

SHERMAN TOWNSHIP

MASTER PLAN

2020



ADOPTED:

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CHAPTER 1: INTRODUCTION

Purpose and Planning Process

The purpose of the Sherman Township Master Plan is to provide guidelines for future development within the community while protecting the natural resources and the agricultural and rural character of the township. The Michigan Planning Enabling Act, P.A. 33 of 2008, as amended, enables Sherman Township to adopt, amend, and implement a master plan.

This plan examines current and pre-existing conditions in the Township. The current and pre-existing conditions are outlined in the demographic characteristics and economic data examination as well as the natural resources and existing land uses analysis. The background information is used to help develop the plan for future land uses in Sherman Township. The plan reflects on those conditions and history and outlines the type, location, and scale of development desired by Township stakeholders.

Based on information gathered early in the process, it was determined that the Planning Commission wants to stay-the-course as they envision the community remaining predominantly agricultural and low-density residential for the foreseeable future. Through the planning process, the Planning Commission did express a desire for limited commercial development along M-66. To ensure that the planning process was comprehensive, the Township developed goals and objectives. These goals and objectives, along with a series of maps including soils, existing land use, and zoning, provide the basis for the Future Land Use Plan.

The Master Plan was developed for the Sherman Township Planning Commission by the

This section gives a brief overview of the Master Plan and the process used to develop the plan.

Southcentral Michigan Planning Council (SMPC). Generally, this plan looks at a twenty-year horizon but it intends to provide a vision for the community long into the future. State enabling legislation requires reviews of this plan revisits every five years or sooner if warranted.

Purpose of this Plan

The purpose of this master plan is to guide Township officials and citizens when making land use decisions. This plan will serve as a signal of the Township's land use desires to officials, citizens, and land developers. To that end, a master plan is required when a Township has a zoning ordinance. The master plan is designed to inform the zoning scheme adopted and amended by a municipality.

Sherman Township History

By 1721, Native Americans from Wisconsin had migrated to the St. Joseph County area. England relinquished present Michigan to the United States in 1787 as part of the Northwest Territory.

Early white settlers came to the area around 1827, and before 1830, a Native American Chief collected a fee from all travelers at a toll gate he had set on the Old Indian War Trail, now US-12. This was forcibly discontinued when stage coaches began traveling from Detroit to Chicago. The "Chicagua Trail" became a military road in 1832.

The St. Joseph River was the lifeline for supplies to the area in its early history. Navigable from its mouth in Benton Harbor to Constantine, goods which were shipped by flat boats up the St. Joseph for overland distribution. Often those

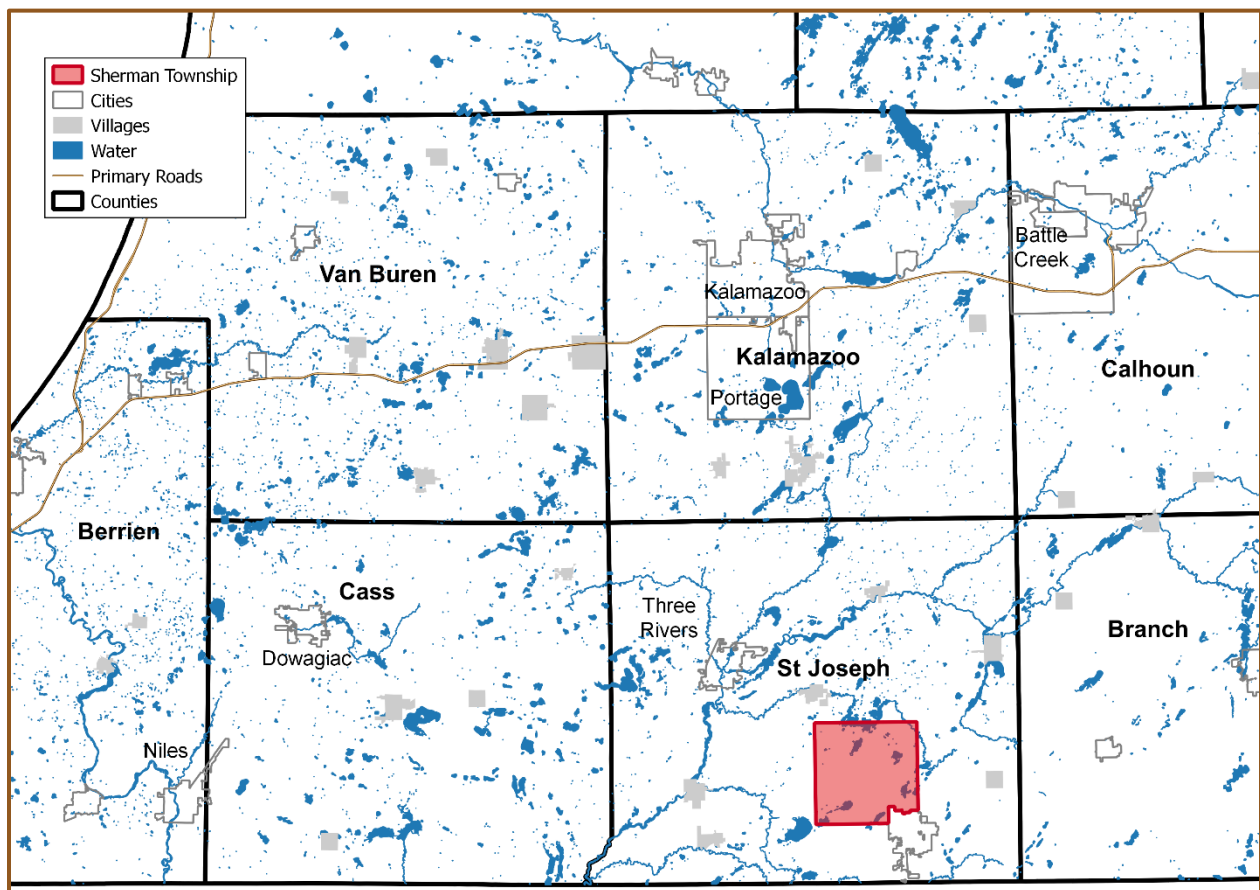
goods arrived via the Erie Canal to Buffalo and Great Lakes.

Pioneers described their greatest obstacle in settlement in the area as the abundance of great whitewood trees as much as eight feet in diameter. These native forests were felled and burned to make way for settlement and agricultural uses. Soon after, agriculture dominated the use of land and has shaped the modern settlement pattern which depended upon large tracts of land for crops and livestock.

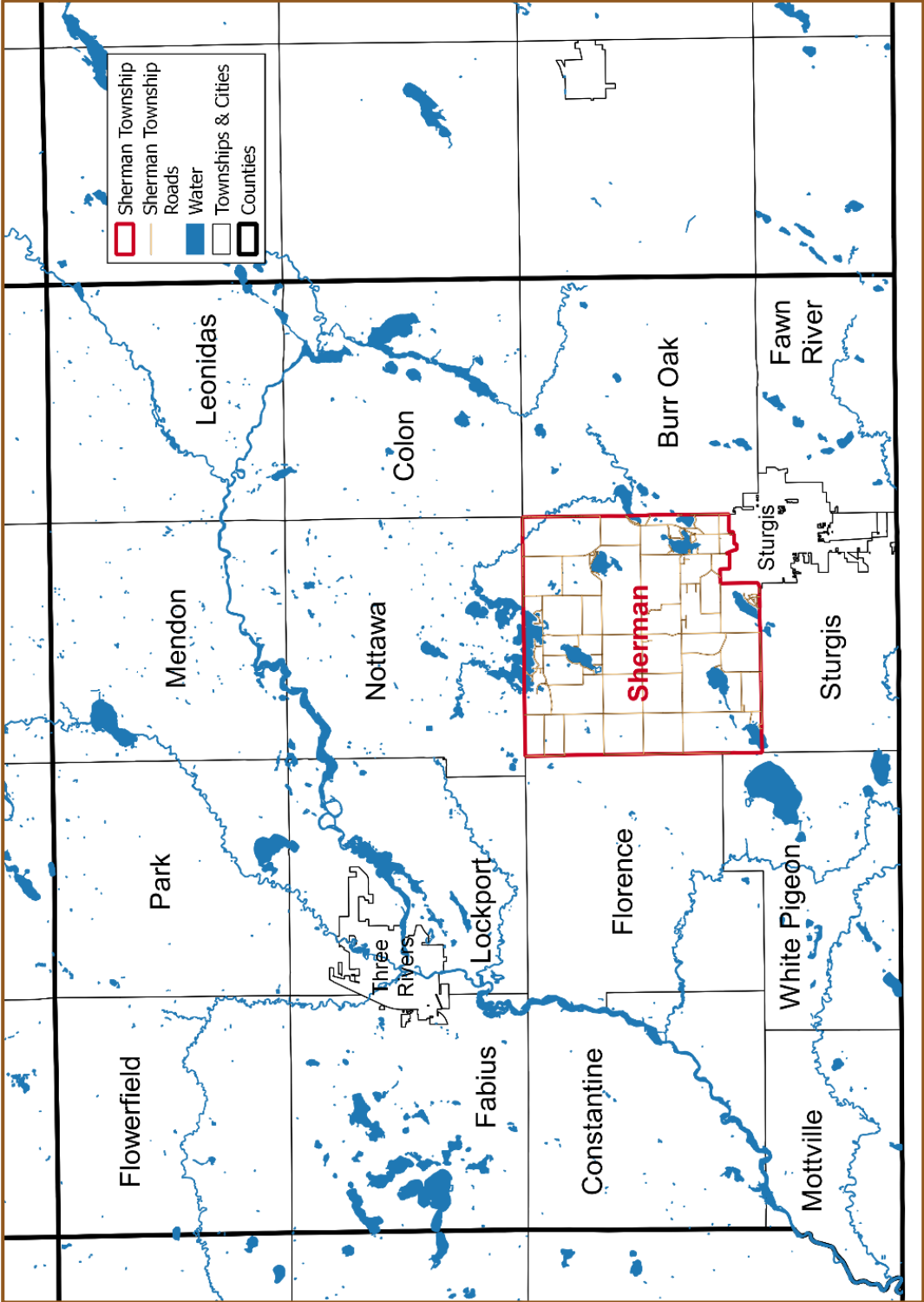
Location and Regional Setting

Sherman Township is located in the central portion of St. Joseph County, in the southwest region of Michigan's Lower Peninsula. The Township is 35 square miles while one square mile of the original township area has been annexed into the City of Sturgis. The Township is a mixture of large-scale farms with residential development scattered throughout the Township; some commercial and higher-density residential development is located near the City of Sturgis.

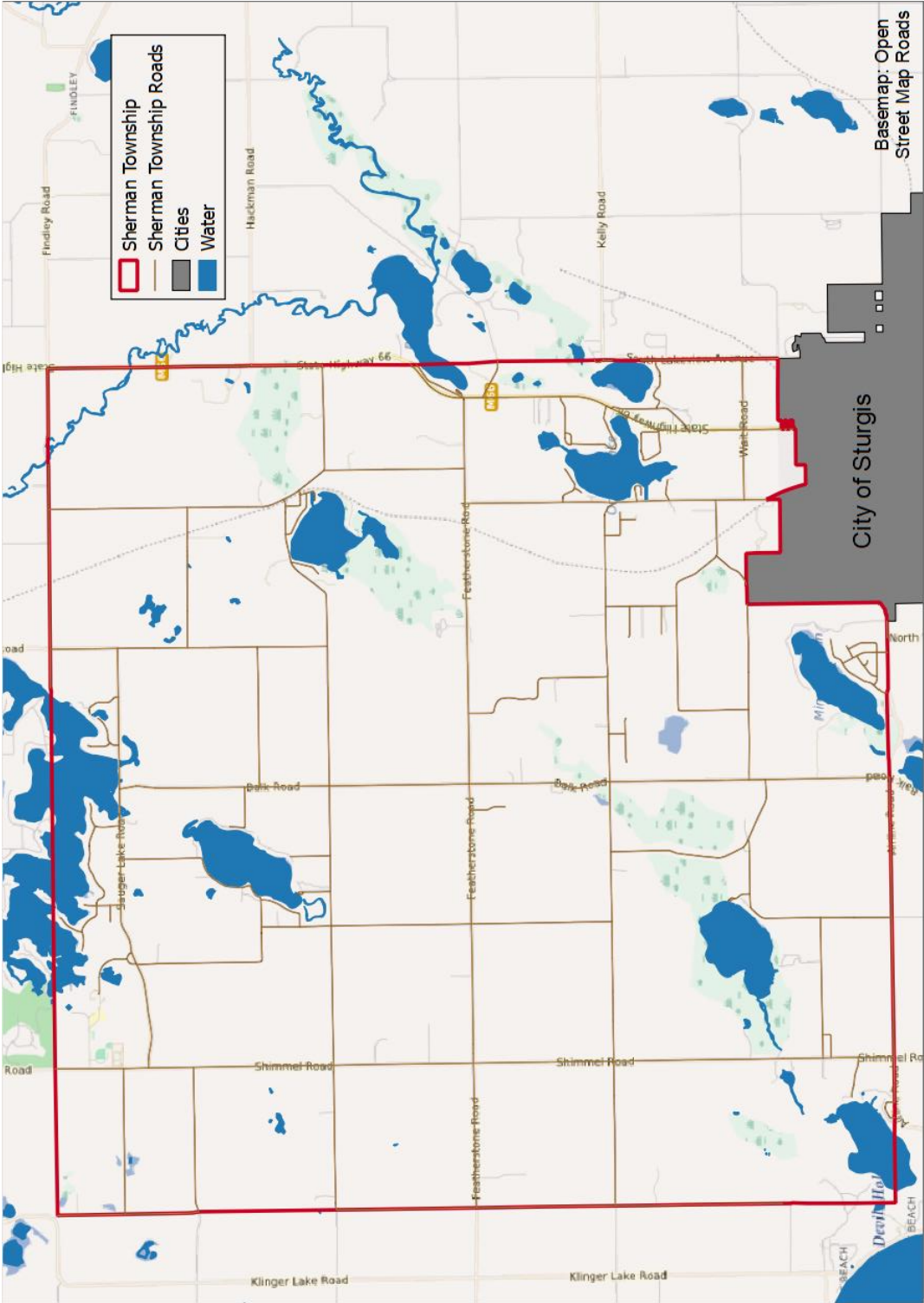
Map 1-1: Location and Regional Setting



Map 1-2: Location and Regional Setting



Map 1-3: Location and Regional Setting



CHAPTER 2: GOALS, OBJECTIVES, AND IMPLEMENTATION

This chapter of the Master Plan outlines the goals for Sherman Township and their related policies. Goals are an important way for the Township to articulate the long-term direction of the community. The goals must also reflect the vision of the Township Board, business owners, residents, and other interested parties regarding the future of the Township. Goals should also shape the policies implemented by the Township. To this end, the following goals and policies are achievable, relevant, and represent community attitudes.

Residential Development

- **Goal 1:** Enable existing residents to remain in their homes
 - Maintain the existing housing stock
 - Educate existing homeowners and landlords on proper home maintenance
 - An organization in Kalamazoo, Community Homeworks, offers sessions designed to teach homeowners basic maintenance skills. Grants are available to hire professionals to teach these courses, or volunteers could also teach, with minimal cost to the Township. The Township would need to coordinate and advertise these courses, such as in a periodic newsletter.
 - Identify homes in disrepair
 - Charge the Planning Commission with creating an existing home inventory. The inventory would identify any houses in need of immediate action to preserve it into the future.
 - Seek grants or other sources of funding to create a land bank or an improvement revolving fund. The fund could acquire the homes and repair them; sale of the home would recoup most, if not, all expenses.
 - Assist residents with home maintenance
 - Seek donations or create a fund for materials so under-resourced residents can have what they need to keep up their homes. This coupled with the homeowner maintenance course should give all residents the tools to maintain their homes. Well-maintained homes will help to increase the desirability of the Township and help to increase property values.
 - In the Township, 15% of households have incomes under \$25,000 and 29% have incomes between \$25,000 and \$49,999. These groups are only able to spend at most \$625 and \$1,250 per month on housing expenses, according to Department of Housing and Urban Development affordability metrics. Limited housing budgets such as these often do not allow for basic housing repairs or upgrades.

Table 2-1: Household incomes in the Township

Under \$25,000	15.10%
\$25,000 to \$49,999	28.60%
\$50,000 to \$74,999	21.70%
\$75,000 to \$99,999	14.80%
\$100,000 to \$149,999	12.80%
\$150,000 to \$199,999	3.20%
\$200,000 or more	3.80%

Source: US Census - American Community Survey

- Create an older resident assistance network to connect volunteers with those in need
 - Minimal time or cost need for coordination. The Township may need to find funds or donations for materials needed.
 - More than one in five (21%) Township residents are 65 years old or older; another 21% of residents are between 55 and 64 years old. Both of these proportions are higher than they were in 2000. The US Census through the 2012-2016 American Community Survey estimates that residents aged between 55 and 64 comprise 20% of residents 18 years and older; 24% of the residents aged 18 and older are now 65 years and older. The Township is growing older and strategies are needed to help these residents age in place and remain Township residents. Additionally, maintaining houses occupied by older adults will ensure that the homes are ready for the next generation when they become available.

Table 2-2: Age of Resident in 2000 and 2010

	2010	2000
18 to 24 years	8.0%	11.2%
25 to 34 years	11.4%	13.5%
35 to 44 years	14.8%	23.8%
45 to 54 years	24.0%	20.7%
55 to 64 years	20.9%	14.3%
65 years and over	20.8%	16.5%

Source: US Census - American Community Survey

- Create a tool lending program
 - Develop and implement a program that would allow residents to borrow tools that would help them maintain their homes.
 - The Township will need to invest in tools and in time coordinating the tool lending and retrieval.
 - These tools could include simple tools like shovels, rakes, hammers, etc., or more specialized tools like a roofing shovel, power tools, a wet saw, etc.

- **Goal 2:** Increase the diversity of housing options found in the Township to accommodate the needs and preferences of residents
 - Allow non-traditional housing units, such as:
 - Accessory dwelling units, often known as “Mother-in-law units,” are converted garages or spaces above an attached or detached building on a residential site that can serve the needs of many families when they need to care for a loved one or generate additional income.
 - Construction of tiny houses or other kinds of smaller residences may better meet the cost restrictions of certain current or prospective residents.
 - Encourage the development of cost-effective duplexes
 - Ensure that the zoning ordinance allows for the development of duplexes

According to US Census American Community Survey estimates, all housing units in the Township are either single family detached houses or mobile homes. The Township does not currently offer much diversity in housing types. Surveys conducted by the National Association of Realtors show a significant desire for a diversity in housing type.

- **Goal 3:** Provide for limited housing development in a manner that preserves the rural character and quality of lake areas
 - Promote clustered development with open space provisions
 - Promote diversification of housing, in Goal 2
 - Increase the minimum lot size on lake-adjacent lots, while decreasing lot sizes elsewhere

Agricultural Development

- **Goal:** Preserve, to the maximum extent possible, the Township’s most productive agricultural areas and avoid conflicts between farm and non-farm uses.
 - Protect the most productive farm lands in the Township and take steps to encourage long-term commitments to agricultural activities in the identified areas.
 - Use soil maps found in Chapter 4 to identify prime agricultural lands.
 - Create zoning-based protections for the prime agricultural lands.
 - When possible, use outside funding to purchase development rights.
 - Discourage residential land development activities in agricultural areas which would lead to land use conflicts or adversely affect farming operations and the economic viability of agricultural activity.
 - Only allow accessory residential uses in prime agriculture areas.
 - Increase the minimum lot size in prime agriculture areas.
 - Encourage best practices for high intensity farming
 - Ensure that potentially impacted farmers have the latest information on best practices.
 - Provide for agri-business type uses – clearly define these uses, provide limits and regulations to prevent nuisances.
 - Determine if wind of solar facilities would be appropriate for the Township. If they are, create rules and regulations.

Commercial Development

- Goal: Provide suitable areas for the orderly development of a variety of commercial and service activities to serve the needs of Township residents.
 - Encourage commercial and service facilities to locate in clustered developments where essential public services can be economically provided, and traffic can be accommodated without increasing congestion.
 - Properties along M-66 are the only appropriate areas at this time.
 - Refer to maps in Chapter 4 for traffic volumes
 - Discourage commercial locations which could create land use conflicts with residential areas.
 - Use zoning to ensure the peaceful coexistence of commercial and other land uses.
 - Encourage commercial development that serves the needs of Township residents.

Industrial Development

- Goal: Allow minimal industrial development if it meets the following criteria:
 - In locations with the following attributes:
 - Sites with direct access to major roadways without relying on residential streets
 - Locations and in a manner to minimize impacts upon adjacent land uses
 - Areas where essential public services can be provided
 - Operations that have minimal impact on adjacent landowners
 - Noise and light pollution minimized
 - Minimal traffic increases especially during evening and overnight hours
 - Limited odor during normal conditions
 - Any negative impact on the community is offset by an equal or greater positive impact (jobs, tax base, etc.)

Open Space and Recreation

- Goal: Provide adequate open space areas to meet the needs of the residents of the Township and preserve and enhance the Township's natural features and rural character.
 - Control lakeshore and stream bank development to ensure that projects do not directly nor indirectly destroy these areas.
 - Write setback requirements into the zoning code.
 - Encourage conservation and protection of natural, scenic, lake, wetland, and wooded areas for public enjoyment.
 - Restrict floodplain development except for recreational purposes.
 - Create overlay districts that limit development.
 - For land division applications, prohibit the inclusion of areas which are subject to flooding in the minimum lot size requirement.

Public Utilities

- Goal: Encourage the development of utilities to meet the needs and desires of current and future residents.
 - Monitor the sewage and water distribution needs of the Township.
 - Periodically review the sewage needs of houses around lakes and wetlands.
 - Ask residents to share water quality reports.
 - Encourage development of telecommunication facilities in the Township so that all who desire cellular or high-speed internet have access to it.
 - Conduct an assessment of cellular communication facilities and coverage.
 - Conduct an assessment of high-speed internet facilities and coverage.
 - Compel telecommunication providers to expand coverage to those in the Township that desire it.

CHAPTER 3: TOWNSHIP STATISTICS

This section of the Master Plan is an analysis of social and economic factors that help define the character of the Township. The most important component in any community is the population of the area. The actions of the population directly impact the character and future of the community. The diversity of backgrounds and similarities among residents merge to give a community its distinct and unique character and personality.

Population

The population of Sherman Township saw major increases between 1960 and 2000 but has remained relatively stable since 2000. Between 1960 and 2000, the population of the Township nearly doubled; Since 2000, the population has decreased by 28 residents. This pattern is fairly common among similarly situated townships. The stagnation of the population growth is most likely due to limited employment growth in the area. Despite the small decrease, the Township's population has fared better recently than the rest of the County; the county as a whole lost 2.5% of the population between 2000 and 2016 (US Census and 2012-2016 American Community Survey).

TABLE 3-1: Township Population Counts (1960-2016)

Year	Count	Increase (decrease)	% Change
1960	1,796	---	---
1970	2,101	305	17.0
1980	2,756	655	31.2
1990	2,978	222	8.1
2000	3,248	270	9.1
2010	3,205	(43)	-1.3
2016	3,220	15	0.5

Source: US Census, 2012-2016 American Community Survey estimates

Age Distribution

In addition to total population figures, analyzing the age distribution within a community helps shape the Township's goals for future growth. The needs and interests of people living in a community can vary according to their age; a predominantly younger population has different attitudes and seeks different activities than an older population. The U.S. Census estimates the median age of the population of Sherman Township is 51.5 years, much higher than the median age of St. Joseph County (39.3), the State (39.5), and the United States (37.7). The Township also has a higher percentage of folks aged 55 to 84 than both the County and the State. The most populous age group in the Township is 45-54 years old, making up 15.2% of the population.

TABLE 3-2: Age Composition of Sherman Twp. Residents

Total population	Twp 3,220	County 60,923	State 9,909,600
AGE	%	%	%
Under 5 years	6.1%	6.8%	5.8%
5 to 9 years	6.5%	6.8%	6.1%
10 to 14 years	5.9%	7.3%	6.5%
15 to 19 years	4.8%	6.8%	6.9%
20 to 24 years	2.3%	5.7%	7.3%
25 to 34 years	7.0%	11.9%	12.2%
35 to 44 years	8.9%	11.5%	12.0%
45 to 54 years	15.2%	13.3%	14.1%
55 to 59 years	13.2%	7.0%	7.3%
60 to 64 years	6.5%	6.7%	6.4%
65 to 74 years	14.6%	9.3%	8.8%
75 to 84 years	9.0%	5.1%	4.6%
85 years and over	0.0%	2.1%	2.1%

Source: US Census 2012-2016 ACS estimates

Educational Attainment

Another important characteristic of any population is the educational attainment level. According to the American Community Survey, 24.9% of the Township's residents over the age of 25 years had obtained a college-level degree. While 17.6% obtained a bachelor's degree or higher. The Township has a similar level of educational attainment as the County as a whole but lags far behind the state; 36.5% of Michigan residents have a college-level degree and 27.4 have at least a bachelor's degree.

	Twp	County	State
Population 25 years & over	2,398	40,651	6,682,881
Less than 9th grade	7.5%	5.6%	3.1%
9th to 12th grade, no diploma	6.2%	8.4%	7.0%
High school graduate & equivalency	33.4%	38.9%	29.6%
Some college, no degree	28.0%	23.7%	23.8%
Associate degree	7.3%	8.1%	9.1%
Bachelor's degree	9.5%	9.5%	16.7%
Graduate or professional degree	8.2%	5.9%	10.7%

Source: US Census 2012-2016 ACS estimates

Income

A reliable measure of the economic health of a Township is median household income; median household income is the midpoint of incomes for all households. Residents in the Township have income levels that far exceed the county as a whole; the income levels in the Township also exceed those in the state.

The economic downturn in 2008 resulted in a general drop in median household income throughout the country; Sherman was not immune but has rebounded well. Table 2.4 presents information on the median household income for Sherman Township, St. Joseph County, and the State of Michigan.

The U.S. Census estimates that median household income in Sherman Township between 2012 and 2016 was \$56,176. Only 7.5% of residents were in poverty during the 2012-2016 survey; that is far better than the county and state which were at 16.2% and 16.3% respectively. Furthermore, Sherman Township is home to a higher percentage of residents who make between \$75,000 and \$150,000. Despite these gains at the higher income level, 25.2% of residents make less than \$35,000.

	Township	County	State
Median Household Income (\$)	56,176	45,410	50,803
Average Household Income (\$)	70,565	56,595	68,928
Per Capita Income (\$)	28,572	22,182	27,549
Individual Poverty Rate (%)	7.5	16.2	16.3

Source: US Census 2012-2016 ACS estimates

Housing

Housing is another important feature of any area. Vacancy rates, the size of homes, the age of homes and other key metrics give public officials the information to make plans for the future of the Township. All the housing units found in the Township are single family or mobile homes. Additionally, the majority of housing units have three or more bedrooms.

Total housing units	1,568	100%
Duplexes	0	0.0%
Apartment buildings	0	0.0%
Mobile homes	101	6.4%
Single Family	1,467	93.6%
Bedrooms		
No bedroom	8	0.5%
1-bedroom	44	2.8%
2-bedroom	286	18.2%
3-bedroom	744	47.4%
4-bedroom	347	22.1%
5+	139	8.9%
Year built		
2014-present	35	2.2%
2010-2013	23	1.5%
2000-2009	187	11.9%
1990-1999	191	12.2%
1980-1989	123	7.8%
1970-1979	447	28.5%
1960-1969	107	6.8%
1950-1959	264	16.8%
1940-1949	71	4.5%
1939 or earlier	120	7.7%
Year moved into unit		
2015-present	51	3.9%
2010-2014	171	13.2%
2000-2009	344	26.6%
1990-1999	318	24.6%
1980-1989	81	6.3%
1979 or earlier	329	25.4%
Occupied housing units	1,294	82.5%
Vacant housing units	274	17.5%
Median value (\$)	157,100	
Median monthly rent (\$)	627	
Homeowner occupancy rate		98.1%
Rental occupancy rate		100%

Source: US Census 2012-2016 ACS estimates

Employment & Unemployment

The unemployment rates for St. Joseph County have historically been on a par with the State of Michigan and the United States. St. Joseph County's economy, like the state of Michigan, was stronger in the late 90's. Since 2009, the annual average unemployment rate for St. Joseph County began to rise until finally reaching over 5.1% in 2014 but still less than that for the State of Michigan (6.0%). After 2009, the unemployment rate in Sherman Township decline and stabilized around 2% for three years, then rose to 5.2% in 2013. The unemployment rate fell again to 3.0% in December 2014.

From 2009-2013, 62% of the labor force in Sherman Township was employed. Of the labor force, management, business, science and arts occupations were the largest occupation work groups. Together, those work groups account for 37% of occupations. Twenty-seven percent of the civilian labor force was employed in manufacturing. Educational services, health care, and social assistance continue to be important industries for employment in Sherman Township.

Industry	Sherman	County	MI
Ag, forestry, & mining	5.1	3.8	1.2
Construction	4.3	3.8	5.0
Manufacturing	35.7	36.9	18.0
Wholesale trade	1.4	1.9	2.4
Retail trade	8.7	8.7	11.3
Transport & warehousing & utilities	4.2	4.1	4.2
Information	0.0	0.7	1.6
Finance, insurance, & real estate	3.4	3.2	5.5
Professional, scientific, & management	7.1	5.6	9.4
Education, health care, & social	20.3	17.2	23.7
Arts, entertainment, rec., accomm. & food services	2.7	7.4	9.5
Other services, except public	5.4	4.1	4.7
Public administration	1.6	2.6	3.5

Source: US Census 2012-2016 ACS estimates

CHAPTER 4: EXISTING LAND USE

Land use in Sherman Township is typically undeveloped, agriculture, or low-density residential. Pockets of higher-density residential, commercial, and industrial uses exist but are very limited. The areas of higher-density residential are mostly found adjacent to lakes; other areas of medium-density residential are found adjacent to the City of Sturgis and in two other smaller districts. The industrial used land in the Township is exclusively adjacent to the City of Sturgis. Commercially-used lands are limited and found exclusively along M-66. Given the recent pattern of development and current lack of develop pressure, the Township is unlikely to see significant changes to the land use composition.

Water Resources

Wetlands

The National Wetlands Inventory (Map 4-2) revealed significant extensive wetlands adjacent to the lakes found in the Township. The areas between Thompson Lake and Perrin Lake are home to a number of wetlands. A number of other wetlands are scattered throughout the Township. The center of the Township is the most devoid of wetlands. Both federal and state regulations limiting development in these areas exist. Given the regulation, environmental concerns, and construction problems, other uses are advised.

Prior to developing a future land use plan and map, a community must first assess its existing land uses. This chapter presents information on the types and location of existing land uses and land cover. The process identifies both developed lands along with natural land cover types like woodlands and wetlands. The maps presented in this chapter reflect land cover and land use currently seen in the Township.

Lakes

Nine significant water bodies are located wholly or partially in Sherman Township, they are as follows:

- Lake Templene
 - Is the largest lake in the Township
 - Located in the northcentral portion of the Township, the lake is split by the Township boundary with Nottawa Township
 - Part of the Prairie River
- Fish Lake
 - Located in Section nine
 - Has public access site
- Perrin/Chapin Lake
 - Located in the northeaster portion of the Township
- Prairie River Lake
 - Western end is located in the eastern edge of the Township.
 - Part of Prairie River
 - Has public access site
- Omena Lake
 - Located in the southeastern portion of the Township
 - Connected to Grey Lake
 - Has public access site
- Grey Lake
 - Located east of M-66 just north of the City of Sturgis
 - Connected to Omena Lake
- Minnewaukan Lake
 - Located in the southeastern portion of the Township

- Thompson Lake
 - Located in the southcentral portion of the Township
 - Connected to Tamarack Lake via Sherman Mill Creek
 - Has public access site
- Tamarack Lake
 - Located in the extreme southwestern section of the Township
 - Connected to Thompson Lake via Sherman Mill Creek
 - Drains into Klinger Lake

Rivers and Creeks

It is important to understand the risks and benefits of rivers and creeks when planning for land uses in the Township. Rivers and creeks were historically viewed as a resource for transportation or economic development; towns were built around moving water because of the transportation possibilities and environmental and economic benefits. Today, rivers and creeks have lost much of their economic benefits, nonetheless, rivers and creeks offer environmental recreational benefits. Rivers and creeks still pose flooding risks to development.

One significant river and one significant creek traverse the Township. Prairie River clips the northeast corner of the Township. The Prairie River originates in southcentral Branch County and flows west until it joins the St. Joseph River south of Three Rivers. Sherman Mill Creek originates in the center of the Township it then flows into Thompson Lake, Tamarack Lake, and Klinger Lake in White Pigeon Township. From Klinger Lake, Sherman Mill Creek joins the Fawn River which joins the St. Joseph River outside Constantine.

Educational Facilities

The Township is home to Glen Oaks Community College, St. Joseph Intermediate School District facilities, and Lake Area Christian School. The Township is serviced by the St. Joseph County Intermediate School District and the local districts of Centreville, Nottawa, Burr Oak, and Sturgis. Most of the Township is serviced by Centreville and Sturgis Public Schools.

Municipal Utilities & Other Services

The Township does not contain any municipal utilities. As such, all households use well and septic systems for drinking water supplies and wastewater treatment. This plan examines the septic suitability of soils in the Township to help direct residential development.

Septic Suitability

The following soils found in the Township are not suitable for septic fields due to severe limitation, mainly poor filtering:

- The Sebewa-Cohoctah association including: Granby, Sebeway, Cohoctah, Houghton, Bronson and Adrian soils, all of which are loamy soils found in glacial outwash plains and floodplains.
- Brady and Elmdale soils have severe septic suitability limitations due to wetness or ponding. These are poorly drained loamy and sandy soils found over sand in outwash plains.

The map and description below describe the overall septic suitability of Sherman Township:

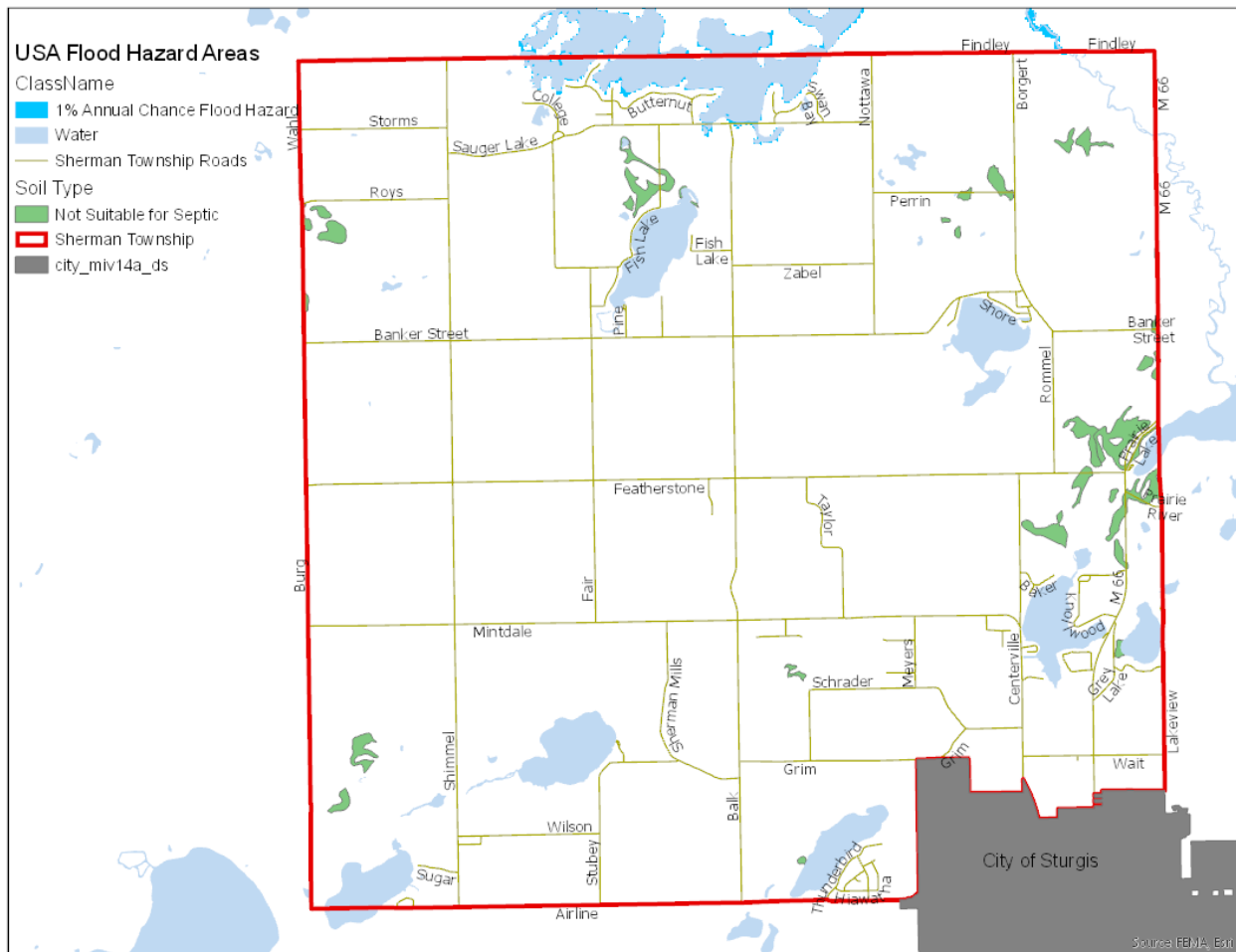
“Septic Tank Absorption Fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches is evaluated. The ratings are based on soil properties, site features, and observed

performance of the soils. Permeability, a high water table, and flooding affect absorption of the effluent. Large stones interfere with installation. Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health. Ground water can be polluted if highly permeable sand and gravel is less than 4 feet below the base of the absorption field, if slope is excessive, or if the water table is near the surface. There must be

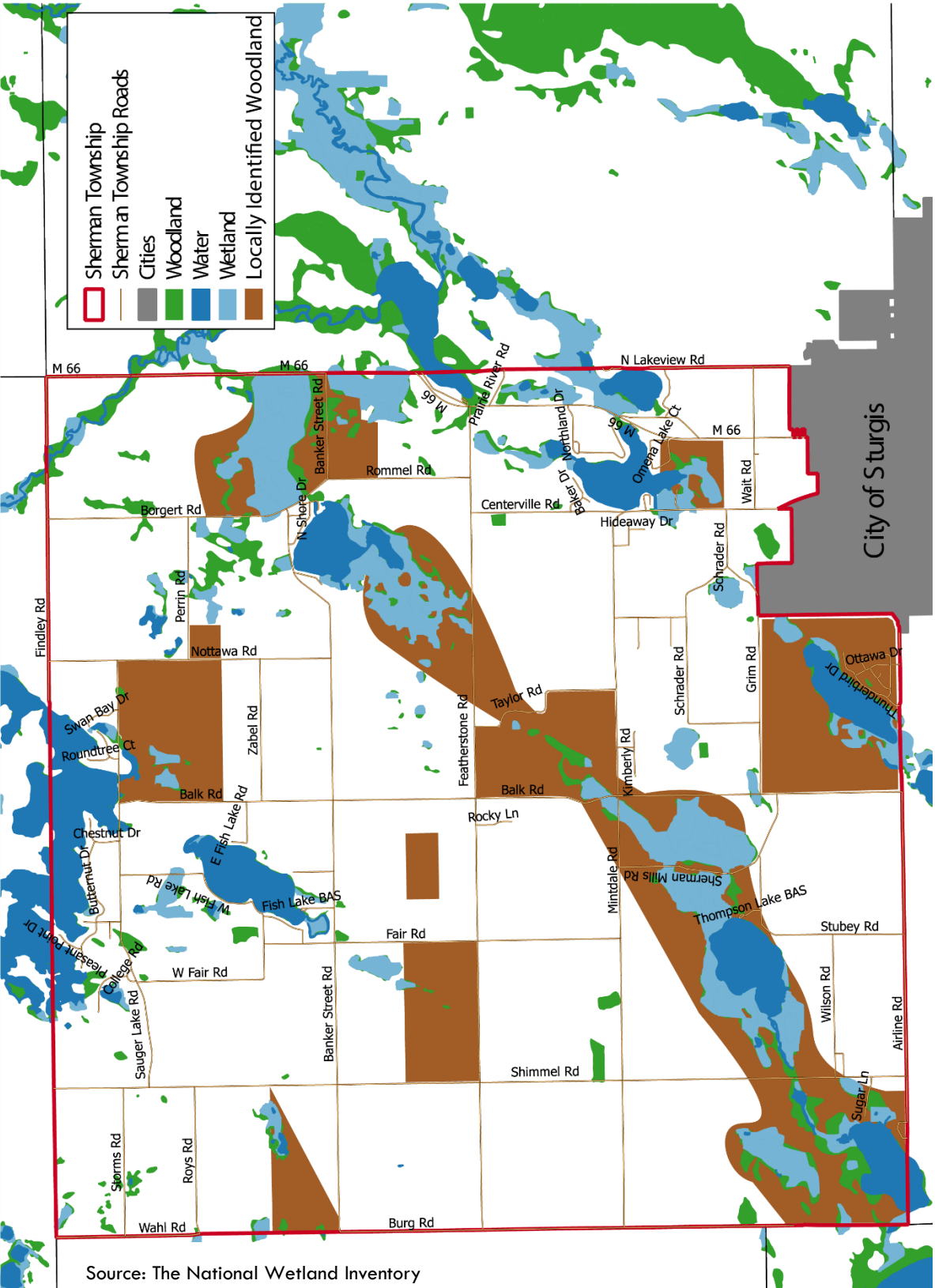
unsaturated soil material beneath the absorption field to filter effluent effectively. Many local ordinances require that this material be a certain thickness.”

Source: Soil Survey of St. Joseph County, Michigan - United States Department of Agriculture, Soil Conservation Service, April 1983

Map 4-1: Septic Suitability in Sherman Township



Map 4-2: Woodlands & Wetlands in Sherman Township



Transportation Facilities

Roads

The Township does not have direct access to any major highways. The most significant road to traverse the Township is M-66. M-66 is a state designated highway that runs from the Indiana border through the City of Sturgis, through the Township on its eastern border, north through St. Joseph and Calhoun Counties, through the City of Battle Creek, then northward for another 120 miles before joining with M-115 east of Cadillac. Though not in the Township, two major roads are just beyond the southern border. US-12 is around one mile from the southern border of the Township and provides east-west access. Interstate 80 is less than five miles away and is one of the most traveled highways in the U.S., running from New York City to San Francisco.

The St. Joseph County Road Commission manages the local roads in Sherman Township. Featherstone Road (5.8 miles) and Shimmel Road (6 miles) are class A all-season roads (totaling five miles). While most roads are paved, a small number are gravel (https://stjoeroads.com/wp-content/uploads/St-Joseph-County-Map_20150306_0001.Class-A-Roads.pdf).

Bridges

No bridges in the Township received a rating. Two bridges on Findlay Road just north of the Township border were rated as fair.

Vehicle Traffic

Traffic counts are available for only one road in the Township: M-66. These traffic counts are found in MAP 4-4 and MAP 4-5.

The traffic counts available for M-66 have an Average Daily Traffic (ADT) volume of 7,673 cars in the City of Sturgis and at the south township line, and 6,164 ADT through the rest of

the Township. Commercial traffic on M-66 is low, at 491 CADT (Commercial ADT) in the City of Sturgis and at the Township's southern border. CADT is 437 through the rest of the Township.

Road Conditions

The PASER (Pavement Surface Evaluation & Rating) analysis of roads in Sherman Township (MAP 4-6) lists many of the well-traveled roads in the Township as fair or poor. Most notably, the entirety of Balk Road is listed as "poor". Only small portions of any road in the Township are list as "good," M-66 between Wait Road and Omena Lake Court, and Shimmel Road between Featherstone Road and Sauger Lake Road.

Public Transit

The Three Rivers Circle Ride is a public transit route running from the Three Rivers Public Library out to Riverside Townhouses on Sherman Drive. The St. Joseph County Transportation Authority also operates a dial-a-ride system with Sherman Township included within the service area.

Rail Transportation

No rail lines traverse the Township.

Non-Motorized Travel

The Township has no formal non-motorized travel facilities, but some roads in the township are used as such. None of the main roads in the township have significant non-motorized traffic, but some of the smaller streets near lakes see a good deal of non-motorized activity. Amish communities also use horse-drawn buggies for transportation in many parts of the Township. The Township should work with Amish communities and the St. Joseph County Road Commission to ensure roads are safe for all users.

Map 4-4: Commercial Traffic Volumes in Sherman Township

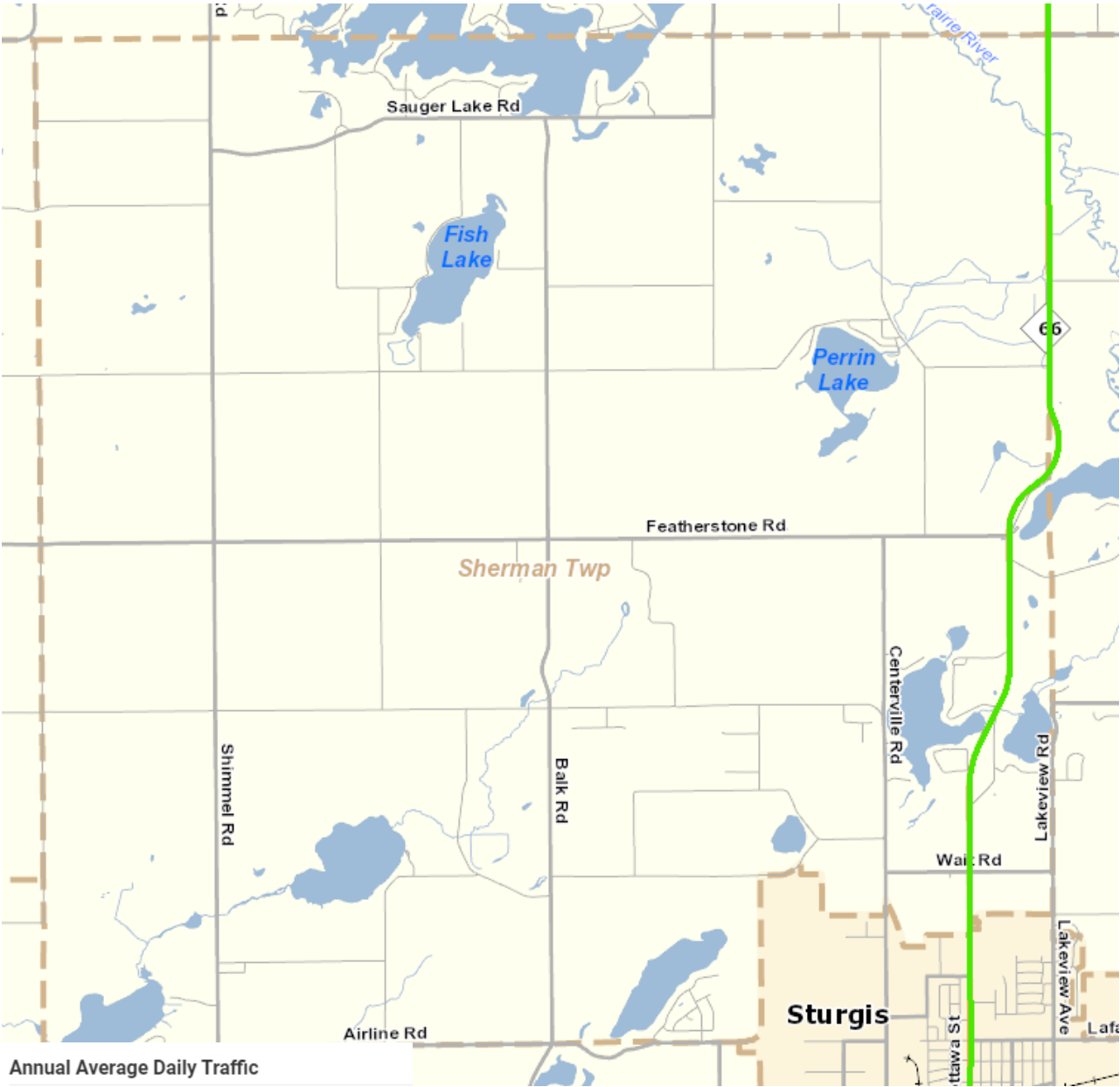


Commercial Annual Average Daily Traffic Source: Transportation Asset Management Council of Michigan

View CADT



Map 4-5: Passenger Traffic Volumes in Sherman Township

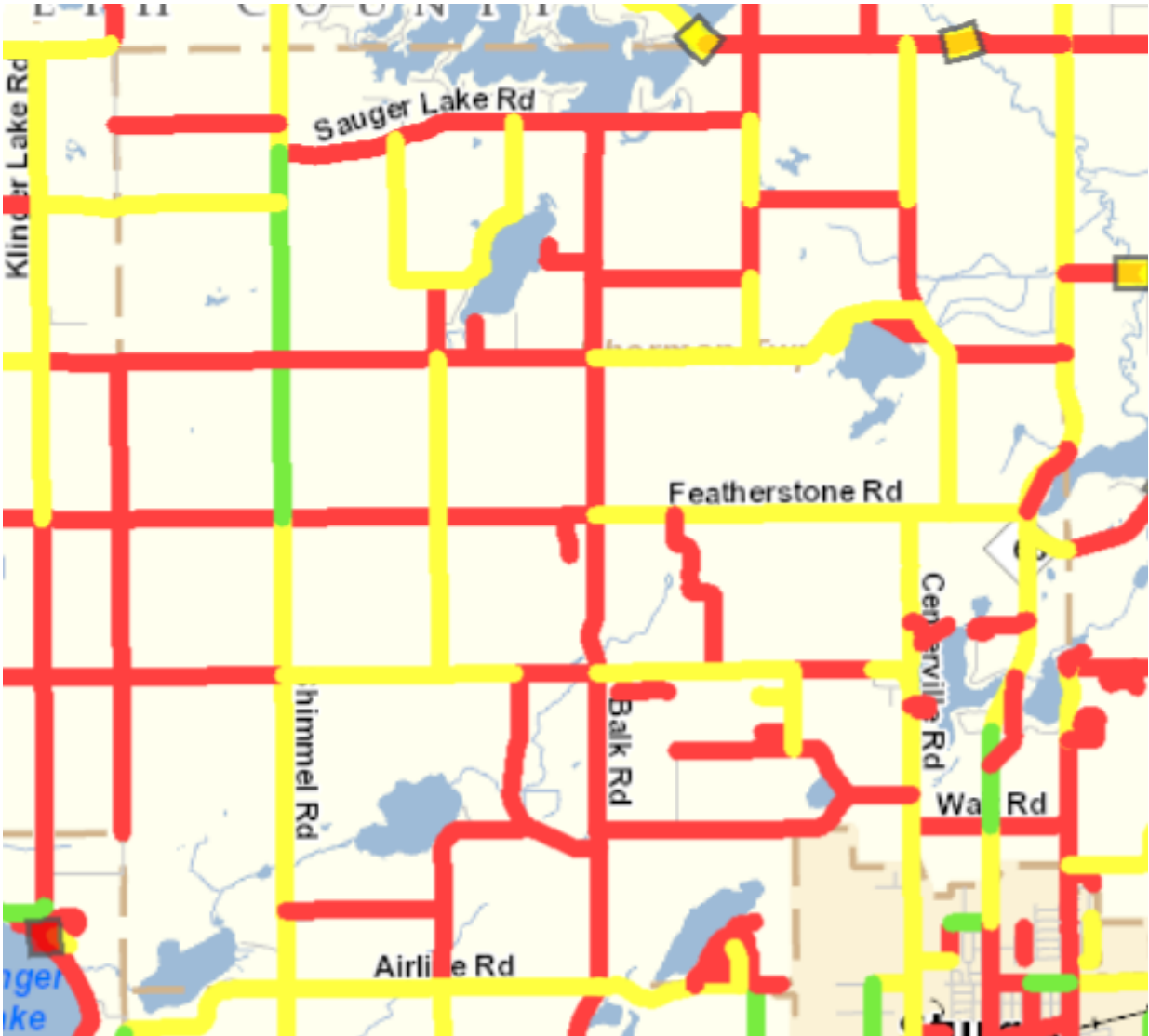


Annual Average Daily Traffic



Source: Transportation Asset Management Council of Michigan

Map 4-6: Road Conditions in Sherman Township (2016-2017)

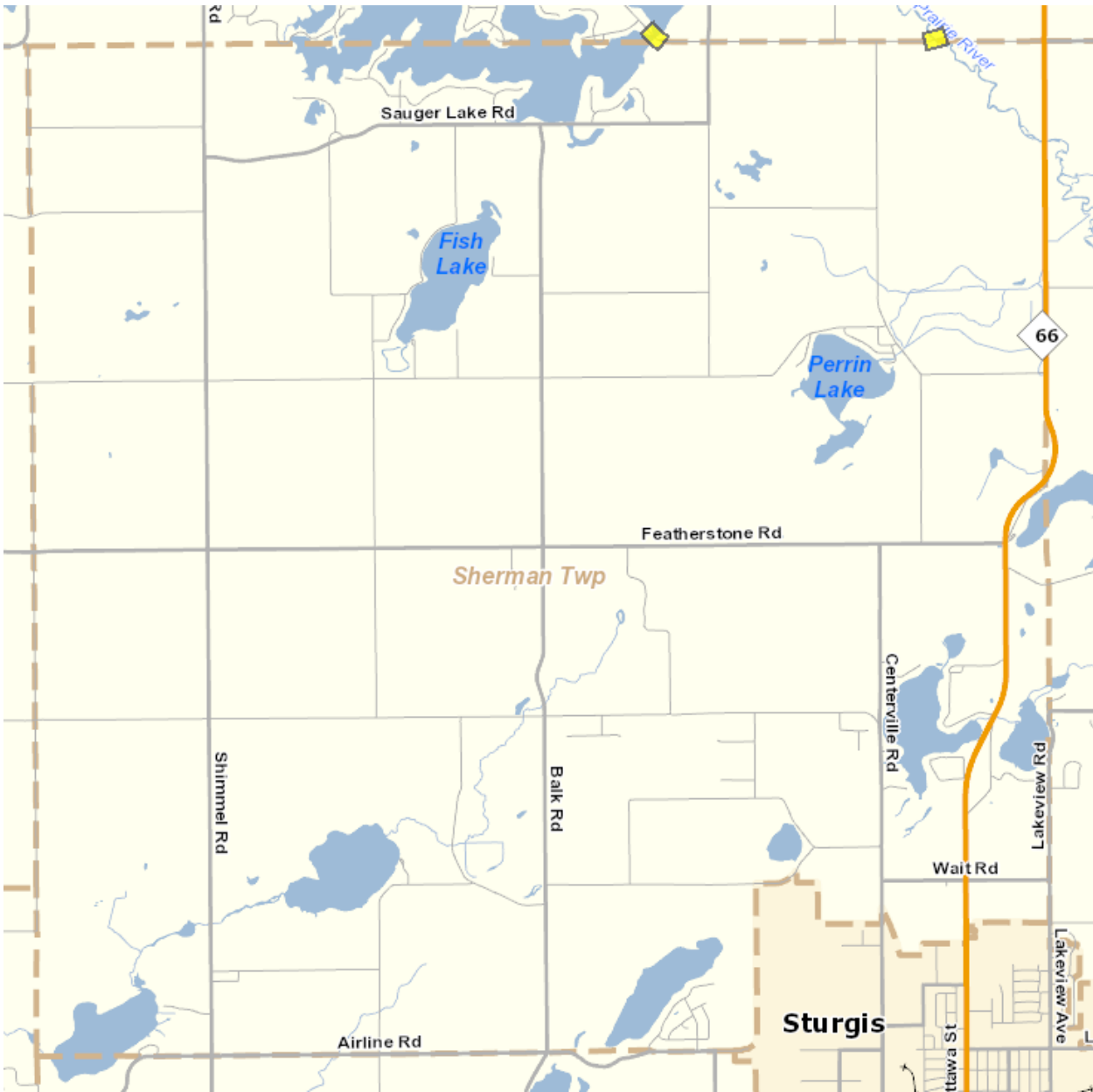


Rating

Source: Transportation Asset Management Council of Michigan



Map 4-7: Bridge Conditions in Sherman Township (2016-2017)



Rating

Source: Transportation Asset Management Council of Michigan



Airport

The City of Sturgis has a municipal airport located at the northern end of the city adjacent to the Township. 18 aircraft were based out of the airport; 16 single engine airplanes, one jet engine airplane, and one helicopter. The airport averages 22 operations per day. This facility does provide non-commercial airport services to the entire area. There are no scheduled airlines. Nonetheless, the Township must restrict land uses adjacent to the airport.

Five airport Runway Protection Zones (RPZ) are identified by the State of Michigan Department of Transportation, Bureau of Aeronautics & Freight Services. Within these zones, the state's land use guidelines supersede the Township's zoning ordinance. State law prohibits rezoning of these areas to a higher density land use. Below are listed specific restrictions for these areas:

Zones 1 and 2:

- Avoid land uses which concentrate people indoors or outdoors.
- Prohibit all residential land uses. All non-residential land uses permitted by right are subject to the state's Population Density and Special Function Land Use guidelines, which lists prohibited structures and uses.

Zones 3 and 4:

- Avoid land uses which concentrate people indoors or outdoors.
- Limit residential development to Low Density housing standards. All non-residential land uses permitted by right are subject to the state's Population Density and Special Function Land Use guidelines, which lists prohibited structures and uses.

Zone 4:

- Limit population concentrations.
- Limit residential development to Low Density housing standards. All non-residential land uses permitted by right are subject to the state's Population Density and Special Function Land Use guidelines, which lists prohibited structures and uses.

Zone 5:

- Avoid land uses which concentrate people indoors or outdoors.
- Prohibit all residential land uses. All non-residential land uses permitted by right are subject to the state's Population Density and Special Function Land Use guidelines, which lists prohibited structures and uses.

Under the Special Function Land Uses guidelines, the following structures and uses are prohibited in Zones 1 through 5:

- Overhead utilities and noise sensitive land uses
- Schools, play fields, hospitals, nursing homes, day-care facilities, and churches.
- Storage of large quantities of hazardous or flammable materials.
- Large areas of standing water or uses that generate smoke, steam, etc.

For any proposed structure or addition that breaks an imaginary surface or plane extending outwards and upwards at the rate of one (1) foot rise for every 100 feet of horizontal distance within 20,000 feet of the nearest point of all runways, the Zoning Administrator and/or Building Official shall not issue a zoning compliance permit or building permit until the applicant has filed with the Township (1) the "Acknowledgement of Notice" and a "Declaration of No Hazard" issued by the Federal Aviation Administration; and (2) the Michigan Department of Transportation "Tall Structure Permit" issued pursuant to P.A. 259 of 1959, as amended, concerning the proposed construction or alteration.

The elevation is determined by the elevation above mean sea level of the airport runway surface, to the elevation of the top of the height of a proposed structure measured from the elevation above mean sea level of the land on which the structure is located.

Parks, Open Space, and Leisure Time

The Township does not contain any Township, County, or State parks, but it does have recreation facilities. The Township is home to several boat access sites, two navigable waterways, campgrounds, an off-road recreational vehicle park, and shooting range. Additionally, many parks are located in close proximity to the Township.

Aquatic Recreation

Two waterways that traverse the Township were mentioned as potential water trails by the St. Joseph County Water Trail Master Plan – the Prairie River and Sherman Mill Creek. Water trails can provide residents and visitors the opportunity to access the river for boating, fishing, or educational opportunities. The water trail master plan and additional information is found here: www.stjoeh2o.com.

Public lake access can provide recreational opportunities for residents and visitors. Typically, these access sites are administered by the Michigan Department of Natural Resources and require very little Township resources. The Township has four public boat access sites:

- The south end of Fish Lake
- The west end of Prairie River Lake
- The east end of Omena Lake
- The east end of Thompson Lake

Other Recreation in the Township

The Township is home to campgrounds, an off-road recreational vehicle park, and a conservation club. Amigo Park is a private campground and recreational area. It is located on the west end of Perrin Lake. It offers camping, boating, fishing, swimming, and hiking opportunities. The park is also home to summer camps, retreats, and educational programs.

Rouch World is a private multi-use recreation area that offers off-road recreational vehicle courses, camping, boating, and an event center for weddings and other large gatherings. Rouch World has plans for other recreational amenities in the near future. The varied uses presented a challenge to the Township's zoning; nonetheless, Township officials found a way to accommodate plans for the area while maintaining the character of the Township through a Planned Unit Development.

The St. Joseph County Conservation Sportsman Club is located in the east-center of the Township. The membership-based club offers a variety of firearm safety and marksmanship programs. The facility is roughly 180 acres and has eight shooting ranges. A clubhouse is also available for member-hosted events.

A number of parks outside the Township offer recreational opportunities those are listed below:

- East of the Township
 - Timm Preserve County Park
 - Klinger Lake Country Club
- North of the Township
 - Sand Lake County Park
 - Hoshel Canoe County Park
 - Adams Park in Centreville
- South of the Township
 - Old Depot Dog Park (Sturgis)
 - Memorial Park (Sturgis)
 - Trojan Timbers Park (Sturgis)
 - Franks Park (Sturgis)
 - Plumb County Park

An officially adopted *Five-Year Parks and Recreation Plan* approved by the Michigan Department of Natural Resources is a requirement for the submission of a request for land acquisition or park development funding. The Plan, if prepared, would address the current and future needs of the Township. National park and recreation planning standards acceptable to the Michigan Department of Natural Resources indicate that the total land reserved for parks and recreation purposes in the Township should comply with a ratio of 10.5 acres of land for

every 1,000 residents. Therefore, the Township, with a future population approximating 4,500 persons in the year 2025, would be expected by that time to have an inventory of parks and recreation land of approximately 47.3 acres.

The State of Michigan gives priority to joint municipal parks and recreation plans for the selection of projects from the limited funding available. Such joint plans can involve a township, a city, a village, and/or a school district or it can be a county-wide plan with sign-on by multiple jurisdictions.

Agriculture

The climate, terrain, and variety of soils make several areas in the Township well suited for agriculture. Open space lands including woodlands, wetlands and other environmentally significant areas are features normally associated with farmlands and agricultural areas. These lands provide unique and economic benefits to the citizens of Sherman Township and are an important part of the Township's natural and agricultural heritage. Agriculture also contributes to the local economy in direct sales of agricultural products. Many of the agricultural activities in Sherman Township provide the opportunity to harvest locally grown foods to sell at roadside stands, farmers markets and local retail food stores to increase tourism and the economic impact of agriculture.

Agriculture is an important economic activity for St. Joseph County (statistics of economic impact at the township level are not available). In 2012, St. Joseph County ranked 2nd among counties in the state in production of broilers and other meat-type chicken; 2nd in potato production; 3rd in vegetables, melons, potatoes and sweet potato production; and 3rd in all types of vegetables harvested for the State of Michigan. In 2012, there were 967 farms in St. Joseph County. Of these, 57 were vegetable farms and 421 were in corn for grain farms. There was a

total of 221,745 acres of land in farms with 10,842 acres in vegetables, 98,336 acres in grain corn and 52,453 acres in soybeans.

The average size of a farm in St. Joseph County in 2012 was 229 acres and the median size was 60 acres. In 2012, in St. Joseph County the average market value of agricultural products sold per farm was \$1,090,048 with the total market value of agricultural products in the County valued at \$238,053,000.

Amish Land Use

The Township is home to a significant Amish community. The nature of the Amish lifestyle often conflicts with typical zoning practices. Amish communities often use one piece of property as a residence, workshop, and retail outlet. The Township has, and should continue, to accommodate Amish activities as long as they do not conflict with nearby uses.

Relevance to the Master Plan

These data demonstrate that agriculture and natural areas are valuable assets to Sherman Township and St. Joseph County. The importance of these lands was also made clear during the master planning process; residents, farmers, and township officials all agreed to prioritize the preservation agricultural land and natural, open spaces. To account for their priorities, specific goals for preserving open space and farmland are outlined in Chapter 2, and changes to future land use are proposed in Chapter 5. Existing Michigan programs and legislation that could affect these aims are outlined below.

Farmland and Open Space Preservation Program, PA 116

In Sherman Township, many farms are enrolled in Public Act 116, Michigan’s Farmland and Open Space Preservation Program. The program, known as PA 116, is designed to preserve farmland and open space through agreements that restrict development and provide tax incentives to property owners for their participation.

...there are 4,243 acres of land – about 1% of the land area in the Township – enrolled in PA 116.

According to the 2012 Census of Agriculture prepared by the United States Department of Agriculture, the amount of land being farmed in St. Joseph County has increased from 215,425 acres in 2007 to 221,745 acres in 2012. The increase was experienced mostly in the acres used for cropland up from 181,051 acres in 2007 to 188,221 acres in 2012. USDA reports that 179,483 acres of cropland were harvested in 2012.

Corn for grain, and soybeans for beans are the primary crops in St. Joseph County. The total market value of agricultural crop production in St. Joseph County in 2012 totaled \$238 Million with crop sales reaching \$190 Million and livestock production reaching \$47 Million.

Agricultural Land Value

A 2014 study by Michigan State University produced estimates for farmland value for distinct areas of the state. Within the South-Central District (St. Joseph, Branch, Hillsdale, Calhoun, Jackson, Barry, Eaton, Ingham, Clinton, Ionia and Shiawassee counties) the study estimated farmland values between \$3,610 per

acre and \$4,724 per acre. State-wide the values ranged from \$3,699 to \$8,576 per acre with the higher value being for fruit trees, a classification not found in the South-Central district. For agricultural land converted to residential uses the average value was \$6,719 per acre and the average for farmland converted to commercial/industrial uses was \$11,500 per acre.

	Field Crop Tiled	Field Crop Non-field	Irrigated	Fruit Trees
South Central District	\$4,095	\$3,610	\$4,724	N/A
State-wide	\$4,646	\$3,699	\$5,144	\$8,516

Source: Michigan State University, Department of Agricultural, 2013 Farmland Valuation Summary

St. Joseph County assessor’s records reported in 2017 an average sale price per acre of \$4,687.97 for vacant land. This ranged from a high of \$38,888.89 to a low of \$1,339.28 per acre. In the Centerville/Three Rivers area there were 188 acres sold in 2017 for an average price of \$5,434.5 per acre. The price per acre ranged from \$10,000 to \$2,444.

Open Space and Farmland Preservation

Part 362 of the Natural Resources and Environmental Protection Act (NREPA), Michigan Public Act 451 of 1994 as amended, created the Agricultural Preservation Fund and the Agricultural Preservation Fund Board. The purpose of the fund is to provide matching dollars to qualifying local units of government Purchase of Development Rights Programs. In order to qualify for participation a local unit of government must:

- Have a comprehensive plan that has been adopted within the last 10 years and reviewed and/or updated within the last 5 years that contains an agricultural preservation component, and
- Have adopted a purchase of development rights ordinance that includes a method to select parcels for possible purchase and also includes a method to determine the price to be paid for those development rights, and
- Provide for funds to match the State grant. Matching funds are not required to come directly from the local unit of government. They can come from a variety of sources, including private donations, landowner donations, and other grants.

In order to fulfill a portion of the requirements listed above, on March 15, 2005, the St. Joseph County Board of Commissioners adopted a county-wide Farmland and Open Space Preservation Ordinance. The intent of the ordinance is to create a St. Joseph County Farmland and Open Space Preservation Program to:

- Protect eligible farmland by purchasing development rights voluntarily offered for purchase by landowners,
- Authorize acceptance of voluntary donations and the cash purchases and/or installment purchase of development rights of eligible farmland

and the placement of conservation easement on these properties that restricts the future development,

- Establish a county comprehensive plan element to be prepared in collaboration with local units of government within St. Joseph County that describes geographic areas within St. Joseph County where eligible property should be protected and preserved,
- Provide procedures and guidelines for selecting the farmland parcels to be protected; for determining the value to be paid for those rights; and, for the repurchasing of those rights for properties that no longer comply with the protection and preservation policies of the program and goals of the St. Joseph County Comprehensive Plan.

Townships, such as Sherman, can qualify for state grants by participating in the County Farmland and Open Space Preservation Program. Criteria for participation can be found in the Farmland and Open Space Preservation ordinance, available at the County's website (www.stjosephcountymi.org/forms/educational_brochure.pdf).

Development Rights Sending Areas

Development rights sending areas are intended to provide owners of properties that have sever development limitation with an option to realize development opportunities. The concept is tied to the bonus provisions of the Planned Unit Development section of the Zoning Ordinance. Where higher density developments are possible, a developer, through a purchase/transfer of development rights provision, may purchase additional density rights from property owners in a sending area. These purchased development rights are then transferred to developable property in a receiving area of the township. Potential Development Rights Sending Areas are:

- Properties larger than three (3) acres zoned Agricultural and located under the

Airport Overlay Zone that cannot be rezoned to a higher density.

- Properties larger than one (1) acre within a Special Flood Hazard Area.
- If St. Joseph County exceeds a population of 100,000, then properties larger than one (1) acre located within a regulated wetland.
- Properties larger than one (1) acre having a documented lead/arsenic contamination situation or well-water source area with phosphorous above recommended levels resulting in property which cannot be reasonably developed.

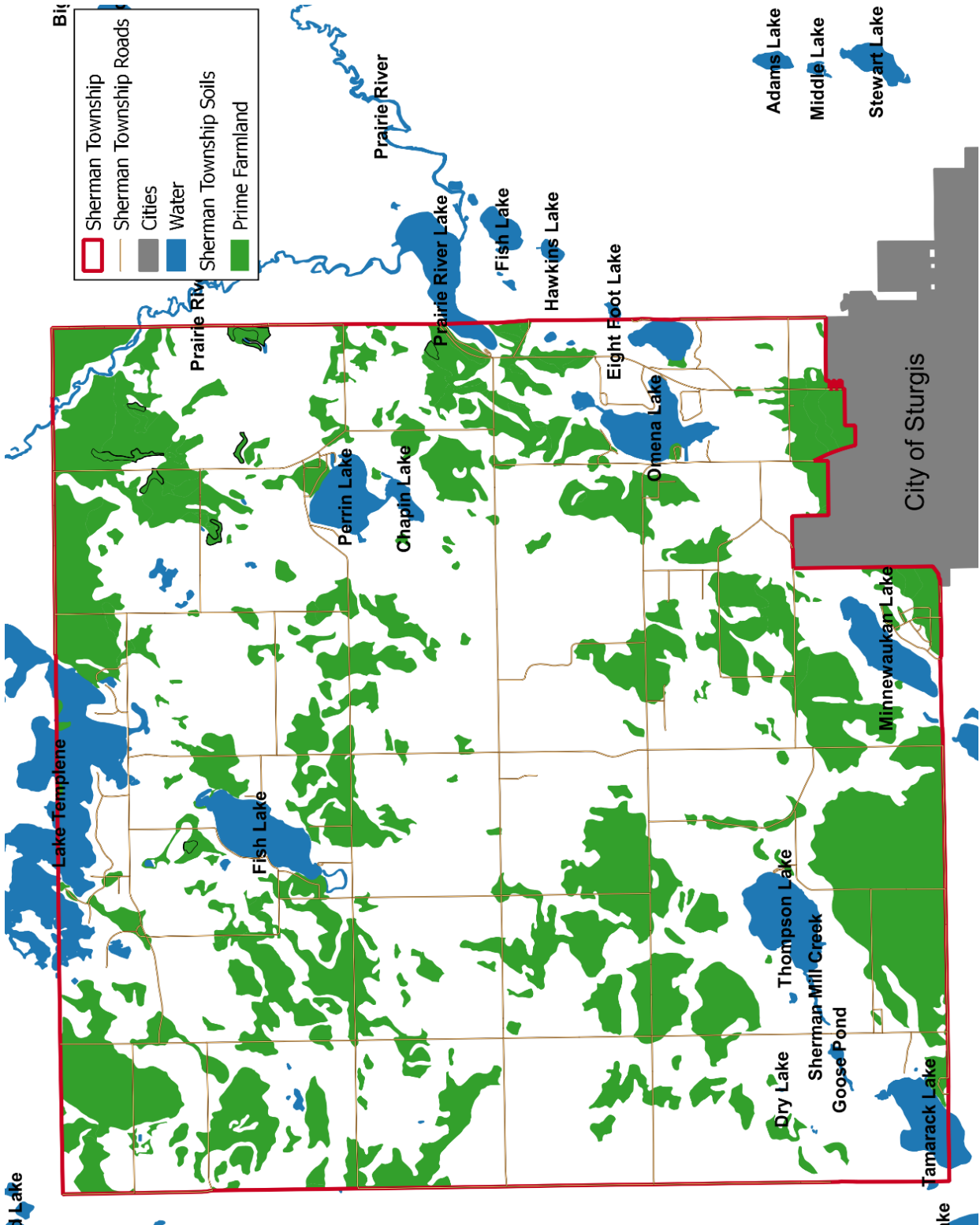
Temporary Farmland Preservation Agreements

The State of Michigan provides a program that offers farmland owners a tax credit for enrollment of their active agricultural land in a temporary easement intended to retain the enrolled property in active agricultural production.

Prime Farmland Map

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service (see Appendix for list of prime farmland soils).

Map 4-10: Farmland Soils in Sherman Township



See Appendix for list of soils considered prime by the Soil Conservation Service.

CHAPTER 5: FUTURE LAND USE PLAN

FINDINGS

The future land use plan is based on the following findings:

- The Township is predominantly rural with a population density of 97.6 people per square mile, or 47.6 housing units per square mile. On average, there is one housing unit per 13.4 acres.
- The Township is primarily a mix of agriculture, housing, and undeveloped lands; only small amounts of commercial and industrial uses are found in the Township. Wetlands limit development in some parts of the township.
- Significant portions of the Township have soils that are considered “prime” for agricultural use.
- Several lakes play an important role in shaping the land use of the Township.
- Only one significant state highway traverses Sherman Township.
- Adjacent to the Sherman Township, in the City of Sturgis, is a small municipal airport. Land uses near the airport are subject to restrictions.
- The Township does not have any public parks within its boundaries but is home to a few private recreation areas.
- These conditions are largely similar to those found when the previous version of the plan was adopted in 2000.
- The Township adopted a zoning ordinance in 2006 and incorporated updates in 2015.

FUTURE LAND USE and ZONING PLANS

This Future Land Use Plan will serve as the blueprint for future development of the township until amended or replaced. The Zoning Plan will describe the zoned uses and articulate the relationship between the current zoning and Future Land Use Plans.

1. Agriculture

Future Land Use Plan

The Township wishes to preserve its rural and agricultural heritage. It plans to keep its most productive farmland in agricultural use for the foreseeable future. The Township will make efforts to keep prime farmland in agricultural uses. The Township will give careful consideration to any proposed use other than agriculture on lands label “prime farmland”. The Future Land Use map aims to maintain in perpetuity the areas currently zoned AG.

Zoning Plan

Agriculture uses occur in the Agriculture district (AG) and the Rural Residential district (RR) by right. New agricultural related buildings located on grandfathered farms (in existence and in operation as of August 7, 2006) in Natural Features districts (NF) are allowed by permit or special land use designation (depending on the situation). Another type of agricultural use, private greenhouses, are allowed in the Medium Density Residential districts (MDR). The AG and RR districts comprise the bulk of the land area of

Sherman Township and are found across all areas of the Township.

The AG district is intended for residential and farm uses, including other uses generally associated with agriculture, and related non-residential uses. The purpose of this District is to preserve the agricultural and rural residential character of the lands within this District, minimizing public service costs, limiting urban influence, and preserving a maximum of open space. Careful consideration is given to environmental concerns related to groundwater quality and other related issues pertaining to development in rural areas with limited public services. All uses permitted within this District shall be conducted with due consideration for the potential effects which may result from authorized agricultural uses, in accordance with Public Act 93 of 1981, the Michigan Right to Farm Act.

2. Residential

Future Land Use Plan

Residential uses are scattered throughout the Township and take on different levels of density and a variety of settings. While the diversity of housing is limited, it does vary to some degree. Housing is found among farms, wetlands, woodlands, open spaces, and occasionally in somewhat tight groupings. The Township plans to encourage residential housing outside of prime farming soils, and in those areas where the soils permit well and septic systems.

Zoning Plan

The Township has six districts that allow housing: Agriculture (AG), Natural Features (NF), Rural Residential (RR), Medium Density Residential (MDR), and Manufactured Community Housing (MHC). Housing is not permitted in the Neighborhood Commercial (NC) or Light Industrial (LI) districts. Single-family detached housing units, adult foster care family homes, and foster family homes are allowed in all districts

that allow housing. Two-family housing units (duplexes) are only allowed by special land use permit in the Waterfront Residential (WR) and MDR districts. Housing units with more than two units are only allowed by special land use permit in the MDR district. Housing for migrant laborers is only allowed by special land use permit in the RR district. Manufactured housing is addressed in a section below. AG, NF, and RR comprise the bulk of the residential districts in the Township and are found throughout the Township. WR is only found around the lakes in the Township; all areas adjacent to the lakes in the Township are planned for WR. MDR is found in sporadic pockets in the Township, primarily near lakes, the City of Sturgis, and a few other areas.

District Definitions are as follows:

NF, Natural Features District: This district intends to maintain existing rural features in areas of the township characterized by woodlands, wetlands and other natural features. The purpose of preserving the essential characteristics of these lands is to maintain natural features and open spaces as long as it is economically viable to do so, and to preclude the necessity of serving scattered urban developments with water, sewer, schools, roadways, and other public services. To achieve these objectives, uses other than low-density residential and limited community facilities, including agriculture and home-based businesses, are allowed in special circumstances.

RR, Rural Residential District: This District is intended primarily for large residential lots, principally on non-prime farmland. The purpose of this District is to preserve the rural character of lands within the township, maintain the integrity of viable agricultural areas, minimize public service costs, and preserve the maximum amount of open space. Careful consideration will be given to environmental concerns related to groundwater quality and other related issues

due to the limited ability of the Township to provide public services. No public utilities are planned for these areas.

WR, Waterfront Residential District: This District is intended for medium density single family residential development located on and near the lakes, rivers and streams of Sherman Township. Preservation of lake, stream, and river water quality and the rural residential character is an important element within this District. The unique character of development in this District is evidenced through smaller lots that once were generally seasonal homes but are increasingly seeing year-round use.

MDR, Medium Density Residential District: The purpose of this District is to encourage a suitable environment for a variety of residential densities, and compatible supportive recreational, institutional, and educational uses. Careful consideration is given to environmental concerns related to groundwater quality and other related issues pertaining to development in rural areas with limited public services.

Manufactured Housing Community (MHC) districts allow for the creation of manufactured housing communities. These are areas in which manufactured houses are densely grouped. Single family housing and family foster care homes are also permitted in MHC districts. Adult foster care homes require a special land use permit to operate in the MHC district. The definition of the MHC district is as follows:

The Manufactured Housing Community District is intended to provide regulations for manufactured housing communities and to provide for additional variety in housing opportunities and choices.

3. Commercial Development

Future Land Use Plan

Only areas along M-66 are designated at commercial uses in the future land use plan. The need for commercial development in Sherman Township is minimal. Most of the commercial needs of the residents of the Township are serviced by shops located in and around Sturgis, Centerville, and Three Rivers. If the need arises for commercial services in the Township, they should be located along M-66.

Zoning Plan

The Township zoning scheme allows for by right or through a special land use permit, office, retail, restaurant, lodging, gathering, service, automotive service, and other uses in Neighborhood Commercial (NC) districts. The definition of a NC district is as follows:

NC, Neighborhood Commercial District: This District is intended to permit local retail business and service uses which are desirable to serve the residential areas of the Township. The purpose of this District is to focus commercial development in targeted areas of the Township. Generally, square footage of Neighborhood Commercial uses should not exceed ten-thousand (10,000) square feet of building area.

4. Industrial Development

Future Land Use Plan

Industrial development is largely out of place in most parts of the Township. Only areas adjacent to the population and service hub of Sturgis should see industrial development. Even so, industrial develop should be limited in scope and scale to preserve the character of the Township. Furthermore, many industrial users will want access to municipal water supplies and sewer systems; industrial uses in Sherman Township might necessitate annexation or PA 425 land use transfer agreements.

Zoning Plan

Zoning restricts the land uses in areas zoned LI. Many industrial uses are allowed, while limited retail and services uses are allowed by right or special land use permit. Automotive service uses are allowed more generally by right or special land use permit. Other uses are allowed on a limited basis.

LI, Light Industrial District: This Zoning District is intended to provide exclusive areas for industrial uses in areas served by adequate infrastructure. Uses in this Zoning District are to provide for various types of light industrial and manufacturing uses, wholesale businesses, warehouses and other uses compatible with one another and with surrounding land uses and with an absence of objectionable external effects. These uses are characterized by moderate lot coverage, adequate setbacks, environmental sensitivity, and creative site design. The regulations are defined to exclude uses which would have a detrimental effect upon the orderly development and functioning of the District, as well as surrounding land uses.

5. Other Land Uses

Recreation

The Township is home to a few private recreation facilities, which are outlined in the Existing Land Use Chapter. There are no current plans for additional recreational facilities in the Township.

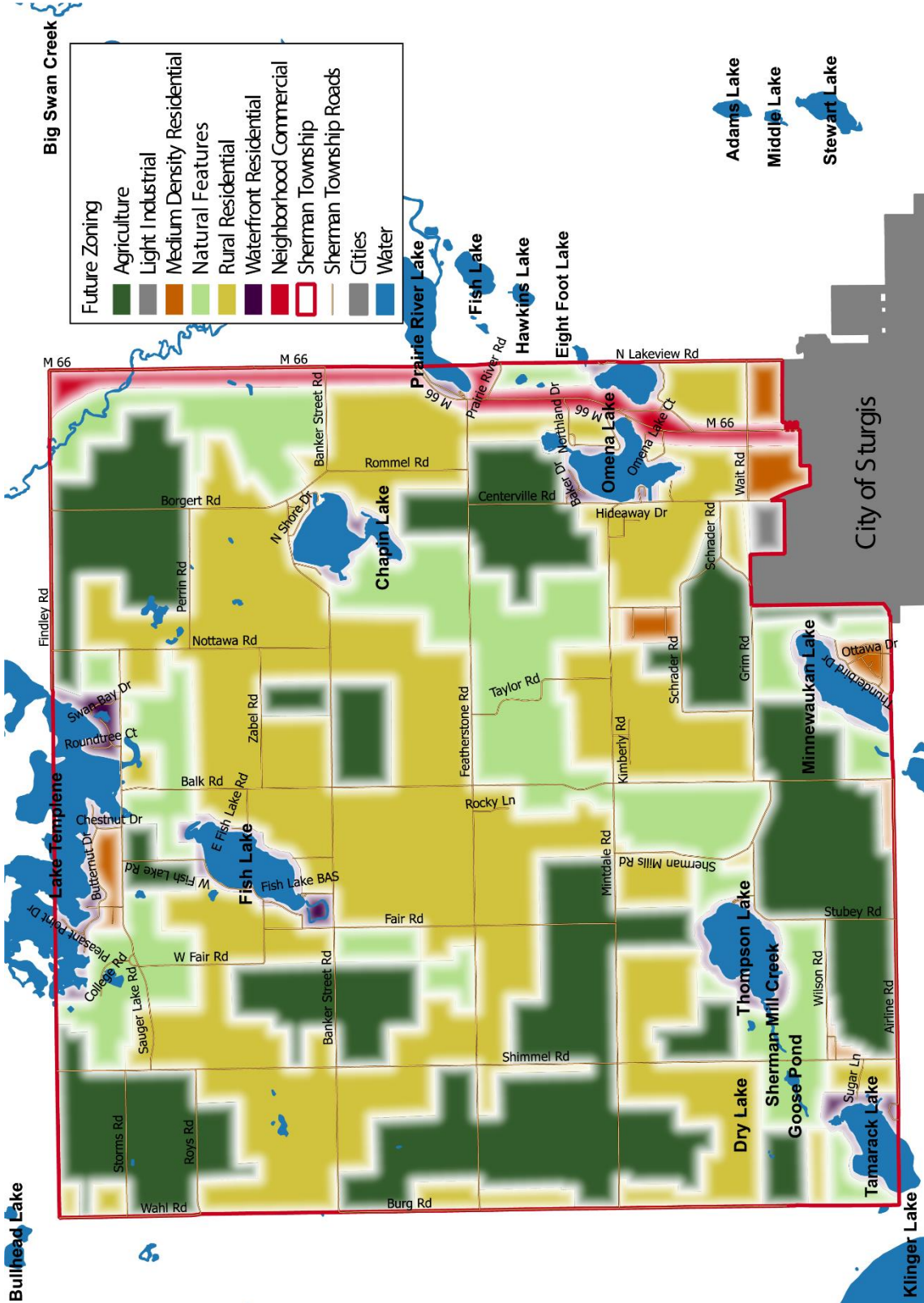
Public Uses and Transportation Facilities

Public uses and transportation facilities are minimal in the Township. The Township hall is the only public building. The transportation facilities found in the township are roads; those are outlined in greater detail in the Existing Land Use Chapter.

Undeveloped Areas

The Township has many existing undeveloped areas. The wetlands found in many parts of the Township are well-preserved natural areas. The Township is also home to many wooded areas and forests. Outside of the Natural Features (NF) districts, there is no need to make provision to protect or increase natural areas found in the Township.

Map 5-1: Future Land Use Map of Sherman Township



CHAPTER 6: PLAN PREPARATION AND PUBLICATION

PLAN PREPARATION:

This 2020 Sherman Township Master Plan Update is a complete overhaul of the 2000 Sherman Township Land Use Plan Update (adopted October 2000).

The planning process followed a strategy-first process. This process required the Planning Commission to establish goals and objectives before defining strategies, land use priorities, or examining community characteristics. A strategy-first approach will base all aspects of a master plan on the goals and objectives established by the Planning Commission. The Planning Commission created and distributed a survey the results of which drove the strategic planning discussions. Lee Adams from the Southcentral Michigan helped the Planning Commission interpret the results of the survey and led the Planning Commission through a strategic planning process using the previous version of the master plan as a starting point.

Once the strategic direction was established by the Planning Commission the planning work moved on to developing strategies designed to accomplish the goals and objectives. After the strategies were established the Planning Commission reviewed the existing land use patterns and compared those to the strategic direction. A future land use plan was established from the analysis of the existing land use patterns and the strategic direction of the Township. The Planning Commission quickly reviewed the community characteristics,

introduction, and plan preparation and publication chapters to complete the master plan.

Where the previous master plan was based upon the Township Zoning Act, being Public Act 168 of 1959, the present, 2020 Master Plan is based on the Michigan Zoning Enabling Act, P.A. 33 of 2008, as amended. The 1959 law being rescinded and replaced in its entirety by the 2008 law.

Public input was accepted during the public hearing as well as from communications received during the 63-day review period all of which are included in the appendix.

Publication:

The Sherman Township Board has reserved the right of final approval of the Master Plan. The Township Planning Commission recommended the 2020 Master Plan Update to the Township Board for distribution on _____.

The Township Board authorized distribution on _____, and comments were received from the St. Joseph County Planning Commission from their meeting of _____. (minutes in the appendix)

The Sherman Township Planning Commission held a public hearing on the proposed Master Plan Update (minutes in the appendix) on _____ and voted to recommend the plan to the Township Board on _____.

The Sherman Township Board approved the 2020 Sherman Township Master Plan Update on _____.

DRAFT

CERTIFICATION:

I, the undersigned duly qualified Clerk of Sherman Township, St. Joseph County, Michigan do hereby certify that the foregoing is a true and complete copy of the 2020 Master Plan and Future Land Use Map adopted by the Township Board of Trustees of the Township of Sherman, County of St. Joseph, Michigan at a regular meeting held on [MONTH ____, 2020] at [7:00P.M]. prevailing Eastern Time and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976.

[name], Clerk

APPENDIX

Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested federal, state, and local government organizations, has inventoried land that can be used for the production of the nation's food supply.

Prime farmland is of major importance in meeting the nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops with proper management, including water management, and application of acceptable farming methods. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures are needed to overcome a hazard or limitation, such as flooding, wetness, or drought. In these cases, onsite evaluation is needed to determine whether the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, prone to drought, less productive, and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate state agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by state law.

In some areas that are not identified as having national or statewide importance, land is considered to be farmland of local importance for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Soil Name	Prime Class
Histosols and Aquepts, ponded	Not prime farmland
<i>Nottawa sandy loam, 0 to 3 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Elston sandy loam, 0 to 3 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Hillsdale sandy loam, 2 to 6 percent slopes</i>	<i>All areas are prime farmland</i>
Hillsdale sandy loam, 6 to 12 percent slopes	Farmland of local importance
Hillsdale sandy loam, 12 to 18 percent slopes	Farmland of local importance
<i>Brady sandy loam, 0 to 2 percent slopes</i>	<i>Prime farmland if drained</i>
Cohoctah loam	Not prime farmland
<i>Elmdale sandy loam, 1 to 6 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Teasdale sandy loam, 0 to 4 percent slopes</i>	<i>Prime farmland if drained</i>
<i>Bronson sandy loam, 0 to 3 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Matherton loam, 0 to 3 percent slopes</i>	<i>Prime farmland if drained</i>
<i>Riddles sandy loam, 2 to 6 percent slopes</i>	<i>All areas are prime farmland</i>
Riddles sandy loam, 6 to 18 percent slopes	Farmland of local importance
<i>Schoolcraft loam, 0 to 4 percent slopes</i>	<i>All areas are prime farmland</i>
Urban land-Oshtemo complex, 0 to 6 percent slopes	Not prime farmland
Udorthents, loamy	Not prime farmland
Spinks loamy sand, 0 to 6 percent slopes	Farmland of local importance
Spinks loamy sand, 6 to 12 percent slopes	Farmland of local importance
Spinks loamy sand, 12 to 18 percent slopes	Not prime farmland

<i>Sebewa loam, 0 to 2 percent slopes</i>	<i>Prime farmland if drained</i>
<i>Oshtemo sandy loam, 0 to 6 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Oshtemo sandy loam, 6 to 12 percent slopes</i>	Farmland of local importance
<i>Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil</i>	Farmland of local importance
<i>Kalamazoo loam, 0 to 6 percent slopes</i>	<i>All areas are prime farmland</i>
<i>Kalamazoo loam, 6 to 12 percent slopes</i>	Farmland of local importance
<i>Barry loam, 0 to 2 percent slopes</i>	<i>Prime farmland if drained</i>
<i>Houghton muck, 0 to 1 percent slopes</i>	Farmland of local importance
<i>Adrian muck, 0 to 1 percent slopes</i>	Farmland of local importance
<i>Oshtemo sandy loam, 12 to 18 percent slopes</i>	Farmland of local importance
<i>Palms muck, 0 to 1 percent slopes</i>	Farmland of local importance

Detailed Traffic Counts for Sherman Township

LOCATION	BETWEEN	DATE	Daily Average	% COMMERCIAL
Bakers Acres Sub.	North Centreville to Cul-de-sac	5/6/2019	18.0	17.4
BANKER STREET	M-66 & ROMMEL	4/15/2002	63.9	4.2
BANKER STREET	M-66 & ROMMEL	6/28/2010	57.9	7.4
BANKER STREET	BORGERT & N. SHORE	4/15/2002	81.0	5.5
BANKER STREET	BORGERT & N. SHORE	6/28/2010	85.7	7.8
BANKER STREET	NOTTAWA & BALK	4/15/2002	67.9	9.3
BANKER STREET	NOTTAWA & BALK	6/28/2010	50.3	13.6
BANKER STREET	BALK & ZABEL SHORES	5/8/2000	185.0	3.9
BANKER STREET	BALK & ZABEL SHORES	6/28/2010	105.1	7.8
BANKER STREET	ZABEL SHORES & PINE DRIVE	5/8/2000	176.0	3.9
BANKER STREET	ZABEL SHORES & PINE DRIVE	6/14/2004	99.1	5.7
BANKER STREET	PINE DRIVE & FAIR	5/8/2000	170.3	4.5
BANKER STREET	FAIR & SHIMMEL	5/8/2000	140.3	4.9
BANKER STREET	FAIR & SHIMMEL	6/14/2004	90.7	8.5
BANKER STREET	FAIR & SHIMMEL	6/28/2010	83.1	7.7
BANKER STREET	SHIMMEL & BURG	4/15/2002	56.0	5.6
BANKER STREET	SHIMMEL & BURG	6/28/2010	53.0	8.6
BORGERT ROAD	FINDLEY & PERRIN	4/22/2002	77.7	4.4
BORGERT ROAD	FINDLEY & PERRIN	5/16/2011	65.0	7
BORGERT ROAD	PERRIN & BANKER	4/22/2002	97.1	4.0
BORGERT ROAD	PERRIN & BANKER	5/16/2011	91.9	7.3
BORGERT ROAD	BANKER & BANKER	4/15/2002	207.1	4.4
BORGERT ROAD	BANKER & BANKER	5/16/2011	164.6	5.7
BURG ROAD	BANKER & FEATHERSTONE	8/4/2003	11.8	6.8
BURG ROAD	BANKER & FEATHERSTONE	6/14/2004	4.7	6.5
BURG ROAD	FEATHERSTONE & MINTDALE	8/4/2003	9.7	0.0
BURG ROAD	MINTDALE & KLINGER LAKE	8/4/2003	8.0	3.7
FAIR ROAD	SAUGER LAKE & W FISH LK	4/15/2002	26.6	7.5
FAIR ROAD	SAUGER LAKE & W FISH LK	8/1/2011	22.9	6.8
FAIR ROAD	W FISH LK & BANKER	4/15/2002	53.7	4.9
FAIR ROAD	W FISH LK & BANKER	8/1/2011	39.9	8.1
FAIR ROAD	BANKER & FEATHERSTONE	4/15/2002	99.5	6.3
FAIR ROAD	BANKER & FEATHERSTONE	6/10/2004	29.3	4.4
FAIR ROAD	BANKER & FEATHERSTONE	8/1/2011	29.4	8.2
FAIR ROAD	FEATHERSTONE & MINTDALE	4/15/2002	13.6	5.8
FAIR ROAD	FEATHERSTONE & MINTDALE	8/1/2011	12.1	4
GRIM ROAD	SCHRADER & SCHRADER	10/8/2001	22.7	12.8
GRIM ROAD	SCHRADER & BALK	10/8/2001	28.9	13.7
GRIM ROAD	SCHRADER & BALK	8/8/2011	19.3	14.5
MEYERS ROAD	MINTDALE & SCHRADER	10/8/2001	33.3	6.4
MEYER ROAD	MINTDALE & SCHRADER	8/8/2011	30.7	13.4
MINTDALE ROAD	N CENTREVILLE & MEYERS	10/8/2001	92.6	4.3

LOCATION	BETWEEN	DATE	Daily Average	% COMMERCIAL
MINTDALE ROAD	N CENTREVILLE & MEYERS	6/28/2010	87.0	5.4
MINTDALE ROAD	MEYERS & TAYLOR	10/8/2001	92.3	3.3
MINTDALE ROAD	MEYERS & TAYLOR	6/21/2010	78.4	8.8
MINTDALE ROAD	TAYLOR & BALK	10/8/2001	79.6	4.5
MINTDALE ROAD	TAYLOR & BALK	6/21/2010	66.1	8.7
MINTDALE ROAD	BALK & SHERMAN MILLS	10/8/2001	67.4	4.8
MINTDALE ROAD	BALK & SHERMAN MILLS	6/21/2010	62.3	6.6
MINTDALE ROAD	SHERMAN MILLS & FAIR	10/8/2001	72.1	3.8
MINTDALE ROAD	SHERMAN MILLS & FAIR	6/21/2010	36.4	10.1
MINTDALE ROAD	FAIR & SHIMMEL	10/15/2001	70.1	5.9
MINTDALE ROAD	FAIR & SHIMMEL	6/21/2010	59.9	7.7
MINTDALE ROAD	SHIMMEL & BURG	10/15/2001	71.1	7.0
MINTDALE ROAD	SHIMMEL & BURG	6/21/2010	61.7	7.5
NOTTAWA ROAD	SAUGR LAKE & PERRIN	11/13/2000	110.1	4.6
NOTTAWA ROAD	SAUGR LAKE & PERRIN	8/1/2011	109.0	8.7
NOTTAWA ROAD	PERRIN & ZABLE	11/13/2000	62.3	6.6
NOTTAWA ROAD	PERRIN & ZABLE	8/1/2011	79.4	8.1
NOTTAWA ROAD	ZABLE & BANKER	11/13/2000	60.6	6.0
NOTTAWA ROAD	ZABLE & BANKER	8/1/2011	74.0	7.8
PERRIN ROAD	NOTTAWA & BORGERT	4/24/2002	57.1	6.7
PERRIN ROAD	NOTTAWA & BORGERT	5/16/2011	37.6	9.1
ROMMEL ROAD	BANKER & FEATHERSTONE	4/15/2002	158.9	3.3
ROMMEL ROAD	BANKER & FEATHERSTONE	5/16/2011	119.6	5
ROYS ROAD	SHIMMEL & WAHL	11/12/2001	23.6	5.4
ROYS ROAD	SHIMMEL & WAHL	7/19/2010	18.3	8.6
SCHRADER ROAD	N. CENTREVILLE & GRIM	8/8/2011	65.9	8
SCHRADER ROAD	GRIM & MEYERS	10/8/2001	51.4	4.8
SCHRADER ROAD	GRIM & MEYERS	8/8/2011	48.6	9.1
SCHRADER ROAD	MEYERS & GRIM	10/8/2001	11.9	14.1
SCHRADER ROAD	MEYERS & GRIM	8/8/2011	9.7	7.1
SHERMAN MILLS RD	MINTDALE & STUBEY	6/4/2001	17.9	7.2
SHERMAN MILLS RD	MINTDALE & STUBEY	8/1/2011	8.4	12.7
SHERMAN MILLS RD	STUBEY & BALK	10/8/2001	28.3	8.0
SHERMAN MILLS RD	STUBEY & BALK	8/1/2011	32.4	8.4
STORMS ROAD	SHIMMEL & WAHL	4/22/2002	17.9	8.7
STUBEY ROAD	SHERMAN MILLS & WILSON	8/27/2001	24.0	4.8
STUBEY ROAD	SHERMAN MILLS & WILSON	8/8/2011	21.6	11.9
STUBEY ROAD	WILSON & AIRLINE	8/27/2001	43.6	13.5
STUBEY ROAD	WILSON & AIRLINE	8/8/2011	29.6	9.4
TAYLOR ROAD	FEATHERSTONE & MINTDALE	10/8/2001	12.6	9.9
TAYLOR ROAD	FEATHERSTONE & MINTDALE	8/1/2011	9.9	12.1
WAHL ROAD	KLINGER LK & STORMS	4/14/2003	14.0	8.1
WAHL ROAD	STORMS & ROYS	4/14/2003	5.7	9.3
WEST FISH LK RD	SAUGER LAKE & FAIR	4/15/2002	29.6	6.5
WEST FISH LK RD	SAUGER LAKE & FAIR	7/25/2011	26.4	12.7

WILSON ROAD	STUBEY & SHIMMEL	8/27/2001	16.7	4.5
LOCATION	BETWEEN	DATE	Daily Average	% COMMERCIAL
WILSON ROAD	STUBEY & SHIMMEL	8/8/2011	14.3	19.7
ZABEL ROAD	NOTTAWA & BALK	8/4/2003	33.0	4.2
ZABEL ROAD	NOTTAWA & BALK	6/14/2004	9.3	1.7
ZABEL ROAD	NOTTAWA & BALK	8/1/2011	6.4	4.4

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LOCATION	BETWEEN	DATE	COUNT	% COMMERCIAL	# DAY CO
Bakers Acres Sub.	North Centreville to Cul-de-sac	5/6/2019	126	17.4	7
BANKER STREET	M-66 & ROMMEL	4/15/2002	447	4.2	7
BANKER STREET	M-66 & ROMMEL	6/28/2010	405	7.4	7
BANKER STREET	BORGERT & N. SHORE	4/15/2002	567	5.5	7
BANKER STREET	BORGERT & N. SHORE	6/28/2010	600	7.8	7
BANKER STREET	NOTTAWA & BALK	4/15/2002	475	9.3	7
BANKER STREET	NOTTAWA & BALK	6/28/2010	352	13.6	7
BANKER STREET	BALK & ZABEL SHORES	5/8/2000	740	3.9	4
BANKER STREET	BALK & ZABEL SHORES	6/28/2010	736	7.8	7
BANKER STREET	ZABEL SHORES & PINE DRIVE	5/8/2000	704	3.9	4
BANKER STREET	ZABEL SHORES & PINE DRIVE	6/14/2004	694	5.7	7
BANKER STREET	PINE DRIVE & FAIR	5/8/2000	681	4.5	4
BANKER STREET	FAIR & SHIMMEL	5/8/2000	561	4.9	4
BANKER STREET	FAIR & SHIMMEL	6/14/2004	635	8.5	7
BANKER STREET	FAIR & SHIMMEL	6/28/2010	582	7.7	7
BANKER STREET	SHIMMEL & BURG	4/15/2002	392	5.6	7
BANKER STREET	SHIMMEL & BURG	6/28/2010	371	8.6	7
BORGERT ROAD	FINDLEY & PERRIN	4/22/2002	544	4.4	7
BORGERT ROAD	FINDLEY & PERRIN	5/16/2011	455	7	7
BORGERT ROAD	PERRIN & BANKER	4/22/2002	680	4.0	7

BORGERT ROAD	PERRIN & BANKER	5/16/2011	643	7.3	7
BORGERT ROAD	BANKER & BANKER	4/15/2002	1450	4.4	7
BORGERT ROAD	BANKER & BANKER	5/16/2011	1152	5.7	7
BURG ROAD	BANKER & FEATHERSTONE	8/4/2003	47	6.8	4
BURG ROAD	BANKER & FEATHERSTONE	6/14/2004	33	6.5	7
BURG ROAD	FEATHERSTONE & MINTDALE	8/4/2003	68	0.0	7
BURG ROAD	MINTDALE & KLINGER LAKE	8/4/2003	56	3.7	7
EAST FISH LAKE RD.	BALK & DEAD END				
FAIR ROAD	SAUGER LAKE & W FISH LK	4/15/2002	186	7.5	7
FAIR ROAD	SAUGER LAKE & W FISH LK	8/1/2011	160	6.8	7
FAIR ROAD	W FISH LK & BANKER	4/15/2002	376	4.9	7
FAIR ROAD	W FISH LK & BANKER	8/1/2011	279	8.1	7
FAIR ROAD	BANKER & FEATHERSTONE	4/15/2002	199	6.3	2
FAIR ROAD	BANKER & FEATHERSTONE	6/10/2004	205	4.4	7
FAIR ROAD	BANKER & FEATHERSTONE	8/1/2011	206	8.2	7
FAIR ROAD	FEATHERSTONE & MINTDALE	4/15/2002	95	5.8	7
FAIR ROAD	FEATHERSTONE & MINTDALE	8/1/2011	85	4	7
LOCATION	BETWEEN	DATE	COUNT	% COMMERCIAL	# DAY CO
GRIM ROAD	SCHRADER & SCHRADER	10/8/2001	159	12.8	7
GRIM ROAD	SCHRADER & BALK	10/8/2001	202	13.7	7
GRIM ROAD	SCHRADER & BALK	8/8/2011	135	14.5	7

MEYERS ROAD	MINTDALE & SCHRADER	10/8/2001	233	6.4	7
MEYER ROAD	MINTDALE & SCHRADER	8/8/2011	215	13.4	7
MINTDALE ROAD	N CENTREVILLE & MEYERS	10/8/2001	648	4.3	7
MINTDALE ROAD	N CENTREVILLE & MEYERS	6/28/2010	609	5.4	7
MINTDALE ROAD	MEYERS & TAYLOR	10/8/2001	646	3.3	7
MINTDALE ROAD	MEYERS & TAYLOR	6/21/2010	549	8.8	7
MINTDALE ROAD	TAYLOR & BALK	10/8/2001	557	4.5	7
MINTDALE ROAD	TAYLOR & BALK	6/21/2010	463	8.7	7
MINTDALE ROAD	BALK & SHERMAN MILLS	10/8/2001	472	4.8	7
MINTDALE ROAD	BALK & SHERMAN MILLS	6/21/2010	436	6.6	7
MINTDALE ROAD	SHERMAN MILLS & FAIR	10/8/2001	505	3.8	7
MINTDALE ROAD	SHERMAN MILLS & FAIR	6/21/2010	255	10.1	7
MINTDALE ROAD	FAIR & SHIMMEL	10/15/2001	491	5.9	7
MINTDALE ROAD	FAIR & SHIMMEL	6/21/2010	419	7.7	7
MINTDALE ROAD	SHIMMEL & BURG	10/15/2001	498	7.0	7
MINTDALE ROAD	SHIMMEL & BURG	6/21/2010	432	7.5	7
NOTTAWA ROAD	SAUGR LAKE & PERRIN	11/13/2000	771	4.6	7
NOTTAWA ROAD	SAUGR LAKE & PERRIN	8/1/2011	763	8.7	7
NOTTAWA ROAD	PERRIN & ZABLE	11/13/2000	436	6.6	7
NOTTAWA ROAD	PERRIN & ZABLE	8/1/2011	556	8.1	7
NOTTAWA ROAD	ZABLE & BANKER	11/13/2000	424	6.0	7

NOTTAWA ROAD	ZABLE & BANKER	8/1/2011	518	7.8	7
PERRIN ROAD	NOTTAWA & BORGERT	4/24/2002	400	6.7	7
PERRIN ROAD	NOTTAWA & BORGERT	5/16/2011	263	9.1	7
ROMMEL ROAD	BANKER & FEATHERSTONE	4/15/2002	1112	3.3	7
ROMMEL ROAD	BANKER & FEATHERSTONE	5/16/2011	837	5	7
ROYS ROAD	SHIMMEL & WAHL	11/12/2001	165	5.4	7
ROYS ROAD	SHIMMEL & WAHL	7/19/2010	128	8.6	7
SCHRADER ROAD	N. CENTREVILLE & GRIM	8/8/2011	461	8	7
SCHRADER ROAD	GRIM & MEYERS	10/8/2001	360	4.8	7
SCHRADER ROAD	GRIM & MEYERS	8/8/2011	340	9.1	7
SCHRADER ROAD	MEYERS & GRIM	10/8/2001	83	14.1	7
SCHRADER ROAD	MEYERS & GRIM	8/8/2011	68	7.1	7
LOCATION	BETWEEN	DATE	COUNT	% COMMERCIAL	# DAY CO
SHERMAN MILLS RD	MINTDALE & STUBEY	6/4/2001	125	7.2	7
SHERMAN MILLS RD	MINTDALE & STUBEY	8/1/2011	59	12.7	7
SHERMAN MILLS RD	STUBEY & BALK	10/8/2001	198	8.0	7
SHERMAN MILLS RD	STUBEY & BALK	8/1/2011	227	8.4	7
STORMS ROAD	SHIMMEL & WAHL	4/22/2002	125	8.7	7
STUBEY ROAD	SHERMAN MILLS & WILSON	8/27/2001	168	4.8	7
STUBEY ROAD	SHERMAN MILLS & WILSON	8/8/2011	151	11.9	7
STUBEY ROAD	WILSON & AIRLINE	8/27/2001	305	13.5	7

STUBEY ROAD	WILSON & AIRLINE	8/8/2011	207	9.4	7
TAYLOR ROAD	FEATHERSTONE & MINTDALE	10/8/2001	88	9.9	7
TAYLOR ROAD	FEATHERSTONE & MINTDALE	8/1/2011	69	12.1	7
WAHL ROAD	KLINGER LK & STORMS	4/14/2003	98	8.1	7
WAHL ROAD	STORMS & ROYS	4/14/2003	40	9.3	7
WEST FISH LAKE RD	SAUGER LAKE & FAIR	4/15/2002	207	6.5	7
WEST FISH LAKE RD	SAUGER LAKE & FAIR	7/25/2011	185	12.7	7
WILSON ROAD	STUBEY & SHIMMEL	8/27/2001	117	4.5	7
WILSON ROAD	STUBEY & SHIMMEL	8/8/2011	100	19.7	7
ZABEL ROAD	NOTTAWA & BALK	8/4/2003	33	4.2	1
ZABEL ROAD	NOTTAWA & BALK	6/14/2004	65	1.7	7
ZABEL ROAD	NOTTAWA & BALK	8/1/2011	45	4.4	7