CHAPTER 2: Existing Conditions

Developing an accurate representation of existing conditions is a critical preliminary step in the comprehensive planning process. This chapter identifies existing conditions in the study area. A series of graphics, maps, and photos are included to show the area's demographics, existing land use, transportation facilities, and community character. Accompanying text describes these existing conditions in detail. Planning and zoning, future land use, and traffic conditions are provided in subsequent chapters.

Data Sets

Information in this plan came from a number of sources, including: Alpena County, the City of Alpena, Alpena County Road Commission, MDOT, Michigan State University, the Alpena Convention & Visitors Bureau, the Alpena Regional Airport, the US Census Bureau, the USDA NRCS Office, NEMCOG, and the Townships of Alpena, Maple Ridge, and Wilson.

Previous Studies and Reports

There are several past studies and reports that are of importance to this Plan: the 2000 *City of Alpena North Sub-Area Plan*, the 1997 *Bagley/Hobbs Corridor Study*, the 1995 *Alpena County Resource Plan* , the 1988 *Economic Adjustment Strategy for Alpena County*, the 1988 *US-23 Improvement Study*, and the 1979 *Alpena Area External Origin and Destination Survey*. Excerpts from some of these documents may be found in appropriate sections of this Plan, and will be cited.

Existing Land Use (Note: the entire study area encompasses approximately 25,486 acres)

Land use classifications are important from a traffic generation standpoint. A map of the study area was created that shows the year 2001 land use. The categories of land use are those from the Michigan Resource Inventory System (MIRIS) classifications (**Appendix A**). The classifications were merged into 10 categories for transportation analysis purposes: Residential, Commercial, Industrial, Institution/Recreational, Agricultural, Nonforest, Upland Forest, Lowland Forest, Wetlands, and Surface Water. Text provides detailed descriptions of each category. **Figure 2.1** on the following page shows the existing land use for the study area. **Table 2.1** below is a summary of existing land use and future land use categories.

Table 2.1 *Summary of Existing and Future Land Use within the Study Area*

Category	Existing Acres	Percent	Future Acres	Percent
Residential	3,697	14.5%	9,073	35.6%
Commercial	680	2.7%	1,707	6.7%
Industrial	3,003	11.8%	4,511	17.7%
Institution/Recreational	828	3.2%	968	3.8%
Agricultural	35	0.1%	1,274	5.0%
Non-Forest	1,698	6.7%	"Conservation" 6,473	25.4%
Upland Forest	3,591	14.1%		
Lowland Forest	7,573	29.7%		
Wetlands	2,773	10.9%		
Surface Water	1,608	6.3%	1,478	5.8%

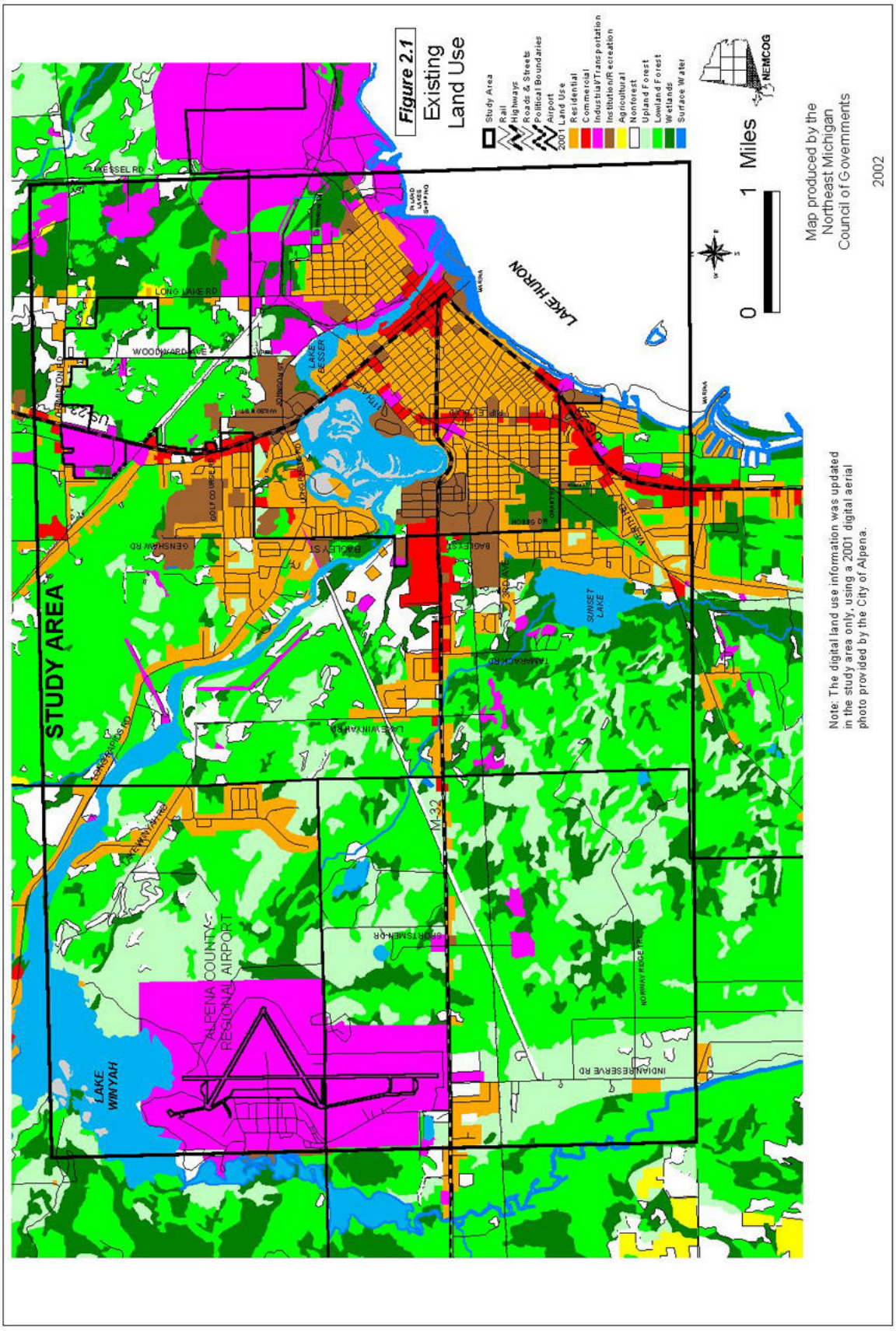


Figure 2.1
Existing Land Use
Study Area
Rail
Highways
Roads & Streets
Political Boundaries
Airport
2001 Land Use
Residential
Commercial
Industrial/Transportation
Institution/Recreation
Agricultural
Nonforest
Upland Forest
Lowland Forest
Wetlands
Surface Water
NEMCOG
0
1 Miles
Map produced by the Northeast Michigan Council of Governments
2002
Note: The digital land use information was updated in the study area only, using a 2001 digital aerial photo provided by the City of Alpena.
STUDY AREA
LAKE HURON
LAKE WINYAH
ALPENA COUNTY REGIONAL AIRPORT
LAKE KESSEL RD
LONG LAKE RD
WOODWARD AVE
US-23
M-32
INDIAN RESERVE RD
SUNSET LAKE

Residential Land Use

Residential land use includes residential dwelling structures such as: single family or duplexes, multi-family low rise residential, multi-family medium & high rise residential, and mobile home parks. The total residential land use in the Alpena study area is approximately 3,697 acres, or 14.5% of the total. Community master plans show a desired future residential land use of 9,073 acres, or 35.6% of the total. **Figure 2.2** depicts the future land use for the study area.

Certain transportation characteristics can be associated with residential land use. For example, on average, there are 9.57 daily vehicle trips generated per dwelling unit per single-family detached unit[1]. Techniques for reducing residential vehicle trips may include: allowing mixed-use in site developments so that residents may walk or bicycle to close-by destinations, allowing room for the development of transit facilities, developing trails programs to provide continuous community trails, and providing safe pedestrian and bicycle crossing facilities at all major roads.

Additionally, residential areas that are close to a highway or major truck route are subject to the impacts of traffic noise, exhaust pollution, vehicle light glare, and vibration. It may be possible to use aesthetically pleasing and practical designs to reduce these impacts, and local community zoning can play an important role in the location of residential areas and in development design standards that include buffering, landscaping, and screening. Zoning is examined in **Chapter 3**, *The Status of Planning and Zoning,* in this Plan.

Commercial Land Use

The commercial land use category includes classifications related to the sale of products and services such as: central business districts, shopping centers/malls, strip commercial, and neighborhood compact groups of stores that are surrounded by noncommercial uses. This category includes parking areas related to the commercial businesses. The total commercial land use in the study area is approximately 680 acres, or 2.7% of the total. Community master plans show a desired future commercial land use of 1,707 acres, or 6.7% of the total.

Commercial areas are very important economic assets to the community, and, they are necessarily large generators of vehicular traffic. For example, a shopping center can generate as high as 70.67 daily vehicle trips per 1,000 sq. ft. of gross leasable area (G.L.A.), a general office building can generate between 8.46 and 24.6 daily vehicle trips per 1,000 gross square feet (G.S.F.), or a business park approximately 14.37 daily vehicle trips per 1,000 G.S.F. A quality restaurant can generate about 96.51 daily vehicle trips per 1,000 G.S.F., and a walk-in bank, 265.21 daily vehicle trips per 1,000 G.S.F.[2] All commercial roadways in each jurisdiction should have an on-going access management program so that the capacity of roadways are preserved and the smooth flow of traffic is maintained. This is especially important as development continues westward from Alpena along M-32. Details of access management techniques may be found in **Chapter 6**, *Access Management*.

There are several other transportation-related factors to consider as a community develops new commercial areas: 1) Scenic and aesthetic qualities; Scenic views may be impaired by structures erected between the roadway and a distant view, which can detract from the visual experience of the community, 2) Types of lighting fixtures; Light glare from parking areas and other facilities close to the roadway can be a visual problem for motorists and 3) Signage; Areas of commercial activity may allow the construction of large signage which can have a significant visual impact for motorists. Visual issues are addressed in more detail in the “Visual Resources and Community Character” section of this chapter. Billboards and signage are addressed in the model zoning ordinance language found in **Appendix B**.

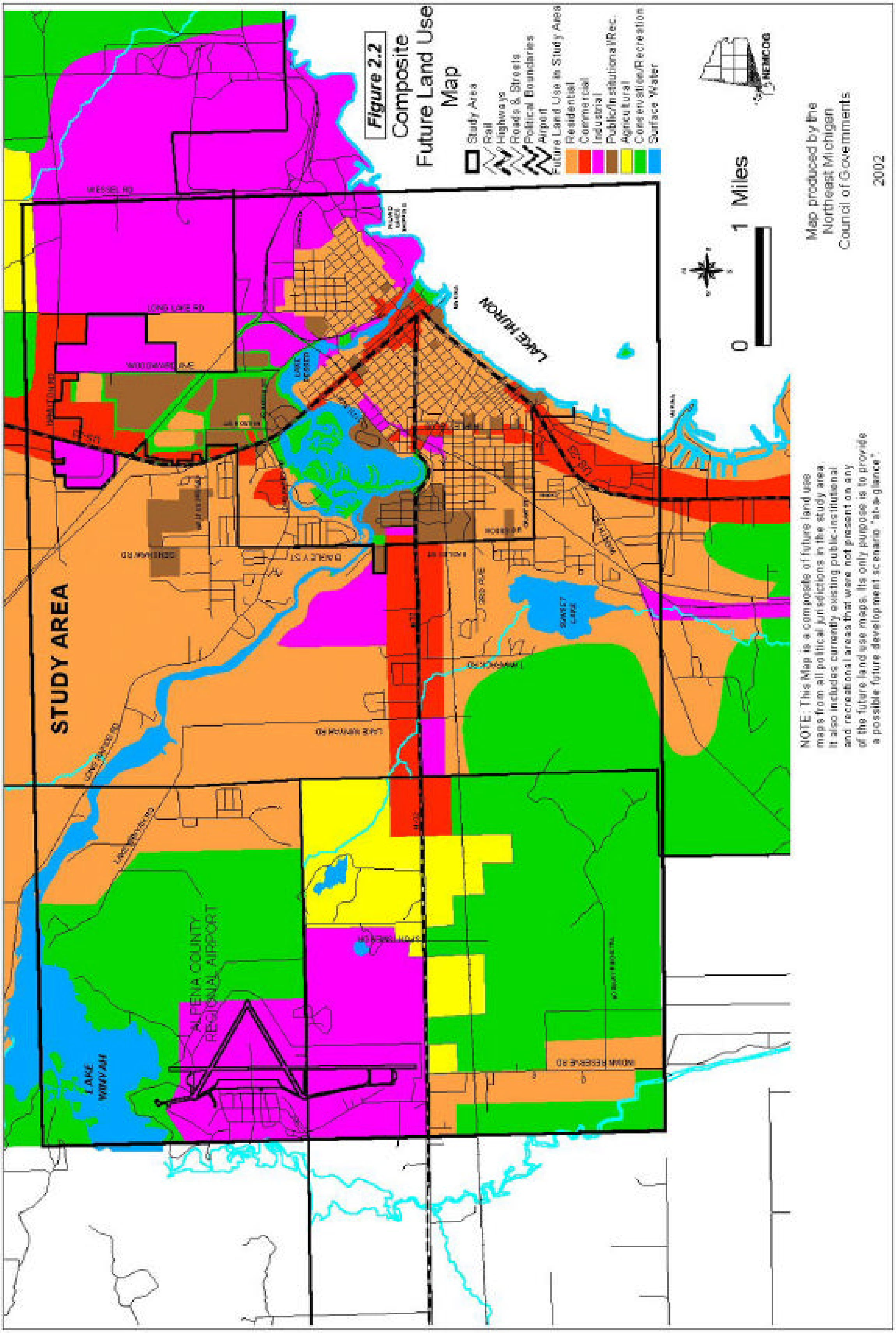


Figure 2.2
Composite
Future Land Use
Map
Study Area
Rail
Highways
Roads & Streets
Political Boundaries
Airport
Future Land Use in Study Area
Residential
Commercial
Industrial
Public/Institutional/Rec.
Agricultural
Conservation/Recreation
Surface Water
0
1 Miles
NEMCOG
Map produced by the
Northeast Michigan
Council of Governments
2002
NOTE: This Map is a composite of future land use maps from all political jurisdictions in the study area. It also includes currently existing public-institutional and recreational areas that were not present on any of the future land use maps. Its only purpose is to provide a possible future development scenario "at-a-glance".
STUDY AREA
LAKE HURON
ALPENA COUNTY REGIONAL AIRPORT
LAKE WINYAH
SUNSET LAKE

Industrial/Transportation Land Use

Industrial land use includes manufacturing and industrial parks, light industries that fabricate or package products, oil & gas drilling and production facilities, lumber mills, chemical plants, brick-making plants, large power facilities, waste product disposal areas, areas of stockpiled raw materials, and transportation facilities that normally handle heavy materials. The total industrial land use in the study area is approximately 3,003 acres, or 11.8% of the total. Community master plans show a desired future Industrial land use of 4,511 acres, or 17.7% of the total.

Industrial areas generate somewhat less vehicular traffic than commercial areas, however jurisdictions of the adjacent roadways should also incorporate sound access management techniques for these areas. For example, docking bays for vehicles carrying materials, equipment, and products should have an approach to a rear-access road or a parallel access drive. These types of modifications can greatly reduce many of the potential turning conflicts with traffic on the main traveled roadway. A Manufacturing plant and warehouse can generate as much as 3.85 and 4.88 daily vehicle trips, respectively, per 1,000 G.S.F., an industrial park building and a light industry building can each generate approximately 6.97 daily vehicle trips per 1,000 G.S.F.[2]

Institution/Recreational Land Use

Institution/recreational land use includes a variety of classifications such as education, government, religious, health, correctional, and military facilities, all indoor and outdoor recreational facilities, and all cemeteries. The buildings, parking areas, and immediate grounds are included in this category, however all surface water, forest, barren land, and wetlands associated with these facilities are entered into their own respective categories. The current total institution/recreational land use in the study area is approximately 828 acres, or 3.2% of the total. The future land use map shows approximately 968 acres, or 3.8% of the total. An example of an institutional traffic generator would be a research and development center, which generates 7.70 average daily vehicle trips per 1,000 G.S.F. An elementary school may generate approximately 13.39 daily vehicle trips, as measured per employee.[2] Schools in the Alpena area have special bus routing issues relating to the location of the bus garage on M-32, and the location of the schools to the east and west of South Bagley Street. If a crossing of the DNR rail-trail were allowed to the south of the bus garage to the junior high school, then many busses would not have to drive east and south through the already busy M-32/Bagley intersection to reach these schools.

Agricultural Land Use

The agricultural land use category generally includes land that is used for the production of food and fiber, but also includes land used for non-food livestock such as horses. These classes are: cropland, orchards (including vineyards and ornamental horticulture), confined feeding operations for livestock of any kind, permanent pasture lands, farmsteads, greenhouse operations, and horse training areas. The total agricultural land use in the study area is approximately 35 acres, or only 0.1% of the total, although the future land use composite map shows that the community would like this to increase to 1,274 acres, or 5.0% of the total. Besides the practical applications of agricultural operations, such as providing food and products, large tracts of scenic farmland can have a significant positive impact on travelers.

[1] *Trip Generation,* 6th Edition, Institute of Traffic Engineers (ITE)
[2] *Trip Generation,* 5th Edition, (ITE), Table 5-3

Nonforest

Nonforest land includes “open land” and rangeland classifications such as barren land, herbaceous open land, and shrubland. Herbaceous open land is usually subjected to continuous disturbance such as mowing, grazing, or burning, and typically it can have a variety of grasses, sedges, and clovers. Shrubland is land in transition from being open to becoming an eventual forest. There are native shrubs and woody plants like blackberry, dogwood, willow, sumac, and tag alder. The nonforest land in the study area is approximately 1,698 acres, or 6.7% of the total. Open land can provide an important habitat and food source to a variety of wildlife in the study area. This Plan explores natural features, soils, and urban forest issues in Chapter 3, *Environmental Analysis*. Open land and upland forested land are generally found to be more suitable for structural and roadway development than are lowland forest or wetland areas.

Upland Forest

Forest land use areas are generally at least 10% stocked by trees of any size. The upland forest category includes upland hardwoods like maple & beech, other upland species like aspen & birch, species of pine like red, white or jack pine, and other upland conifers like white spruce, blue spruce, eastern hemlock, and balsam fir. Upland forest in the study area is approximately 3,591 acres, or 14.1% of the total. Open land and upland forested land are generally found to be more suitable for structural and roadway development than are lowland forest or wetland areas.

Lowland Forest

Lowland forest areas are dominated by tree species that grow in very wet soils. Lowland hardwoods include ash, elm, soft maple, cottonwood and others. Lowland conifers include cedar, tamarack, black and white spruce, and balsam fir. The lowland forest in the study area is approximately 7,573 acres, or 29.7% of the total. Lowland forest can provide an important habitat, food, and water source to a variety of wildlife in the study area. It is less likely to be suitable for structural and roadway development than either upland forest or high open areas. However, when development occurs in these areas, there are landscaping/planting techniques that may preserve overall visual qualities by blending the structures and open areas with the surrounding landscape.

Wetlands

Wetlands are those areas where the water table is at or near the land surface for a significant part of most years. Examples of wetlands are marshes, mudflats, wooded swamps, and shallow areas along rivers or lakes or ponds. Wetland areas include both non-vegetated mud flats and areas of hydrophytic vegetation. The wetlands category in the study area is approximately 2,773 acres, or 10.9% of the total. Wetland areas can provide important habitat, food, and water sources to a variety of wildlife in the study area, and these areas are also less likely to be suitable for structural and roadway development than either upland forest or high open areas.

Surface Water

The surface water category includes areas such as lakes, reservoirs, ponds, rivers, and streams. Inland surface water in the study area is approximately 1,608 acres, or 6.3% of the total. Besides a major power source for the Community of Alpena, surface water provides scenic vistas, recreational opportunities, and habitat for a variety of wildlife. On the other hand, the limited number of bridges across the Thunder Bay River make surface water a formidable obstacle to the north-south movement of traffic in this community.

[2] *Trip Generation*, 5th Edition, Institute of Traffic Engineers (ITE)

Land Ownership (Note: the approximate total number of acres in the study area is 25,486)

Publicly Owned Land

The amount of publicly-owned land in the study area is approximately 7,256 acres, or 28.5% of the total.

The major tracts of publicly owned land in the study area belong to the State of Michigan, and can be found in Wilson Township. These lands are part of the Alpena State Forest, and total about 4,050 acres, or 15.9% of the study area. The County owns approximately 2,947 acres, or 11.6%, the City owns approximately 256.5 acres, or 1%, and the federal government owns about 2.5 acres, or less than 0.01%. **Figure 2.3** on page 2-8, shows the locations of existing publicly-owned vs. privately-owned land. Inland surface water comprises about 6.3% of the total, or 1,608 acres.

The significance of publicly owned land is twofold:

1) It is being managed by a public agency (most of this land is State owned), so there is the potential for right-of-way (ROW) agreements to be developed with other public agencies.

2) In most cases, its potential to be developed is minimal. Thus, access management issues are less likely to become a concern, and it may be easier to maintain or preserve natural scenic qualities along roadways that traverse public land.

Privately Owned Land

Privately-owned land, or 65.2% of the total in the study area, has the potential to be impacted by development pressures. Residential, commercial, industrial, and institutional development can cause changes in roadway access points and traffic generation patterns (both of which affect travel times, crash rates, roadway capacities and rates of road surface wear). Changing vehicular traffic patterns also have an impact on residential neighborhoods, pedestrians, and bicyclists, so it is important to establish community development guidelines and regulations that will maximize efficiency, safety, and comfort in all aspects of transportation in the community.

Local governments assume the major role in establishing “access management” techniques for privately-owned land in their jurisdictions. While MDOT has the responsibility of regulating driveway access along State highways, it still falls to local jurisdictions to regulate development so that rear access drives are built, driveways are shared, and parking lots between businesses are connected. Property owners do have the right to reasonable access to the general system of streets and highways. However, at the same time, adjacent roadway users have the right to freedom of movement, safety, and efficient expenditure of public funds. Balancing these interests is critical at locations where significant changes to the transportation system and/or surrounding land uses are occurring. The safe and efficient operation of the transportation system calls for effectively managing driveways, streets, or other access points. More about access management techniques is found in **Chapter 6**, *Access Management*.

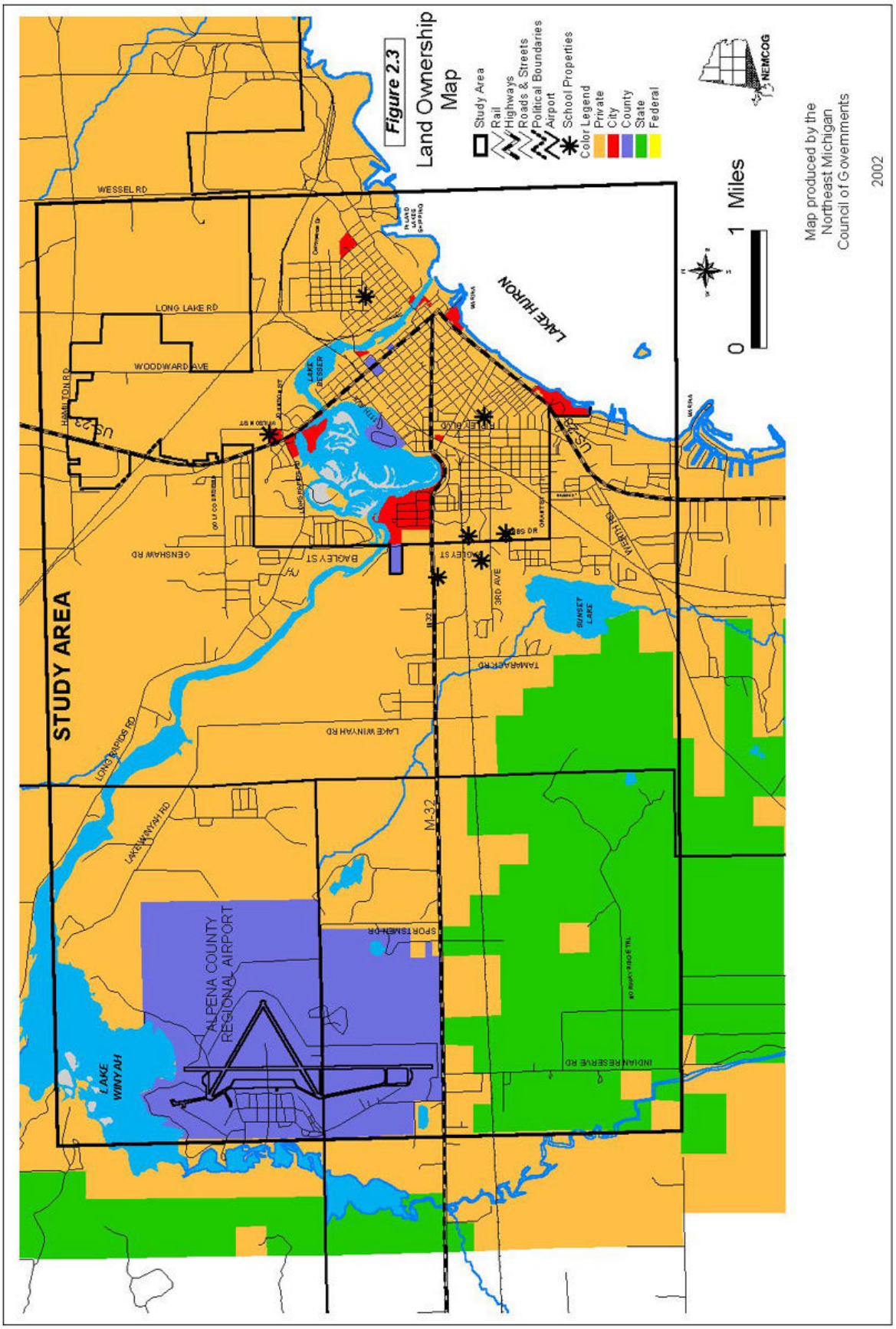
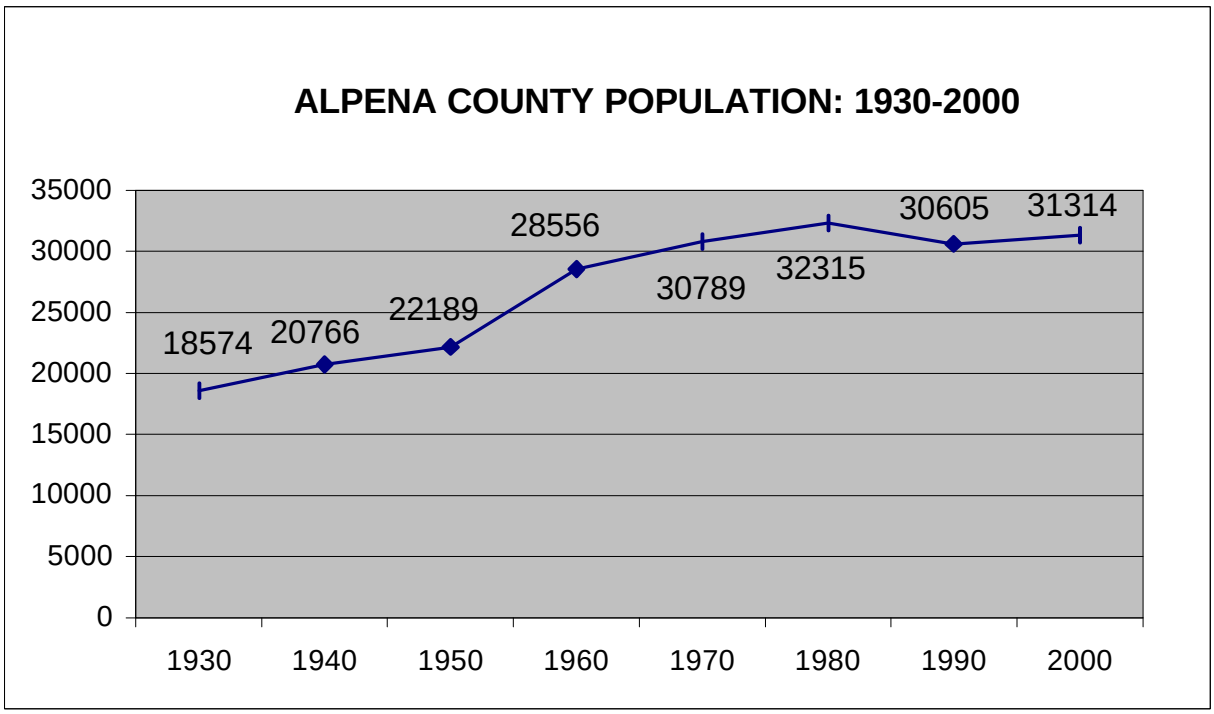


Figure 2.3
Land Ownership Map
Study Area
Rail
Highways
Roads & Streets
Political Boundaries
Airport
School Properties
Color Legend
Private
City
County
State
Federal
NEMCOG
0
1 Miles
Map produced by the Northeast Michigan Council of Governments
2002
STUDY AREA
LAKE HURON
WESSEL RD
LONG LAKE RD
WOODWARD AVE
HAMILTON RD
US-23
GENSHAW RD
BAGLEY ST
3RD AVE
M-32
LAKE WINYAH RD
LONG RAPIDS RD
ALPENA COUNTY REGIONAL AIRPORT
LAKE WINYAH
SUNSET LAKE
INDIAN RESERVE RD

Demographics

Population

The 2000 Census showed that Alpena County, with a population of 31,314, continues to be the most populated County in the Northeast region. Since 1990 there has been an increase in population of 2.3 percent (709 persons). The county population density averages 54.6 persons per square mile, however, two thirds of the total population is located in the City of Alpena and Alpena Township. The study area, which includes all of the City, the central portion of Alpena Township and parts of Wilson and Maple Ridge Townships, encompasses the most populated area of the County.



Source: U.S. Census Bureau

In general, the rural areas of the County have experienced faster rates of population growth than the more developed areas (see **Table 2.2**). Between 1990 and 2000, Alpena Township had a modest increase in population of 1.9 percent (176 persons). The City of Alpena experienced a loss in population for the fourth consecutive decade, although the 0.4 percent decline was significantly less than the out-migration experienced in the 1980's when the population decreased by 7 percent. Six of the municipalities had population increases between 1990-2000. Percentage wise, the fastest growing municipalities in the County were the Townships of Green, Maple Ridge, Wilson and Wellington. The percentage gains found in these areas ranged from a high of 13.3 percent in Maple Ridge Township to 9 percent in Wilson Township. Maple Ridge Township also had the largest net increase in residents with the addition of 201 persons between 1990 and 2000.

Table 2.2
Population For Alpena County & Municipalities, 1990-2000

Municipality	1990 Pop.	2000 Pop.	% Change '90-'00
Alpena Co.	30,605	31,314	2.3%
City of Alpena	11,354	11,304	-0.4%
Alpena Twp.	9,602	9,788	1.9%
Green Twp.	1,095	1,205	10.0%
Long Rapids Twp.	1,021	1,019	-0.2%
Maple Ridge Twp.	1,514	1,715	13.3%
Ossineke Twp.	1,654	1,761	6.5%
Sanborn Twp.	2,196	2,152	-2.0%
Wellington Twp.	269	296	10.0%
Wilson Twp.	1,902	2,074	9.0%

Source: U.S. Bureau of the Census

Seasonal Population

Obtaining accurate numbers of seasonal residents and tourists is difficult. Because the U.S. Census is conducted each decade in April, the numbers only reflect those persons who live in the county on a year-round basis.

In 2000, the Census demonstrated that 10.8 percent of the housing units in the county were seasonal, a decrease of almost 2 percent since 1990. The percentage of Alpena County's housing units that are seasonal is much less than that of the surrounding counties.

A rough estimate of the number of county seasonal residents can be calculated by multiplying the number of county seasonal housing units (1,658) by the county's average number of persons per household (2.6), for a total of 3,979 persons. Seasonal residents, therefore, could have added another 13 percent to the county's year-round residents, for a total of approximately 35,293 persons, compared to the actual 2000 Census figure of 31,314 persons. This figure does not include those seasonal visitors or tourists staying in area motels, campgrounds or family homes.

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. Besides boating, fishing, and swimming, other tourist activities include: camping, hunting, sightseeing, hiking, biking, skiing, golfing, snowmobiling, ice fishing, shopping, and more.

An Alpena County tourism study was completed in 2002 (and is in progress for other counties), and was funded by Travel Michigan. The *Michigan Tourism Business* study was conducted by Michigan State University (MSU) using tourism models developed at MSU. These models require the entry of existing data such as lodging room taxes/assessments, government reports of tourism-related sales and employment, visitor surveys, camping, seasonal homes, and other information. The results of this study show that in the year 2000, Alpena County hosted approximately 445,000 person trips, or 165,000 party trips- assuming an average of 2.6 persons per party of tourists. A "tourist" is defined in the study as a person who travels 50 miles or more

to reach their destination, and consists of all travelers including seasonal home owners and visiting friends and relatives.

Tourism activity grew by 10% between 1999 and 2000. An estimated $34 million was spent by tourists in Alpena County during 2000, resulting in 760 direct tourism-related jobs, $9.1 million in personal income (wages & salaries) and $14 million in value added (wages, salaries, profits, rents, and sales taxes). Of the 760 direct jobs created, about 258 were in restaurants, 182 in retail trade, 173 in hotels or campgrounds, and 145 other. These numbers do not include government jobs. The study goes on to describe employment by sector, value added sales, secondary sales, taxes, and other useful information. This study was provided courtesy of the Alpena Convention and Visitors Bureau.

Population Projections

Projections from three different sources are shown below in **Table 2.3**. NEMCOG predictions and predictions from the University of Michigan (U of M) show the county's population growing between 2000 and 2020, while projections from the Michigan Department of Management and Budget (DMB) show a decline in population.

With a range of a 7 percent loss to a 13 percent gain, the projections do not give a clear picture on the future trend of the population. Population estimates for Alpena County prepared by the Census Bureau for July 2000 and July 2001 show a population loss of less than 0.1 percent respectively.

Table 2.3
Population Projections For Alpena County 2000-2020

Source	2000*	2010**	2020**
NEMCOG	31,314	35,319	35,497
U of M	31,314	34,567	35,220
DMB	31,314	30,100	29,000

Source: 1990 figures from the U.S. Bureau of the Census
NEMCOG: Northeast Michigan Council of Governments.
U of M: Regional Economic Models, Inc by the University of Michigan through the Mich. Department of Transportation
DMB: Michigan Department of Management and Budget

Age Distribution

2000 census data shows that 42.1 percent of Alpena County's population was 45 years old or older, a 5.5 percent increase since 1990 (**Table 2.4**). The breakdown of County's population by age grouping shows a significant shift in the 25-44 and the 45-64 age groups from 1990 to 2000. The percentage of those in the 45-64 age group grew by 3.4 percent while the 25-44 age group declined by 3.8 percent. Since the total population increased by 709 persons between 1990 and 2000 and the population of people over 45 grew by 1,944 persons during the same time period, the shift towards an older population is most likely due to the existing residents getting older.

Table 2.4 Population By Age For Alpena County 1990-2000				
Age	1990	% of Total Pop.	2000	% of Total Pop
Under 5	2,005	6.7%	1,716	5.5%
5-17	6,042	19.7%	5,702	18.0%
18-24	2,392	7.8%	2,436	7.8%
25-44	8,968	29.3%	8,309	25.5%
45-64	6,604	21.6%	7,784	25.0%
65+	4,593	15.0%	5,357	17.1%
Median Age	35.3 years		40.4 years	
Source: U.S. Bureau of the Census				

Growth and Development

Residential Development

An analysis of the building permits issued in the study area can give insight to the trends and magnitude of growth in the area. In the study area, building permits are issued by each of the four municipalities. As can be seen in **Table 2.5**, the majority of new dwellings have been constructed in Alpena Township. The number of new homes being built in the Township has remained relatively constant with an average of 54 new homes being built per year since 1997.

The number of new homes being built has significantly outpaced the number of new residents that have moved into the area. Over the past 5 years it is estimated that 435 homes have been built in the municipalities included in the study area, while the population increased by 354. The most likely cause for this pace of construction is the decrease in average household size and more people living alone. The increase in building activity cannot be attributed entirely to the construction of seasonal homes, since there was an overall decrease in the number of seasonal homes in Alpena County (1,810 to 1,658) from 1990 to 2000. However, one factor which may help to explain the 'disappearing' seasonal homes is that existing seasonal homes are being converted to full time occupancy.

Table 2.5 Building Permits 1997 - 2001										
Year	1997		1998		1999		2000		2001	
Community	New Res.	New Comm.	New Res.	New Comm.	New Res.	New Comm.	New Res.	New Comm.	New Res.	New Comm.
Alpena Twp.	51	9	64	19	57	11	42	12	55	11
Maple Ridge	7*		7*		7*		7*		7*	
Wilson	15*	1*	14	3	23	0	20	0	19	2
City of Alpena	14	6	7	7	7	2	9	6	3	6
Totals	87	16	92	29	94	13	78	18	84	19
Source: Township Building inspectors *Estimated values										

An increase in commute times, as shown in **Table 2.6,** suggests that many of the new homes being built in the County are in rural areas farther from places of employment. From 1990 to 2000 the average commute time for an Alpena County worker increased by18 percent from 14.4 minutes to 17 minutes. The vast majority of workers in Alpena County get to work by driving alone. Compared to 1990, approximately the same number of people carpool to work as did in 2000, but the use of public transportation as a means to get to employment destinations decreased by 37.5 percent. The number of people walking to work also decreased during this time period also from 360 (3.0%) to 330 (2.4%).

Table 2.6

Alpena County Work Commute 1990 & 2000

	1990		2000	
Mode of Transportation	#	%	#	%
Drove Alone	10,024	82.3%	11,452	83.8%
Carpooled	1,016	8.3%	1,092	8.0%
Public Transportation (includes taxi)	88	0.7%	55	0.4%
Walked	360	3.0%	330	2.4%
Worked at home	512	4.2%	577	4.2%
Other means	187	1.5%	160	1.2%
Average Commute time (minutes)	14.4	NA	17.0	NA

Source: U.S. Bureau of the Census

Using the information in **Table 2.6**, the amount of additional miles being driven due to people living farther from places of employment can be estimated. Assuming an average commute speed of 45 miles per hour, the average commute in Alpena County increased by 2 miles from 10.8 miles to 12.8 miles. Assuming two commute trips per day, 250 work days per year, and 11,452 commuters (number of people who drive alone to work) the net of effect of the outward growth trend is an additional 11.5 million miles per year being driven on Alpena County Roads.

Commercial Development

Over the past 5 years there has been an average of 19 new commercial buildings built per year in the City and Townships included in the study area. The majority of the new commercial development has occurred in Alpena Township. Over the past 5 years an average of 12 new commercial buildings per year have been constructed. New commercial construction is primarily taking place in the commercial corridors located on M-32 and US-23 North and South.

Due to limited space, the City of Alpena has had significantly less construction of new commercial buildings. Most of the commercial construction in the City takes the form of redevelopment of existing structures or use of space. There is, however, some acreage south and east of the corner of Hamilton Road and US-23 that may some day be developed for retail, service industry, or some other purpose. The 2000 *City of Alpena North Sub-Area Plan*'s future land use map shows areas on the east side of Woodward Avenue that could become light industrial, heavy industrial, and recreational. However, some of these areas, currently zoned R-2, may find other uses such as residential.

Alpena Community College (ACC) is in the process of producing a college campus master plan, however this is not yet available to be shared with the Transportation Plan Committee. In the 2000 *City of Alpena North Sub-Area Plan*, the future land use map shows the College acreage north of the railroad tracks and west of Woodward avenue as institutional, office/research, and some residential areas. The sub-area plan goes on to recommend:

- Future uses for the area should be located along thoroughfares that can accommodate their expected demand and impact
- As the study area develops, additional internal roads should be provided where necessary and appropriate
- Future signalization or other traffic safety design should be installed at Johnson and Woodward or at other intersections as warranted in the future
- An extension of Henry Street east to Woodward should be considered to provide secondary access to US-23
- Wilson Street might be extended to the north to a new east/west road between US-23 and Long Lake Road
- A road connector should be considered from Johnson Street east of the railroad tracks to the northeast to connect with Long Lake Road, to alleviate potential congestion to the southeast

A Campus Plan may be ready for the public sometime in 2003. Some of the issues identified by the College, relating to the Transportation Plan are: 1) finding a solution to students having to cross Johnson Street with potentially hazardous traffic conditions; 2) a greater presence of public transportation will be needed in the future for students and faculty; and 3) Hamilton Road is paved, however Woodward Avenue north of the railroad tracks will need to be paved, and new roads that will serve future developments will need to be constructed.

Very few new commercial buildings have been built in Wilson township, and this is also assumed to be true in Maple Ridge Township but data could not be obtained to verify the exact number of permits that have been issued.

In terms of traffic generation, the most intense commercial development has been on M-32 west of Bagley. Uses tailored to the automobile such as gas stations, drive through restaurants, drive through banks, hotels and regional retail stores have significantly impacted the traffic dynamics and characteristics of M-32, Bagley Street, and the surrounding area.

In addition to the new commercial buildings being constructed, residential areas and single family homes along the commercial corridors of M-32, US-23 North, and US-23 South are transitioning into commercial uses. As the commercial areas extend outward, residential lots and residences are being converted for commercial use. The conversion of residential lots to commercial uses creates access management problems: the narrow lots, each with its own curb cut, are merged with other lots to form a large site with many curb cuts close together. The high number of access points combined with an increase in traffic generated by the commercial uses entering and exiting the roadway significantly impact the function and capacity of the roadway.

Industrial Development

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 are still a vital component to the regional economy, the trend has been towards the development of smaller businesses with fewer employees. According to the *Michigan Industrial Directory*, the number of industrial employers has increased from 50 to 65 , however the number of employees in these industries decreased from 2,874 to 2,429. Small machine shops make up the largest number of industrial businesses with 20 shops operating in Alpena County.

In addition to the diversification of the industrial workforce, advances in technology has allowed employers to increase production and hire fewer workers. One noticeable example is cement

production at the Lafarge Corporation which now has the same amount of production with 300 employees as Huron Portland Cement did in 1978 with a labor force of 1,000. In the context of the Alpena-Area Wide Transportation Study, the result has been a lessening impact on the road system by the industrial labor force.

Renaissance Zones

In 1998, six renaissance zones were designated in Alpena County, all of which are in the study area. Four of the zones are in the City of Alpena and the other two are in Wilson Township at the Alpena County Regional Airport. The renaissance zone designation promotes economic development through tax exemptions from State Income Tax, Single Business Tax, General Property Tax (not including debt retirement and special assessments) and Education Tax for eligible businesses. The renaissance zone designation provides property owners and residents tax exemptions for a period of 15 years. Although the clock begins ticking at the time of the designation, extensions can be requested. All of the zones are awaiting development at the time of this writing.

Commerce Industrial Park Sub Zone 1

Located just to the east of Long Lake Road in Alpena, this is a 16 lot, 21.76 acre industrial park and access road which is zoned Light Industrial. Sites average 1 acre in size and the park is designed and intended for small industrial uses.

Oxbow Park Sub Zone 2

This is a 39.7 acre former City landfill on the northwest corner of the City of Alpena. Plans for a neo-traditional mixed use development have been proposed for this site, called Oxbow Village. Proposed uses for the development would include a combination of residential, office, recreation, and institutional.

National Guard Armory Site Sub Zone 3

Located in downtown Alpena, and presently owned by the State of Michigan, this 0.70 acre site is home to the historic Armory Building. The State will be divesting itself of the property following the relocation of the National Guard offices.

Southwest Residential Site Sub zone 4

A city-owned 14.85 acre site on the east side of US-23, south of Hamilton Road, the intention is to sell the property for residential development.

Alpena County Regional Airport, West Side Sub zone 5

This is an 87-acre site located on the west side of the main entrance drive (Airport Road) into the airport. There are plans to develop the property closest to M-32 into a commercial retail center, with industrial developments just to the north, on the same site. Large parcels are available for commercial and industrial development in both Sub zone 5 and Sub zone 6. Water and sewer services as well as cable and fiber optics utilities extend to these sites.

Alpena County Regional Airport, East Side Sub zone 6

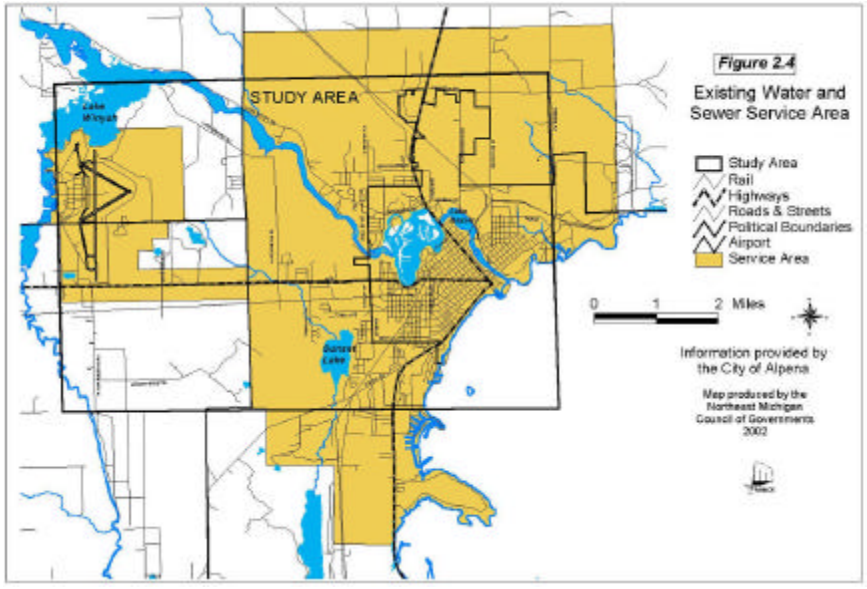
This is a120-acre site located on the east side of the airport property, abutting the north side of M-32. There will be a continuation of an existing roadway on the east side of Airport Road, to provide access for future industrial developments. There are additional airplane hangars being constructed at the west edge of this property, for increased capacity that will be needed. A land use plan is being developed at this time, which will show the intended development layout for all airport properties.

Water and Sewer

Public water and sewer is available throughout the city, portions of Alpena Township and lines have been extended west along M-32 through Wilson Township to Alpena County Airport. Water is supplied by the City of Alpena Water Filtration Plant and all wastewater in the public system is treated at the City of Alpena Waste Water Treatment Plant. The Alpena Waste Water Treatment Plant has an average daily flow capacity of 5.5 million gallons per day. The annual average daily flow over the past two years has been approximately 2.5 million gallons per day.

Alpena Township and the City of Alpena each manage, operate and maintain the water and wastewater facilities within their boundaries. Per a 1977 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 sewage per day. Data from an Alpena Township water and waste water feasibility study prepared by Wade-Trim in July of 2000 shows that the average daily water usage in the Township is approximately 600,000 gallons and the average daily wastewater flow is approximately 500,000 gallons. Considering the average daily water demand for a residential unit is 260 gallons per day, and wastewater flow from a residential unit is 215 gallons per day, a considerable amount of capacity is available to accommodate future growth in Alpena Township.

Also per the 1977 agreement , service area boundaries were established (**Figure 2.4**) that limited the extension of the sewer 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 sewer and water lines to the Alpena Regional Airport and other amendments to the agreement for other extensions are being explored.



Intermodal Transportation

Roads and Streets (This section contains a general overview only. For capacities and traffic conditions in the study area, see **Chapter 5**, *Traffic Conditions*.)

Alpena County has no interstate highway but is served by US-23 which runs along Lake Huron from Mackinaw City to Standish, and by state highway M-32 that connects Alpena with Gaylord and I-75. M-65 running north and south 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 also supports 205.5 miles of local primary roads and 454.5 miles of local secondary roads.

The City of Alpena's street program includes approximately 56.4 miles of local streets and roads. State highway M-32 extends 2 miles into the City, and there are 3.56 miles of US-23 within the boundaries of the City. Refer to **Figure 2.5**, *Road Classifications Map,* which shows Principal Arterials, Minor Arterials, Collectors, and local roads and streets.

Principal arterials carry a major portion of trips that are entering and leaving the urban area, passing through the urban area to a farther destination, and generally accommodate the highest traffic volumes at faster speeds. They serve the major urban centers of activity, and tie into minor arterials as well as major rural connections to outlying areas.

Minor arterials connect with the principal arterials to augment that major system. There is somewhat more emphasis on local land access and lower speeds, than on high speed travel to farther destinations. Minor arterials serve trips between urban connections and collector roads from more rural areas. Unlike collectors, they do not directly serve identifiable neighborhoods.

Access to local streets and roads, as well as direct access to properties is provided by collector roads in residential neighborhoods, commercial areas, and industrial areas. Collectors are generally lower speed and lower volume roads than arterials. Trips on collectors are distributed from arterials through diverse areas to their ultimate destinations, either to local roads or to properties adjacent to the collectors. Collectors bring together traffic from local road and street systems and channel that traffic to the arterial system.

The local road and street system provides direct access between abutting properties and the collectors. Local roads and streets are generally lower speeds and lower volumes than either arterials or collectors. Through traffic is deliberately discouraged on this system.

Air Transportation

Air travel is based at the Alpena County Regional Airport, elevation 689 feet above sea level. The 3,000 acres owned by the airport is mostly undeveloped, but with 11,500 feet of 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. The airport is also home to the Combat Readiness Training Center (CRTC) of the Michigan National Guard. Passenger service is provided by North Country Aviation of Gaylord, and Mesaba Airline / Northwest Air Link. Charter services are provided by Freedom Transportation and Aviation North. Air freight service is provided by FED-EX, UPS and Airborne Express. Flight training is provided by the Fixed Base Operator (FBO) Aviation North, and medivac services are provided by North Flight of Traverse City, Wings of Mercy and Life Flight.

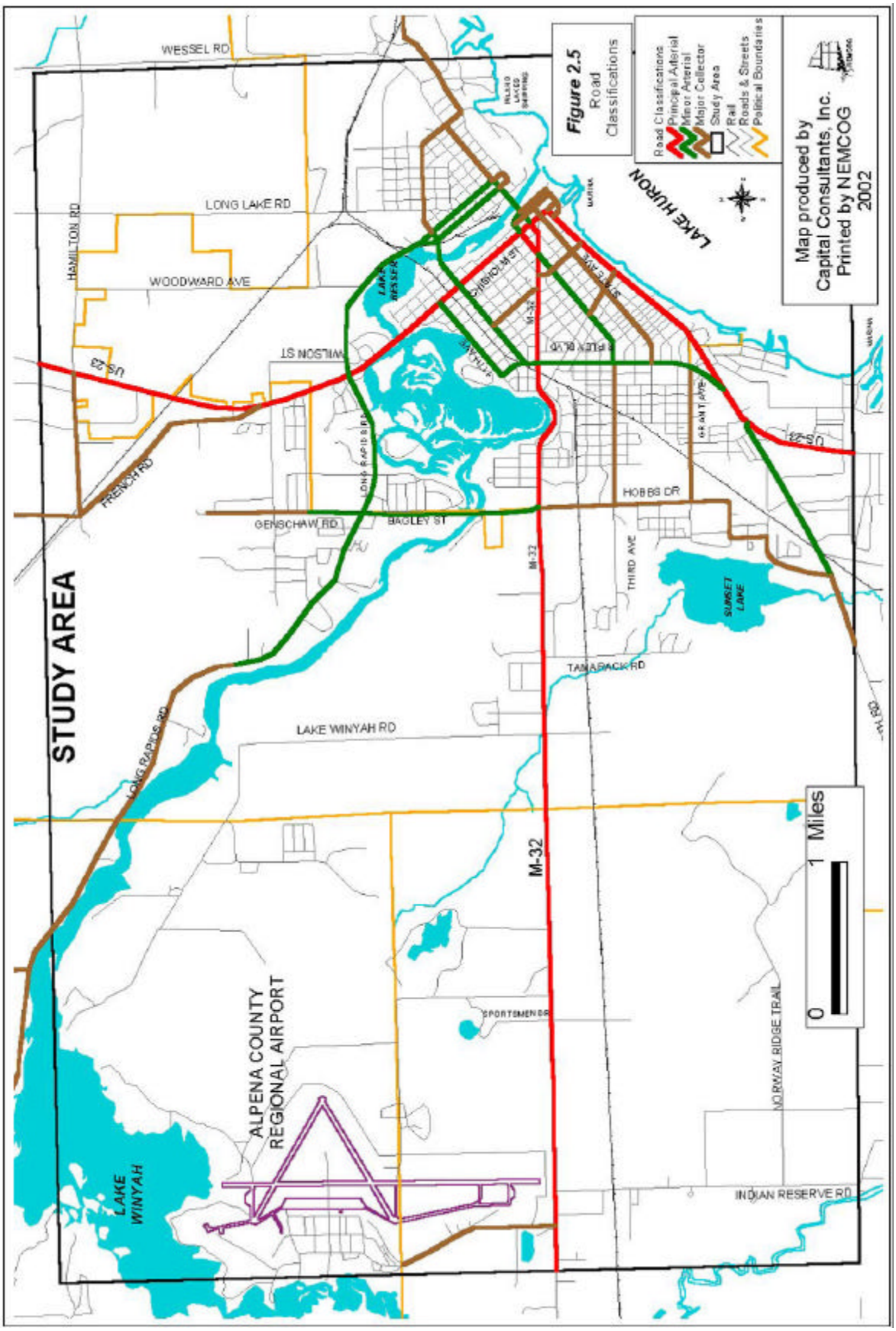


Figure 2.5
Road Classifications
Road Classifications
Principal Arterial
Minor Arterial
Major Collector
Study Area
Rail
Roads & Streets
Political Boundaries
Map produced by
Capital Consultants, Inc.
Printed by NEMCOG
2002
STUDY AREA
WESSEL RD
LONG LAKE RD
HAMILTON RD
WOODWARD AVE
US-23
FRENCH RD
WILSON ST
LAKE HURON
US-23
HOBBS DR
GENSCHAW RD
BAGLEY ST
M-32
THIRD AVE
SUNSET LAKE
TAMARACK RD
LAKE WINYAH RD
LONG RAPIDS RD
M-32
ALPENA COUNTY
REGIONAL AIRPORT
LAKE
WINYAH
SPORTSMENS RD
NORWAY RIDGE TRAIL
INDIAN RESERVE RD
0
1 Miles

The airport is administered by the Airport Manager, as a department of the County. The CRTC jointly maintains the airport by sustaining a crash-rescue unit, maintaining tower operations (08:00-16:00 Mon-Sat), snowplowing the runways, and performing other routine maintenance activities. Available fuel includes 100 LL and Jet-A for most types of aircraft.

Table 2.7 shows the amount of freight and passengers that have traveled through the Airport from 1997 to 2000. The amount of inbound and outbound freight increased robustly between 1997 and 1998 but began to slow and then decline from 1999 to 2001. In 1998 inbound freight increased by 20 percent and outbound freight increased by 36 percent. In 1999 the amount of inbound freight grew only 0.7 percent and outbound freight grew by 5 percent. Over the next two years the amount of inbound and outbound freight declined 20 percent and 32 percent respectively. Although the amount of decline was certainly affected by the events of September 11, 2001, it appears there was an existing downward trend in airfreight being shipped in and out of Alpena County.

Passenger service at Alpena Regional Airport had dramatic increases from 1997 to 1998 and from 1998 to 1999 with 68 percent and 75 percent increases respectively. The amount of passengers passing through the airport leveled off in 1999 and changed little from 1999 to 2001. Factoring in the effects that September 11 had on passenger service, the amount passengers flying through Alpena probably would have otherwise increased modestly in 2001.

Table 2.7 Alpena Regional Airport Usage 1997-2001

Year	Freight (inbound) lbs.	Freight (outbound) lbs.	Passengers
2001	923,248	417,363	21,033
2000	1,119,710	540,194	21,073
1999	1,163,812	618,503	21,603
1998	1,155,783	587,065	12,313
1997	954,903	430,350	7,310

Source: Alpena Regional Airport

Rail

Freight rail service is provided by Lake State Rail which is primarily used to deliver raw materials and products to and from the industrial users in the area. No passenger service is offered. Alpena is the end of the line for the rail line and Lake State Rail has one inbound and one outbound train per day, Monday - 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 using a 50-50 loan from

the Michigan Department of Transportation.

Marine Facilities

The City of Alpena has two channels used for great lakes shipping. One is the Port of Alpena and the other is for the Lafarge Corporation. The shipping season for Alpena Harbor is from March 15 to December 17. Over the past decade the amount of freight shipped has steadily increased approximately 7% per year (**Table 2.8**). In 1991 a total of 2,284 thousand short tons were shipped in or out of Alpena and in 2000, 3,405 thousand short tons were shipped. Most of the tonnage being shipped is outbound with over 70% of the total tonnage consisting of cement being shipped out of Alpena (**Table 2.9**). Coal and Limestone are the major commodities being shipped into Alpena with 432 thousand short tons of coal and 384 thousand short tons of limestone being shipped into Alpena in 2000.

Table 2.8 Alpena Total Shipping 1991 – 2000 (thousand short tons)

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total	2,284	2,486	2,547	2,672	2,767	2,345	2,901	3,078	3,947	3,405

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

Table 2.9 Alpena Shipping Traffic 2000 (thousand short tons)

Commodity	Inbound	Outbound	Total
Coal Ignite	249	17	266
Coal Coke	165	0	165
Starches, gluten, glue	0	6	6
Limestone	340	45	385
Iron ore	26	0	26
Slag	4	0	4
Non-metal mineral	26	0	26
Cement & concrete	19	2,486	2,507
Misc. mineral prod.	0	20	20
Total	829	2,574	3405

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

Transit

Alpena Dial-A-Ride - The Alpena Dial-A-Ride, managed by the Thunder Bay Transportation Corporation (TBTC), provides a city-wide public demand response service providing door to door transportation within the City of Alpena, which operates seven days a week, with hours of 7 a.m. to 7 p.m. Monday through Thursday; 7a.m. to 10 p.m. on Friday; 8 a.m. to 10 p.m. on Saturday and 8a.m. to 6 p.m. on Sunday. The Alpena Dial-A-Ride service operates seven 22-passenger buses equipped with lifts.

Thunder Bay Transportation Corporation – In 2001, the TBTC, a non-profit corporation, provided public transportation services for 57,167 passengers. TBTC operates five days a week, Monday through Friday, and at other times and days by special contract. TBTC operates a fleet of 28 vehicles, of which 24 are equipped with lifts. Revenues are obtained from the fare boxes (80%), the State (19%), and local funds (1%)

Northeast Michigan Community Mental Health - NMCMH operates a fleet of 49 vehicles (cars, mini-vans and vans) in its four-county service area. The agency primarily provides transportation for developmentally disabled persons and persons with mental illnesses to allow them access to services such as supported employment programs, drop-in centers and day activity centers. Most of the vans are wheelchair lift equipped and have space set aside for wheelchairs. The typical hours of operation are Monday through Friday, 8:00 a.m. to 5:00 p.m. with transportation generally pre-arranged. Vehicles are available around the clock for limited emergency use. Staff members use agency vehicles to transport clients for special purposes.

Northeast Michigan Rehabilitation and Opportunities Center, Inc. (NEMROC) – NEMROC operates three (3) vans and four (4) passenger cars for transporting of disabled adults and some students to job sites and individualized learning events in the community as part of the Vocational – Rehabilitation and Employment program. Transportation services are provided Monday through Friday, with the majority of the use occurring between 8:30 a.m. and 3:00 p.m., additional one crew does provide night transportation between 4:00 p.m. and 10:00 p.m. Additional client transportation needs are met through services provided by Alpena Dial-A-Ride and Thunder Bay Transportation with funding provided through Northeast Michigan Community Mental Health.

District Health Department No. 4 - The Health Department provides transportation services in the form of mileage reimbursements for clients on maternal and infant support services programs and the Day One program. Destinations are generally medical care providers, primarily in Alpena. Funding for this transportation service comes from the appropriate program budget. Like other human service agencies, the Health Department utilizes Thunder Bay Transportation for transporting persons to Caring Place Adult Day Center in Alpena. Hours of operation are typically Monday through Friday, 8 a.m. to 5 p.m., with a heavier demand experienced on Tuesday and Fridays.

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. The company operates 44-passenger buses on this route. Buses are wheelchair lift equipped and have space set aside to accommodate wheelchairs. MDOT subsidizes this transportation service for areas in northern Michigan. This system functions as a daily link between select cities and allows people to travel outside the area to other parts of the state and country.

Alpena Area Senior Citizen Council – The Alpena Area Senior Citizen Council provides transportation for disabled seniors for medical, shopping and recreational purposes. Transportation services are typically provided through volunteer drivers, who use their own vehicles and receive mileage reimbursements. Hours of operation are Monday through Friday, from 8 a.m. to 5 p.m.

Family Independence Agency (FIA) – The Alpena, FIA office provides transportation services to children, adults, seniors, and disabled persons who are clients the agency. Transportation services are typically provided through volunteer drivers, who use their own vehicles and receive mileage reimbursements. Funding sources include Medicaid which is federal and Volunteer Services, a state program. Trips for medical and dental appointments are the primary

focus, however, volunteer drivers also transport FIA clients for shopping, training, and school purposes. Transportation is typically pre-arranged one or more days in advance and services are dependent upon availability of volunteer drivers.

Taxi / Shuttle Services – Demand response public transportation service is provided by Harley Light Trucking and Shuttle Service of Lewiston, primarily serving Alcona, Alpena and Montmorency Counties. J & S Cab Service of Alpena provides service primarily to Alpena, Montmorency and Presque Isle Counties.

Charter/Rental bus service is provided by Mert's Tour Service. Located in the City of Alpena, these passenger busses serve portions of Michigan's lower and upper peninsula. Mert's Service specializes in escorted tours and senior citizen trips. There are motor coaches available for 21-25 passengers.

Bus freight is carried by G & A Bus Line which transports U.S. mail between the Alpena Post Office and Gaylord's postal sorting center. This service is provided on a daily basis via M-32. Smith Bus Line also acts as a U.S. mail contractor and Mert's Bus Tours offers long/short distance package carrier services

Limousine services are provided by Diamond Limousine service. Located in the City of Alpena, this chauffeur-driven service is offered county wide and is also available for private transportation to and from other areas in Michigan.

Shuttle services are provided by Holiday Inn and Fletcher Motel between Alpena County Regional Airport and their respective lodging facilities. Passenger van schedules coincide with airline arrivals and departures.

Car rental agencies include Avis Rent A Car, Hertz Rent A Car and Superior Car Rental. Located with Alpena County Regional Airport. These companies offer local, state and national rentals

Bicycle and Pedestrian Facilities

In the City of Alpena there is a well developed recreational trail system called the Alpena Bi-Path (see **Figure 2.6**, *Alpena Bi-Path*, page 2-23). This system of trails is approximately 10 miles long and connects the residential areas with the downtown area and numerous parks and beaches. The path extends from Mich-E-Ke-Wis Park, on the east side of State Avenue north to the downtown area, then along the Thunder Bay River and the east side of Lake Besser, then west to the Wildlife Sanctuary and south past the County Fairgrounds, south on Ripley Boulevard and back to the Mich-E-Ke-Wis Park. There are two western segments that head west to Bagley Street, then loop back to Ripley Boulevard.

There is a need to find alternative Bagley Street connectivity of the path for two reasons: the shoulder is inadequate for bicycle traffic, and the Bagley Street bridge over the Thunder Bay River is too narrow to allow pedestrian and bicycle traffic along with the heavy flow of vehicular traffic. It will be in the community's best interest to seek a separate bridge and path facility along Bagley Street.

In addition to the Bi-Path, there are many sidewalk facilities along streets and roads within the City of Alpena. Most urbanized areas in the Township of Alpena, however, do not have sidewalks available for pedestrian use.

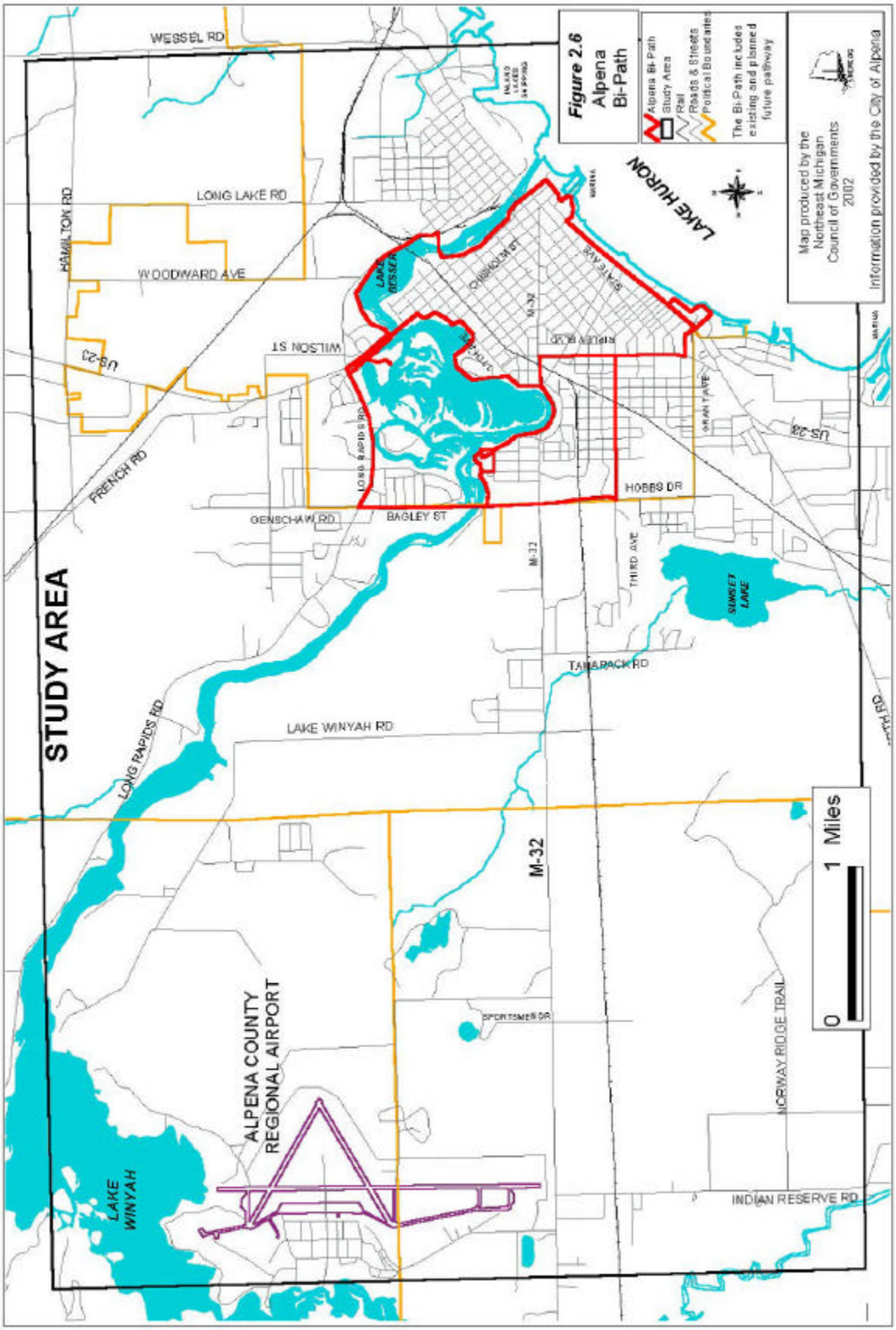


Figure 2.6
Alpena
Bi-Path
Alpena Bi-Path
Study Area
Rail
Roads & Streets
Political Boundaries
The Bi-Path includes existing and planned future pathway
Map produced by the Northeast Michigan Council of Governments 2002
Information provided by the City of Alpena
LAKE HURON
WESSEL RD
LONG LAKE RD
HAMILTON RD
WOODWARD AVE
US-23
WILSON ST
FRENCH RD
LONG RAPIDS RD
GENSCHAW RD
BAGLEY ST
HOBBS DR
M-32
THIRD AVE
SUNSET LAKE
TAMARACK RD
LAKE WINYAH RD
STUDY AREA
ALPENA COUNTY REGIONAL AIRPORT
LAKE WINYAH
SPORTSMEN DR
NORWAY RIDGE TRAIL
INDIAN RESERVE RD
0
1 Miles

Visual Resources and Community Character

The way that transportation facilities are developed and managed affects not only the efficiency of moving people and products, but it affects the way that both visitors and residents perceive their surroundings- the entire character of the community. The visual resources of Alpena are many, and the community character is varied within the study area. The following impressions are brought together 1) from trips along the main US-23 North, US-23 South, and M-32 West "gateways" into the community of Alpena; 2) from driving County roads and City streets; and 3) from bicycling on the Alpena Bi-Path.

On US-23 North, heading south, the Alpena Township building is seen on the east side of the road. Occasional small businesses and homes line the east and west sides of the road farther south, among patches of lowland forest and small open areas. Hamilton Road intersection marks the entryway to a well-maintained area of industrial sites to the west. Small businesses become more numerous just south of the French Road intersection, and are interspersed with motel facilities on either side of the road, and a large golf course to the west. The Alpena Civic Center on the northeast corner of US-23 and Johnson Street marks the beginning of a significant cultural hub that also includes the Alpena Community College, the Besser Museum and Planetarium, and the new Thunder Bay Recreation Center to the east. Continuing south, through the City of Alpena, travelers are able to enjoy the remarkable architecture of some of the public buildings, churches, and homes found there. There are also many well-managed small parks, connected by a pedestrian/bicycle pathway, at which a traveler may enjoy a bagged lunch or just sit and take in the view.

On US-23 South, heading north past Bare Point Road, small businesses, homes, and automobile dealerships are to the east and west sides of the road. Past the intersection of Werth Road and US-23, the business areas expand briefly into bustling retail shopping centers, then recede into small business areas again, past Ripley Boulevard. Occasional City parks begin to appear on the east side of the road as the small businesses give way to architecturally exceptional homes looking east toward the shore of Lake Huron. The beautiful Bay View Park and Alpena Boat Harbor are last seen to the east before turning northwest to intercept the M-32 intersection.

From the Airport, along M-32, there is very low density residential development, and an occasional small business, interspersed among open field and forested areas. The M-32 West entryway to the Community of Alpena (from approximately 1 mile west of Bagley Street to the intersection) is less inviting and is typical of strip commercial highway developments, designed to serve only automobiles and not pedestrians or bicyclists. With the exception of a shared restaurant driveway with landscaping on the north side of M-32, there are large unconnected parking lots in front of buildings, numerous access points, minimal landscaping amenities, an absence of street trees, and an excess of tall business signs, which add to a visual clutter. The considerable width of the roadway makes a safe crossing by pedestrians or bicyclists virtually impossible, thus encouraging more people to use vehicles to go even short distances in this area. Ironically, the use of a vehicle does not guarantee safety on this segment of roadway, for there are few physical barriers to control and channel traffic, contributing to a vehicular "free-for-all" of conflict points. The center lane is used as both an acceleration or 'merging' lane, and as a left turn lane- two diametrically opposed uses. Access management techniques, traffic calming methods, and aesthetics improvements are needed on this segment.

East of the Bagley intersection, on M-32/Washington Avenue are well-groomed cemeteries on either side of the roadway which then yield to a pleasing view of the wildfowl sanctuary and a

roadside park to the north. Small businesses and well-maintained homes begin to line both sides of the road, and these continue until M-32 intersects US-23. Continuing to the east, across the river, there is a quaint “Old Town” district consisting of stores, restaurants, and a park. Just farther to the east are the scenic open water vistas of Misery Bay and Lake Huron.

Visual Assets

Visual Detractions

Visual detractions, or “visual clutter”, may include such things as overhead utility lines and poles, excessive signage, dilapidated buildings, and typical strip development that lacks landscaping or other visual enhancements.

These areas could benefit from buried utility lines, streetscaping, a green median in the center lane, and the installation of bicycle and pedestrian facilities.