

## Chapter 5: Community Services/Facilities & Transportation Network

### Overview

Figure 5-1 shows the existing types and locations of public and private infrastructure currently located in Cheboygan County. While the County encompasses 716 square miles, the majority of the population and infrastructure is concentrated in the urbanized areas of Indian River and the City of Cheboygan. Similar to many northern Michigan communities, Cheboygan County is primarily a rural community with a relatively low density of persons per square mile. This development pattern presents significant challenges in providing facilities and services to the residents of the County. Greater detail of community facilities for the city and each township is shown in the planning sector maps included in Chapter 6.

### Utilities

The county's utility system includes the private suppliers of electric, natural gas, telephone, solid waste disposal and cable television services along with the publicly owned and operated Village of Mackinaw City and the City of Cheboygan water and sewer systems. Many of these suppliers are faced with the task of providing services to a relatively low-density, dispersed population.

**Table 5-1** lists the suppliers of various utilities within the county, user figures and service areas. The most widely distributed service is natural gas, provided by Consumers Energy, Top-O-Michigan and MichCon. These suppliers provide service to a large portion of the county.

Telephone service is another private utility found throughout the entire county. Services are presently provided by two companies, with GTE serving the majority of users, as illustrated in **Table 5-1**.

Electricity is provided largely through Consumer's Energy, Great Lakes Energy (formerly Top 'O Michigan Electric Co-Op) and Presque Isle Electric and Gas Co., as shown in **Table 5-1**.

### Water & Sewer

Within Cheboygan County, two municipalities provide public water and sewer service. The Village of Mackinaw City's water and sewer system provides its services to those areas within the Village limits. The last treatment system improvement occurred in 1988. No new expansions or improvements are planned for the near future because the present capacity is meeting the current demand.

The City of Cheboygan's water and sewer system services areas within the City of Cheboygan, and in 2004 was extended to the south into Inverness Township. The City's water system is capable of pumping 1.1 million gallons per day and the City's sewage treatment facility is capable of handling 2.5 million gallons of wastewater a day.

The City of Cheboygan has recently updated its water and sewer master plan. The master plan calls for the extension of sewer pipeline into areas of the City that are not currently serviced by the treatment system. Recently a fourteen mile, \$2.2 million expansion to the City's sewer system occurred. In addition, \$2.2 million was spent to update the City's stormwater treatment facilities.

The remainder of the county is served by individual wells and septic tanks. The number of well and septic permits issued by District Health Department #4 has increased considerably over the past decade (**Table 5-2**). The hilly terrain of some areas in the county necessitates the drilling of deep wells. This can be a costly addition to the price of constructing a home. The areas around many of the county's major lakes, especially Burt and Mullett lakes, have been and continue to be extensively developed, often creating problems in maintaining proper levels of water quality. As more commercial and residential development takes place, in relatively high density regions, the greater the need will be to eventually install a water and sewer system.

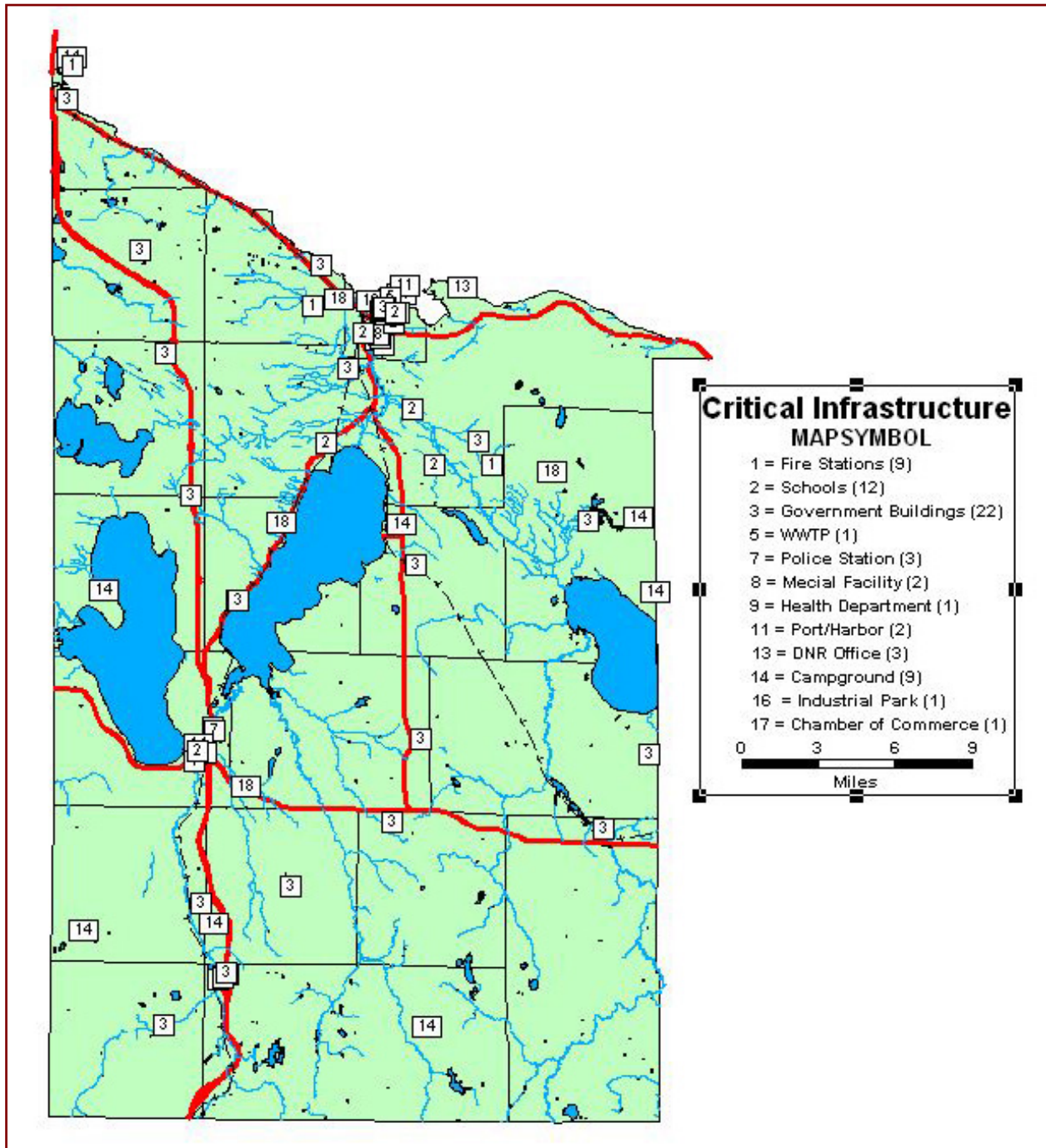
**Table 5-1  
Cheboygan County Utility System**

SERVICE	COMPANY	APPROXIMATE NUMBER OF UNITS SERVED	SERVICE AREA
Natural Gas	Consumers Energy	Residential: 10,100 Comm/Ind: 1,775 Total: 11,875	City of Cheboygan, Burt Lake, Indian River, Mackinaw City, Mullett Lake and Wolverine
	Michigan Consolidated Gas (MichCon)	Residential: 1,033 Commercial: 729 Industrial: 60 Total: 1,822	Portions of Mackinaw, Beaugrand, Benton, Inverness, Burt, Mullett, Tuscarora, Mentor, Ellis and Wilmot townships, & the villages of Wolverine and Mackinaw, & the City of Cheboygan
	Presque Isle Electric & Gas	N/A	Portions of Cheboygan Co.
Electricity	Consumers Energy	Residential: 7,608 Commercial: 1,695 Industrial: 40 Total: 9,343	Portions of Aloha, Beaugrand, Benton, Burt, Ellis, Forest, Hebron, Inverness, Koehler, Mackinaw, Mentor, Mullett, Munro, Nunda, Tuscarora and Wilmot Townships
	Great Lakes Energy (formerly Top 'O Michigan)	550	Portions near Wolverine
	Presque Isle Electric & Gas	N/A	
Tele;hone	SBC	N/A	Cheboygan County
Water & Sewer	Village of Mackinaw City	Approximately 600 hook-ups each for water and sewer	The majority of residential and commercial units within the Village limits.
	City of Cheboygan Township	Residential: 2,010 Commercial: 85 Manufacturing: 10 Total: 2,100	City limits of Cheboygan & portions of Inverness

N/A = information unattainable

Source: Survey of local utility officials - 1998

**Figure 5-1, Cheboygan County  
Critical Infrastructure**



<b>Table 5-2 Cheboygan County Well and Septic Permits Issued</b>		
Year	Septic Permits	Well Permits
1987	344	N/A
1992	472	N/A
1997	517	469
N/A		1997 was the first year well permits were required
Source: District Health Department #4		

Lakefront communities often crowd residences along their lakeshore. This type of development can directly effect the water quality by increasing potential for pollutants from improperly designed or inadequately maintained septic systems. Alternative on-site systems may be appropriate in low-density or cluster lakeshore developments where soil conditions, distance between lots, or shallow bedrock make traditional septic systems or sewer excavations inappropriate. Adequately sized and properly maintained septic systems provide on-site wastewater treatment that is biologically equivalent to many centralized sewage treatment plans. Sewage disposal alternatives include biologically sound on-site disposal systems such as constructed wetlands. Other sewage disposal designs include developing a multi-jurisdictional sewer system.

Careful consideration must be given to protecting the county's water resources from the effects of residential, commercial, and industrial development. Adequate drain fields and proper maintenance of septic systems are important elements in safeguarding water quality and should be closely monitored. New developments should include provisions for handling household waste efficiently and adequately. Continued growth should not be stifled by environmental restrictions but must be located and designed to best fit in with the character of the county, while having a minimal impact on the area's resources.

**Solid Waste**

Cheboygan County does not operate a county landfill. Instead, solid waste disposal services are currently provided by Waste Management Inc., and sent to Waste Management's landfill in northern Crawford County.

As explained in Chapter 2, the soils in this area are very sandy, causing them to be highly permeable. This causes concern for the protection of the area ground water from contamination. Current regulations governing landfill construction and operation attempt to minimize the potential for adverse environmental impacts on resources such as ground water. Protecting this valuable natural resource is very important and should be possible through proper landfill construction, ground water monitoring and sound landfill management.

**Public Services & Facilities**

The public sector in Cheboygan County provides a wide range of services. They include the police and fire departments, ambulance corps, health care system and school and library facilities. These services are used by both residents of the county and visitors to the area and are often faced with the same seasonal variations and population pressures that affect the county's land use and economy.

**Public Safety**

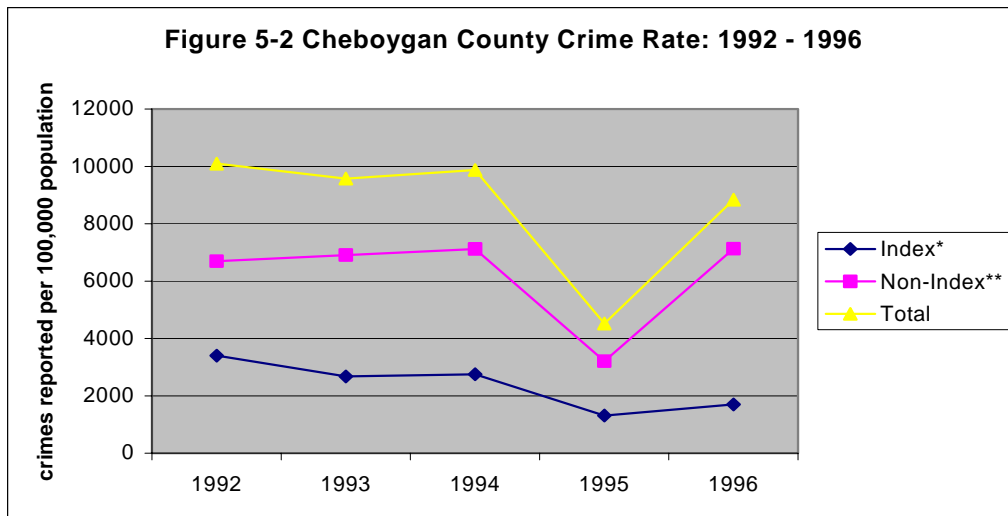
The Cheboygan County Sheriff's Department services those areas of the county which do not have municipal police departments. The Sheriff's Department employs 16 full-time officers and has 34 total personnel. The City of Cheboygan employs its own police department separate from the county. In 1996, the City had nine full-time officers to service its nearly five thousand residents.

The Village of Mackinaw City also has its own police staff. In 1996, six full-time officers serviced the village's one thousand residents and large numbers of tourists. Indian River also has its own police department, consisting of seven full-time officers (including the Chief), two part-time officers and one office personnel. The Michigan State Police post in the City of Cheboygan works with these agencies in patrolling Interstate 75 and the other major roads within the county. In 1996, the State Post employed 20 full-time officers to service the surrounding region. The next closest State Police Posts are located in Gaylord, Petoskey, Rogers City, and St. Ignace.

Currently 911 Emergency telephone service is provided to Cheboygan County through a multi-county 911 system for Cheboygan, Emmett and Charlevoix Counties. It is a state-of-the art enhanced 911 system, which provides emergency dispatch for all calls to the police, fire departments and ambulance service for the entire three county area. Police cruisers are equipped with lap top "mobile data terminals" for direct communications between the 911 dispatch and the officers in the field. The mapping system used by the 911 system was developed through the use of satellite technology through a "g.p.s." (geographic processing system) unit.

When comparing the years 1992 to 1996, **(Figure 5-2)** Cheboygan County's crime rate has shown an overall decrease of 12.5%. During those years, Cheboygan County's crime rate for both the more serious "index" and the less serious "non-index" crimes ranked between second and fourth lowest in the area, when compared to six neighboring counties. The crime rate figures shown represent the number of crimes reported per 100,000 population, therefore differences in population are equalized.

The Cheboygan County Jail provides lock-up facilities for the local law enforcement agencies. For the past decade the jail has had a chronic problem of overcrowding. The average daily population of the prison in some cases was double the prison's capacity and the county spent almost \$200,000 per year to house inmates outside the county. With the assistance of grant funds from the State, the county expanded the existing facilities in 1999. The county jail is now an 80 bed facility which houses male and female inmates and also has a temporary (less than 24 hour) holding facility for juveniles. The jail in 2002 brought in \$ 347,721 in revenues generated from housing out-county inmates, diverted felons, inmate telephone, in-county boarding, work release and other.



**Table 5-3  
Crime Rates Cheboygan & Surrounding Counties: 1990 - 1994**

Actual Offenses	1992			1993			1994			1995			1996			Total % Change 1990-94
	Index*	Non-Index**	Total	Index*	Non-Index**	Total	Index*	Non-Index**	Total	Index*	Non-Index**	Total	Index*	Non-Index**	Total	
Charlevoix	2,225	8,085	10,311	2,515	9,858	12,373	2,504	8,767	11,272	1,291	3,147	4,437	1,101	3,201	4,302	-71.5%
Cheboygan ***(*)	3,405	6,691	10,097	2,674	6,905	9,579	2,751	7,124	9,875	1,316	3,209	4,526	1,705	7,131	8,836	-12.5%
Emmet****	4,877	10,399	15,276	4,445	11,239	15,684	3,696	11,158	14,853	3,713	11,276	14,989	3,526	12,320	15,846	+3.7%
Mackinac	6,211	7,919	14,131	6,440	10,289	6,412	7,392	11,234	18,626	7,382	10,135	17,517	5,555	9,441	14,995	+6.1%
Montmorency	3,516	4,344	7,860	4,431	4,610	9,042	2,347	4,210	6,558	2,882	4,230	7,112	2,738	4,259	6,997	-12.3%
Otsego	3,267	7,497	10,764	2,939	7,858	10,797	2,985	7,507	10,492	2,988	7,364	10,278	2,539	8,293	10,832	-0.6%
Presque Isle	1,873	3,529	5,402	1,819	3,745	5,564	1,650	3,563	5,213	1,187	3,930	5,149	1,134	3,200	4,333	-24.7%

Note: Total Crime Rate represents the number of actual offenses reported per 100,000 population.

\* Index Crimes consist of murder and non-negligent manslaughter, rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson.

\*\* Non-Index Crimes consist of less serious crimes such as negligent manslaughter, forgery and counterfeiting, fraud, driving under the influence and vagrancy.

\*\*\* Data for these counties is incomplete due to incomplete jurisdiction reporting. Cheboygan County's figures are incomplete only for 1994.

\*\*\*\* Jurisdiction in multiple counties.

Source: Uniform Crime Reports, Michigan State Police

The City of Cheboygan operates the only paid fire department in the county and has between 18 and 20 personnel. Volunteer fire departments have adequate equipment and manpower to serve the needs of the existing county population. The Village of Mackinaw City has 24 volunteer fire fighters that provide fire protection within the Village limits. In the northwest corner of the county, the townships of Inverness, Munro, Hebron and Beaugrand, nearly 4,200 persons, are serviced by twenty two volunteer fire fighters. The townships of Ellis, Koehler, Mentor, Mullett, Tuscarora and Walker also have a joint volunteer fire department consisting of 28 volunteers. Other portions of the county are serviced by volunteer fire departments, many of which cover multiple townships.

Outlying portions of the county may have a relatively high response time, but this is often an unavoidable problem in such a low density, rural area. Residential development could increase in sections of the county distant from current fire fighting facilities. If this should be the case, efforts should be made to ensure adequate protection for these newly developed areas from existing facilities. If new growth were to occur around established population centers, however, the major requirement for increased fire protection would involve additions to the equipment and manpower available to existing centers.

### **Early Warning & Siren Systems**

Cheboygan County does not have a functioning public warning system. The Cheboygan Local Emergency Planning Committee has discussed this situation and is aware that there is a need for a public warning system, but at this time no workable solution has been reached. **(See Appendix F)**

As indicated on page 11 in Chapter 7 of the Cheboygan Hazard Mitigation Plan, at this time there is no NOAA Weather Radio coverage in much of Cheboygan County. **(Figure 7-3)** To a significant extent the western 2/3rds of the County is not covered.

A proposed site in Emmet County site for a NOAA Weather Radio transmitter has been identified.. Upon completion this transmitter would provide coverage for almost all of Cheboygan County. **(Figure 7-4)**, and would open Cheboygan County to the hazard mitigation advantages inherent in the NOAA Weather Radio system.

### **Health Services**

Health care services are another important element of the community facilities available to county residents. Community Memorial Hospital, located in the City of Cheboygan, provides a wide range of medical services including emergency and extended care facilities, surgery and intensive care units, and outpatient services.

Other hospitals in the surrounding region include Alpena General Hospital in Alpena, Mackinac Straits Hospital in St. Ignace, War Memorial Hospital in Sault Ste. Marie, Otsego Memorial Hospital in Gaylord, and Northern Michigan Hospital in Petoskey.

One important determinant of the quality of medical services is the availability of health care facilities and professionals. Community Memorial Hospital had 129 licensed beds in 1992, as illustrated in **Table 5-4**. This is the second greatest number of licensed beds when compared to the surrounding counties. Emmet County had the greatest number of licensed beds in the six county region.

By comparing each county's facilities per 100,000 persons, the differences in population are equalized. In terms of the number of beds per 100,000 persons, Cheboygan County ranked fourth behind Presque Isle, Mackinac and Emmet counties. It should be noted that Presque Isle County's hospital has closed since this data was released. The number of licensed beds in nursing care facilities per 100,000 for Cheboygan County was also fourth behind Otsego, Emmet and Montmorency counties in 1992. In 1992, Cheboygan County had the third highest doctors to population ratio among the surrounding counties. Cheboygan County tied Charlevoix County for the second highest number of dentists per 100,000 persons when compared to the surrounding counties.

**Table 5-4****Hospital Facilities & Doctors Availability: Cheboygan County & Surrounding Counties in 1992**

County	Hospital Facilities #	Licensed Beds #	Beds Per 100,000 Pop.	Nursing Care Facilities #	Licensed Beds #	Beds Per 100,000 Pop.	Medical & Osteopath Doctors #	Doctors Per 100,00 Pop.	Dentists #	Dentists Per 100,00 Pop.
Charlevoix	1	44	205	1	73	339	29	135	18	84
Cheboygan	1	129	603	2	162	757	31	145	18	84
Emmet	1	285	1,094	2	230	883	146	561	31	119
Mackinac	1	75	696	1	60	557	11	102	5	46
Montmorency	0	0	0	1	95	1,067	12	135	2	22
Otsego	1	87	486	2	154	860	28	156	14	78
Presque Isle*	1	89	641	1	49	353	10	72	4	29

\*Presque Isle County's only hospital has closed since the release of this data

Source: Michigan Department of Public Health, 1992

Michigan Department of Commerce - Bureau of Occupational and Professional Regulation, 1992

Data compiled by the Institute for Public Policy and Social Research, Michigan State University



**Schools**

Nearly all of Cheboygan County residents are served by the Cheboygan-Otsego-Presque Isle Intermediate School District's public schools, while some are served by various private parochial schools located in the area. The Cheboygan Area Schools service the City of Cheboygan and its outlying townships. Kindergarten through sixth grade education is also provided by Bishop Baraga Catholic School and Cornerstone Christian School in the City of Cheboygan. The Mackinaw City Public Schools System covers the northern tip of the Lower Peninsula including the Village of Mackinaw City. Inland Lakes Community Schools includes residents living near Burt and Mullett lakes and the community of Indian River. The Wolverine Community Schools extend from the Otsego and Cheboygan County borders north to the Inland Lakes Community School system. The southeastern portion of Cheboygan County is served by the Onaway Area Community School System in Presque Isle County.

School location and enrollments for the 2002-2003 school year for public schools in Cheboygan County are year are shown in **Table 5-5**. Private school enrollments and location are shown in **Table 5-6**.

<b>Table 5-5 Cheboygan County Public School Locations and Enrollment</b>		
Location	Grades	2002-2003 enrollment
801 West Lincoln, Cheboygan	9-12	763
905 West Lincoln, Cheboygan	6-8	571
2732 Orchard Beech Road, Cheboygan	Pre-K	193
440 Garfield Avenue, Cheboygan	1-2	281
7461 North Straits Highway, Cheboygan	3-5	210
512 Pine Street, Cheboygan	3-5	281
5243 South Straits Highway, Indian River	9-12	380
5243 South Straits Highway, Indian River	5-8	348
5243 South Straits Highway, Indian River	K-5	401
5993 Sholes Road, Wolverine	K-6	188
13131 Brook Street, Wolverine	7-8	55
13131 Brook Street, Wolverine	9-12	74

Source: Michigan Educational Directory

**Table 5-6  
Cheboygan County Private School Locations and Enrollment**

Location	Grades	2002-2003 enrollment
Bishop Baraga Catholic School, 421 State Street, Cheboygan	P-6	226
Northern Michigan Christian Academy, 1833 McMichael Road, Burt Lake	K-12	69
Cornerstone Christian School, 900 Western Ave, Cheboygan	P-8	72

Source: Michigan Educational Directory

## Libraries

Cheboygan County has five libraries, each with its own jurisdictional management. The library facility in Indian River is almost four years old and is the newest of all five libraries in the county. The library is a 5,000 square foot facility attached to the Municipal Building. The City of Cheboygan's Public Library is located in a 6,000 square foot building that was constructed in 1968. The 2,500 square foot Village of Wolverine's public library was constructed in 1992. The Topinabee library is located in the town's old railroad depot that was constructed in 1881. The library in the Village of Mackinaw City is the main branch of four district libraries in the region and expanded its facilities in 1994 to include a wing to the main building.

## Transportation Network

### Roads

The road network in Cheboygan County is shown in **Figure 5-3** and **Figure 5-4** and is critical to providing the flow of goods and services. An efficient road system provides people the ability to quickly and safely travel to and from employment, shopping and recreation sites and provides the means to move emergency personnel and equipment to anywhere they are needed in the County. The major roads within the county are Interstate 75, running north and south, M-68, running east toward Onaway and west toward Alanson, US-23, running east and west along the Lake Huron shoreline, M-27, from Otsego County connecting I-75 north of Indian River to the City of Cheboygan, and M-33 running north and south, connecting M-68 with M-27. The most populace region in the county, the vicinity of the City of Cheboygan, cannot be directly reached via Interstate 75. U.S. Highway 23 and M-27 provide access to the City of Cheboygan from I-75.

Cheboygan County Roads 66 and 64 provide east and west connection for the City of Cheboygan and Douglas and Burt lakes and westerly into Emmet County. County road F-05 connects the City of Cheboygan in the north to the Black Lake and southern portions of the county. Several other county maintained, paved roads link outlying sections of the county with the major road network. In addition to these paved roads, an extensive system of dirt and gravel roads covers all the portions of the county, providing access to the lakes and forests that serve as sites for residential and recreational activities, as well as forestry activities.

### Public Transportation

Currently, Straits Regional Ride provides public transportation system within Cheboygan County. Straits Regional Ride is a multi-county service providing inter and intra urban transportation. In addition the Council on Ageing operates limited bus service to transport clients to their centers.

Public transit is most efficient when origins and destinations are clustered. In low-density regions similar to Cheboygan County, financially efficient service is often unable to meet the needs of local citizens.

Private bus transportation to destinations outside of Cheboygan County was provided by the Greyhound Bus Service. As of early 1994, however, bus service to this area was suspended. The nearest bus stations are now in Petoskey and Traverse City.

### ***Air***

The Cheboygan City-County Airport is located west of the City of Cheboygan. This public airport provides the needs of private and charter aircraft throughout the region. Recent improvements and upgrades, totaling approximately \$80,000, have been made to the fuel tank storage system. Future airport improvement plans call for an extension of the current runway of 3,300 feet to a proposed 4,000 feet. The community of Indian River also maintains an airport for private and chartered aircrafts.

There is presently no commercial passenger service in the county, although air charter service is available. Residents and visitors must make commercial airline connections through neighboring cities (Pellston, Alpena, Traverse City or Sault Ste. Marie).

### ***Rail***

No active rail lines currently exist within Cheboygan County. The portion of the Detroit & Mackinaw Railroad line that provided railroad service between the Village of Mackinaw City and Alpena was recently purchased by the State of Michigan using the Michigan Land Trust Fund. The grade between Millersburg and the Village of Mackinaw City is currently being used as a snowmobile trail. The State of Michigan is currently in a multi-year process of purchasing all the portions of the rail right of way just north of Gaylord to the City of Cheboygan.

### ***Water***

Cheboygan County is home to Northern Michigan's Inland Waterway. A network of lakes and rivers make up a 38-mile route that connects the Straits of Mackinaw in Cheboygan County with Crooked Lake in Emmet County. Halfway between the Straits of Mackinaw and the north end of Mullet Lake, the Cheboygan River is joined by the Black River that drains the Black River watershed. From the south end of Mullet Lake, the waterway follows Indian River and on into Burt Lake and continues into the Crooked River before coming to an end at Crooked and Pickerel Lakes. The Route has two locks, the Cheboygan River Lock located in the city of Cheboygan and the Crooked River Lock. The route can handle boats up to 65 feet long (18 foot beam) with up to a 5-foot draft. Navigation on the Crooked River generally limits boats to 25 feet. There are three bridges along the route, two that do not open. Lincoln Avenue bridge has a vertical clearance of 20 feet and M-33 Highway bridge has a vertical clearance of 16.7 feet.

There is a deep-water port at the mouth of the Cheboygan River. This port provides mooring facilities for large ships and is the wintertime home for several Mackinaw Island passenger ferries. Limited amounts of commodities are shipped in and out of the port. The port is home to the Coast Guard Cutter Mackinaw and to the Kristen D. which is a passenger and car ferry for Bois Blanc Island.

Figure 5-3, Cheboygan Co. Transportation System

