

Community Description

The City of Fremont, Sheridan Charter Township, Dayton Township and Sherman Township (herein referred to as the Fremont Area) are located in southwest and central Newaygo County (see map below). The Fremont Area is approximately 30 miles northeast of the City of Muskegon and 45 miles north of the Grand Rapids metropolitan area. The northeast portion of the Fremont Area borders the City of White Cloud, the geographical center of Newaygo County. The Fremont Area is served by M-82 and west 48th Street, which traverses all four jurisdictions and ties into M-120 and M-37.

Social Characteristics



The examination of socioeconomic data is an essential element in the process of preparing a comprehensive recreation plan. Researching and dissecting existing data reveal a picture of the study area including what type of people live in the community, how old or young the population is, income levels, what industries people are employed in, the level of education of those people living in the area as well as many other characteristics. Understanding the make up of the population assists in determining future needs for the community. For example, the age of the population can reveal needs for public services such as parks and recreation, education and senior activities and programming. This baseline data can also be compared to the same information for the county as a whole, providing a frame of reference for the results of the study area. Collecting and analyzing information for the community also establishes trends occurring in the area, which can assist in estimating

changes in the future as well as identifying opportunities or constraints that might exist for future recreation development activities.

The social characteristics portion of the plan examines socioeconomic data for the Fremont Area. To provide a frame of reference, data is benchmarked against the county as well as surrounding communities where applicable. The following section evaluates the historical population growth in the area, the age, sex and race of the population, educational attainment and persons per household as well as projections of future population growth.

Population Trends

Population data from 1960 through 2005 were gathered to establish the trends in population growth and decline within the Fremont Area as well as surrounding communities in the county.

As data below indicate, from 1960 to 2005, the Fremont Area (including the City of Fremont, Sheridan Charter Township, Dayton Township and Sherman Township) has seen a population increase of approximately 32% with a majority of growth occurring in the 1990's. Dayton Township grew by approximately 21% and the City of Fremont grew by approximately 26% between 1960 and 2005. Sheridan Charter Township experienced a more moderate 9.6% overall population increase from 1969 to 2005. However, due to several decades of population fluctuation, the 2005 estimated population is approximately the same as 1970. Sherman Township experienced a considerable 108% overall population increase from 1960 to 2005, with a majority of growth occurring from 1960 to 1980. Overall, population growth for the Fremont Area occurred at a significantly slower pace than the county as a whole, but between 2000 and 2005 growth in Dayton and Sheridan Charter Townships was closely correlated to the growth rate of the county. During the same span, the City of Fremont experienced a significantly slower pace of growth and Sherman Township exceeded the growth rate of the county.

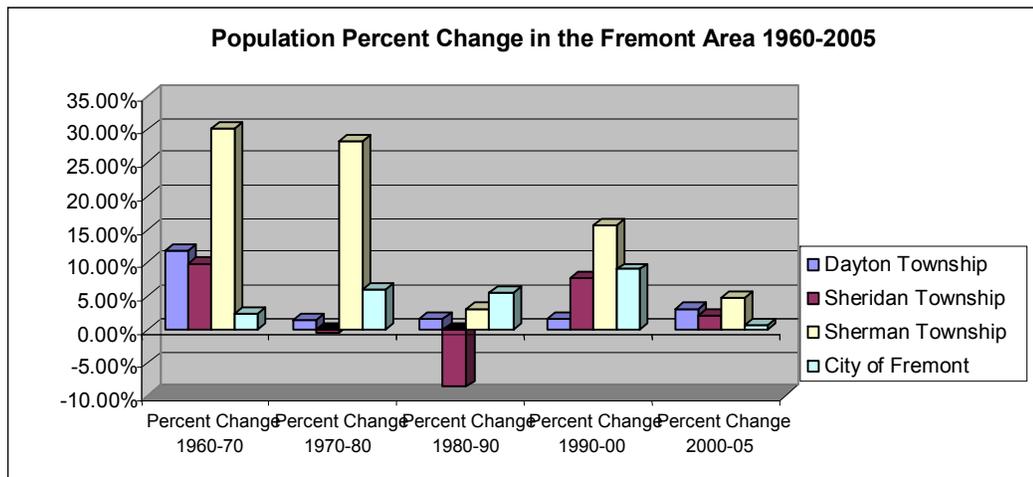
Population Trends of the Fremont Area and Surrounding Communities: 1960 - 2005

	1960	1970	Percent Change 1960-70	1980	Percent Change 1970-80	1990	Percent Change 1980-90	2000	Percent Change 1990-00	Estimate 2005	Percent Change 2000-05	Total Percent Change 1960-2005
Dayton Township	1,709	1,910	11.76%	1,938	1.47%	1,971	1.70%	2,002	1.57%	2,065	3.15%	20.8%
Sheridan Township	2,256	2,477	9.80%	2,465	-0.48%	2,252	-8.64%	2,423	7.59%	2,473	2.06%	9.6%
Sherman Township	1,085	1,411	30.05%	1,810	28.28%	1,866	3.09%	2,159	15.70%	2,267	5.00%	108.9%
City of Fremont	3,384	3,465	2.39%	3,672	5.97%	3,875	5.53%	4,224	9.01%	4,256	0.76%	25.8%
Bridgeton Township	738	870	17.89%	1,562	79.54%	1,574	0.77%	2,098	33.29%	2,391	13.97%	224.0%
Ashland Township	1,231	1,463	18.85%	1,751	19.69%	1,997	14.05%	2,570	28.69%	2,659	3.46%	116.0%
Garfield Township	1,189	1,448	21.78%	1,822	25.83%	2,067	13.45%	2,464	19.21%	2,524	2.44%	112.3%
Lincoln Township	444	490	10.36%	885	80.61%	969	9.49%	1,338	38.08%	1,388	3.74%	212.6%
Denver Township	1,237	1,362	10.11%	1,422	4.41%	1,532	7.74%	1,971	28.66%	2,052	4.11%	65.9%
Wilcox Township	500	519	3.80%	722	39.11%	831	15.10%	1,145	37.79%	1,212	5.85%	142.4%
Brooks Township	1,772	1,330	-24.90%	2,349	76.66%	2,728	16.13%	3,671	34.56%	3,744	1.99%	111.0%
Everett Township	704	844	19.88%	1,360	61.13%	1,519	11.69%	1,985	30.67%	2,071	4.33%	194.2%
City of Newaygo	1,447	1,381	-4.56%	1,271	-7.97%	1,336	5.11%	1,670	25.00%	1,685	0.90%	16.4%
City of Grant	732	772	5.46%	683	-11.53%	764	11.86%	881	15.31%	885	0.45%	20.9%
City of White Cloud	1,001	1,044	4.30%	1,101	5.46%	1,147	4.18%	1,420	23.80%	1,432	0.85%	43.1%
Newaygo County	24,160	27,992	15.86%	34,917	24.74%	38,202	9.41%	47,874	25.32%	50,019	4.48%	107.0%

Source: U.S. Census Bureau, Fremont Area Recreation Master Plan 2000 - 2005

Within Newaygo County, the Townships surrounding the Fremont Area experienced their most significant growth between 1970 and 1980, with Lincoln and Bridgeton Townships experiencing nearly 80% growth rates. Between 1960 and 2005, the townships surrounding the Fremont Area experienced growth rates exceeding 100%, with Bridgeton and Lincoln Township experiencing growth rates over 200%.

With the exception of growth in the 1990's, the smaller cities in Newaygo County, including the City of Newaygo, Grant and White Cloud experienced a relatively slower growth rate or even a decline in population when compared to many of the townships in the area. This can most likely be attributed to several factors including the lack of available vacant land within the cities, the desire of many people to live on large lots in a rural atmosphere and the possible lack of appeal of the older housing stock within the cities. The City of Fremont has not experienced a decline in population since the 1930's and remains the most populous city in Newaygo County with a growth rate of 9.8% between 1990 and 2005. However, when compared to the surrounding cities during that same period, the City of Fremont was outpaced by the City of Newaygo (26%), Grant (15.8%) and White Cloud (24%).



Between 1970 and 1990, Sheridan Charter Township experienced a decline in population and was the only community in the immediate area to experience a decrease between 1980 and 1990. While 2000 census figures and 2005 population estimates reveal an end to this trend with the Township gaining approximately 221 persons between 1990 and 2005, the Township continues to grow at a slower pace than the majority of the surrounding communities and the estimated population is the same as it was in 1970.

Population Projections

County-wide population projections from 2000 through 2020 in five year increments were collected from the West Michigan Shoreline Regional Development Commission (WMSRDC) and the U.S. Census Bureau. The WMSRDC projections were based on county level population trends from 1994 to 2004.

Three sets of projections are generated; Arithmetic, Proportional and Constant County Share. The Arithmetic method adds a calculated number of persons to each five year period and is based upon the absolute change in population between 1970 and 2000. The Proportional method adds a percentage to each period which is based upon the 1970 through 2000 relative change in population. The Constant County Share method applies each community's average share of county population from 1970 to 2000 to the average county estimates for each five-year period. In all three instances, population projections were generated from U.S. Census Bureau 2005 population estimates.

Population Projections: 2000 - 2020

	1990	2000	Estimate 2005	2010	2015	2020
Fremont Area	7,993	10,808	11,061			
Arithmetic				11,141	11,281	11,421
Proportional				11,156	11,313	11,472
Constant County Share				11,027	11,053	11,079
Dayton Township	1,971	2,002	2,065			
Arithmetic				2,080	2,096	2,111
Proportional				2,082	2,098	2,115
Constant County Share				2,079	2,093	2,108
WMRSDC				2,263	2,445	2,641
Sheridan Township	2,252	2,423	2,473			
Arithmetic				2,462	2,455	2,446
Proportional				2,462	2,455	2,446
Constant County Share				2,494	2,514	2,535
WMRSDC				2,711	2,930	3,165
Sherman Township	1,866	2,159	2,267			
Arithmetic				2,392	2,516	2,641
Proportional				2,467	2,685	2,923
Constant County Share				2,284	2,301	2,318
WMRSDC				2,486	2,687	2,903
City of Fremont	3,875	4,224	4,256			
Arithmetic				4,383	4,509	4,636
Proportional				4,411	4,572	4,739
Constant County Share				4,318	4,380	4,444
WMRSDC				4,687	5,064	5,471
Newaygo County	38,202	47,847	50,019			
WMRSDC				54,746	59,150	63,909
Source: US Census Bureau, WMRSDC						

Population projections estimates for the three communities vary depending on the method utilized due to the assumptions inherent in each method. While the arithmetic and proportional methods project relatively similar numbers, the constant county share projections vary by a significant number. This is due to the fact that this method is tied to the projections for the county as a whole while the arithmetic and proportional methods are community specific and calculated independently from the county. The most significant variance is in the projections for Sheridan Charter Township. The population in Sheridan Charter Township decreased from 1970 to 1990. The arithmetic and proportional methods make projections using this trend and estimate the population to continue to decrease. However, these projections can most likely be discounted due to a 7.59% increase in population between 1990 and 2000 and an estimated 2% increase in population between 2000 and 2005.

Age Distribution

As was previously stated, analyzing the breakdown of the population in a community in terms of age can assist in determining current and future needs for recreation. In this analysis, six life-cycles are defined:

1. Preschool (Less than five years of age)
2. School (5 to 20 years)
3. Family Formation (21 to 44 years)
4. Empty Nest (45 to 64 years)
5. Senior (65 to 74 years)
6. Elderly (75 years or more)

As detailed on the chart and tables, Fremont’s largest population group falls within the family formation ages of 21 to 44 years old (3,302 persons or 30.5 percent of the population). In 2000, this was also the largest age group within each individual community. The smallest age group within Dayton Township and Sheridan Charter Township are those people 75 years and older, while those people under 5 years old represent the smallest population group within the City of Fremont and Sherman Township.

Nearly 20% of the population within the City and 17% of the population within Sherman Township is over 65 years old. While the number of people over 65 has decreased within these two jurisdictions since 1990, the number of people over 65 is relatively high when compared to Sheridan Charter Township (11%) and Dayton Township (10%). This may prove to be an important factor for future decision making within the City and Sherman Township in terms of affordable housing for seniors which offers living for diverse needs and abilities, in-home health services and community support services for the elderly. While the number of elderly people living in the City is greater than the Townships, since 1990, the number of elderly (75 years and older) living in the entire study area has increased significantly. At the same time, the number of people under 5 has decreased in the three Townships, particularly within Dayton Township (-42.9%) and Sheridan Charter Township (-30.6%) While the number of people under 5 has decreased in the Townships, the City has experienced growth of nearly 25%. In addition, with the exception of Dayton Township, each jurisdiction has experienced an increase in people between the ages of 5 and 20 (school age), an increase from the declining figures of the 1980’s. This may prove to be another important factor for future decision-making within each jurisdiction in terms of facilities and programming for school age children. While the male to female ratio within Dayton and Sheridan Charter Townships is nearly 50/50, there are (3%) more females residing within Sherman Township and (5%) more females residing within the City of Fremont.

Percent Change in Age Distribution: 1990 to 2000

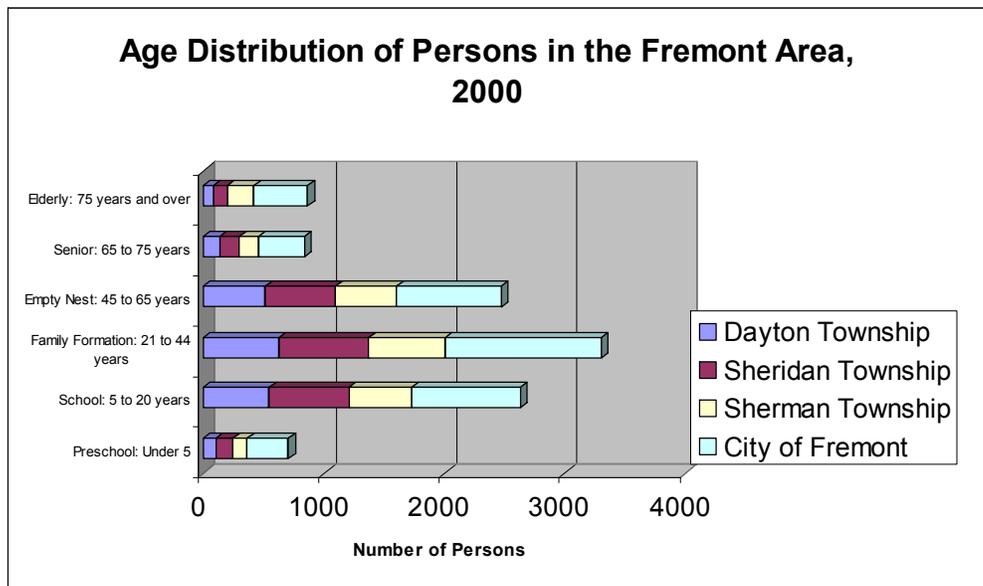
	Dayton Township	Sheridan Township	Sherman Township	City of Fremont
Preschool: Under 5	-42.9%	-30.6%	-8.1%	24.5%
School: 5 to 20 years	-3.0%	19.0%	14.9%	5.9%
Family Formation: 21 to 44 years	-6.3%	3.6%	11.3%	3.8%
Empty Nest: 45 to 65 years	26.9%	13.4%	43.8%	16.2%
Senior: 65 to 75 years	35.6%	3.8%	-9.3%	-9.2%
Elderly: 75 years and over	39.7%	31.5%	16.3%	30.6%

Source: US Census Bureau, Fremont Area Recreation Plan

Fremont Area Age Distribution: 2000

	Dayton Township	Sheridan Township	Sherman Township	City of Fremont
Preschool: Under 5	104	145	114	341
School: 5 to 20 years	544	663	525	898
Family Formation: 21 to 44 years	622	753	631	1296
Empty Nest: 45 to 65 years	514	583	512	862
Senior: 65 to 75 years	137	162	156	383
Elderly: 75 years and over	81	117	221	444
Median Age	37.6	36.4	39.4	37.4

Source: US Census Bureau, Fremont Area Recreation Plan



Disability Status

Analyzing the disability status of a community can assist decision makers with facility development and programming issues such as handicap accessibility as well as the type and location of recreation facilities. The following table illustrates the disability status of the population of the entire Fremont Area. In 2000, there were 7,000 people in the area who were 16 years or older, 15% (1,119) of which reported a disability that limited their mobility, self-care or both. This analysis should be referenced when making decisions regarding the type and locations of recreational facilities and programs.

Disability Status in the Fremont Area 2000

	Number	% of Age Group Sub-total	% of Disabled population
Population Aged 16 to 64 years	5,889		
Physical limitation only	457	7.8%	28%
Self care limitation only	159	2.7%	10%
Go-outside-the-home only	296	5.0%	18%
Sub-total	912	15.5%	
Population over 65 years	1,528		
Physical limitation only	441	28.9%	27%
Self care limitation only	62	4.1%	4%
Go-outside-the-home only	218	14.3%	13%
Sub-total	721	47.2%	
Total Disabled Population	1,633		

Source: US Census Bureau (SF-3)

Race and Hispanic Origin: 2000

Race and Hispanic Origin: 2000	Percent of Total Population				
	Dayton Township	Sheridan Township	Sherman Township	City of Fremont	Newaygo County
White	95.47%	94.88%	95.00%	95.60%	92.72%
Black	0.00%	0.08%	0.23%	0.25%	0.95%
American Indian	0.19%	0.08%	0.18%	0.53%	0.56%
Asian or Pacific Islander	0.92%	0.55%	0.09%	1.43%	0.35%
Other Race	0.48%	1.31%	1.59%	0.51%	1.56%
Hispanic Origin (of any race)	2.94%	3.09%	2.91%	1.67%	3.86%

Source: US Census Bureau 2000, SF-3

Racial Composition

The majority of people residing within the Fremont Area are Caucasian. Since 1990, the racial makeup of each jurisdiction has experienced an increase in people of Hispanic Origin. The City of Fremont's population differs slightly from the racial makeup of each Township in that 1.43% of the population are people of Asian or Pacific Islander race. Overall, the racial composition of the communities closely resembles the racial makeup of Newaygo County.

Persons Per Household

A trend occurring nation-wide and characteristic of today’s population is the declining size of households. A household includes all the persons who occupy a housing unit. A housing unit is defined as a house, apartment, a mobile home, a group home, or a single room that is occupied as a separate living quarter. As a result of smaller households, it has been common for communities to register a net increase in the housing supply while not experiencing a proportional population growth or, in some cases, even a recorded population loss.

There are several factors that demographers have linked to the declining size of households including the fact that people are marrying at a later age than a generation ago, postponing having children and having fewer children when they do start a family. Nation-wide, married couple families still comprise the largest group of households, but the number of single parent (male or female) headed households is increasing and expected to grow, contributing to the decline in average household size. This nation-wide trend can be seen on a micro scale in the Fremont Area. In 1990, the average household sizes of Dayton, Sheridan Charter and Sherman Townships were 3.12 persons per household, 2.90 persons per household and 2.94 persons per household, respectively, while the City of Fremont had a relatively smaller persons per household at 2.34. Between 1990 and 2000, each Township, as well as the county and state, experienced a decline in household size, while the City remained even. The relationship trends among communities, county and state have remained relatively proportional over the last 30 years. The City of Fremont continues to have the fewest persons per household, even in relation to the county and state, while Dayton Township continues to have the highest persons per household, (2.89 in 2000).

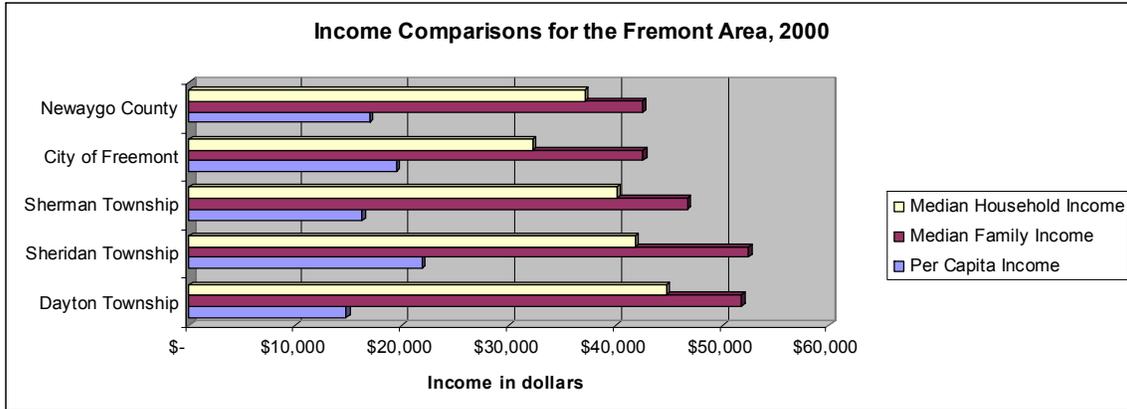
Persons Per Household

	1970	1980	1990	2000
Dayton Township	3.62	3.24	3.12	2.89
Sheridan Township	3.44	3.12	2.90	2.84
Sherman Township	n/a	n/a	2.94	2.71
City of Fremont	2.89	2.48	2.34	2.34
Newaygo County	3.28	2.91	2.74	2.68
State of Michigan	3.27	2.84	2.66	2.56

Source: US Census Bureau, Fremont Area Recreation Master Plan

Income

An important determinant of a community’s viability and ability to support future recreation facilities and programs is the income of its residents. Three measures of income (median household, median family and per capita) are analyzed on the following pages. It should be noted that income statistics for the 2000 Census reflect information from the 1999 calendar year and are in 1999 dollars.



Households are the basic consumer unit and supplier of labor to potential businesses. A household represents all the persons (not necessarily related) who occupy a housing unit and includes even those with one person living alone. Median household income (that level of income at which half of all households earn more and half of all households earn less) is a broad measure of relative economic health of a community’s populace. Within the Fremont Area, Dayton, Sheridan Charter and Sherman Townships have a significantly higher median household income (\$44,770, \$41,875 and \$40,163 respectively) in comparison to the City of Fremont (\$32,246).

Because many households consist of only one person, the household income figures are in most instances less than family income figures, as is the case in the Fremont Area. In compiling family income data, the US Census included the incomes of all members 15 years old and over in each family. Within the Fremont Area, Dayton and Sheridan Charter Townships have a significantly higher median family income than Sherman Township and the City of Fremont.

Per capita income figures represent income per person. The per capita income for residents of Sheridan Charter Township was \$21,834 while the per capita income for persons residing in Dayton Township, Sherman Township and the City of Fremont were (\$14,746, \$16,195 and \$19,475), respectively. Since 1990, Sheridan Charter Township experienced the largest per capita increase (\$10,030).

Employment Trends

This section analyzes the employment trends within the Fremont Area in terms of occupation and industry as well as the occupational trends from 1990 to 2000 within each individual community. Information on occupation describes the kind of work the person does on the job while information on industry relates to the kind of business conducted by a person’s employing organization. Some occupation groups are related closely to certain industries. Operators

- According to the Michigan Department of Labor and Economic Growth, “Hot 50 List”, the ten best long-term growth occupations in Michigan include:
1. Personal Financial Advisor
 2. Sales Manager
 3. Marketing Managers
 4. General and Operations Managers
 5. Financial Managers
 6. Computer and Information Systems Managers
 7. Construction Managers
 8. Medical and Health Service Managers
 9. Physician Assistants
 10. Computer Software Engineers, Systems

of transportation equipment and farm operators and workers account for major portions of their respective industries of transportation and agriculture. However, the industry categories include persons in other occupations. For example, persons employed in agriculture include truck drivers and bookkeepers, while persons in the transportation industry include mechanics, freight handlers and payroll clerks. Understanding the composition of the workforce in a community can assist in assessing how a community might be affected by changes in the economy and employment trends. Data may reveal a need to diversify the employment base to protect the community from over reliance on one employment sector. The occupational trends within each community are crucial in establishing those employment sectors which are increasing at a high rate, stable or faltering. Due to changes in the industry classification system since 1990, the following charts attempt to *best match* 1990 occupation and industry classifications with 2000. In 2000, the Fremont Area had 4,770 people over the age of 16 who were employed. Nearly 20% (or 952) of those people were employed within the “professional and related” occupational category. The occupations that employed the second and third highest number of people were “office and administrative support” “service, other than productive”, with 718 and 626 people respectively.

The occupations that employ the greatest amount of people within Sheridan Charter Township are “Professional and Related” (215 people, or nearly 20% of those people living within Sheridan Charter Township), and “Office and Administrative Support” (167 people). The greatest amount of employed persons living in Dayton Township fall into the “Office and Administrative Support” category (170 people, or nearly 17%). The occupations that employ the greatest amount of people within Sherman Township are “Professional and Related” (143 people, or approximately 16% of those people living within Sheridan), “Service, other than Productive” (142 people), and “Office and Administrative Support” (140 people). A significant portion, 447 people or (24%), of employed people who reside within the City limits are employed in the “Professional and Related” occupation, with the second highest percentage of people (15%) being employed in the “Management, Professional and Related” occupation. Within the Fremont Area, “Professional and Related” experienced the greatest increase in terms of percentage of persons employed. In 1990, 621 people stated they were in the “Professional and Related” occupation, while in 2000 that number increased to 952 people, a 53% increase. Significant increases were also experienced within the “Transportation and Material Moving” occupation (47%), “Management, Professional and Related” occupation (31%) and “Office and Administrative Support” occupation (29%). The “Private Household” occupation category decreased by the most significant percentage (-100%), but it should be noted that the actual number of persons employed in this occupation was small to begin with 16 people in 1980, 11 people in 1990 and zero people in 2000. Significant decreases also occurred in the “Farming/Forestry/Fishing” (-77%) and “Installation, Maintenance, and Repair” (-33%) occupations.

Occupational Trends in the Fremont Area: 1990 to 2000

	1990	2000	% Change
Management, professional and related	455	594	31%
Professional and related	621	952	53%
Sales and related	391	447	14%
Office and administrative support	558	718	29%
Private household	11	0	-100%
Productive services	51	57	12%
Service, other than productive	568	626	10%

Farming/Forestry/Fishing	282	66	-77%
Production	478	546	14%
Installation, maintenance and repair	295	197	-33%
Transportation and Material Moving	233	343	47%
Construction and extraction	211	224	6%
Total	3665	4770	30%

Source: US Census Bureau, 2000 and Fremont Area Recreation Plan

In analyzing the industries in which people of Newaygo County are employed, 7 of the top 15 major employers in Newaygo County are located within the City of Fremont, employing 3,125 people. The Gerber Products Company, manufacturer of a number of non-durable goods, employs 1,300 people. The City of Fremont is also home to large employers in the metal stamping, lubricant, health care, education, life insurance and retail trade industry. In analyzing the industries in which people worked in the Fremont Area, over 60% work in either the manufacturing (24%), retail trade (12.7%), health services (12.5%) or education services industry (10.7%).

Newaygo County Employers: 2004

Major Employers	Location	Number of Employees	Product
<i>Gerber Products Company</i>	<i>Fremont</i>	<i>1300</i>	<i>Baby Food</i>
<i>DURA Automotive Systems, Inc.</i>	<i>Fremont</i>	<i>535</i>	<i>Metal stampings & assemblies</i>
<i>Magna Donnelly Corporation</i>	<i>Newaygo</i>	<i>505</i>	<i>Automotive doors and mirrors</i>
<i>Gerber Memorial Health Services</i>	<i>Fremont</i>	<i>470</i>	<i>Health care services</i>
<i>Fremont Public Schools</i>	<i>Fremont</i>	<i>335</i>	<i>School/education</i>
<i>Grant Public Schools</i>	<i>Grant</i>	<i>300</i>	<i>School/education</i>
<i>Wm Bolthouse Farms</i>	<i>Grant</i>	<i>250</i>	<i>Vegetables (seasonal emp.)</i>
<i>White Cloud Public Schools</i>	<i>White Cloud</i>	<i>205</i>	<i>School/education</i>
<i>Newaygo Public Schools</i>	<i>Newaygo</i>	<i>200</i>	<i>School/education</i>
<i>County of Newaygo</i>	<i>White Cloud</i>	<i>200</i>	<i>County Government</i>
<i>Wal-mart</i>	<i>Fremont</i>	<i>195</i>	<i>Retail Department Store</i>
<i>Hesperia Public Schools</i>	<i>Hesperia</i>	<i>170</i>	<i>School/education</i>
<i>Gerber Life Insurance Company</i>	<i>Fremont</i>	<i>165</i>	<i>Life Insurance</i>
<i>North American Refractories</i>	<i>White Cloud</i>	<i>125</i>	<i>Refractory Products/Furnace Linings</i>
<i>Valspar (Lilly) Industries, Inc.</i>	<i>Fremont</i>	<i>125</i>	<i>Lubricants & oil additives</i>

Source: Newaygo County Economic Development Office, 2004

Industry Trends in the Fremont Area: 1990 to 2000

	1990	2000	% Change
Agriculture, Forestry, Fisheries	340	179	-47%
Mining	0	5	
Construction	231	272	18%
Manufacturing	1204	1151	-4%
Wholesale Trade	95	103	8%
Retail Trade	740	609	-18%

Transportation and Warehousing	109	148	36%
Utilities	43	29	-33%
Information	0	76	
Finances/Insurance/Real Estate	159	213	34%
Professional Services	141	293	108%
Entertainment/Recreation Services	35	240	586%
Health Services	470	597	27%
Educational Services	399	512	28%
Other Professional and Related Services	213	209	-2%
Public Administration	109	134	23%
Total	4288	4770	11%

Source: US Census Bureau, 1990 & 2000 SF-3

Physical Characteristics

This portion of the Community Description chapter examines existing land use patterns for their distinguishing characteristics and impact on future land development, zoning in regard to recreation lands, the natural features of the community and finally the transportation systems within the Fremont Area.

Physical Setting

The Fremont Area, located in southwest Newaygo County, encompasses four political jurisdictions; the City of Fremont, Dayton Township, Sherman Township and Sheridan Charter Township. The City of Fremont (including Fremont Lake), measures 5.06 square miles or 3.83 square miles without Fremont Lake, and has been incorporated from parts of Dayton and Sheridan Townships, which lie north and south of Main Street respectively. Sherman Township lies to the northeast. The Fremont Area is located approximately 45 miles northwest of the Grand Rapids metropolitan area and 30 miles northeast of the City of Muskegon.

The Fremont Area may be generally described as an urban center engulfed by inland lakes, rural farmland, forest lands and open space. Fremont Lake, the planning area's most prominent natural feature, is found in the northeast quadrant of Sheridan Charter Township. The Lake has an area of 1.23 square miles and a shoreline of nearly six miles. A string of four lakes found in the northeast portion of the City and the southeast portion of Dayton Township are connected to Fremont Lake by Darling Creek. Sherman Township is home to several prominent lakes including Robinson Lake, Crystal Lake and Ryerson Lake. In addition, large portions of the Manistee National Forest are located in the eastern third of Sherman Township.

Community Character Analysis

Community character may be defined as the image one receives from viewing a landscape. There are many aspects to every image that combine to form an overall impression. The Small Town Planning

Handbook summarizes positive aspects associated with rural character. These aspects should be retained to the greatest extent possible to preserve the pastoral image associated with the rural areas. The positive aspects listed below are abundantly found in the rural landscape of Dayton, Sherman and Sheridan Charter Townships. The gently rolling pastures and agricultural fields are colored by farmsteads and separated by treed fence lines. The serene nature of the Township area provides residents with a sense of solitude. Wetlands surrounding lakes and creeks serve as a natural habitat for waterfowl. Scenic overlooks provide views of orchard rows and gravel country roads heading for the horizon.

Positive Aspects of Rural Character

Wooded areas	Fence lines
Low activity	Shorelines
Open range	Quiet
Open fields	Water
Creeks	Trees along roads
Farm residences	Simplicity
Vistas	Architecture
Imagery	Historic Sites
Storage Elevators	Wetlands

Source: Daniels, Thomas L. Keller and Lapping, The Small Town Planning Handbook, Planners Press, American Planning Association, 1995

The City of Fremont, on the other hand, contains a compact development pattern within a more intimate, small mid-western town setting. The Small Town Planning Handbook provides insight into people’s perceptions of small towns. “Small towns conjure up images of tree-lined streets with sidewalks, slow, easy-moving traffic, and a town square where people shop and socialize. The houses are well kept among all income groups. Industries are on the edge of town, often on the other side of the railroad tracks. And from almost anywhere in the town, you can see out to the surrounding countryside. There is order, neatness, and safety. The town works as a place to live and to make a living. It works as a community. It has a sense of identity and of its place in the world.”¹

Community Sub-areas

¹ Daniels, Thomas L., Keller and Lapping, The Small Town Planning Handbook, Planners Press, American Planning Association, 1995.

The landscape found in the Fremont Area can be generally subdivided into eight areas of distinction. The following describes the location and distinguishing characteristics of each subarea. The subareas are depicted on Map 1, Community Character Subareas. They are intended to conceptually capture the predominant land use theme within the larger area. Areas between community sub-area types are intentionally left blank to depict areas of transition and to emphasize boundary lines as being conceptual in nature.

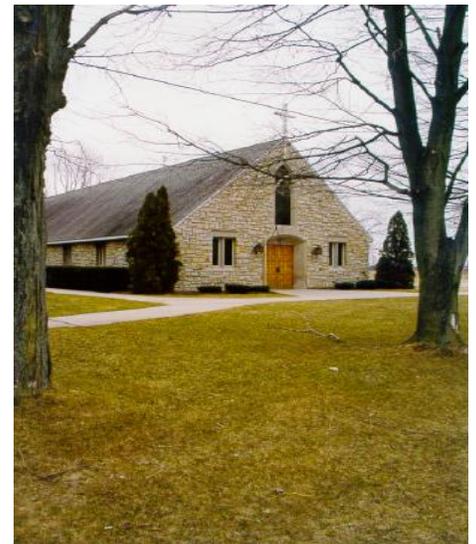
Residential Neighborhood Areas
 Residential neighborhoods have developed within a rectangular grid street pattern throughout the City. The housing stock generally increases in age according to proximity to the city center, with some homes of historical significance being renovated to preserve the traditional character of the community. Modern housing developments are generally found in subdivisions in the northeast and southeast parts of the City. Moreover, new housing units are under construction along Valley Avenue, north of 44th Street. Two mobile home parks are situated adjacent to the industrial park in the southwest portion of the City. A manufactured housing park has developed in the northwest corner of the City.

Public/Semi Public Areas

Large tracts of land devoted for public and semi-public purposes embrace the City’s neighborhood areas. The southern perimeter of the City contains two public schools, four recreation areas and a cemetery. Ramshorn on the Lakes and Arboretum Park border neighborhoods to the east. Branstrom Park consumes over 100 acres of land in the north with Daisy Brook and Pathfinder elementary schools binding neighborhood areas to the northwest.

Churches with large acreage, such as All Saints and Second Christian Reformed, are also found along the City’s perimeter. These uses generally combine to form transition areas that separate more intense residential areas from the rural countryside. In general, large portions of the National Forest lie within Sherman Township from Baseline

Road in the north to 40th Street in the south and almost the entire eastern third of Sherman Township.



Central Business District (CBD)

The focal point of the City is centered on its historic CBD situated along Main Street, between Weaver Avenue and Darling Avenue. The downtown is filled with specialty stores, banks, offices, restaurants and public buildings. Main Street is lined with trees, decorative street lamps and brick pavers that promote a pedestrian friendly and attractive atmosphere. Off-street public parking areas are located to the rear of buildings and parallel to the road.

Veterans Memorial Park anchors the west-end of the downtown pulling pedestrian shoppers through the CBD. The park features an open-air amphitheater, picnic and resting area as well as a play area for children.



The newly constructed City Hall and Fremont Area District Library anchor the east-end of the CBD. The Fremont High School is sited adjacent to the east, adding to the cluster of public uses.

There are many prominent buildings within the downtown that give definition to the identity to the CBD. These structures include the Gerber Life Insurance Company, the United States Post Office, White Agency, Inc. and Huntington Bank.

West Main Street (M-82) Corridor Area

The West Main Street Corridor Area covers properties fronting M-82, west of Gibson Avenue to Green Avenue. This area carries distinction for its franchise commercial/suburban type business developments that rely on automobile use and high visibility. The north side of the corridor contains large and small shopping plazas, freestanding businesses and a few single-family residences. The south-side of M-82 supports primarily strip commercial development on individual parcels.

East Main Street (Old M-20) and Stewart Avenue (M-82) Corridor Area

The East Main Street and Stewart Avenue Corridor Area can be characterized as supporting segments of neighborhood commercial and office establishments that do not rely on passerby traffic. Included in this area are blocks of single-family residential units typically connected to neighborhood areas. This community subarea extends south into Sheridan Charter Township along M-82 to capture a node of general commercial development.

Industrial Areas

The heart of the City's economy is largely pumped by its industry. The Gerber Products Company, Fremont's largest employer, occupies a substantial landmass north of the convergence of State Street and the CSX railroad. The complex contains manufacturing plants, corporate offices and a research facility within a campus like setting and employs 1,254 persons². Valspar Inc, a contract packaging company, lies to the east of the Gerber complex, within an undefined industrial node of small shops surrounded by residential uses.

² City of Fremont Community Profile and Business Directory, Fremont Chamber of Commerce, 1998.
Fremont Area Recreation Master Plan

The City's southwest side supports a 149-acre, state certified industrial park. It was developed with a campus-like setting, taking advantage of the land's natural wooded surroundings, and providing all the amenities, including municipal water and sanitary sewer, storm sewer facilities, curb/gutter asphalt streets and other private utilities such as electric, gas, telephone and cable television³. The industrial park was expanded in 1996 to include 118 acres of platted, fully improved land. The expansion area is beginning to develop, with one industry operational and two others under construction.



Lakeside Resort Area

The Lakeside Resort Area includes land surrounding the chain of lakes found just outside the City limits in Dayton and Sheridan Townships and land surrounding Peterson, Robinson, Crystal and Long Lakes in Sherman Township. This area can be characterized as supporting shoreline cottages and year-round dwellings on relatively

small lots. The string of four lakes in Dayton Township is surrounded by platted subdivisions that take advantage of buildable soils. Residential development has occurred on long and narrow lots along the west and south shoreline of Fremont Lake. The north side contains more concentrated residential developments with sewers and shared access drives. The east side of Fremont Lake has not developed largely due to hydric soils and wetlands. In Sherman Township, residential development has occurred on long and narrow lots along the south shoreline of Peterson Lake, all but the southeast shoreline on Robinson Lake, the northwest and southeast shoreline of Crystal lake and west and south shorelines of Long Lake.

Rural Township Area

The Rural Township Area can be generally described as a patchwork of agricultural fields, pastures, forested areas and dispersed residential development along section line roads. The Rural Township Area is filled with rich soils for agricultural production that feed the Gerber Products Company and other food processing industries. Apple orchards and dairy farms are tucked into the rolling hills while flatlands are used for the production of clean tillage crops such as corn, soybeans and vegetables. Horse breeding operations are becoming increasingly prevalent in the area. Home-based vegetable and fruit stands sprout along the roadways during harvest season to add local flavor.



Upland forests found in the southern third of Sheridan Charter

³ Ibid

Township have not been cleared mainly due to non-prime agricultural soils.

Existing Land Use Inventory

An understanding of the existing land development pattern and site conditions furnishes the basic information by which future residential, commercial, industrial and public land use decisions can be made. In the course of exercising its zoning powers, the controlling municipality must give reasonable consideration to the character of each area and its suitability for particular uses. An inventory of existing land use furthers this objective. Existing land use data was provided by the Center for Remote Sensing and GIS at Michigan State University, and reflects Michigan 1998/1999 land use/land cover update figures.

Land Use Distribution

Each existing land use was placed in one of sixteen general land use categories. Map 2, Existing Land Use, depicts the geographic distribution of the land use classifications. A discussion of each land use category follows.

Agriculture Land

The agriculture category includes land under cultivation, horse farms, dairy farms, ranching operations, pastures, orchards and tree farms. These lands are generally located in areas of prime agricultural soils. Agricultural land occupies 53 percent of the Fremont Planning Area. Within Dayton Township, agricultural uses account for 15,735 acres, or 72.2 percent of the total land area. Just under two-thirds of Sheridan Charter Township is used for agricultural purposes.

Extractive

The extractive category includes wells, quarries, gravel pits, mining sites and other operations which remove minerals and other matter from the earth's subsurface. Extractive operations are found outside the City in the rural countryside. In total, this category comprises 164 acres, or less than one percent of the Fremont Planning Area.



Forest Land

The forest category includes all areas covered by broadleaf (northern hardwoods, central hardwoods, oak, aspen-birch, and lowland hardwoods), coniferous (pine, spruce-fir, lowland conifers, and managed Christmas tree plantations), and mixed conifer-broadleaf forest. Forest land occupies 29 percent of the Fremont Area. Forest Lands account for 11,998.4 acres or 52.4% of the total land in Sherman Township.

Grass and Shrub Lands

The grass and shrub land category includes land subject to continuous mowing, grazing or burning or areas dominated by native shrubs and low woody plants that if left undisturbed, will be dominated by young tree growth. In total, this category comprises 4,824 acres, or 7 percent of the total land area.

Industrial

The industrial category includes manufacturing, assembling and general fabricating facilities, warehouses, heavy auto repair facilities and non-manufacturing uses which are industrial in their character (significant outdoor storage or shipping/receiving requirements). Examples of industrial uses include DURA Automotive, Lilly Industries, Larry's Transmission Service and Gerber Products Company. Developed industrial land uses occupy approximately 124.9 acres, or 5.7 percent of the total land area in the City of Fremont.

Manufactured Home Park

The manufactured home park category includes land assembled for the purpose of locating a planned mobile home community on the site. Land so classified includes related service and recreational areas. No mobile home parks are located in Dayton or Sherman Townships. Mobile home parks occupy 50.8 acres of land within the City of Fremont. They are situated near the Fremont Industrial Park and in the northwest corner of the City.

Multi-Family Residential

This multiple-family residential category includes structures with two or more units on the same site. These may be duplexes, apartments or townhouses developed individually or in complexes. It also includes related lawn areas, parking lots and any accessory recreation facility. Examples of this type of use are Wedgewood Apartments, Oakcreek Village Apartments and Greenfield Manor. Multiple-family residential uses are primarily limited to the City of Fremont where public services are readily available. This category comprises 29.7 acres of City land.

Open Land and Other

The open land and other category includes land used for outdoor cultural, public assembly and recreational purposes such as fairgrounds, some parkland and cemeteries. Open land and other uses occupy 267.5 acres or 12.4 percent of the land with the City of Fremont.

Primary/Central Business District

The central business district contains a mix of land uses at the historic core of the City. It includes specialty stores, restaurants, banks, offices, public buildings and residential dwelling units. This

category encompasses 14 acres of land along Main Street, between Weaver Avenue and Darling Avenue.

Secondary/Neighborhood or Rural Business

The commercial category includes convenience stores, comparison shopping centers and general commercial businesses, as well as gasoline stations, restaurants, automotive sales, light auto repair/service facilities (i.e., quick oil change businesses), theaters and landscaping supplies. In total, this category encompasses 89 acres in the Fremont Area.

Single-Family Residential

The single-family residential category includes site-built single-family detached structures used as a permanent dwelling, manufactured (modular) dwelling or mobile homes located outside of designated mobile home parks and accessory buildings, such as garages, that are related to these units. It also includes small farmsteads and related agricultural buildings located near the primary dwelling.

Single-family residential uses occupy 2,234 acres, or 3.2 percent of land within the Fremont Planning Area. Within the City of Fremont, single-family residential uses account for nearly two-fifth's of the City land area, occupying approximately 838 acres. Larger lot single-family residential development is found on 331 acres in Dayton Township, 480 acres in Sherman Township and 584 acres in Sheridan Charter Township.

Transition Lands

The transitional lands category includes lands that appear to be changing in use, but have yet to be identified by a field inspection. These lands are primarily associated near the urban fringe where open and agricultural lands are likely to transition into more urban or residential uses.

Transportation, Communication, Utilities

The Transportation, Communication and Utilities category includes major highways, railways and airports, areas associated with radio, radar, television and telephone equipment and areas associated with the transport of gas, oil, water and sewage. This category occupies 465 acres in the Fremont Planning Area.

Water

The water category includes all lakes, rivers, streams, creeks, and drains. This category comprises 937.7 acres in the Fremont Community. The lakes category comprises 735.8 acres or 3.2 percent of the land in Sherman Township.

Wetlands

The wetlands category includes all areas where the water table is at, near or above the land surface for a significant part of most years. In Sherman Township, wetlands occupy 1,049 or 4.6 percent of the land.

Fremont Area Land Use Categories

Land Use Categories	City of Fremont		Dayton Twp.		Sheridan Ch. Twp.		Sherman Twp.		Fremont Area	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Agricultural Land	177.4	8.2%	15,735.5	72.0%	13,422.7	63.1%	6,976.8	30.5%	36,312.4	53.3%
Extractive	8.2	0.4%	55.2	0.3%	79.2	0.4%	21.8	0.1%	164.4	0.2%
Forest Land	199.2	9.2%	3,429.5	15.7%	4,589.0	21.6%	11,998.4	52.4%	20,216.1	29.7%
Grass and Shrub Lands	190.0	8.8%	1,326.8	6.1%	1,906.9	9.0%	1,402.3	6.1%	4,826.0	7.1%
Industrial	124.9	5.8%	24.8	0.1%	16.5	0.1%			166.2	0.2%
Institutional	133.2	6.2%	0.2	0.0%			21.1	0.1%	154.4	0.2%
Manufactured Home Park	50.8	2.4%			3.4	0.0%			54.2	0.1%
Multi-Family Residential	29.7	1.4%	0.2	0.0%					29.9	0.0%
Open Land and Other	267.5	12.4%	169.0	0.8%	14.1	0.1%	86.5	0.4%	537.2	0.8%
Primary/Central Business District	21.9	1.0%			8.7	0.0%			30.6	0.0%
Secondary/Neighborhood or Rural Business	44.3	2.1%	13.2	0.1%	18.4	0.1%	13.1	0.1%	89.0	0.1%
Single Family Residential	838.3	38.8%	331.7	1.5%	584.9	2.7%	480.0	2.1%	2,234.8	3.3%
Transitional Land	33.2	1.5%			14.2	0.1%	56.9	0.2%	104.3	0.2%
Transportation, Communication, Utilities					420.6	2.0%	44.6	0.2%	465.2	0.7%
Water			183.1	0.8%	18.8	0.1%	735.8	3.2%	937.6	1.4%
Wetlands	41.0	1.9%	581.9	2.7%	175.4	0.8%	1,049.5	4.6%	1,847.9	2.7%
Totals	2,159.6	100.0%	21,851.0	100.0%	21,272.9	100.0%	22,886.6	100.0%	68,170.1	100.0%

Natural Features

One measure of a community's "quality of life" can be found in its natural features. Natural features include a variety of elements such as wetlands, woodlands and bodies of water. The amount, type and location of these features help to establish an area's "character," while also providing vital habitat for a variety of wildlife. Natural areas are often times also prime areas for both active and passive recreational opportunities. Activities such as excavation, filling, clearing, grading and construction, which take place during the development of a site, can significantly affect a community's natural features.

Citizens have become increasingly aware of the sensitive nature of their environment and the extent to which it affects the quality of their lives. The level of importance that citizens place on the environment and environmental issues was apparent in a recent poll commissioned by the National Wildlife Federation. Results of the poll found that 62 percent of American voters were in favor of strong environmental protection, while only 18 percent were opposed to such measures⁴.

⁴ Michigan Department of Natural Resources, Office of Great Lakes Activity Report, February 1995. (Poll conducted by Peter D. Hart Research Associates for the National Wildlife Federation.)

Another study, conducted in 1992, identified and ranked the State of Michigan's most pressing environmental issues. The results of this study showed that land use planning procedures that fail to consider a community's natural features and the integrity of their ecosystems pose one of the greatest risks to the quality of the environment in the future⁵.

For these reasons, and many others, special attention should be given to the preservation of natural and *environmentally-sensitive* areas in long-range planning initiatives. Environmentally-sensitive areas are lands whose destruction or disturbance will immediately affect the life of the community by either:

- Creating hazards such as flooding or slope erosion;
- Contaminating important public resources such as groundwater supplies or surface water bodies; or,
- Misusing land with significant productivity characteristics and renewable resources.

Climate

The general climatic characteristics of Newaygo County are highly varied due to the topographical variations of the region and the proximity of the county to Lake Michigan (approximately 25 miles to the west). Lake-effect weather patterns occur in the area, giving way to somewhat longer winter seasons and heavier snowfalls than those experienced in the eastern half of the State. The Soil Survey for Newaygo County includes weather readings from three stations in the area. Information below was derived from averaging data compiled by all three stations. In winter, the average temperature for the Fremont Area is approximately 22° F. In summer, the average temperature is approximately 69° F, with the growing season lasting approximately 128 days.

Average annual precipitation (rain) for the Fremont Area amounts to approximately 32 inches, with more than half of this amount occurring during the months of April through September. Snowfall for the area averages 75 inches annually.

Geology

Generally, the surface geology of the Fremont Area consists of several outwash and lake plains in nearly level valleys having defined boundaries. Marshall sandstone underlies all of Newaygo County. Other minor formations which overlie the county-wide Marshall sandstone formation consist of limestone, gypsum, shale and clay. Overlying these rock formations is a mass of glacial drift, deposited after the Wisconsin Glaciation during the last Ice Age. This glacial drift ranges from 200 to 800 feet in thickness. Glacial meltwater streams, which were much larger than the current rivers and streams, deposited outwash material into the valleys. The long abandoned meltwater channels have been filled with organic deposits over time. As the ice receded and the levels of the glacial lakes dropped, the valleys were incised and terraces formed along present day streams and rivers.

⁵ Michigan Relative Risk Analysis Project. Michigan's Environment and Relative Risk. 1992.
Fremont Area Recreation Master Plan

Topography

The topography of the Fremont Area is characterized by gently sloping to nearly level plains. Elevations range from approximately 975 feet in north-central Dayton Township to 835 feet in north-eastern Sherman Township and 710 feet in south-central Sheridan Charter Township. The following map (Map 3) depicts the few areas in the community with slopes greater than 12 percent. The majority of these are found in the north-western and south-eastern third of Sherman Township (Sections 6, 7, 8, 17, 18, 19, 20, 21, 22, 26, 27, 33, 34, 35, 36). A small pocket of steep slopes are also located in the south-central portions of Sheridan Charter Township (Sections 28, 29, 32 and 33) and northern portions of Dayton Township (Sections 1, 2 and 5) as well as in the southern portions around the chain of four lakes, near the northern border of the City of Fremont (Sections 25 and 26).

Steep slopes are subject to earth movement, especially where they have been disturbed by excavation and deforestation. Although the amount of movement may be slight, it can result in cracked foundations, tilted basement walls and damaged sewer and water lines. Where possible, buildings should not be placed on slopes in excess of 12 percent⁶. Construction on these types of slopes is not only subject to earth movement, but it can also prove costly, due to the need for extensive construction engineering provisions.

Bodies of Water

Many of the creeks and streams found in the Fremont Area are direct results of glacial activity. Darling Creek and Brooks Creek are the two primary creeks in the Fremont Area. Darling Creek runs from First Lake to Fremont Lake, while Brooks Creek runs from Fremont Lake into Bridgeton Township and eventually to the Muskegon River. Other creeks include Cushman, Dragoo, Dry Run, Butler, Wrights and Black Creeks. The White River cuts across the northeast corner of Sherman Township. Located in the north-central portion of Sheridan Charter Township, approximately 1 mile south of Dayton Township, Fremont Lake is 790 acres and is the second largest natural lake in Newaygo County. Fremont Lake provides the area with an excellent source of water related recreational activities and picturesque views. The area also has a few additional and relatively small natural lakes. The largest of these include Robinson Lake, Crystal Lake and Ryerson Lake in Sherman Township and the “chain” of lakes in the southeastern portion of Dayton Township. The “chain” of lakes include First Lake, Second Lake, Third Lake and Fourth Lake. The largest of the four, Third Lake, is approximately 20 acres in size. As was previously discussed, this chain of lakes is surrounded by land with varying degrees of elevation change creating one of the most scenic areas in the community.

⁶ Stream Sites: Buying, Building and Care, *Michigan Natural Resources Commission*.
Fremont Area Recreation Master Plan

Carrying Capacity

According to the *Soil Survey of Newaygo County, Michigan*⁷, there are 7 major soil associations found in the Fremont Area: Plainfield-Grattan-Brems, Cosad-DelRey-Sickles, Coloma-Spinks-Metea, Marlette-Metea-Spinks, Toogood-Boyer, Glendora-Abscota-Algansee and Pipestone-Couvert-Kingsville. The following table briefly describes the general characteristics of each soil association.

Soil types in the immediate vicinity of the City of Fremont, as well as the majority of Dayton Township and the south-western portion of Sherman Township, are well suited for crops and pasture (Marlette). These soils also provide a good base for building sites and roads. In contrast, a majority of soils in Sheridan and Sherman Townships can be characterized as having limited development capacity. For example, the eastern portion of Sheridan Township and the North-eastern portion of Sherman Township consist of poorly drained soils which are best suited only as woodland and wetland habitat (Plainfield, Pipestone & Glendora) and vegetable production when drained and improved, while the western portion of the Township consists of soils which are well suited for pasture or cropland (Cosad).

An important aspect regarding the types of soils found in the Fremont Area is the incidence of *hydric soils*. The United States Department of Agriculture defines hydric soils as soils that form under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper portion. Hydric soils pose significant development concerns. In order to use them for building sites of any type, special engineering and design considerations must be considered.

Map 3 shows the general location of hydric soils in the Fremont area. As can be seen, hydric soils tend to be found in areas such as lowland drainage courses, particularly along Dry Run Creek and Brooks Creek; south of Fremont Lake, in areas associated with wetlands along the eastern shore of Fremont Lake, or in woodland areas such as the south-central portion of Sheridan Charter Township and the north-eastern portions of Sherman Township.

Map 3 also delineates the location of soils that have been categorized by the Soil Conservation Service as having severe constraints in the construction of dwellings without basements due to slope, wetness, cutbanks cave, ponding, subsides, low strength, etc. A large portion of the Fremont Area contains such soils. Severe soils are scattered throughout Dayton Township but are more concentrated in Sheridan and the northeastern portions of Sherman Township. There is a strong correlation between soils that are difficult to build on and the existing land use pattern throughout Sheridan Charter Township. While these soils have been built on in the past and most likely will continue to be, construction and engineering costs will be more extensive than construction on drier, more stable soils. The majority of

⁷ United States Department of Agriculture, Soil Conservation Services, Soil Survey of Newaygo County, Michigan, February 1995.

the soils in the entire planning area also have severe constraints when utilized as septic tank absorption fields.

Prime Farmland

According to the United States Department of Agriculture, prime farmland is defined as:

“Land that has the best combination of physical and chemical characteristics for producing food, feed, forage fiber and oilseed crops, and is available for use as cropland, pastureland, rangeland and forestland.”⁸

In general, prime farmlands have adequate and dependable water supplies from precipitation or irrigation, as well as favorable temperatures and growing seasons. In addition, prime farmlands are relatively rock-free and permeable to water and air. Prime farmlands are also not excessively erodible or saturated with water for long periods of time and are not frequently flooded during the growing season. As is illustrated in Map 4, prime farmlands dominate the Fremont Area. Prime farmland soils have been broken down into three categories--those that are prime soils and have less than a 6 percent slope (P1), those that are considered prime farmland soils if they are adequately drained (P2), and those soils which are prime soils if they are not flooded (P3).

A large percentage of prime farmland in the Fremont Area is found on the well drained, loamy Marlette soils that underlie the majority of Dayton Township. Sheridan Charter Township has a good share of prime farmlands as well, found primarily in the western third of the Township and areas southeast of Fremont Lake. Sherman Township has a fair share of prime farmlands as well, found primarily in the southwestern quarter of the Township. Prime farmland soils also ring the entire City limits of Fremont.

These soils coincide closely with properties enrolled in the PA 116 program. In 1974, the Michigan State Legislature adopted the *Farmland and Open Space Preservation Act*. This is now known as *Part 361, Farmland and Open Space Preservation, of Act 451*. The scope of this program is to preserve prime agricultural and open space lands by allowing the landowner to enter into a legally binding document with the State, agreeing not to develop the land for a set period of time. In exchange for not developing the land, the landowner may receive special tax consideration. The legally binding agreements are for a time period of between 10 and 90 years and are recorded at the County Register of Deeds.

⁸ Ibid, p.80.

Soil Associations in the Fremont Area

Association	General Location				Description
	Dayton Township	Sheridan Township	Sherman Township	City of Fremont	
Plainfield-Grattan-Brems	Not Found	Southeast Portion	Northeast Portion	Not Found	Excessively drained soils on outwash plains and moraines. Formed in sandy deposits. Rapid permeability. Slopes to 70 percent. Best suited as road fill. Most areas used as woodland wildlife habitat. Only 0 to 6 percent slopes suited to building site development.
Cosad-DelRay-Sickles	Southwest Portion	Southwest Portion	Not Found	Not Found	Somewhat poorly drained soils on lake plains and outwash plains. Formed in sandy sediments over loam and clay deposits. Rapid permeability in upper part of profile, slow in lower part. Typical slopes 0 to 3 percent. Best suited as woodland and wetland wildlife habitat. Most areas used as cropland. Well-suited as pasture. Cosad loamy soils with 0 to 3 percent slopes considered prime farmland.
Coloma-Spikes-Metea	Eastern Portion	North Central Portion	Southeast Portion	Not Found	Excessively drained, rapidly permeable soils on moraines and outwash plains. Formed in sandy deposits. Typical slopes 0 to 6 percent. Fairly well suited to pasture. Lower slope, well suited to building site development, poorly suited to septic tank absorption fields.
Marlette-Metea-Spinks	Majority	Northern Portion	Southwest Portion	Majority	Well drained and moderately well drained, moderately slow permeable soils on moraines or till plains. Formed in loamy deposits. Typical slopes 1 to 6 percent. Most areas used for cultivated crops or for orchards. Well suited for crops such as corn, winter wheat, oats and hay. well suited as pasture. Fairly well suited to building site development. Marlette loams, moderately wet with 1 to 6 percent slopes considered prime farmland.
Pipestone-Covert-Kingsville	Not Found	Eastern Portion	Northern Portion	Not Found	Somewhat poorly drained, rapidly permeable soils on lake plains and outwash plains. Formed in sandy deposits. Typical slopes 0 to 4 percent. Most areas used as woodlands. Poorly suited to pasture and cropland. Unsuitable to building site development.
Toogood-Boyer	Not Found	Not Found	Northeast Portion	Not Found	Somewhat excessively drained soils on broad, flat plains, of the side slopes of steep drainage ways and ridges. Formed in loamy sand deposits. Typical slopes 0 to 18 percent. Most areas used as woodlands. Poorly suited for to cropland and generally unsuited to building site development.
Glendora-Abscota-Algansee	Not Found	Not Found	Northern Portion	Not Found	Very poorly drained soils on flood plains. Formed in loamy deposits. Typical slopes 0 to 3 percent. Most areas used as woodlands. A few areas well suited for croplands. Wetness and flooding a major concern and unsuited for septic tanks.

Source: United States Department of Agriculture, Soil Conservation Service, Soil Survey of Bawaygo County, Michigan, 1995

When applications are received by the MDNR (Michigan Department of Natural Resources), they are evaluated according to criteria established by Part 361 of Act 451, which includes a scoring system approved by both the Natural Resources Commission and the Commission of Agriculture. Factors considered in the selection of parcels include a mandate that at least 51% of the parcel be devoted to an agricultural use, and that the local governing body with zoning authority over the nominated property must approve all applications. Other factors include consideration of the productive capacity of the farmland, threat of conversion to non-farm uses, complementing *local* farmland preservation efforts, proximity to other similarly protected land and the availability of matching funds.

PA 116 Property in the Fremont Area

Sheridan Township	3,640	acres
Dayton Township	7,401	acres
Sherman Township	5,743	acres
Total	16,784	acres

Source: Fremont Rec. Plan 2000, Sherman Twp. Master Plan 2004

As is apparent on Map 4, the PA 116 program has been very popular in the Fremont Area, with significant portions of property retained for agricultural purposes. Properties enrolled in the PA 116 program are not only lands which are considered to be “prime farmlands”, but they also incorporate additional properties throughout the planning area.

A sizable amount of agricultural land is being preserved through this process in both Sheridan and Dayton Townships. Although this program ensures that a large portion of privately-held land within the Fremont Area remains agricultural for many years, significant implications regarding the future development of these lands exist. For example, due to the fact that many local landowners entered into PA 116 agreements, the amount of land available for immediate residential or commercial expansion is limited. Lands preserved under the PA 116 program place additional development pressures on the community by tying up large tracts of potentially developable land for extended periods of time. Additionally, land prices may rise considerably as a result, limiting the affordability of the area. Therefore, the effects resulting from participation in this program by local landowners should continue to be monitored by City and Township officials in the future.



Wetlands

In simple terms, a wetland is an area that is influenced by water in which certain water tolerant plants are likely to survive and reproduce. This may include areas that are *seasonally wet*, by a surface or ground water influence, as well as areas that are permanently saturated or ponded throughout the year⁹. Wetlands are important because they contribute to the quality of other valuable natural resources, such as inland lakes, groundwater, fisheries, wildlife and in Michigan, the Great Lakes. Wetlands provide places for breeding, nesting and rearing of young waterfowl and other species of birds, mammals, fish and reptiles. Wetlands intercept and hold flood or storm waters, naturally dissipating them over a period of time. They also intercept and retain excess nutrients from surface water, generated mainly by human practices such as agriculture or lawn fertilizing, sewage treatment or road salt application. Wetland systems filter these excess nutrients out of the surface runoff, lessening the occurrence of unwanted plant and algae growth in inland lakes and streams¹⁰.

Part 303 of the Natural Resources and Environmental Protection Act, PA 451 of 1994, defines a wetland as:

“Land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh and which is any of the following:

- Contiguous to the Great Lakes or Lake St. Clair, an inland lake or pond, or a river or stream.
- Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and more than five acres in size; except this subdivision shall not be of effect, except for the purpose of inventorying, in counties of less than 100,000 population.
- Not contiguous to the Great Lakes, an inland lake or pond, or a river or stream; and five acres or less in size if the Department determines that protection of the area is essential to the preservation of the natural resources of the State from pollution, impairment or destruction and the Department has so notified the owner.”

The Wetland Act authorizes the Michigan Department of Environmental Quality (MDEQ) to preserve certain wetland areas. The MDEQ may require permits before altering regulated wetlands and may prohibit development in some locations. Among the criteria used by the MDEQ when conducting a wetland determination are:

⁹ Source: U.S. Environmental Protection Agency. Wetland Protection. [Online]. Available from <http://www.epa.gov/owow/wetlands/wetland1.html>. Accessed 17 June 1999.

¹⁰ Ibid.

- Presence of standing water (at least one week of the year).
- Presence of hydric soil types that are saturated, flooded or ponded sufficiently to favor wetland vegetation (usually black or dark brown in color).
- Predominance of wetland vegetation/plant material, or aquatic life, such as cattails, reeds, willows, dogwood, elderberries and/or red or silver maple trees.
- Presence of important or endangered plant or wild life habitat or a rare ecosystem.
- The area serves as an important groundwater recharge.
- Size and Location - minimum size to be state regulated is five acres unless the wetland is contiguous to a lake, pond, river or stream, or is considered to be “essential to the preservation of natural resources of the state.”

The determination that a site contains a regulated wetland can have several consequences. The MDEQ may issue a permit to fill the wetland or they may require mitigation, such as replacing the wetland, which sometimes involves increasing the overall on-site wetland acreage by two or three times. The MDEQ may also prohibit development in the wetland area if it is determined that there is a “prudent” alternative.

Wetlands and wooded wetlands identified on Map 5 were derived from the current land use data set. As the map indicates, wetlands are sparsely scattered throughout the Fremont Area. The largest concentrations of wetlands are located in the eastern and central portions of Dayton Township and Sherman Township and are surrounded by upland deciduous forest.

Another significant wetland area is located on the eastern shore of Fremont Lake. The impact of the presence of this wetland can be seen on the Existing Land Use map where properties surrounding the lake have been heavily developed while this portion remains vacant. This particular body of wetlands will continue to pose constraints regarding future development as it is considered a “regulated wetland” under the guidelines mentioned above.

It should be noted that the map delineates *significant* wetlands, but is not necessarily all encompassing and delineates only the general boundaries of wetlands. Where this map or on-site observation indicates the likelihood of a regulated wetland, further professional on-site investigation should take place, which may include contacting the MDEQ for verification.

Although the existence of wetlands may place certain restrictions on future development in the Fremont Area, the community should develop regulations which promote these areas as *amenities* that *enhance*, not as *detriments* to *avoid*.



Groundwater

Groundwater is a term used to describe available subsurface water in porous layers called aquifers. Groundwater supplies about 20 percent of the United States water demand¹¹ and 100 percent of the Newaygo County demand. The groundwater source is protected by the soils which exist between the aquifer and the surface. Heavy soils, such as clay, provide a protective cap for groundwater, while light soils, such as sand, allow chemicals and other surface contaminants to seep more freely into the groundwater. Soil types often make it necessary to bypass a shallow aquifer and go to a deeper, more protected source. It is important to understand that surface soils may be no indication of the type of protective cap which exists to protect the groundwater.

Past agricultural practices are often the source of today's groundwater contamination problems. Heavy applications of fertilizers have left many areas in the midwest with high levels of nitrates in the water supply. According to the Newaygo County Health Department, several scattered areas within the study area, particularly in Dayton Township, are experiencing these high levels of nitrate.

The first available aquifer in Dayton Township is between forty and sixty feet deep. The soils in Dayton Township do little to prevent contaminants from seeping into the groundwater, thus the contamination. The Health Department cited the area west of Stone Road, between 44th and 24th Streets as areas experiencing unacceptable levels of nitrate in the water. Another concern for Dayton Township is the old Kunnen's Landfill, north of the City of Fremont. The landfill was determined by the Health Department to be leaking into the surrounding soils, contaminating the nearby upper aquifer. This contamination has put both City wells and private wells in the Township at risk. The Health Department is continuing to work with the Michigan Department of Environmental Quality (MDEQ) to address this hazard.

¹¹ Standard Handbook for Engineers, F.S. Merritt, et. Al., McGraw-Hill, 1996.
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Sheridan Charter Township has less extensive groundwater concerns than Dayton Township. The Health Department attributes this to the fact that less farming occurred in the past and the soils in Sheridan have provided a heavier, more protective cap for the aquifer. The Health Department cited the area along M-82, between 56th and 64th Streets as the area with the poorest soils and most cases of nitrate contamination in Sheridan. Another problem in Sheridan stems from the site of the Weaver Oil Company. Leaking fuel tanks allowed hydrocarbons to seep into the groundwater and into the Township. The area has since been cleaned, but the Health Department is unsure of how deep into the earth the cleaning extended and is continuing to monitor the site.

The City of Fremont has less of a problem with nitrates and other surface contaminants in the water supply than with the contamination occurring from private septic systems leeching into nearby private wells. This is especially a concern in the southern part of the City, along M-82 south, where the soils are not especially well suited for private septic systems.

Any development in any area of groundwater concern is potentially hazardous, especially if the proposed use involves any hazardous materials storage or use. Even small amounts of dry-cleaning fluid or paint solvent can create a hazard that may stay hidden for several years. Low to medium density residential uses are most often recommended for areas of groundwater vulnerability.

Woodlands

Woodlands are a very valuable natural asset to have in a community. They provide necessary functions such as: habitat for many wildlife species, climate moderators, watershed protection from siltation and soil erosion caused by storm water runoff, wind and noise buffers, as well as aesthetic and recreational enjoyment.

Data obtained from the current land use data set indicate several woodland stands throughout the Fremont Area. While virtually every section in the community contains woodlands as shown on Map 5, by far the largest contiguous stands are those found in the Manistee National Forest, located in the eastern half of Sherman Township. In addition, significant stands are located in the northern and central tiers of Dayton Township (Sections 1, 4, 5, 6, 7, 15, 20 and 24) as well as in the southern tier of Sheridan Charter Township in and around the confluence of Dry Run Creek and Brooks Creek. (Sections 26 to 29 and 31 to 36).

Woodlands located in well drained soils on the uplands (mainly the majority of Dayton Township) consist of deciduous species such as sugar maple, aspen, birch, oaks and beech. Woodlands in poorly drained soils (mainly those in the western portion of Sheridan Charter Township) consist of soft maple, elm and ash. Woodlands in well drained, sandy soils (those in the lower tier of Sheridan Charter Township) contain several different species of pine. Woodlands located in poorly drained soils up the uplands (mainly the majority of eastern Sherman Township) consist of several different species of pine.

There are also areas throughout the community that contain significant coniferous forests, consisting of such species as white, red and jack pines as well as other upland and lowland conifers.

Special Natural Features

The Michigan State Department of Natural Resources maintains a comprehensive database of special natural features that are present within the state. Specifically, the database, known as the Michigan Natural Features Inventory (MNFI) tracks the presence of plant, insect and animal species which are threatened or endangered at both state and federal levels. The presence of threatened or endangered species does not necessarily preclude development but may require alterations of a development plan.

At the present time, the MNFI has identified the Karner Blue butterfly as the Fremont Area's lone special natural feature.¹² The Karner Blue is considered state threatened and federally endangered. The MNFI provides the following description of its habitat and management recommendations:

The Karner Blue butterfly is a species of open-canopied barrens communities, including oak and pine-oak barrens. Its larval host plant, blue lupine (*Lupinus perennis*) has declined markedly within its range due to shading from closed canopies, competition from other plants, and extreme soil scarification following farming or intensive logging and burning regimes. Lupine, an early successful species, can become abundant after appropriate disturbances, fire or logging, for example.

The Karner Blue has two generations per year. This small butterfly is silvery blue. Adults are active most of the day, decreasing activity during midday and during cool, rainy weather. Adults typically live an average of five days. Peak flight dates are late May through early June and mid-July through early August.

Recommendations for management of Karner Blue butterfly habitat will be pertinent only if the Karner Blue butterflies larval host plant, blue lupine, is present. If lupine is present the following guidelines should be followed:

- Mower blades should be set no lower than 6 inches
- Mowing should not occur before August 15th (i.e. no spring mowing at all)
- No burning of habitat where lupine exists

¹² State of Michigan, Department of Natural Resources, Michigan Natural Features Inventory, *Notification Letter*, July 27, 1999.

Barrier-Free Status

With the passage of the Americans with Disabilities Act of 1990 (ADA), all areas of public service and accommodation became subject to barrier-free requirements, including parks and recreation facilities and programs. Therefore, an important step in planning must involve the evaluation of a community's park and recreation system accessibility to persons with disabilities.¹³ Each of the 13 public parks (8 in the City of Fremont/2 in Sheridan Charter Township/3 in Sherman Township) were inventoried to identify barrier-free conditions and issues in 2006. The table below indicates barrier-free and handicap accessible areas at each of the 13 parks.

Barrier-Free Status at Fremont Area Public Parks

Public Park	Paved Parking	Curb Cuts	Sidewalks	Loading Points	Restrooms	Paved Pathways	Railed Stairway	Picnic Table
Branstrom park	✓				✓	✓	✓	✓
Clubview Park								
Beebe's Natural Park								
Arboretum Park						✓		✓
Fremont Lake Park	✓		✓		✓	✓		✓
Fremont Ave. tot-Lot		✓						
Cherry Hill Playground								
Veteran Memorial Park	✓	✓	✓	✓	✓	✓		✓
Sheridan Boat Launch								
Sheridan Chtr. Twp. Property								✓
Sherman Twp. Boat Launch								
Robinson Lake Boat Launch					✓			✓
Alley Lake Roadside Park								✓

Branstrom Park

A paved road traverses through Branstrom Park. There are pathways leading to the lower picnic shelter, playground area and restroom. The paved portions of a walking path are in good condition. There are picnic tables in the upper portion of the park which are accessible by a paved pathway. There is a paved parking area near the baseball diamond with a steep, narrow path without railings leading to the handicap accessible restrooms. The restroom appears to be difficult to approach. There are stairs with a railing leading to the ball diamond. Throughout the park there are extensive dirt walking/ running trails. There is also a cabin referred to as the 'Lodge' available for groups to reserve, off a paved pathway.

Clubview Park

Clubview Park is a small park within a residential neighborhood with open space. There are no curb cuts from the road and no pathways leading to the park.

Beebe's Natural Park

Beebe's Nature Park is in its natural state and remains undeveloped. It is accessed from a dirt road.

¹³ Community Recreation Planning: Guidelines for preparing a Community Recreation Plan. MDNR. 1/99.
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Arboretum Park

Arboretum Park consists of open space and wooded areas. Paved, narrow pathways stretch across various portions of the park and eventually lead to streets. The pathways are in good condition. There are also benches scattered throughout the park with no pathways leading to them.

Fremont Lake Park

Paved roads in good condition lead to paved parking areas at Fremont Lake Park. Designated handicapped parking is located close to the handicapped accessible restrooms. There are access points to the picnic areas, shelter, beach, playground and volleyball court. Near the boat launch, a wooden dock stretches out into the lake and does not have railings.

Fremont Avenue Tot-Lot

There is a curb cut off of the road into the Fremont Avenue Tot Lot, but there are no pathways leading into the park.

Cherry Hill Playground

There is a short driveway leading into the Cherry Hill Playground which is almost completely covered with grass. There is no access provided to the swings and open space.

Veterans Memorial Park

Veterans Memorial Park is the most handicap accessible park in the Fremont Area. There are paved parking areas and curb cuts from the road to the sidewalks. The park has paved pathways throughout and an access point to the playground apparatus. There is a handicap accessible picnic table in the picnic shelter. There are paved pathways surrounding the memorial at the center of the park as well as leading to the handicapped seating surrounding the band shell. Restrooms at the park are handicap accessible and there is also a ramp for individuals to get up to the stage area.

Sheridan Charter Township Boat Launch

The boat launch is accessed via a dirt road which leads into a large gravel parking and loading area. There is no railing by the water's edge.

Sheridan Charter Township Property

The Township property is undeveloped with no parking or additional facilities.

Robinson Lake Boat Launch

The Robinson Lake Boat Launch is not adequately accessible.

Sherman Twp. Boat Launch and Beach Area

The Sherman Twp. Boat Launch is not adequately accessible.

Alley Lake Roadside Park

The Alley Lake Roadside Park is not adequately accessible.