrated, year-round, realistic training environment (airspace, facilities, equipment and instruction) which enable military units to enhance their mission capability and readiness at a deployed, combat oriented operating base. In addition, the CRTC has a full time fire department with complete fire, rescue and HAZMAT capabilities. The military area is isolated from the civilian airport to provide minimal interference between the two operations. The flight line and maintenance facilities are subdued to provide a European NATO type operating environment. Sufficient winterized facilities are available to provide a year-round training capability.

Transportation

Streets and Highways

Alpena County has no interstate highway but is served by US-23, which follows the shoreline of Lake Huron

from Mackinaw City to Standish and then south into the State of Ohio, and by M-32 which runs east-west, connecting Alpena with I-75, US 131 and beyond. M-65 heads north and south, which bisects the western portion of the County. State and federal highways include approximately 72 miles of M-32, M-65 and US-23. The County maintains 660 miles of county roads and the Road Commission is also under contract with the Michigan Department of Transportation (MDOT) for the maintenance of 159 lane miles of state highway in Alpena County.

The City of Alpena contains 74.19 total miles of streets, which includes 5.34 miles of State Highway, 25.81 miles of Major Streets, and 43.04 miles of Local Streets. In and around the City of Alpena, four bridges cross the Thunder Bay River. The bridges are located on Bagley Street, US-23, Ninth Avenue and Second Avenue. The limited number of river crossings in this densely populated area of the County has created heavy traffic volumes on all the bridges, but most notably on the Bagley Street and the US-23 bridges. These roads are the primary and secondary truck routes through and around the City of Alpena. **Figure 4.4** illustrates the road system within the City of Alpena.

The City of Alpena is located within the Federal-Aid Urban Boundary. A National Functional Classification System (NFC) is utilized to determine if a given road is a federal-aid road. Federal-aid roads are eligible for federal-aid, either as part of the National Highway System (usually limited to principal arterials) or through the Surface Transportation Program (STP). Federal-aid roads are collectively all principal arterials, all minor arterials, all urban collectors and all rural major collectors. If a road has a NFC designation of rural minor collector or urban or rural local, then it is not a federal-aid road and it is not eligible for federal-aid.

Air Transportation

Regional air service is available at Alpena County Regional Airport (Phelps Collins), which is located in Wilson Township. There is a 9001 foot and a 5028 foot concrete runway and state of the art communications and radar systems. The airport has the ability to accommodate any type of commercial or military aircraft and is a U.S. Customs Port of Entry. The airport is also home to the Combat Readiness Training Center (CRTC) of the Michigan National Guard. Passenger service connecting to Detroit and Pellston is provided by Skywest an affiliate of Delta. Charter, airfreight and medivac services, as well as flight training and aircraft rentals are available from a variety of companies.

In 2019 construction will start on a new airport terminal, parking lot and ramp improvements. The new terminal will be 12,900 square feet and will vastly improve the passenger experience. The new terminal will improve baggage handling, reduce airliner ground time, more efficient TSA screen and baggage x-ray, passenger boarding bridge. The new facility will be energy efficient with all power lines being underground. The former terminal building will be renovated for airport offices and meeting space as well as the airport restaurant.

Table 4.4 shows the amount of freight and number of passengers that have traveled through the Alpena Regional Airport from 2005 to 2017. Passenger service at the airport decreased annually from 2005-2008, then began to increase until 2013 when there was additional flight to Minneapolis which was then later dropped as Alpena was not considered an essential air service out of Minneapolis. From 2005 to 2017, inbound freight decreased by 44 percent and outbound freight decreased by 43 percent. It is interesting to note that inbound freight has outpaced outbound freight for every year shown. This would indicate that there is an opportunity to ship more freight out of Alpena on the airplanes that have delivered goods to the area.

Table 4.4
Alpena County Regional Airport Usage 2005-2017

Year	Freight (inbound) lbs.	Freight (outbound) lbs.	Commercial Passengers (inbound & outbound)	Other Passengers (inbound & outbound)
2017	696,275	459,285	20,404	908
2016	651,692	415,119	16,975	862
2015	714,117	430,370	19,474	936
2014	696,172	425,654	24,852	880
2013	637,930	412,278	31,292	659
2012	649,524	465,811	25,350	975
2011	631,246	493,640	22,747	1099
2010	657,722	447,923	16,818	n/a
2009	518,930	411,489	14,876	n/a
2008	869,140	583,223	14,608	n/a
2007	963,505	785,840	15,288	n/a
2006	1,132,541	794,543	15,625	n/a
2005	1,244,849	806,391	19,666	n/a

Source: Alpena County Regional Airport

Rail Service

Freight rail service is provided by the Lake State Railroad Company. Rail service is used to deliver raw materials and products to and from the heavy industrial users in the area. No passenger service is offered. Alpena is at the end of the rail line, and Lake State Railroad has only one in-bound and one out-bound train per day, Monday through Saturday. Although the volume of freight is expected to increase, no extension or expansion of the line is anticipated. The rail bridge over the Thunder Bay River was replaced in July 2002, financed partially through a loan from the Michigan Department of Transportation.

Marine Facilities

The Alpena area has two channels used for Great Lakes shipping. One is for the Port of Alpena and the other is for the Lafarge Corporation. The annual shipping season for Alpena Harbor is from mid-March to mid-December. Shipping grew steadily between 1991 and peaked in 1999. In 2010, shipping was at its lowest level since 1991 and in general has stabilized at that lower level through 2016 (Figure 4.1).

Table 4.5 shows that cement and concrete are the major commodities being shipped out of Alpena with the major receipts being coal, lignite, crude materials, and nonmetal minerals.

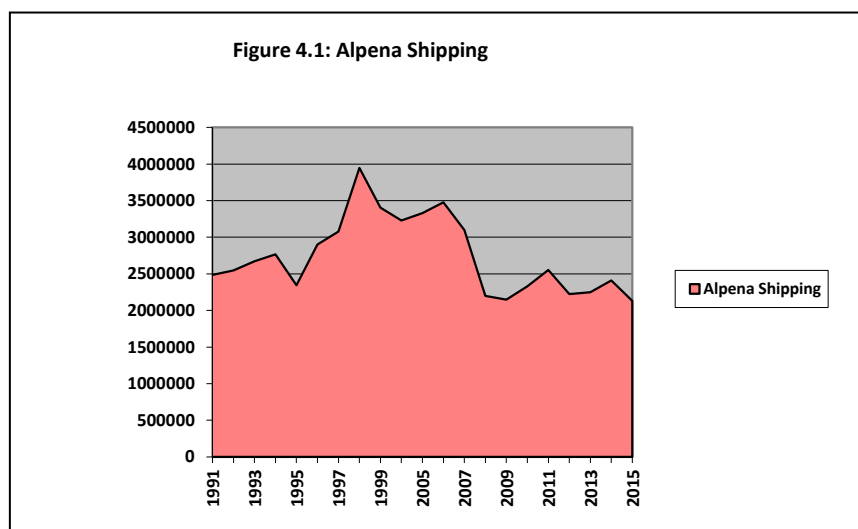


Table 4.5
Alpena Freight Traffic 2016 (short tons)

Commodity	Total	Receipts	Shipments
Coal & Lignite	123,000	123,000	0
Petroleum Coke	129,000	129,000	0
Limestone	38,000	38,000	0
Gypsum	28,000	28,000	0
Aluminum ore	17,000	17,000	0
Cement & concrete	1,718,000	0	1,614,000
Fab. Metal Products	18,000	18,000	0
Salt	17,000	17,000	0
Total	2,131,000	387,000	1,614,000

Source: U.S. Army Corps of Engineers, Waterborne commerce of the United States, Waterways and Harbors, Great Lakes

The City of Alpena Marina is a full-service marina and is the only public or private marina in the area. The marina can accommodate both seasonal and transient boats, of a variety of sizes. The marina is sheltered by a breakwall and access to Lake Huron is made via the mouth of the Thunder Bay River.

The City of Alpena Marina contains approximately 135 slips, 58 seasonal and 77 transient; all with full power and water services, launch ramps, courtesy docks, a fuel station, boater restrooms and shower facility, a fish cleaning station, a pump-out station, a marine store, maintenance facilities, and office building. Winter storage and boat launching services are also available. The City of Alpena Marina also participates in the State of Michigan Central Reservation System.

Public Transit

Thunder Bay Transportation Authority

The Thunder Bay Transportation Authority, a public authority formed under PA 196, provides transportation services for area elderly, handicapped, and special needs passengers. The Authority services Alpena, Alcona and Montmorency Counties as well as Presque Isle County south of M-68, including Rogers City, Onaway and Posen. It operates five days a week and by special contract other times and days and has a fleet of 33 busses and 7 vans, of which 34 of the vehicles are equipped with lifts. TBTA has received a \$7.5-million grant to build a new facility which is expected to be completed and operational by the fall of 2015. In addition, TBTA has received a \$2.4-million grant to purchase four hybrid buses. The first of these buses should enter service in early 2014, with all being in-service by mid-2014 with the routes fully operational by the fall of 2014. These buses will be incorporated into a new fixed route program that should be fully operational by Spring 2014. In FY 2012, the system carried approximately 130,000 passengers, covering 34,000 vehicle hours, and 475,000 miles.

The Alpena Dial-A-Ride, now a service of Thunder Bay Transportation Authority, began operations in 1974 and was the eighth small bus system to be started in Michigan. To date, the DART system has logged nearly 8.5-million miles and carried over 4 million passengers. Today the DART system consists of 10 wheelchair lift equipped buses operating 7 days a week on a demand-response basis. DART provides transportation service to all segments of the population within the greater Alpena area, but most notably to the elderly, handicapped, and youth. Funding for the system is derived from State and Federal reimbursements, fares, and a 0.65 mill City property tax levy. The tax levy was first instituted in 1976 by a vote of the City electorate and has been renewed every 4 years by an average 3 to 1 vote margin. In 2005, the levy was renewed and increased from 0.5 to 0.65 mills.

Attempting to gather updated data. Contacted them by email on 9/18/2018 and 9/25/18 and 10/1/18

Indian Trails, Incorporated

Indian Trails provides statewide public transportation services on a daily basis. The bus route follows US-23 through Alpena County. Buses operate seven days a week, with a southbound run in the morning and northbound run in the afternoon. Buses are wheelchair lift equipped and have space set aside to accommodate wheelchairs. The Michigan Department of Transportation (MDOT) subsidizes this transportation service for areas in northern Michigan. This system serves as a daily link between select cities and allows people to travel outside the area to other parts of the state and country.

Taxi/Shuttle/Limousine Services

Demand response public transportation service is provided by private companies operating in Alpena. A shuttle bus is provided by Holiday Inn between Alpena County Regional Airport and its lodging facility. Passenger van schedules coincide with airline arrivals and departures.

Charter/Rental bus service

Charter bus service is provided by Country Line Tours. The services provided vary by company.

Car Rental

Car rental companies are located within the Alpena County Regional Airport, Cliff Anscheutz Chevrolet, and Thunder Bay Chrysler. These companies offer local, state and national rentals.

Non-Motorized Transportation

The Alpena Bi-Path is a bicycle and pedestrian pathway system which has been developed throughout the City. This marked bikeway connects with the Alpena Township section that parallels US- 23 from the City limits at Thunder Bay Avenue to Bare Point Road. Inside the City limits, residents and visitors are able to bike, walk, roller blade and skateboard on the 18.5 miles of paved pathway and can access all the waterfront parks in the city. In a cooperative City/County effort, a section of the bikeway follows the shore of the Thunder Bay River through the Alpena County Fairgrounds. Discussions with the Alpena County Road Commission are on-going for the possible future extension of the pathway along Bagley Road from the Thunder Bay River north to Long Rapids Road.

The Bi-Path was extended north along Woodward Street to connect to the 70 mile North Eastern State Trail (NEST), owned and maintained by the Michigan Department of Natural Resources. The NEST extends northeast connecting to Posen, Onaway and Cheboygan. The DNR is also working on developing the Alpena to Hillman Rail Trail which will connect directly with the Bi-Path at Franklin Street and will extend to Hillman when it is improved. Current project is to improve the trail from Franklin Street to M-65 in 2019.

Public Water & Wastewater Supplies

The City of Alpena has the only water treatment and wastewater treatment plants in the County. The City contracts operation and billing for both utilities to United Water. Public water and wastewater is available throughout the city, portions of Alpena Township and lines have been extended west along M-32 through Wilson Township to the Alpena County Airport. The City of Alpena Water Filtration Plant supplies water, and all wastewater in the public system is treated at the City of Alpena Water Recycling Plant (**Figure 4.5**).

Alpena Township and the City of Alpena each manage, operate and maintain the water facilities within their boundaries. Per a 1977 contract and Master Agreement, signed with Alpena Township, the City of Alpena provides up to 1.5 million gallons of water to the Township per day and accepts up to 2 million gallons of wastewater per day. However, this agreement has expired and is being renegotiated between the City and Township.

According to information from the managing entity of the water systems states the 2017 average daily water usage of both the City and Township is approximately 1.63-million gallons, with maximum daily usage of 1.77-million gallons. Per the 1977 agreement, service area boundaries were established that limit extension of wastewater and water infrastructure. When initially established, the boundary went north to Bloom Road, East to Wessel Road, West to the Alpena Township Line and south to Partridge Point. The agreement was amended in 1998 to extend the service area to include wastewater and water lines to the Alpena County Regional Airport. In 2006, the water main was extended south along US 23 to the southern Alpena Township line. The remainder of the County is served by individual wells and septic tanks for which permits must be obtained from the District Health Department #4.

Public Water Supply

The Alpena water system serves 4,576 customers in the City of Alpena and 2,298 customers in the adjacent portions of Alpena Township. Thunder Bay is the source for all public water in Alpena County. A groundwater investigation conducted in 1966 by W.G. Keck & Associates determined that there is not a water bearing formation in the area adequate to serve as a source for municipal supply. The City of Alpena Water Filtration Plant is located on the shore of Thunder Bay at the south end of the City of Alpena. The water plant is a conventional surface water plant. Coagulation, flocculation, and filtration are used to clean the water.

The water system consists of a Thunder Bay intake, 6.0 mgd filter plant, four elevated storage tanks and eighty miles of distribution piping. The current raw water intake has been in service since 1905 and has two intakes. The intake line is 2,000 feet long and is a 40-inch diameter pipe with a 30-inch polyethylene liner. There are two openings that are anchored by rock and timber intake cribs; one located approximately 1,000 feet from shore in 10 feet of water and the second located approximately 2,000 feet from shore in 17 feet of water. The rated capacity of the intake pipe is 8 million gallons per day at 2.52ft/sec. Control of zebra

mussel colonization within the intake pipe is accomplished via chemical addition. Once the water enters the treatment, it takes 12 hours to complete the treatment cycle.

During the process, at least 50,000 samples are collected and analyzed per year and fluoride, phosphate, and flocculant aides are added. The plant laboratory is certified by the State of Michigan to test for Total and Fecal Coliform bacteria. These are the primary indicator organisms for water quality, both for drinking and swimming/recreation. The facility also tests for chlorine (disinfectant), pH, hardness, alkalinity, turbidity, and fluoride. The State Drinking Water Laboratory also tests water samples for other possible contaminants as required.

One 750 KVA diesel powered (1034 HP) generator is available to operate the entire water treatment plant. This generator will produce all of the necessary electricity to meet City needs during any power failure. The auxiliary generator is exercised quarterly.

The treatment plant has a firm capacity of 6.0 million gallons per day with a maximum daily demand of 3.04-million gallons per day. The average daily demand is 1.98-million gallons per day. There are also 80.6 miles of water main within the entire system.

Treated water storage is as follows:

- 1-million gallon ground storage at the Water Treatment Plant
- 750,000 gallons at Ninth Avenue elevated tower
- 750,000 gallons at North Industrial elevated tower.
- 500,000 gallons at Alpena Township M-32 elevated tower.
- 500,000 gallons at Alpena Township Piper Road elevated tower.
- 300,000 gallons at the Alpena Township US-23 South elevated tower

Public Wastewater

The original water recycling treatment plant became operational in 1953 and many of the treatment units remain in use today. In 1972, the plant was upgraded to improve pollutant removal capability. Using grant funds from the USEPA, secondary treatment was added to the facility. A biological treatment process called Activated Sludge was used to enhance removal of dissolved pollutants from the wastewater. This addition improved pollutant removal rates and the plant regularly achieves 90 to 95% pollutant removal efficiency.

The Alpena Water Recycling Plant has a defined service area of 25-mile radius around the plant and serves 4,798 customers in the City of Alpena and 2,013 customers in Alpena Township. The system consists of 69.3 miles of sanitary wastewater lines and 11 lift stations. The treatment plant has an average design capacity of 5.5 million gallons per day with a maximum pumping capacity of 7.2 million gallons per day. The average daily treatment is 2.3 million gallons per day.

Preliminary treatment accomplishes the removal of screenings and grit from the raw wastewater. The removed grit is collected, stored, and disposed of by land filling. Primary Clarifiers accomplish about 15% to 20% pollutant removal. Aeration reactors and final clarifiers aid in removing more bacteria. A Biosolids Application Program is in place, which utilizes the nutrient-rich residues to beneficially enrich soils for area farmers. Biosolids are also used to regenerate forest growth and to reclaim areas destroyed during industrial mining operations.

Chlorine bleach is added to the treated wastewater after secondary treatment is complete. Any wastewater treatment process generates solids that must be stabilized and recycled. Two 300,000-gallon anaerobic digesters are used to treat the solid material generated by the Alpena Water Recycling Plant. A valuable byproduct of the anaerobic digestion process is methane gas. This energy source is used to fire the plant boiler and fuel a 4-cylinder engine that drives a raw wastewater pump. Utilization of methane gas from the digester saves the Utility about \$15,000 per year in energy costs.

Mercury Minimization: The Alpena Water Recycling Plant first implemented mercury minimization in 1986. The focus of the plan was to identify and eliminate mercury discharges from commercial and industrial sources. Utility personnel have assisted in the identification of numerous over-the-counter products that utilize mercury as a preservative. Once identified, mercury free products can be substituted.

Industrial Pretreatment Program: The water recycling plant management staff regulates commercial and industrial wastewater discharges. Chemicals that could upset the biological processes at the plant must be strictly controlled. The indiscriminate discharge of metals and other toxins can also pass through the plant and enter the environment. Customers that have the potential to negatively impact plant processes are issued discharge permits and are inspected annually to insure compliance with limitations.

Odor Control: The equipment and infrastructure necessary to transport and recycle wastewater creates conditions that are inherently prone to the creation of odors. Because of the plant's close proximity to the City Marina, \$1.5-million worth of odor control equipment was added to the facility as well as aesthetic upgrades.

Utilities

The City's utility system includes private suppliers of electric, natural gas, telephone, solid waste disposal and cable television services, along with the publicly owned and operated City of Alpena water and wastewater systems. **(Table 4.6)**

TABLE 4.6

Utility System	Company
Natural Gas	DTE Energy
Electricity	Alpena Power Company
Telecommunications	Telephone: Frontier Wireless: Numerous providers Internet: Numerous providers
Water & Wastewater	City of Alpena
Cable TV	Charter Communications
Solid Waste Disposal	Private haulers (see below) for household solid waste, City for yard waste

Source: Survey of local utility officials, 2002

Solid Waste Disposal

Alpena County is a member of the Montmorency-Oscoda-Alpena Solid Waste Management Authority (MOASWMA). The MOASWMA landfill in Montmorency County is the primary destination for the County's solid waste. Collection of solid waste is available through private hauling companies and the City of Alpena is currently serviced by commercial firms. Curbside collection is the most common collection method with door to door pick up service provided in some instances. The City provides monthly pick-up (April-November) of yard waste and processes the materials at its composting facility located at the City DPW Facility on Long Lake Avenue.

Although the Lafarge Corporation owns and operates its own landfill, many other industries have found ways to recycle all or portions of their wastes. The Alpena City Water Recycling Plant produces 500 dry tons per year of sludge, all of which is used for different applications such as farm fields, forest regeneration and mine reclamation. It is the goal of the plant to keep all sludge out of the landfill.

The Alpena Resource Recovery Program is administered by the Northeast Michigan Council of Governments (NEMCOG) and is overseen by the Alpena Resource Recovery Board that includes representation from various political jurisdictions. The program includes the Resource Recovery Facility (RRF) located on M-32, a leased facility directly across from the RRF plus a number of full-time drop off sites located in the City of Alpena and various other outlying areas. The primary funding source for the program is a \$20 per household surcharge fee. The program accepts electronics, household hazardous waste, paper, tin, batteries, aluminum, plastic, cardboard, garbage, construction debris, mattresses, furniture, appliances, and motor oil. It also participates in the "Cleansweep" program sponsored by the Michigan Department of Agriculture, which is designed to encourage citizens to turn in hazardous materials.

Fiber Optic Network

In January of 2005, the Alpena City Council Vision Statement and Goals included the development of a "wired city" and the relocation of all new or reconstructed utilities underground. This led to the development of a plan to develop a fiber optic conduit network which would not only provide the backbone for high-speed telecommunications, but would also provide a readymade system within which to place new or relocated aerial utilities. The City pursued the sharing of resources through the creation of a multi-agency fiber optic consortium. The consortium's purpose is to enhance voice, video and data communications among public/non-profit entities and develop a redundant network throughout the greater Alpena area. The Consortium has recently reorganized, becoming the North East Michigan Fiber Consortium (NEMiFC). NEMiFC is working to offer more support to its members, apply for grants and is also developing a strategic plan for future network expansion.

Figure 4.2 UPDATE THIS MAP add updated bi-path, Alpena Trailhead, 11th Street Boat Launch, Alpena Youth Soccer Association fields.

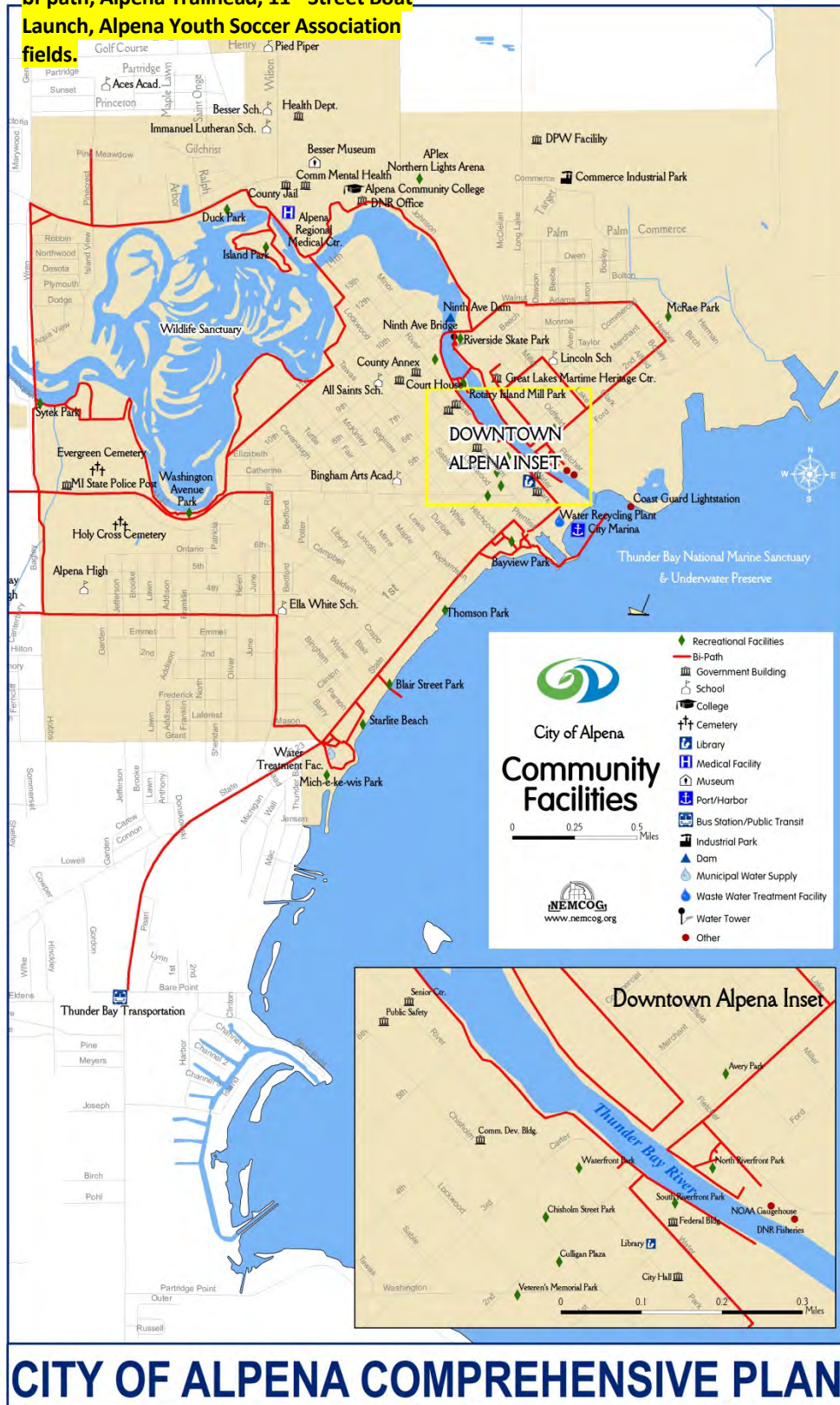


Figure 4.3 this map, include Alpena Trailhead and 11th Street boat launch

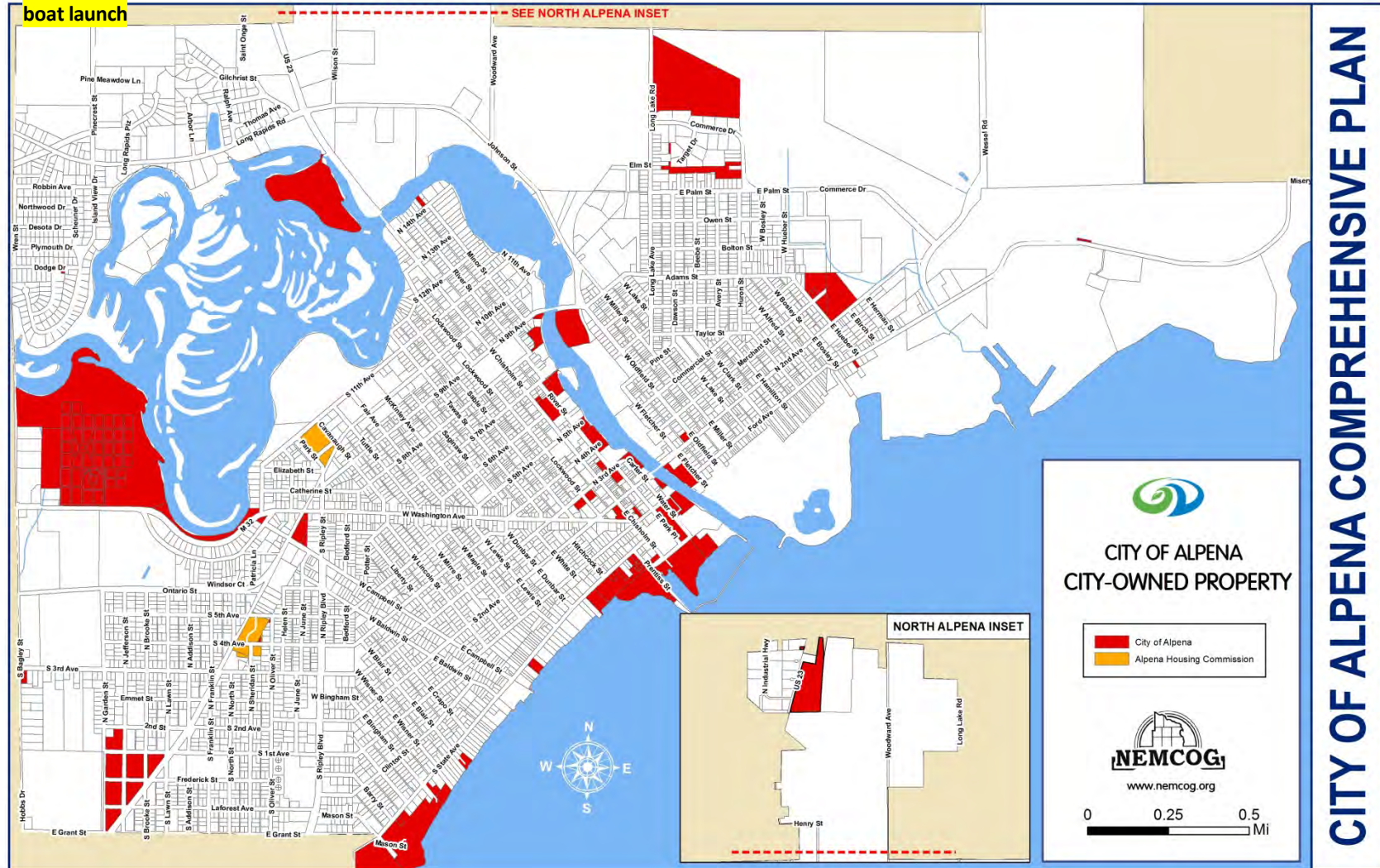


Figure 4.4

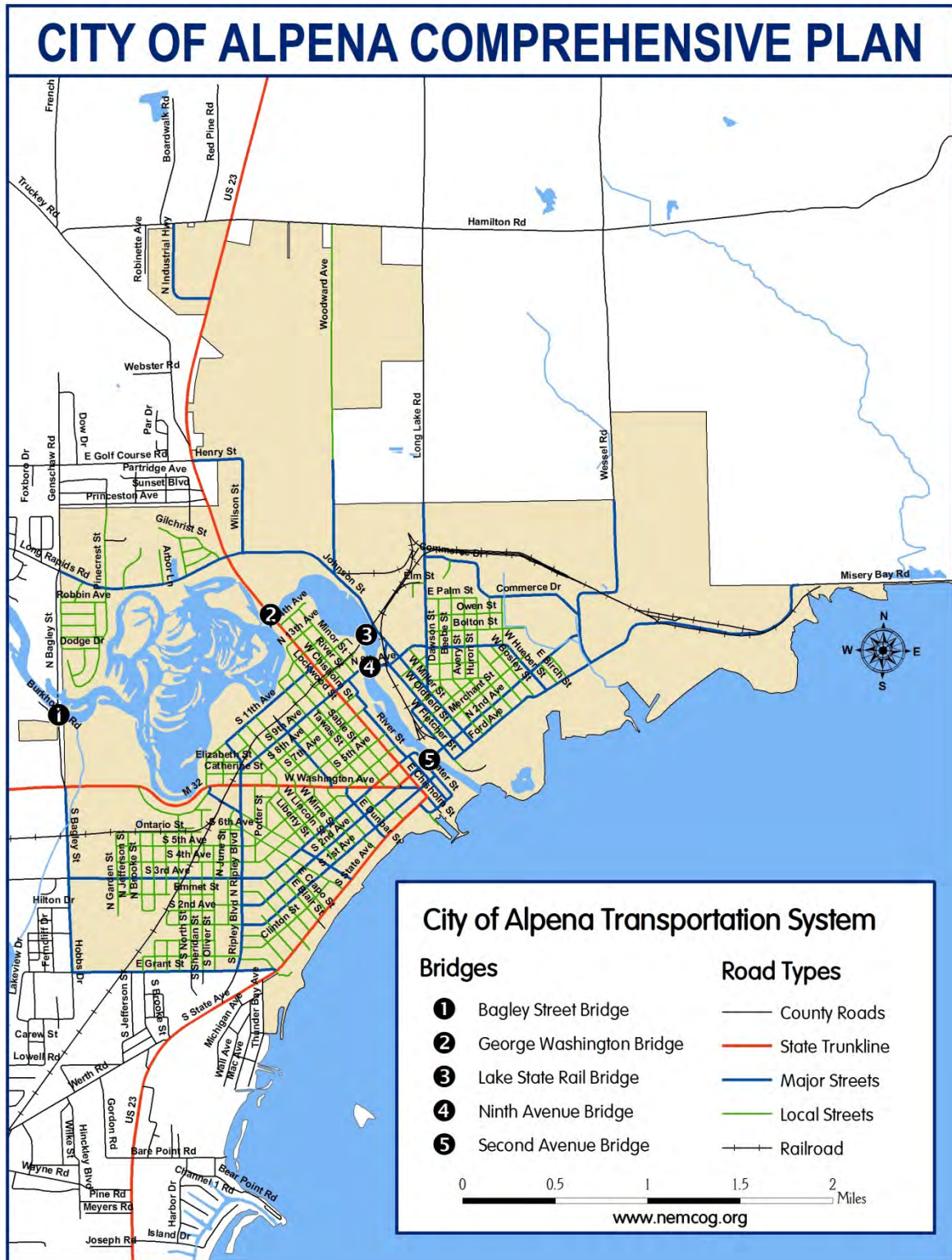
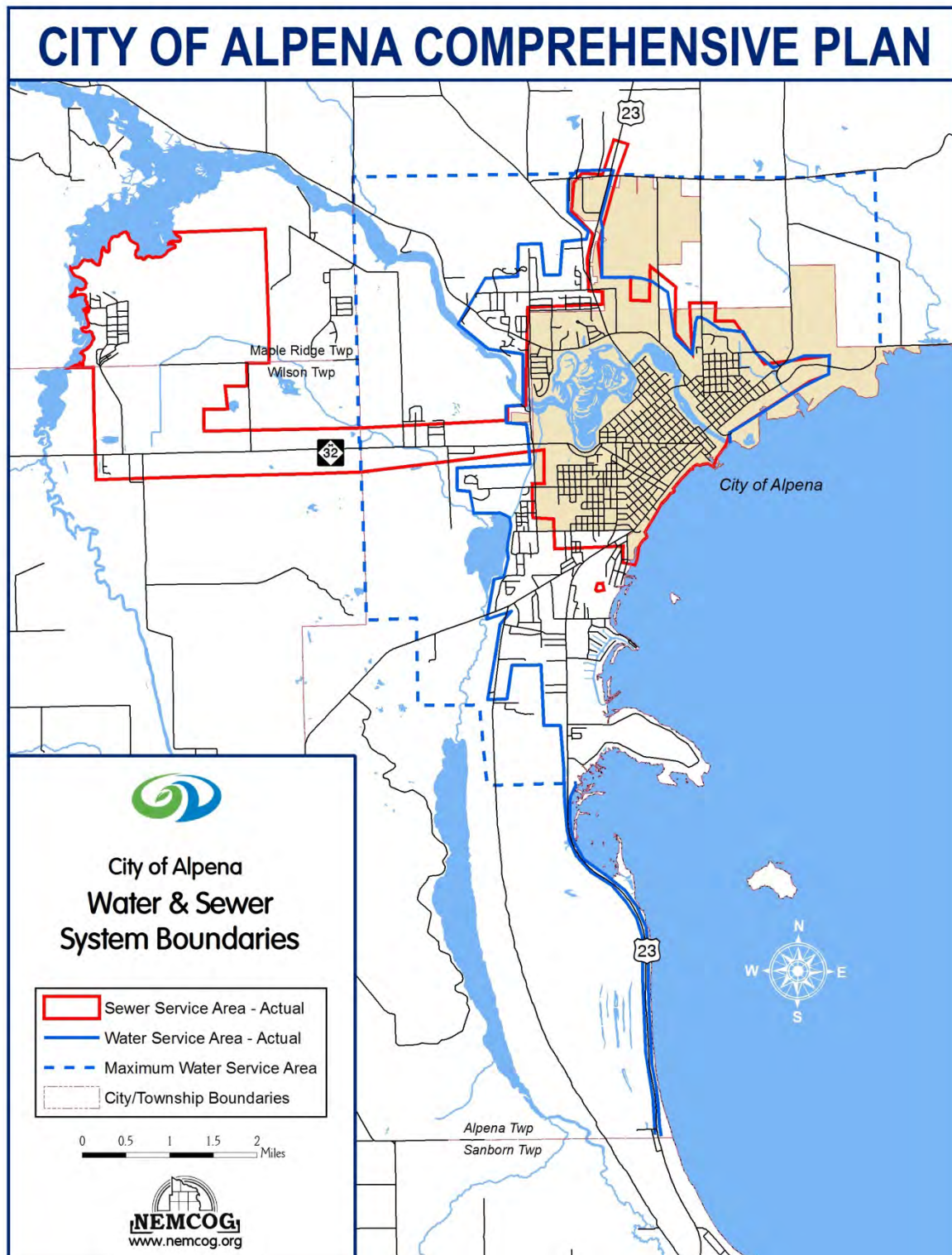


Figure 4.5



Chapter 5

Cultural and Natural Resources

Quality of life and community character are closely tied to the City's cultural and natural resources. A community with access to a variety of cultural and natural resources is not only a desirable place to live, but these resources will draw people from outside the community and indirectly help strengthen the economic base. This chapter presents information on the cultural and natural resources in the City. **Figure 5.1** shows cultural and historic resources within the City of Alpena.

Cultural Resources

Cultural resources include such things as concerts, theater productions, festivals, and community events as well as libraries, museums, art galleries, colleges, and historic buildings. For a community of its size, the City of Alpena is blessed with an abundance of these resources. The following is a list of key cultural and historic features in the community:

Music, Theater Performances and the Arts

- **Alpena City Band:** The Alpena City Band has been performing for nearly 100 years. It performs regular summer concerts at the Fine Arts Band Shell at Bay View Park and includes musicians of all ages.
- **Alpena Civic Theatre:** The Alpena Civic Theatre is an all-volunteer theater that has been presenting live performances to area audiences for over 40 years. On average, nearly one hundred persons become cast or crewmembers each year while participating in the season's productions.
- **Alpena Community Concert Association:** An association which brings an annual series of musical performances by international artists to Alpena.
- **Alpena Community College (ACC) Players:** A theatrical performance club which is open to students of all disciplines. The ACC Players present a minimum of one show a semester and meet on a regular basis to study improvisation.
- **An Evening with the Arts:** Held on the last Friday of the fall and spring semesters, this exhibition showcases the work of ACC visual and performing arts students. It has also become popular for the great food made by art students and faculty and served throughout the evening. Admission is free.
- **Art on the Bay:** The Thunder Bay Arts Council presents Art on the Bay for three days each July at Bay View Park. It showcases artists from the area and from around the country.
- **Art in the Loft:** Art in the Loft is a non-profit art gallery which displays the work of artists from the region on the third floor of the historic downtown Center Building. In addition to the special events showcasing adult artists, Art in the Loft presents displays featuring children's art, evening events

with the artists including music, and other cultural events drawing guests from the region and beyond.

- **Global Awareness Series:** Each October, ACC presents a series of free programs focusing on the political, economic and cultural aspect of another country or region of the world.
- **Huron Shore Barbershop Chorus:** The men's chorus was chartered in the Barbershop Harmony Society in May 1974. There are always two to three Barbershop Quartets in the Chorus. Groups are available for performances throughout the year. The Chorus/Quartets have an annual show at the Stanley Beck Auditorium at the Alpena High School in the last week of September or the first week of October.
- **The ACC Spotlight Series:** This performing arts series offers registered students a student-priced ticket for the entire series or for individual performances.
- **Thunder Bay Theater:** Thunder Bay Theatre (TBT), a professional live theater, occupies a turn of the century building that was originally known as Spens Drug and Wallpaper and then as the Alpena Candy and Cigar Company. The cigar humidor remains intact in the lobby and is used as a storage closet. TBT has amassed an extensive costume collection which is maintained with care to protect the many valuable period pieces included in the inventory. Professional actors work together with local residents to perform theatrical productions.
- **Besser Choir; Community Orchestra; Alpena Area Community Youth Band:** These musical performance groups offer a diversity of musical experiences in the Alpena area.

Facilities and Collections

- **APlex:** The Apex is a state-of-the-art facility that seats 650 and offers a full commercial kitchen and audio/video services. The facility also features a gymnasium, four regulation-sized tennis courts, two multi-purpose rooms, an aerobics area, outdoor beach volleyball courts, corporate fitness area, and locker facilities. The Apex offers an active schedule of sports, fitness classes, camps year-round for all ages, and live entertainment.
- **Alpena Area Senior Citizens Center:** The Alpena Area Senior Citizens Center is a County-owned facility devoted to attending to the needs of area senior citizens.
- **Alpena Community College:** Alpena Community College (ACC) is located on 700 acres of land in the City of Alpena. ACC operates two major campuses including outreach activities in various area public schools. ACC offers degree completion programs, vocational training and community enrichment classes to residents of Alpena County and all of Northeast Michigan. The Madeline Briggs University Center at Alpena Community College houses offices of accredited four-year institutions that are cooperating with ACC on completion programs for selected bachelor and master's degrees available in Northeast Michigan.
- **Alpena County George N. Fletcher Public Library:** The County-owned George N. Fletcher Library is a premier cultural center for the community and is well known for its excellent programming for

children and adults. Over 3,000 visitors each month access the library (see Community Services & Facilities Chapter for more information).

- **Besser Museum for Northeast Michigan:** The only accredited museum in Northeast Michigan, the Besser Museum offers permanent and changing exhibits, lectures, workshops, and classes in art, history, and science.
- **Coast Guard Building:** The United States Coast Guard (USCG) has operated for many years in the City of Alpena. Due to a needed expansion of its Alpena operations and personnel, the Coast Guard partnered with the City and a private developer to establish a new rescue and administrative office in downtown Alpena.
- **Cemeteries (Jewish and Lutheran included):** Alpena's Evergreen Cemetery contains 61 acres and has been an active and operating City-owned cemetery for 141 years. The City also maintains the adjacent Jewish and Lutheran cemeteries. The privately-owned Catholic Holy Cross Cemetery is located on the south side of Washington Avenue across the street from Evergreen Cemetery.
- **Fine Arts Band Shell:** The Fine Arts Band Shell, located on the shores of Lake Huron at Bay View Park, provides a wide range of entertainment events, free of charge, performed by different community cultural organizations.
- **Michigan Room at George N. Fletcher Library:** Part of the library's Special Collections, the Michigan Room offers numerous Michigan reference materials (i.e., law, history, and environment) and general materials (i.e., industry, maritime, sports, wildlife). In addition, genealogy sources with extensive Alpena County records, as well as records from surrounding counties, are also available.
- **NOAA Thunder Bay National Marine Sanctuary and Underwater Preserve:** Organized as the only fresh water National Oceanic and Atmospheric Administration (NOAA) sanctuary in the world, the NOAA Thunder Bay National Marine Sanctuary and Underwater Preserve focuses on the shipwrecks and unique maritime history of the region. The facility relocated to the Great Lakes Maritime Heritage Center in 2005 as part of the redevelopment of the old Fletcher Paper Mill property on the Thunder Bay River. The Great Lakes Maritime Heritage Center is a 20,000-square-foot facility that highlights the maritime heritage of the Great Lakes and the shipwrecks of Thunder Bay. The facility features a maritime heritage "discovery center" featuring more than 8,000 square feet of exhibits on the Great Lakes, shipwrecks, archaeology, and maritime history. The center also has an auditorium for showing films and live video feeds from Thunder Bay shipwrecks, an archaeological conservation laboratory, and an education resource room. Private companies provide shipwreck tours by glass bottom boat, as well as kayak, May through September.
- **Northern Lights Arena:** Northern Lights Arena, with two sheets of ice, offers open ice skating, drop-in hockey, figure skating, and is home to the Alpena High School Wildcats, Alpena Hockey Association, Alpena Speed Skating Club, Alpena General Men's Hockey League, Alpena Men's Senior Hockey League, Carhardt Senior Hockey League, Alpena Figure Skating Club, and NLA R/C Vehicle Club.

- **Old Town:** Old Town Alpena encompasses the downtown area of the City along 2nd Avenue from Fletcher Street to Oldfield Street. Old Town includes several restaurants, the Thunder Bay Theatre, two City parks, and the Great Lakes Maritime Heritage Center.
- **Outdoor Ice Rink:** Due to budget cuts, the City no longer operates the public ice rink at Mich-e-ke-wis Park. The local Optimist Club prepares and operates an outdoor skating rink at McRae Park. In recent years, the facility has become weather-dependent.
- **Thunder Bay Sanctuary Research Collection at George N. Fletcher Library:** Through an agreement with the Thunder Bay National Marine Sanctuary & Underwater Preserve, the library offers one of the premier collections on Great Lakes history in the world. The collection is currently in the process of being digitized (see Community Services & Facilities chapter for more information).
- **United States Federal Building:** Included on the National Historic Register, the United States Federal Building was constructed in 1911 and is designed in the Renaissance Revival style. It is currently privately-owned.

Organizations

- **The Alpena Volunteer Center (AVC)** encourages volunteerism, responds to community needs, and promotes activities that improve the community. It is located in Room 108 of the Donald L. Newport Center on the ACC campus. The many services include: 1) Matching volunteers with requests for volunteer help, 2) Providing community information and directories; networking and consulting, 3) Coordinating community outreach programs such as the Christmas Wish List, Association for Lifelong Learners (ALL@ ACC), Community Education classes, annual A College Day event, service-learning opportunities for ACC credit classes, and the ACC Ropes Course.
- **Thunder Bay Arts Council:** An umbrella organization for a variety of cultural and artistic organizations, many of which operate within the City's Cool City project neighborhood, the Council sponsors the annual "Art-on-the-Bay" arts and crafts fair at Bay View Park each summer.
- **Northeast Michigan Genealogical Society (NEMGS):** NEMGS aims to foster genealogical interest and activities, encourage and preserve family histories, and encourage the expansion and access to genealogy materials to the general public. NEMGS supports microfilm and genealogical collections at the Alpena County Public Library. The Besser Museum for Northeast Michigan houses the society's unpublished manuscript collection, the Faces of Northeast Michigan (ancestral photographs), and the Van Nocker and the Milo Burston collections (Alpena photographers). Support is also provided to the Alpena Latter Day Saints Family History Center.

Community Events and Activities

- **Alpena Farmer's Market:** Located behind City Hall and adjacent to the City Marina, the Alpena Farmer's Market offers vendor space every Wednesday and Saturday from July through October. Throughout the season, special event days are scheduled featuring a variety of programs and events.
- **Festivals/Events**

Alpena Blues Festival
Great Lakes Lighthouse Festival
Michigan Brown Trout Festival
Thunder Bay Maritime Festival
Ramblin' Rods Car Show
Thunder Bay International Film Festival
LaFarge Downtown Riverfest
Thunder Bay Arts Council Art on the Bay
Fall Harvest Fossil Fest
Antique Tractor and Steam engine Show

- **Friday Night Downtown:** Each Friday in July, 2nd Avenue is closed to traffic and opened up to pedestrians to enjoy an evening of entertainment through music, performances, food, and other festivities.
- **Library:** The George N. Fletcher Library hosts many community events that feature authors, musicians, artists, children's programs, and many other activities.
- **Parades**
Memorial Day Parade
4th of July Parade
Christmas Parade (Thanksgiving weekend)

State Historic Sites¹

- **Alpena City Hall:** 208 North First Avenue
Alpena City Hall, a Georgian style structure located on the Government Square, remains one of Alpena's most prominent structures. Since its completion in 1908, City Hall has been the center of civic activity in Alpena. A cupola crowned the structure until the 1950s. City Hall represents the work of several Alpena craftsmen.
- **Alpena County Courthouse:** 720 Chisholm Street
Opened on October 21, 1935, the Alpena County Courthouse is an imposing, Art Deco public building and was likely the first public building constructed of poured Portland cement material in Alpena. The Alpena County Courthouse is on the National Register of Historic Places.
- **Arbeiter Hall:** 1224 North Second Avenue
The Arbeiter Hall (German Aid Society Hall) has historical significance for its association with a rapidly-growing German ethnic group in Alpena during the later years of the 19th Century. In 1891, the German Aid Society constructed a hall to serve the social and recreational needs of its membership. After a fire, a new building was completed before the end of the year using the same foundation of the original structure, much of the same masonry, and the original cornerstone. The German Aid Society Hall continued in use until the late 1930s.
- **Daniel Carter Family Commemorative Designation Marker (George N. Fletcher Library):** Park Place

¹ Source: State Historic Preservation Office, Department of History, Arts & Libraries, State of Michigan

The Daniel Carter Family were Alpena's (then known as Fremont) first settlers and are interred in Evergreen Cemetery.

- **First Congregational Church:** 201 Second Avenue
The first church built at the junction of Washington, Second and Lockwood Streets was completed in 1856 and the present concrete masonry church occupying the site was constructed in 1955 using funding provided by Jesse Besser.
- **George R. Nicholson House:** 422 Washington Avenue
Constructed in 1904, the house was the residence of one of the city's most prominent businessmen and city officials.
- **Huron-Portland Cement Plant:** Ford Avenue
Now called Lafarge North America, the site houses the world's largest cement plant. Portland cement, so-called because it resembles stone from the Isle of Portland (in the British Isles), was first produced in the United States in 1871 and in Michigan in 1896. Because of Alpena's location in the midst of immense limestone deposits, the Huron Portland Cement Company, founded at Detroit in 1907, chose this site for its plant. Cement production began here in 1908. From Thunder Bay, ships of the Huron fleet deliver cement to all parts of the Great Lakes region.
- **I.O.O.F. Centennial Building:** 150 East Chisholm Street
The trapezoid-shaped structure was built in 1876 on the former site of the Alpena Courthouse. For many years it housed the fraternal activities of the Independent Order of Odd Fellows and is now used for business and professional offices.
- **Jesse Besser House:** 232 South First Avenue
The Jesse Besser House (1938) has architectural significance as an example of the use of concrete masonry as a residential building material. It has historical significance as the last home of Alpena master inventor, philanthropist, and humanitarian Jesse Besser (1882-1970). In 1904, Besser and his father designed and manufactured the first concrete block-making machine in the United States.
- **Joseph Bertrand House:** 725 South Third Avenue
The Bertrand House was built in 1925 by Alpena contractor Floyd Gagnon for Joseph Bertrand. The Bertrand House is an excellent example of Craftsman style architecture with strong Prairie style influences. It presents an unusual example of totally unaltered exterior and interior integrity.
- **Memorial Hall/Alpena National Guard Armory:** 230 Water Street
Constructed in 1919 in the Renaissance Revival style, the Armory Building was originally dedicated as Memorial Hall. An imposing building, it is constructed entirely of poured Portland cement. The site has been purchased by a private development group and has been designated Alpena's first historic district.
- **Monarch Milling Company:** 633 Campbell Street
Known today as Alpena Flour Mills, the Monarch Mill has historical significance as the last remaining grist mill in Alpena. The original structure on the site was built in 1883; however, after a fire destroyed the original building, the current structure was constructed in 1913.

- **Saint Bernard Catholic Church:** Southwest corner of Fifth and Chisholm Streets
The structure, completed in 1884, houses the oldest Catholic parish between Bay City and Cheboygan.
- **Thunder Bay River Boundary of the Cession of 1819 (Treaty of Saginaw):** Johnson Street
The Thunder Bay River was the northern boundary of the Treaty of 1819. The Treaty of 1819, or the Treaty of Saginaw, was signed September 24, 1819 between Native Americans and Gen. Lewis Cass, fourth military governor of the Michigan Territory (1813-1831). The treaty added some six million acres to what is now the midbelt of the Lower Peninsula.



Natural Resources

Climate

The climate in Alpena is greatly influence by its topography and its proximity to Lake Huron. Temperature data from the Midwest Regional Climate Center indicates that the climate along the immediate Lake Huron shore is semi-marine in nature and lacks many of the temperature extremes found only a few miles inland.

Summer months are pleasant with considerable sunshine and a daily average of more than 15 hours of daylight for outdoor activities. Summer temperatures as high as 104 degrees have been recorded, but are unusual. The following weather data reflects a 30 year average (1981-2010) data collected at the Alpena Waste Water Treatment Plant. According to the Michigan State Climatologist's Office the 30 year average July temperature is 68.4 degrees Fahrenheit, which is .5 degrees higher than the last 30 year average.

Winters have comparatively uniform day-to-day temperatures. Sub-zero temperatures have been recorded as early as November 22 and as late as April 2 but have their highest frequency during February. Thunder Bay and Thunder Bay River are usually free of ice by the first week in April, but water temperatures remain low enough to produce diurnal sea breezes during the middle of the day with subsequent reduction in maximum temperatures on many days during the spring and summer. The 30 year average January temperature is 20.5 degrees Fahrenheit, which is .6 degrees warmer than the last 30 year average.

Precipitation is fairly well distributed throughout the year. Most winter precipitation is in the form of snow. Most of the summer precipitation is the result of showers or thundershowers, which occur most often during the months of June, July, and August. The 30 year annual average precipitation is 30.03 inches which is a 1.71 inches higher than the last 30 year average.28.59 inches. The precipitation includes the snowfall liquid equivalent. The 30 year average annual snowfall is 57.6 inches, which is 9.6 inches less than the last 30 year average. Prevailing winds are from the northwest with the exception of May and June when southeasterly winds predominate. Generally speaking, the climate is getting warmer with more rain and less snow.

Topography

The City of Alpena is located on an old post glacial lake plain. The terrain is relatively flat. At the water's edge of Lake Huron and Thunder Bay, the elevation is 580 feet above sea level with the land gently sloping up westward from the lake shore to 689 feet above sea level at the Airport. The highest elevation noted on a USGS topographic map is 675 feet near the intersection of Hamilton Road and US-23. The elevation is approximately 620 feet above sea level along the western border of the City. One exception to the gently sloping landscape is Lafarge quarry. The sharply sloping quarry walls define a hole that is approximately 80 feet below the surface level of Lake Huron.

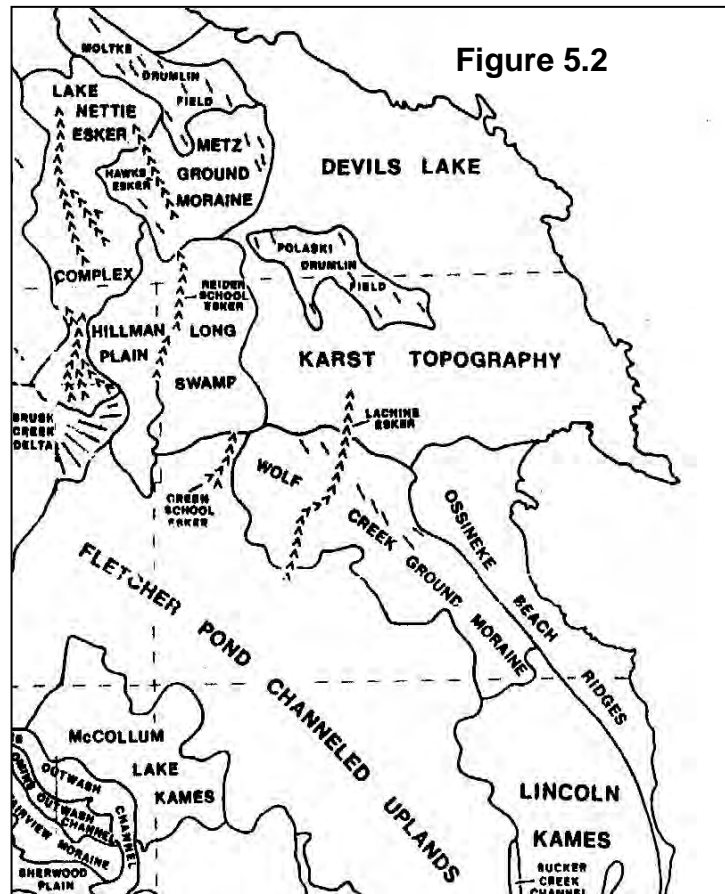
Geology and Landforms

Limestone bedrock laid down over 300 million years ago and glacial landforms created over 10,000 years ago define the landscape of Alpena. This section will describe the glacial landforms or quaternary geology

and the underlying bedrock geology.

Starting some 2 million years ago, during the Pleistocene era, continental glaciers formed in the Hudson Bay area. Several times during this two million year period the massive sheets of ice built up and inched their way south across what is today Michigan. These massive ice sheets were more than one mile thick and advanced in a southerly direction, bulldozing their way across the landscape. The glacier pushed material in front of it, incorporated rocks and soil into the debris laden ice. They scraped, ground and broke apart the sedimentary bedrock of the Michigan Basin.

Each advance and retreat of the continental glaciers took tens of thousands of years. This reoccurring process shaped and reshaped the land by obliterating and then creating hills, valleys, rivers and lakes, swamps and marshes. The last glacial period is called the Wisconsin era which created the landscape we know today. The glacier left behind boulders, rocks, cobble, sand, gravel, silt, clay and loam. In some areas the material was deposited in unsorted masses called till plains, ground moraines and end moraines. Water flowing from the melting glaciers also sorted materials, creating outwash channels, sand deltas, kames and eskers. Fine materials were captured in the fast moving glacial meltwater and settled to the bottom of expansive glacial lakes creating lacustrine clay and silt plains. According to a map prepared by W. A. Burgess and D. F. Eschman (**Figure 5.2**), titled "Landform Units in Northeastern Lower Michigan," the Alpena area is divided into two landform units. Essentially, the southern



part is in the Ossineke Beach Ridges and the northern part is in the Devils Lake Karst Topography.

At the front of the melting glacier, vast lakes formed, these emerging lake basins were the beginnings of our Great Lakes. During different time periods, the post glacial great lakes were both much higher and much lower than the lake levels we have grown accustomed to in recent times. Geologists have identified and named the different post glacial great lake stages, which include glacial great lake stages Warren, Algonquin, Nipissing and Algoma. Landforms and soils adjacent to Lake Huron were heavily influenced by these different lake stages. Glacial Great Lake Warren formed at the front of the melting Huron glacial lobe around 12,000 years before present and was the most extensive, flooding the entire land area of Alpena.

The Ossineke Beach Ridge landform, a beach ridge and swale complex, is a series of alternating old beach ridges and linear depressions that parallel the Lake Huron shoreline. As Glacial Lake Warren receded, a series of beach ridges interspersed with low wet areas formed. At times the recession was slow but steady,

creating a series of closely spaced low ridges and wet swales. When lake levels receded at a rapid rate, expansive areas of relatively level land were uncovered. Initially the area may have been an emergent coastal wetland like Squaw Bay. As the water table further dropped, lowland brush and eventually lowland conifer and hardwood trees would dominate a site. When the receding lake levels stalled, beaches were built by wave action and deposition of sand washed up on shore. A review of aerial photos shows remnant beach ridges in the northern and southern parts of the City. This would indicate prior to settlement much of the area was covered by an extensive dune and swale complex, and as development occurred, the land was filled and leveled. Dune and swale complexes are still evident in the southwestern corner of City. With the low lake levels of Lake Huron, this on-going process can be seen today along the beach areas at Mich-e-ke-wis Park.

There were extended periods when the lake recession stalled, and combined with a readily available supply of sand, long wide sandy ridges or low sand dunes were created inland from the present shoreline. A wide sandy ridge, one to two miles inland from the Lake Huron Shoreline, runs from the community of Black River in Alcona County, through Negwegon State Park and Ossineke continuing north into Alpena Township and the City of Alpena. Sandhill Road in Alcona County as well as Piper Road in Alpena County follows this dry sandy ridge. The wide sand ridge extends into Alpena Township and the City crossing Werth Road at Hobbs Drive, following the west edge of Mud Lake, continuing in a northeasterly direction, crossing the Thunder Bay River and eventually ending northeast of the Thunder Bay Recreation Center.

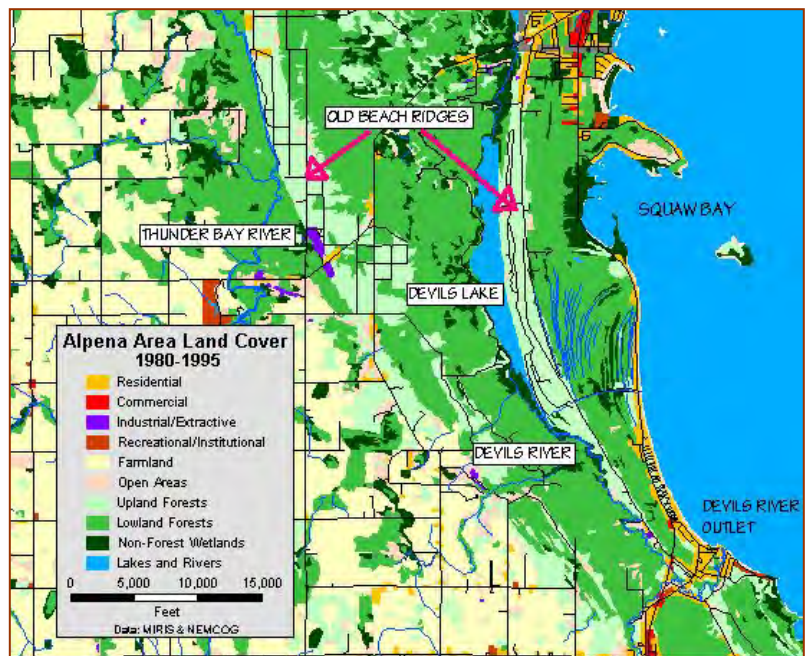


Figure 5.3

Sportsman's Island Park is part of this old beach ridge landform. The pine-oak forest on the island is characteristic of forest vegetation found growing in other segments of this old beach ridge or sand dune. Along with being a good place to build roads, the well drained sand ridge is also built up with subdivisions in the southern part of the study area. Sunset Grade School, Alpena High School, Evergreen Cemetery, Alpena Community College and the Thunder Bay Recreation Center are also located in this sand ridge area.



The presence of limestone bedrock at or near the surface, particularly north of the Thunder Bay River, influences the hydrology and vegetation of the area. Northern white cedar thrives on these shallow soils and is the dominant forest species in both wet and dryer areas north of the Thunder Bay River. Beneath the thin mantle of glacial deposits is sedimentary bedrock that was created during the

upper and lower Devonian ages of the Paleozoic Era. The bedrock was formed in ancient seas, which covered the area some 345 to 405 million years ago. The shallow marine seas deposited layers of silt, clay, sediments, marine animals, plants, coral, and other calcareous materials. These deposits formed shale, limestone, and dolomite bedrock. The bedrock in this area is referred to as the Traverse Group. Deposits are further defined as Potter Farm Formation, Norway Point Formation, Four Mile Dam Formation and Alpena Limestone. Rich deposits of Alpena Limestone, Newton Creek Limestone and Genschaw Formation are mined and processed at the Lafarge facility in the northeast part of the study area.

Soil Constraints Analysis

When planning for types and intensity of land uses, sustainable development and protection of critical resources, soil types and slopes are important factors that determine carrying capacity of land. Construction of roads, and buildings on steeply sloped areas, areas with bedrock at or near the surface or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

The Natural Resource Conservation Service (NRCS) has completed detailed soil survey of Alpena County. A digital or computerized version of the soil survey maps was acquired from the Michigan Center for Geographic Information (CGI). Using information contained within the published soil survey books, a series of maps are presented that depict hydric soils, soils depth to bedrock, and soils with building limitations.

Hydric Soils

Figure 5.3 is a color thematic map that classifies hydric soils. Lower density and less intensive development should be directed to these areas with severe building constraints. Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. Hydric soils have poor potential for building site development and sanitary facilities. Wetness and frequent ponding are severe problems that are difficult and costly to overcome. Areas with hydric soils are best suited for forestlands, wetlands, wildlife habitat, and wildlands recreation. Functioning as the backbone of a community's green infrastructure, these areas convey and retain stormwater runoff from developed lands. Hydric soils are associated with lakes and streams and when covered with natural vegetation, function as important water quality buffers. Sites with high water tables may be classified as wetlands and a wetlands permit would be required to develop these areas. The map shows extensive areas of hydric soils. These wet areas are hydrologically connected to surface water resources either by streams, intermittent drainages or through subsurface water movement.

Building Site Development

The USDA soil survey rates soils for various uses such as building site development and identifies the limiting factors such as steep slopes or high water table. The rating system is slight, moderate and severe limitations. Using the rating system developed by USDA, soil limitations for buildings without basements have been mapped and are displayed in **Figure 5.4**. Areas with well drained soils and slopes less than 10 percent tend to have slight limitations for building development. Areas depicted as yellow on the map would be considered well suited for building development. Areas with slopes greater than 18 percent, high water tables, bedrock near the surface, large stones and organic soils have severe limitations. Lands with

severe constraints are quite extensive. Some of those bedrock influenced areas also have constraints from high water tables.

Depth to Bedrock

The soil survey classifies soils according to depth to bedrock. **Figure 5.5** is a thematic map showing depth to bedrock according to criteria in the soil survey. Areas colored as red contain soils where bedrock is within four feet of the surface. Bedrock outcrops can be seen in road cuts on Woodward Avenue where the old railroad grade crosses the road. As noted on the above building constraints map, areas with shallow soils have severe buildings constraints.

Natural Resource Features

While much of the central core has developed into urbanized land uses over the last 100 years, there are still extensive undeveloped lands bordering the City. The forests, wetlands and open areas provide wildlife habitat, lands for outdoor recreation, protect water quality and bring nature into the city. Within developed portions of the City and the surrounding Alpena Township, the wide expanses of forests and wetlands are squeezed into narrow corridors following rivers, railroads and lakeshores. Information from a Coastal Zone Management project called the Alpena Eco-Plan will be presented to describe the ecological features of the City and surrounding area. Utilizing reference data such as land cover/use maps, topographic maps, and digital aerial photographs, NEMCOG staff developed a natural resource features map of the City, (see **Figure 5.6**).

Forests

Approximately 15 percent of the land area is forested. Forests include upland cover types such as jack-red-white pine, aspen-birch, sugar maple-beech and red oak. Northern white cedar thrives on upland sites where limestone bedrock is close to the surface. Lowland forests include lowland conifers and hardwoods, such as northern white cedar, tamarack, black spruce, balsam fir, elm, red maple, willow, black ash, balsam poplar and aspen. The forests are concentrated in the northern portions of the City. A sandy ridge, remnants of an old sand dune that runs from the southwest to the northeast crossing the river at Sportsman's Island, is dominated by red oak, white oak, jack pine and white pine.

Upland Non-forested Open Areas

Old farm fields, cleared areas, railroad corridors and shore areas are included in this category. The most extensive open areas are located north of the river and include old farm fields, wet meadows and cleared areas. Shrubs such as hawthorn, autumn olive, tartarian honeysuckle, spreading junipers can be found growing in upland areas. Speckled alder, willow, and red osier dogwood shrubs dominate wetter areas. Land bordering the Thunder Bay River, Wildlife Sanctuary and Lake Besser are mapped in this category, with some segments being mowed

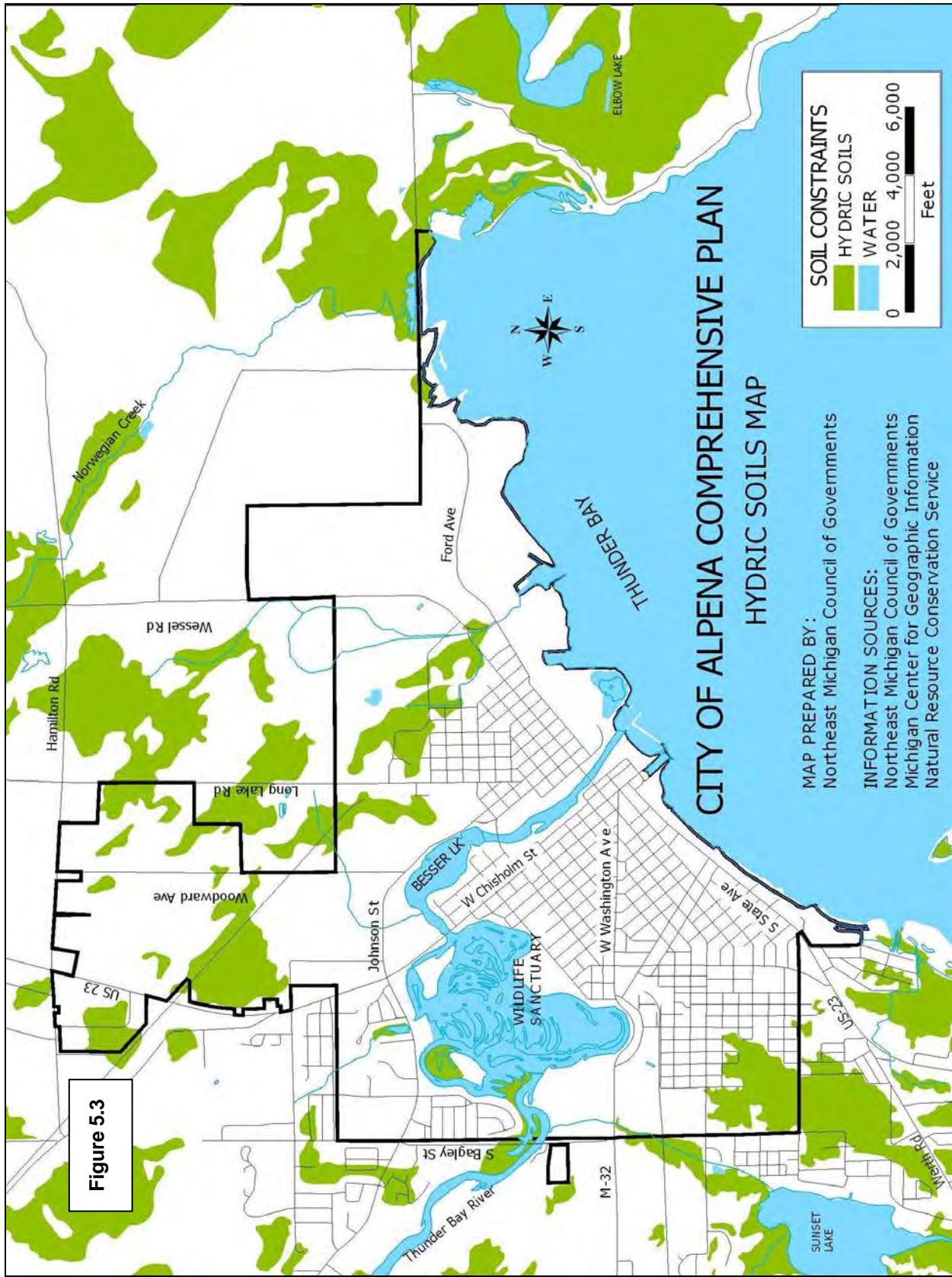


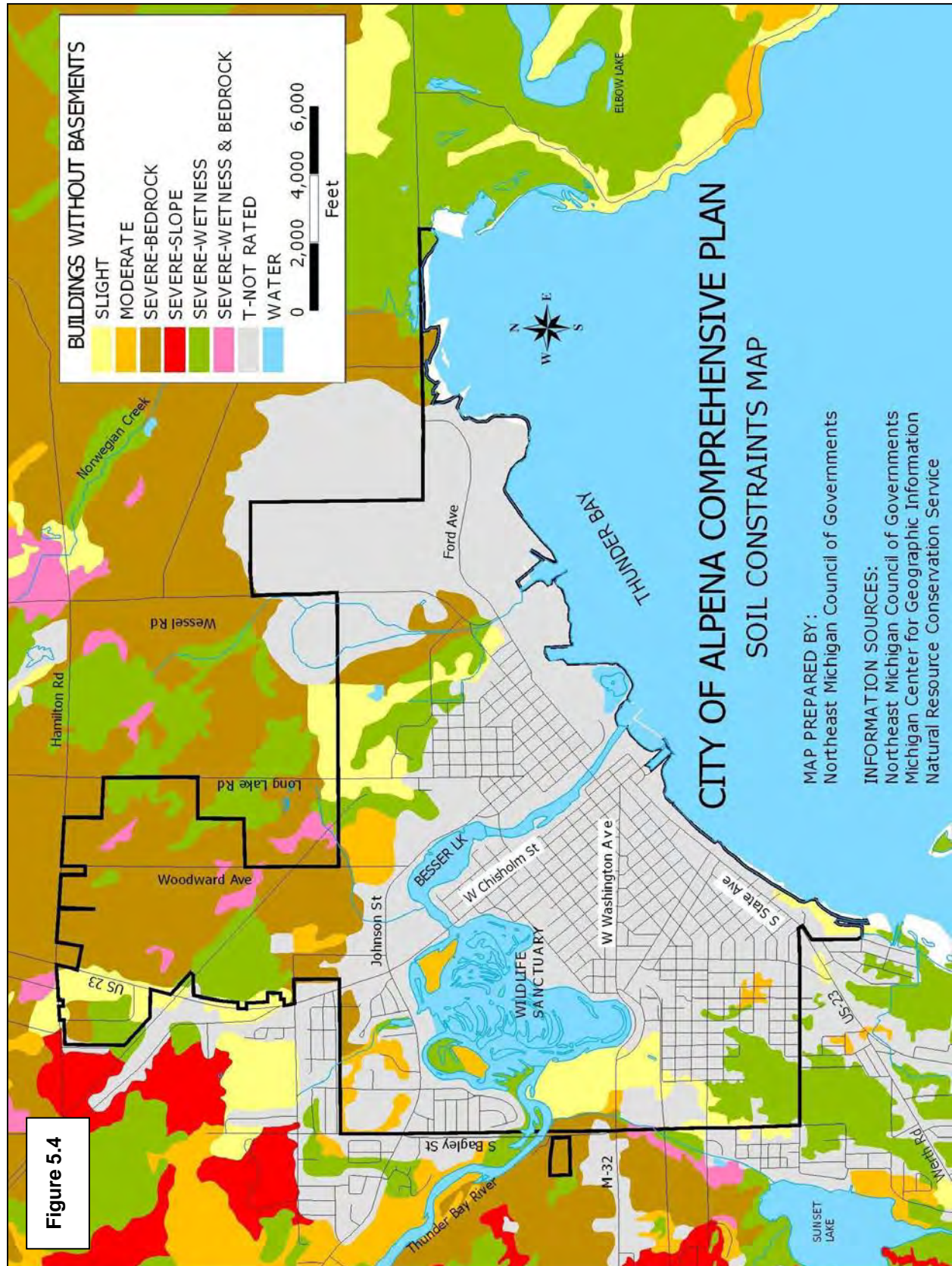
lawns. The Lake Huron shoreline south of the river mouth and within the City is included in this category. These sites are mainly mowed lawns. The railroad corridors and rail-trail (Paxton Spur) are narrow openings that pierce the urban built-up portions of the Township and City. The open areas, particularly in the urban setting, present wonderful opportunities for planting shrubs and trees to enhance wildlife habitat. Shrubs in the undeveloped, mostly wet areas south of the river are speckled alder, willow, and red osier dogwood. Shrubs such as hawthorn, autumn olive, tartarian honeysuckle, spreading junipers can be found growing in upland areas.

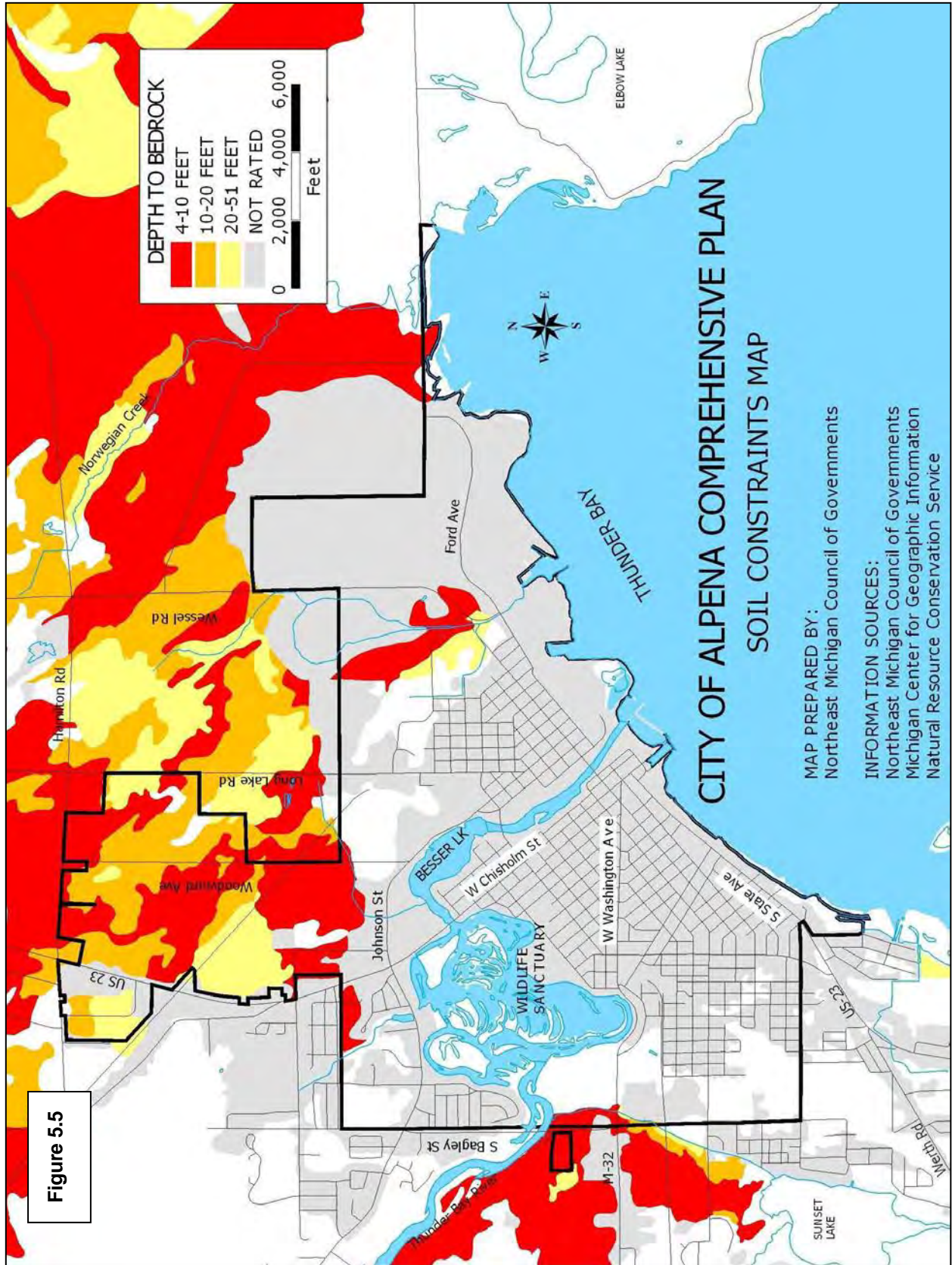
Wetlands

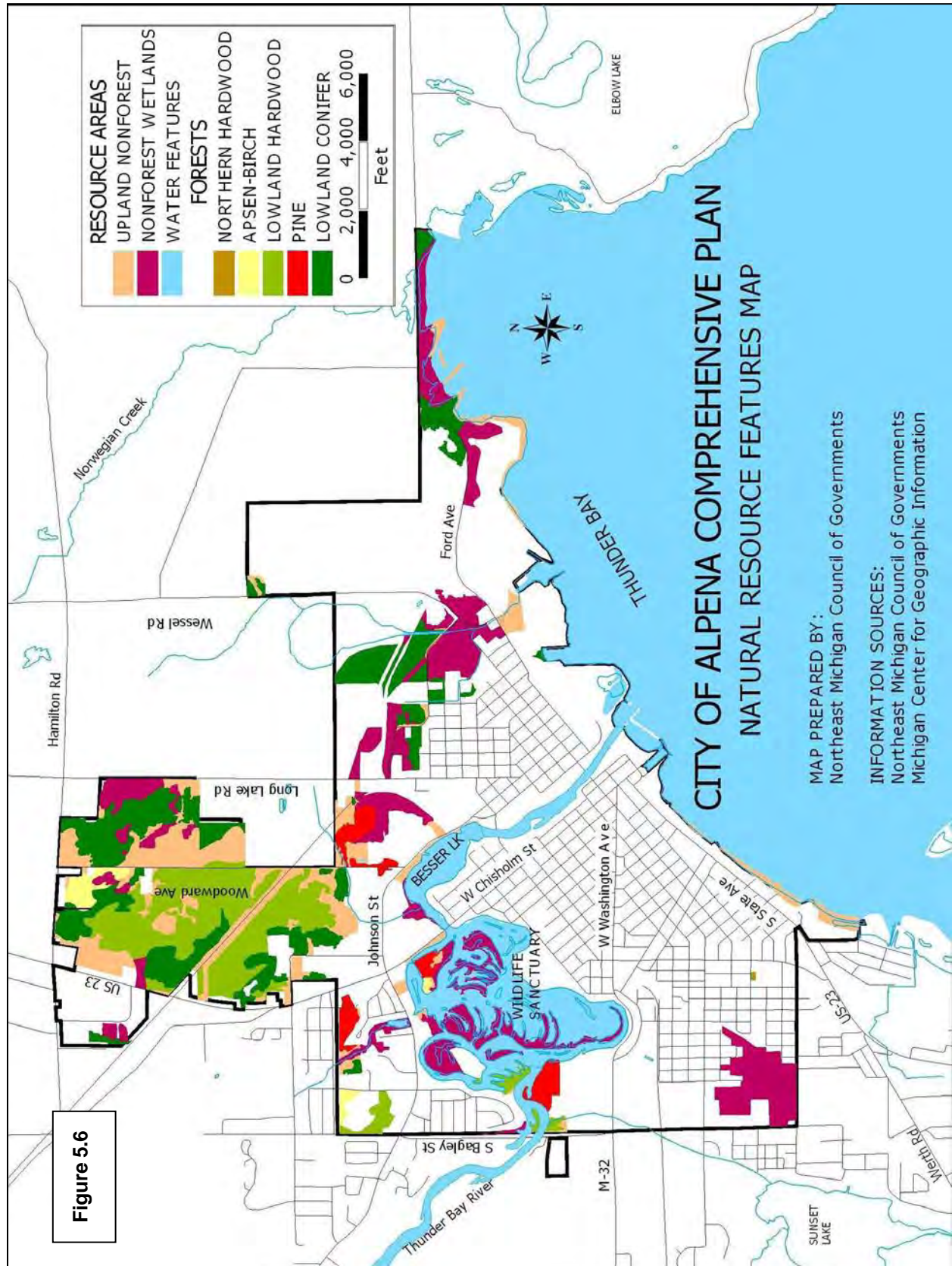
Wetlands are defined as land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes and bogs. Two of the most important functions of wetlands are water quality protection and ecological corridors. As can be noted on the Alpena Resource Map, the major wetland areas are adjacent to rivers and creeks. The networks of wetlands receive surface water and subsurface water discharge creating the many streams and creeks which in turn flow into the area lakes. The interconnected resources exemplify how activities distant from major water bodies can still have an impact on the water quality.

The wetland category comprises non forested types such as lowland brush (speckled alder, willow, and red osier dogwood shrubs, emergent vegetation (cattails, rushes, sweetflag, arrowhead and pickerelweed), and wet meadows (water-loving grasses and sedges). Non forested wetlands are common in the Wildlife Sanctuary and in the northeast and southwest parts of the City. The wetland complex in the southwest of the city is part of a dune and swale complex. Non-forested wetlands often form transition zones between upland areas and water features. Lowland forests grow on soils with a seasonally high water table and are often classified as wetlands. Lowland forests include areas that support lowland hardwoods and conifers, such as northern white cedar, black spruce, balsam fir, elm, black ash, red maple, ash and aspen species.









Water Resources

Surface water resources define the shape, climate, and character of the community. In the developed neighborhoods, one is never more than one half mile from a lake or river. Key water resources include Lake Huron, Thunder Bay and Thunder Bay River. Other water resources include Lake Besser, Norwegian Creek, Fletcher Creek, and Gilchrist Creek. Fletcher and Gilchrist Creeks along with numerous manmade ditches tend to be intermittent, carrying water during spring run-off and heavy rain events.



A large portion of the City's eastern border follows the shoreline of Lake Huron, which is the second largest Great Lake and the fifth largest freshwater lake in the world. Lake Huron serves as habitat for fish, waterfowl, and other aquatic organisms, and offers many fishing opportunities. An abundance of boating and other water-related recreation opportunities are also available through this resource.

In addition to the Lake Huron (including Thunder Bay) shoreline, there are a total of 7.6 miles of Thunder Bay River frontage located in the City. The river is used for recreation and transportation. The greatest use designated for the river is as parkland. The next largest use of this river frontage is residential, with residential dwellings occupying 12,247 feet. The remaining 15,352 feet are occupied by institutional, industrial, and commercial uses. According to the City's 1992 River Plan, the water quality of this river can "be considered fair to good and of a quality that will support intensive urban fishing programs and urban recreation."

The Thunder Bay River includes a small impoundment of 45 acres at the Ninth Street Dam called Lake Besser. Located upstream from Lake Besser, the Wildlife Sanctuary is an impoundment of the Thunder Bay River that contains marshes, narrow curving linear islands and flooded river oxbows. The lake area includes approximately 190 water acres, and the river includes 160 acres for an approximate total water area of 350 acres. The Sanctuary is a key ecological resource located entirely within the city limits. Water courses function as the central core of ecological corridors. The Thunder Bay River is a corridor of regional importance.

Islands

Numerous curve-a-linear islands, remnants of past erosive powers of the untamed Thunder Bay River, can be found in the Wildlife Sanctuary. Depending upon the soils and elevation above the average water level, vegetation varies from pine and oak on Sportsman Island; willows and ash on lower islands and speckled alder, red osier dogwood, sedges, and cattails on wetter sites.

Pre-settlement Vegetation

The Michigan Department of Natural Resources has compiled pre-settlement vegetation maps of counties in Michigan. The maps were generated from information contained in the first government land survey notes in the 1800's along with information such as current vegetation, land forms and soils. A review of the

pre-settlement vegetation map of the Alpena area show much of the city was classified as spruce-fir-cedar forests and mixed conifer swamp forests. The sand ridge (old sand dune) was covered with jack pine-red pine forests and pine-barrens. Other types of vegetation in the northern parts of the City included beech-sugar maple-hemlock forests and hemlock-white pine forests. Hemlock, considered an important species for song birds, was once fairly common along coastal areas, but logging and land clearing has greatly reduced the species.

The pre-settlement map does not show coastal wetlands, but one can only surmise coastal marshes and emergent wetlands would have been abundant. Coastal wetlands in Isaacson Bay, Squaw Bay and around Bare Point and Partridge Point are remnant examples of the extensive wetlands that ringed Thunder Bay during pre-settlement times. The mouth of the Thunder Bay River was a rich delta consisting of emergent wetlands, marshes, wetland forests, sandy beaches and oak and pine forest covered beach ridges. It was an area where great numbers and types of wildlife and fish congregated. Native American people understood and exploited the abundant plant, animal, and fish resources. The junction of a major river and Great Lakes was also the best place to locate a town. When water transportation was the primary mode, the Thunder Bay River brought raw materials to the community, to be processed into goods, loaded on the sailing ships and steamers and then transported to markets in large cities around the Great Lakes. To allow for the construction of large factories, land was cleared, low areas filled and the river tamed. One hundred years of activity eliminated the coastal marshes from Lafarge Corporation down to Mich-e-ke-wis Park.

General Ecological Areas

Based on soil conditions, past and current development patterns, geological landforms, and existing vegetation, general ecological areas have been delineated. This effort identified six eco-areas: beach ridges and swales, riverine, karst, coastal resources, sand dunes and urban areas. **Figure 5.7** is a map of the Eco-Areas. The mapping of these areas will lend itself to development of recommended treatments in subsequent chapters. For example, several preferred species to plant on old sand dunes are red oak, serviceberry, beach cherry, and jack pine.

Beach Ridges and Swales

This area includes remnant sections of the post glacial beach ridge and swale complex called the Ossineke Beach Ridge, (see above section on geology). Most of the remnant undeveloped areas have high water tables and as a result are less desirable for development. However, both the City and Township have slated these areas for residential development. The old beach ridges are low and tend to support aspen, ash, elm and willow trees. White pine can be found growing on better drained, somewhat higher ridges. Speckled alder, willow, and red osier dogwood shrubs along with cattails, sedges are common in the wet swales.

Riverine

This area includes the Thunder Bay River, Wildlife Sanctuary, Lake Besser, islands in the river and riparian lands adjacent to the water features. Vegetation in this eco-area ranges from aspen and jack pine on upland well drained sites to willow, and red osier dogwood shrubs on lower sites adjacent to the river and to cattails, bulrushes and lily pads on wet sites. The area includes the Alpena Wildlife and Sportsman's Island Park. Rivers and riparian forests provide critical habitat for many species of wildlife and reptiles. The riparian zones are long narrow edge habitats, an interface between land and water. The area is part of an ecological corridor that extends far inland to Oscoda and Montmorency Counties

Karst-Forest Lands

The northern part of the planning area is influenced by the presence of limestone bedrock at or near the surface. Northern white cedar thrives on these shallow soils and is the dominant forest species in both wet and dryer areas. Black spruce, white spruce, balsam fir, eastern tamarack, aspen, white birch, white pine, jack pine, and red pine can be found growing in the forested areas. Shrubs such as hawthorn, autumn olive, tartarian honeysuckle, spreading junipers can be found on dryer sites, while, speckled alder, willow, and red osier dogwood shrubs dominate wetter areas. There are also numerous open areas in the karst eco-area which consist of old farm fields, wet meadows and cleared areas. The karst eco-area has extensive areas of undeveloped lands, partially due to large ownership, limited development potential and the underlying bedrock resources.

Old farm fields and natural forest openings are most prevalent in the karst eco-area. Forest openings serve an important function in the spring; because they are in the sun most of the day, openings are the first area to lose snow and to green up. After a winter of eating twigs and seeds, animals seek out openings for a meal of succulent nourishing fresh greens. Predators, like the red-tailed hawk and fox, understand this fact and cruise these areas for a spring meal of rodents. Flowering plants throughout the growing season attract insects, which in turn are devoured by birds.

Coastal Resources

The coastal wetlands in Whitefish Bay, Squaw Bay and around Bare Point and Partridge Point are remnant examples of the extensive wetlands that ringed Thunder Bay during pre-settlement times. The mouth of the Thunder Bay River was a rich delta consisting of emergent wetlands, marshes, wetland forests, sandy beaches and oak and pine forest covered beach ridges.

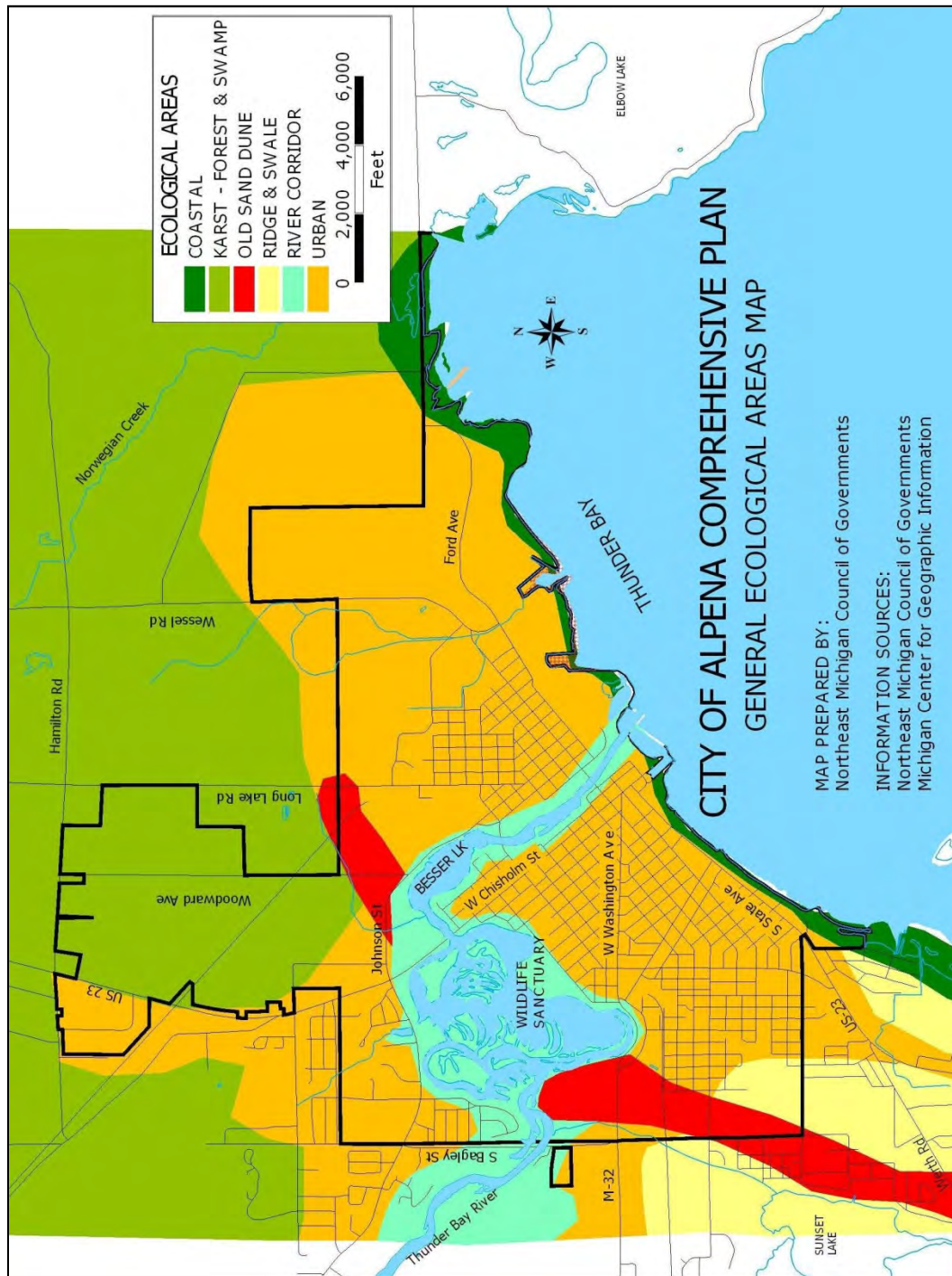
With lower water levels of Lake Huron, coastal marshes along Stony Point, Bare Point and Whitefish Bay have temporarily expanded. Between Stony and Bare Points wave action is creating new beach ridges. The landward side of the beach ridges drops off, creating a protected emergent wetland. This is a living example of the process that happened 1000's of years ago further inland when the beach ridge and swale complexes were created. Birds such as sandpipers, terns, plovers, snipes and gulls all frequent these coastal wetlands and beaches. Great blue herons, marsh wrens, red-winged blackbirds, swamp sparrows, mallard and black ducks can be found in the marshes. Plants include cattails, sandbar willow, bulrushes, sedges, joe-pie-weed, jewelweed, arrowhead, and water plantain.

Sand Dunes

The wide beach ridge or sand dune, located approximately one mile inland from the lakeshore, is designated as its own ecological feature. The pine-oak forest is the predominant forest type growing on these sandy ridges. This forest type is not common in other parts of the study area. Remnant forests of red oak are found in subdivision adjacent to Hobbs Drive, Autumn Drive, Grant Street, Piper Road, Greenhaven Lane and Shelley Street in the southwest corner of the study area. Natural stands of jack pine and white pine trees can be found adjacent to the Alpena Area High School, Evergreen Cemetery, and Thunder Bay Recreation Center. Other plants include sedges, grasses, blueberries, spreading junipers, serviceberry, and chokecherry. Most of this ecological feature has been developed for institutional or residential uses.

Urban Areas

Typical of older cities, small natural pockets of land are very limited in residential and commercial developments. Active and abandoned railroad rights-of-way, parks, cemeteries, creeks and drainage ways provide critical corridors. Connected backyards in the internal portions of city blocks may also function as habitat for certain species of song birds.



Key Ecological Corridors

The key ecological corridors are Thunder Bay River, Wildlife Sanctuary, Lake Besser, Norwegian Creek, Fletcher Creek, and several manmade drainage networks. The shoreline and emergent wetlands along the Lake Huron Shoreline are another important, yet very limited corridor. Other important corridors are the Lake States Railroad that enters the community from the southwest, and the Paxton Spur Rail-Trail that enters the community from the west near the Alpena High School. The Lake States Railroad Right-of-Way (ROW) passes through the community and connects to Lafarge at the north end. The ecological integrity is greatly compromised in commercial areas.

Sites of Environmental Contamination

The Part 201 (Environmental Response) of Natural Resources and Environmental Protection Act (P.A. 451 of 1994), as amended, provides for the identification, evaluation and risk assessment of sites of environmental contamination in the State. The Environmental Response Division (ERD) is charged with administering this law. A site of environmental contamination, as identified by ERD, is “a location at which contamination of soil, ground water, surface water, air or other environmental resource is confirmed, or where there is potential for contamination of resources due to site conditions, site use or management practices”. The agency publishes a list of environmentally contaminated sites by county showing the sites by name, pollutant(s) and site status (**Table 5.1**). A Site Assessment Model (SAM) score is computed to assess the relative risk a site may pose and to help determine the aggressiveness of clean up efforts. SAM scores range from 0 to 48 with 0 being the least contaminated and 48 the most contaminated. In some instances where the score is high and further contamination is possible, immediate response may be required. Conversely, a location where the score is low and the conditions of the site are not likely to change; no action may be the preferred course.

Table 5.1
Sites of Environmental Contamination

Site ID & Status	Location	Source	Pollutant	Score (out of 48)
04000017 Interim response in progress	2222 US 23 S Harry's Oil Co	Gas Station	Acenaphthene; Acenaphthylene; Benzene; Ethylbenzene; Fluoranthene; Fluorene; Naphthalene; Phenanthrene; Toluene; Xylenes	32
04000024 No Action Taken	132 Tuttle	Private Residence	Fuel Oil	28
04000026 Interim response in progress	2919 Garden St Alpena Manufacturing	Metal Working Machinery	Fluoranthene; Phenanthrene; Cutting oil; Oil	20
04000030 No Action Taken	620 West Campbell Alpena Oil	Petroleum Bulk Stations & Term	benzene , toluene , xylenes	25
04000039 Interim response in progress	416 Ford Avenue Abitibi-Price Corp	Misc Manufacturing Industries	Ethylbenzene; Xylenes	36

Table 5.1
Sites of Environmental Contamination

04000066 See LUST (Leaking Underground Storage Tank)	235 Water Street Alpena Oil Company	Petroleum Bulk Stations & Term	Petroleum Products	23
04000075 Delisted	2341 Third Avenue	Private Households	Metals	32
04000077 No Action Taken	Third Avenue Soil Piles	Non-classifiable Establishments	As	21
04000094 Evaluation in progress	1435 Ford Ave Lafarge Corporation	Chemicals & Allied Products	As; Methylene chloride; PCE; Hg	23
04000095 Interim response in progress	Ford and North Point Roads National Gypsum	Portland cement manufacturing	As; Hg; Heavy metals	38
04000115 No action taken	1002 Long Lake Avenue Lake State Railway	Railroad Transportation	1,3,5 TMB; As; Fluorene; Se; BEHP; Hg	30
04000116 Interim response in progress	Off Pinecrest Oxbow Park	Refuse Systems	Pb; Se; PCE	29
04000121 No action taken	Second Avenue NE of Herman Street Second Avenue Former Salvage Yard	Scrap & Waste Materials	Metals	20
04000127 No action taken	Wessel Road Quarry	Concrete Work	Al; Mn; Se; Na; V; Hg; Industrial waste	43
04000128 Interim response conducted – no further action	Third & River Streets Riverview Condos	Unknown	Benzene; Pb; Methylene chloride; Se; VC; cis-1,2 DCE	31
04000129 Interim response conducted – no further action	318 W. Fletcher Street Fletcher Paper	Paper and Allied Products	As; Benzene; Cl; Fe; Se; PCE; Toluene; TCE	41
04000136 No action taken	500 Palm Street	Agricultural Production-Crops	Cd	26
04000141 No action taken	324 North 11th Avenue	Petroleum Bulk Stations & Term	1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Xylenes	36
04000142 No action taken	901 W. Chisholm Street Former Werth Dry Cleaners	Coin Laundry & Dry Cleaners	PCE; TCE	36
04000152 Interim response conducted – no further action	1135 West Chisholm	Gasoline Service Station	1,2,4 TMB; 1,3,5 TMB; Benzene; Ethylbenzene; Naphthalene; Xylenes	33
04000154 No action taken	100-190 North State Avenue Harborside Mall	Dry Cleaning Plants	PCE; VC	34

Source: Department of Environmental Quality

A map is being developed showing the environmental concerns from the DEQ web mapping site. As of 1/2019 there are glitches on the site which prevents the map from producing adequate information.

Discharge Permits

Surface Water - National Pollution Discharge Elimination (NPDES) Facilities

Anyone discharging, or proposing to discharge, waste or wastewater into the surface waters of the State is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program is intended to control direct discharge into the surface waters of the State by imposing effluent limits and other conditions necessary which meet State and federal requirements. The NPDES program regulates pollutants discharged directly into waterways from wastewater sources. The lists below show NPDES permits issued in Alpena County.

Table 5.2 National Pollution Discharge Elimination Facilities	
Alpena Biorefinery	Lakeshore Estates MHP
Alpena Co Regional Airport	Lees Auto Parts-Alpena
Alpena WWTP	MDOT-US-23-Alpena
Alpena WWTP	Nemroc Inc-Alpena
Ameri-Shred Ind Corp-Alpena	Nor-Tech Ind Corp-Alpena
ATI Casting Service LLC	Northern Aggregates
Bay Mfg Corp-Alpena	P C I
Benjey North	Panel Processing Inc-Alpena
Besser Co	Quest Industrial Corp-Alpena
Cheboygan Cement-Alpena BP	R E Glancy Inc-Alpena
Conveyor Systems Inc	Ren-Tech Ind Corp-Alpena
Decorative Panels Intl-Alpena	Specification Stone Products
Federal Express Corp-APNA	Specification Stone Products
Floyd Minton Cedar Post-Alpena	Steel Craft Inc-Alpena
Great Lakes Maritime Center	UPS-Alpena
Lafarge N America-Alpena Plt	Via-Tech Corp-Lachine
Source: Michigan Department of Environmental Quality 2013	

Air Discharge Permits

Two facilities, Decorative Panels, Inc. and LaFarge Midwest, Inc., are listed by the Department of Environmental Quality as a source subject to Michigan's Renewable Operating Permit Program.

Chapter 6

Existing Land Cover/Use

Prior to establishing goals and determining future land uses, a community must have an accurate assessment of existing land uses. This chapter presents information on both the types and location of existing land uses. The process identifies both urban built-up land uses such as residential and commercial, along with natural land cover types like forests and wetlands. As a result the final map presented in this chapter is a hybrid that combines land cover and land use.

As development occurs, larger tracts of land are subdivided into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Typical of most cities, the older parts of the community have small lots that are 10,000 square feet or less. As development occurred, particularly over the last 30 years, lots became larger. This fact is most noticeable for highway commercial development where on-site parking is a requirement. The trend is slowly reversing as new development has shifted to compact, mixed-use and higher density residential. Three developments that fit this trend are Oxbow Village, Alpena Marc, LLC (Fletcher Mill site) and Rivers Edge Condominiums.

The north parts of the City are still in large ownerships. Alpena Community College owns a large tract of land along Woodward Avenue and Long Lake Avenue. The college is developing a master plan that will propose development activities and uses on this tract. Lafarge is another large landowner in the northern part of the City. Most of this land is dedicated to the quarry and processing facility.

Fourteen categories have been identified and mapped within the City. Urban and built-up areas were separated into ten categories and undeveloped areas were separated into four categories. The map of existing land use, shown as **Figure 6.1**, illustrates the distribution of land uses throughout the City. The map was generated using ancillary data sets such as the Alpena Area-wide Transportation Plan, National Wetlands Inventory, 1998 Existing Land Use and 2002 digital aerial photography. **Table 6.1** presents the land uses, showing the number of acres and percent of the City in each of the land use categories. Each of the land use categories is discussed later in this chapter.

Single-Family Residential

This category includes one and two family residential units. As can be seen in **Figure 6.1** -Existing Land Cover/Use Map and **Table 6.1**, this category covers the largest area within the urban built-up categories. The one and two family residential use occupies approximately 25.8 percent (1,352 acres) of the land in the City. Single family residential accounts for most of the residential development in the City.

Multi-Family Residential

Multi-family residential is characterized as a building or cluster of buildings containing three or more dwelling units. This classification includes apartments, condominiums, retirement homes and nursing homes. Multi-family development is found throughout the city with concentrations in the northwest and southwest parts of the City. Upper story residential units above older commercial buildings in the downtown business, while classified as multi-family, are not separated from the downtown business category. Proposed developments such as Rivers Edge Condominiums will add to the multi-family units. Multi-Family residential accounts for 1.4 percent of the City and covers 74 acres.

Office

This category includes office uses such as doctors, dentists, attorneys, accountants, insurance, personal services and office buildings such as medical clinics, banks, and corporate headquarters. Office uses are concentrated along Chisholm Street, Ripley Street, and in the Arbor Lane Office Park and Long Rapids Plaza north of Long Rapids Road. Office uses in the downtown are not separated from the Downtown Business District. Office uses cover 42 acres or less than 0.8 percent of the City.

Commercial

The commercial category includes retail sales of goods and services, motels and restaurants outside the Downtown Business District. This classification contains 138 acres. Commercial activity is concentrated along Chisholm Street, Ripley Street, South State Street, Second Street, north of the river and Washington Avenue, west of Ripley Avenue. Neighborhood commercial establishments are scattered throughout the City. Commercial uses cover 145 acres or 2.8 percent of the City.

Downtown Business District

The downtown business district contains a mix of uses including retail, service, restaurants, and residential. Many of the buildings are multi-story with residential, office or vacant above street level uses. In a effort to revitalize the downtown, the City has been working to encourage residential development in the upper stories of these older commercial buildings. The area mapped as downtown covers 61 acres or 1.2 percent of the City.

Mixed Use

Two areas are classified as mixed use, Oxbow Village and Alpena Marc LLC (Fletcher Paper Mill Property). These developments will include mixed residential, commercial, service, and institutional uses. These two developments account for 1.3 percent of the City's area or 67 acres.

Light Industrial

Light industrial uses include limited manufacturing activities that emit a minimum of noise, vibration, air pollution, etc. Typical uses include warehousing, distribution, research and development, light manufacturing, and limited assembly of finished materials. Land within this category is found along 11th Avenue, east end of Johnson Street, North Industrial Park and Commerce Industrial Park. Land in this use category covers 216 acres or 4.1 percent of the City.

Heavy Industrial

Heavy industrial uses are generally found in the northeast parts of the City and along the waterfront. Uses include quarries, bulk storage, salvage operations, and facilities that process raw materials. At 589 acres (11.2 percent of the City) this is the second largest land use category in the City of Alpena.

Parks

City parks, Alpena County Fairgrounds, City Marina, North East State Trail, and Paxton Spur Rail to Trail corridor are included in this category. With some 221 acres of parklands (4.2 percent of the City), residents have ample access to parks. The wetlands and surface water in the Wildlife Sanctuary are not included in this category.

Institutional/Public

This category includes institutional uses such as churches, schools, recreation fields associated with schools, museums, hospitals, cemeteries, and public agencies and buildings such as City Hall. This is a large category covering 452 acres or 8.6 percent of the City. These uses can be found around the City with large areas along West Washington Street and West Johnson Streets. Alpena Community College owns extensive lands north of the campus along Woodward Avenue and Long Lake Avenue. Since this

property has not been developed, the land area was mapped as current cover types of forests, wetlands and old farm fields.

Non-forested Uplands

The non-forested land category consists of herbaceous and shrub lands, beaches and undeveloped shorelines. The land use inventory found 202 acres (3.9 percent of the City) mostly located in the northern part of the City. A majority of the non-forest areas are old farm fields located on Alpena Community College lands.

Forests

Upland and lowland forests are classified in this category. Upland forest types include pine, aspen-birch, and northern hardwoods (sugar maple, red maple, beech, & basswood). These forest types are found growing on well drained soils. Lowland forests grow on soils with a seasonally high water table and are often classified as wetlands. Lowland forests, include areas that support lowland hardwoods and conifers, such as northern white cedar, black spruce, balsam fir, elm, black ash, red maple, ash and aspen species. Forests occupy 916 acres or 17.5 percent of the City area.

Wetlands

Wetlands are defined as land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes and bogs. The wetland category comprises non forested types such as lowland brush (tag alder and willow), sphagnum bogs, emergent vegetation in lakes, and wet meadows. Non-forested wetlands account for 224 acres or 4.3 percent of the City.

Two of the most important functions of wetlands are water quality protection and ecological corridors. As can be noted on the Existing Land Use Map, the major wetland areas are adjacent to rivers and creeks. The network of wetlands receives surface water and subsurface water discharge, creating the many streams and creeks, which in turn flow into the area lakes. The interconnected resources exemplify how activities distant from major water bodies can still have an impact on the water quality.

Surface Water

The Thunder Bay River, Wildlife Sanctuary, and Besser Lake are mapped as this category, and cover 11.4 percent or 600 acres in the City. Thunder Bay/Lake Huron are not mapped in this category. Given Alpena is bounded by Lake Huron on the east, and the Thunder Bay River and impoundment, water resources are key to the community character and environment.

Other

Certain land uses were included in this category because they comprise a very small portion of land within the City. Primarily this land consists of beaches and the railroad right-of-way. These two land uses total 80 acres of the City.

Land Use Category	Number of Acres	Percent of City
Single-Family Residential	1,352	25.8%
Multi-Family Residential	74	1.4%
Office	42	0.8%
Commercial	145	2.8%
Downtown Business District	61	1.2%
Mixed Use	67	1.3%
Light Industrial	216	4.1%
Heavy Industrial	589	11.2%
Parks	221	4.2%
Institutional/Public/Utilities	452	8.6%
Non-Forested Uplands	202	3.9%
Forests	916	17.5%
Non-Forested Wetlands	224	4.3%
Water	600	11.4%
Other (Beaches, Railroad ROW)	80	1.5%
TOTAL	5,242	100.0%

