Tuscola Township

Master Plan Update 2015







Tuscola Township Master Plan Update 2015

Township Board

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Planning Commission

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The *Tuscola Township Master Plan 2015* was adopted by resolution of the Tuscola Township Planning Commission on January 13, 2016, by authority of the Michigan Planning Enabling Act, Public Act 33 of 2008, after holding a public hearing for this Master Plan on December 9, 2015.

Thelma Bushong
Chair
Planning Commission
Tuscola Township

Tuscola Township PO Box 1702 Vassar, MI 48768

With assistance from Spicer Group, Inc. www.spicergroup.com Robert R. Eggers, AICP

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Chapter 1

The Planning Process



Introduction

This document is the outcome of a year-long effort by the Tuscola Township Planning Commission to update its Master Plan and steer the course for the future. This document reflects the community's concern for the future development of Tuscola Township and conveys a strong commitment to retain and strengthen the local quality of life. The preferred future, or vision, for Tuscola Township is outlined within this Master Plan. Specifically, the vision is expressed in the way this Master Plan:

- Documents citizen input on community needs and services,
- Articulates goals and related actions to be accomplished by local leaders,
- Provides an overall view of future physical development of Tuscola Township, and
- Presents a map that shows locations of how land is proposed to be used in the future.

The Michigan Planning Enabling Act (MPEA), Public Act 33 of 2008, as amended, is the legal basis for Townships in the State of Michigan to develop a Master Plan. The main purpose of a Master Plan is to guide and enable a community to establish a future direction for its development. The Planning Act specifically gives communities the authority to prepare and officially adopt a Master Plan, which serves as the primary policy guide for local officials when considering matters related to land development. As a policy guide, the Master Plan is specific to Tuscola Township and considers trends, community character, environmental conditions, the availability or capacity of public infrastructure and services, and the relationship to existing and planned land uses. As such, the Master Plan aims to:

Guide the use of limited resources in an efficient manner,

- Promote public health, safety, and general welfare,
- Preserve the quality of the environment in the Township, and
- Guide future zoning decisions.

Because of constant change in our social and economic structure and activities, this Master Plan must be maintained through periodic review so that it reflects contemporary trends while maintaining long-range goals. The MPEA requires the Master Plan be reviewed by the Township at least once every five years.

Process and Statutory Requirements

Tuscola Township began the process to update its Master Plan in January of 2015. It contracted with Spicer Group of Saginaw to assist the Planning Commission in the preparation of this Master Plan. The Planning Commission met with the Spicer Group planning consultants six times between January and December 2015 to work on the plan. As required by the MPEA, Tuscola Township followed the required procedures for notifying neighboring communities and registered entities so that each interested party was made aware of the planning effort and was provided an opportunity to comment on the Master Plan.

The planning process began with a review and analysis of existing conditions and land uses in Tuscola Township. Then, community input was sought through an online survey. Feedback from the community along with the pertinent background data was used as the basis for the goals, action program, and future land use outlined within this Master Plan.

A draft of this document was prepared in August of 2015 and delivered to the Planning Commission and the Township Board for review. On September 15, 2015, the Township Board approved the distribution of the proposed plan. The plan was distributed to neighboring communities, registered entities, and to Tuscola County for review. The final step in the planning process was a public hearing, required by the Michigan Planning Act, held on December 9, 2015. This provided an additional opportunity for public information and input. Final Master Plan copies were prepared after the Planning Commission adopted the Master Plan on January 13, 2016.

Relationship of a Master Plan to a Zoning Ordinance

Zoning is regulation of the use of land. A zoning ordinance controls how land is used today. It is the law. A Master Plan is a set of policies, not a law. The Master Plan represents a community's future vision, while the zoning ordinance contains the rules that govern the path to that vision. The long-range goals of the Master Plan are the basis for a zoning ordinance and zoning decisions. State law requires that a zoning ordinance be based on an adopted Master Plan. Zoning decisions that are consistent with the Master Plan are more likely presumed to be valid if ever challenged in the courts.

Chapter 2

About Tuscola Township



Location and History

Tuscola Township is an approximately 33-square mile community located in the southwest portion of Tuscola County in the "Thumb" region of Michigan. The Cass River, a 61.5-mile long waterway which drains from six counties in eastern Michigan, runs through the heart of the Township. Tuscola Township is also adjacent to the west of the City of Vassar, one of only two cities in Tuscola County. Frankenmuth Township in Saginaw County borders Tuscola Township directly to the west. Arbela Township borders Tuscola Township to the south and Denmark Township borders Tuscola Township to the north. Tuscola Township is also close to some of Michigan's major cities, being located about 19 miles southeast of Saginaw, and about 24 miles directly north of Flint.

The Township was formally established in 1847, though various Native American people formerly occupied the area, including those from the Sauk, Fox, and Ojibwe tribes. Prior to being formally established in 1847, the Town of Tuscola was organized under an act of the legislature passed in the winter of 1840. The first town meeting in Tuscola was held on April 15, 1840 at the home of E.W. Perry, seated on the Cass River. At this meeting, Dennis Harrison was elected the supervisor, treasurer, and highway commissioner, and various other prominent Figures including Lovira Hart, Ebenezer Davis, and Ebenezer Perry were elected to office at the meeting. After being formally established as a Township in 1847, 26 voters cast ballots in the 1848 election. By 1880, the number of voters grew to 283. The families of Edwin Ellis (1835-1837, 1840) and Ebenezer Davis (1836) were among the first to permanently settle in the Township.

Today, Tuscola Township has about 800 households and a population of 2,082 at the time of the 2010 Census. Tuscola Township formed a seven-member Planning Commission in 1992, and the Township's first Master Land Use Plan was written in 1994. Today, Tuscola Township is a largely agricultural community, but it is also defined by its close proximity to urban centers for employment, shopping and cultural activities.

General Description of the Population

According to 2010 US Census Figures, Tuscola Township's population is 2,082. This is a 3.3% decrease from its 2000 population of 2,152. This is comparable to the neighboring City of Vassar, which lost 4.5% of its residents between 2000 and 2010. Population trends for surrounding Tuscola County have been similar, with the County losing 2,497 of its 58,226 residents (4.3%) between 2000 and 2010. The State of Michigan as a whole experienced a lesser decline, losing about 0.6% of its population during that time, or a little under 55,000 residents. See Figure 1. These trends are indicative of the Recession of 2007-2009, which proved to be one of the most difficult and long-lasting recessions in the State's history. The Township's population had previously remained almost unchanged between 1990 and 2000, growing by just eight residents from 2,144 to 2,152 in that time period.

Governmental Unit	2000 Population	2010 Population	10-Year Change	% Change 2000-2010
Tuscola Township	2,152	2,082	-70	-3.3%
Tuscola County	58,226	55,729	-2,497	-4.5%
State of Michigan	9,938,444	9,883,640	-54,804	-0.6%

Figure 1. Population trends in Tuscola Township, Tuscola County, and Michigan, 2000-2010.

Figure 2 shows how the age distribution changed in Tuscola Township from 2000 to 2010. The age group with the largest proportionate gain was those age 65 and over. The number of residents in this age group increased from 271 residents in 2000 to 358 residents in 2010, a 32.1% increase. This is the age group that is in its retirement years. The number of residents age 45 to 64 also increased during the same period, by 13.9% from 552 to 629. The needs of this growing generation will have special implications for long-range planning in Tuscola Township. For example, retirees are looking for more leisure time activities, tend to have greater needs for medical care, and have changing housing needs.

The age group with the largest decline was that of the young adult, family forming individuals, those between 20 and 34 years. Correspondingly, the Township had a relatively high median age of 43.3 in 2010 in comparison with the County at 41.7 and the State at 38.9. The Township has a much higher median age than the neighboring City of Vassar at 32.5, in large part due to the

presence of the Wolverine Services housing facility in Vassar, which houses approximately 200-250 youths.

Overall, the Township's population is showing an aging trend as shown by a reduction in the number of younger residents and an increase in the number of older residents.

Age Group	2000 Population	% of Total	2010 Population	% of Total
Under 5 years	144	6.7	96	4.6
5 to 19	467	21.7	456	21.9
20 to 34	390	18.1	277	13.3
35 to 49	485	22.5	449	21.6
50 to 64	395	18.3	446	21.4
65+	271	12.6	358	17.3
Median Age	37.2	NA	43.3	NA

Figure 2. Population by age group in Tuscola Township, 2000-2010. Source: U.S. Census

Housing

There were 868 total housing units in Tuscola Township in 2010. This compares to 826 housing units in 2000, an increase of 5.1%. Of the total housing units in Tuscola Township in 2010, there were 54 vacant units (6.2%). In 2000, the vacancy rate was 4.0%. The percentage of the occupied housing units that were owner-occupied in 2010 was 87.8%. The remaining occupied units were renter-occupied, a total of 99 units, or 12.2%. By comparison, there were 82 renter-occupied housing units in 2000, or 10.3%.

Tuscola Township's housing construction history is distributed widely over the past 70 years. It is important to note that no new housing units have been built in Tuscola Township since 2010; an indication of the severe slowdown of the housing market as a result of the 2007-2009 recession. According to 2013 US Census estimates, approximately 60% of Tuscola Township's housing units were constructed prior to 1970. That compares to 52% in Tuscola County and 51% in Michigan. See Figure 3.

AGE OF HOUSING STRUCTURE						
	Tuscola Township		Tuscola County		Michigan	
	Number of Units	Percentage of Total	Number of Units	Percentage of Total	Number of Units	Percentage of Total
2010+	0	0.0%	10	0.0%	8,628	0.2%
2000-2009	18	2.0%	1,876	7.7%	469,010	10.4%
1990-1999	111	12.4%	3,044	12.5%	578,134	12.8%
1980-1989	51	5.7%	2,106	8.6%	451,317	10.0%
1970-1979	144	16.1%	4,756	19.5%	699,194	15.4%
1960-1969	125	14.0%	3,015	12.3%	552,768	12.2%
1940-1959	159	14.7%	4,355	17.8%	1,076,515	23.7%
1939 or earlier	288	32.1%	5,267	21.6%	692,476	15.3%

Figure 3. Age of housing structure in Tuscola Township, Tuscola County, and Michigan. Source: 2013 American Community Survey.

The median value of a home in Tuscola Township was \$107,900 in 2013 according to Census estimates, which rose from \$98,900 in 2000. This is higher than Tuscola County at \$95,700, which rose from \$87,100 in 2000, but lower than the State of Michigan at \$121,700, which rose from \$115,600 in 2000. See Figure 4.

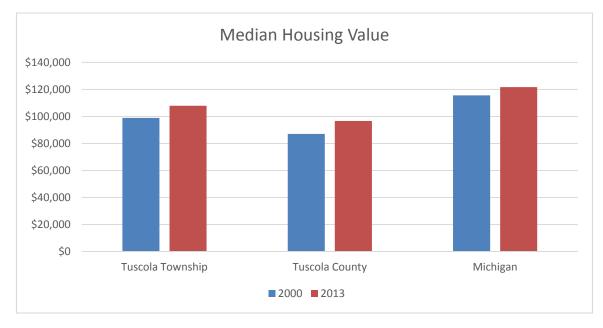


Figure 4. Tuscola Township's Median Housing Values as compared to Tuscola County and Michigan in 2000 and 2013. Source: 2013 American Community Survey

Income and Employment

Economically, Tuscola Township is relatively well off when one examines income and employment figures. Median household income in Tuscola Township is \$57,865 according to the 2013 American Community Survey. Median income is the amount which divides the income distribution into two equal groups, half having income above that amount, and half having income below that amount. This figure compares to \$42,039 for Tuscola County and \$48,411 for Michigan.

Per capita income in Tuscola Township is \$24,014. This compares to \$20,767 in Tuscola County and \$25,681 in Michigan. Per capita income is income per person in a population. Per capita income is often used to measure the standard of living in a particular geography. This is shown in Figure 5.

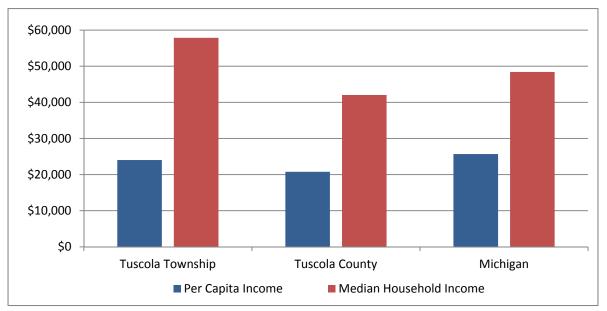


Figure 5. Tuscola Township's Median Household Income is significantly higher than that of Tuscola County and Michigan. *Source: 2013 American Community Survey*

In terms of poverty status, only 1.3% of the population in Tuscola Township is living beneath the poverty level. This compares to 11.5% for Tuscola County and 12% for Michigan.

More than 71% of the population in Tuscola Township is in the labor force. This is an especially high number compared to 58% in Tuscola County and 61.8% in Michigan. This helps to explain the relatively high median household income figure.

Education

Nearly 88% of the residents of Tuscola Township age 25 and older have a high school diploma or higher and 9.8% have a bachelor's degree or higher, according to 2013 Census estimates. In Tuscola County 12.7% of the population over 25 had a bachelor's degree or higher. In the State of Michigan, 25.9% of people over 25 had a bachelor's degree or higher. In Tuscola Township, the percentage of those over 25 who graduated from high school grew, but the percentage of those with a bachelor's degree shrank, between 2000 and 2010. See Figure 6.

	Tuscola Township		Tuscola County		Michigan	
Education level	2000	2013	2000	2013	2000	2013
Bachelor's or higher	12.0%	9.8%	10.6%	12.7%	21.8%	25.9%
Some college or associate degree	35.6%	31.4%	28.8%	32.8%	30.3%	32.6%
High School graduate	39.8%	46.7%	41.8%	41.2%	31.3%	30.4%
No High School diploma	12.5%	12.2%	18.8%	13.2%	16.6%	11.1%

Figure 6. Educational attainment in Tuscola Township, Tuscola County, and Michigan. Tuscola Township residents have less education in 2013 than in 2000. *Source: 2013 American Community Survey.*

Employment

When looking at the census categories for employment industries, manufacturing employs the highest percentage of workers in Tuscola Township at 21%. The next highest percentage is retail trade at 18.3%. Approximately 18% of the workforce is in the educational services, and health care and social assistance industry and 13.1% is in the arts, entertainment, and recreation, and accommodation and food services. This data is compared to that of Tuscola County and Michigan in Figure 7.

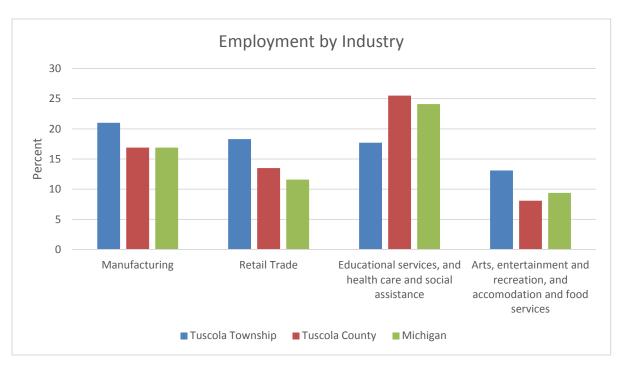


Figure 7. The top four industries for employment of Tuscola Township residents as compared to Tuscola County and Michigan.



Public Services, Infrastructure, and Facilities

Public Schools

Tuscola Township residents are mostly served by the Vassar Public School District, although some residents on the west end of the Township are served by Frankenmuth School District, and a very small portion of the southeast corner of the Township is served by Millington Community Schools. See Figure 8 below. Vassar Public schools serves the entirety of the City of Vassar as well as portions of the surrounding Townships of Vassar, Tuscola, Denmark, Juniata and a very small portion of Arbela Township. The district today includes five schools:

- Townsend North Elementary Pre-Kindergarten-Kindergarten: 220 Athletic Street, Vassar.
- Central Elementary 1-5: 425 Division Street, Vassar.
- Vassar Middle School: 220 Athletic Street, Vassar.
- Vassar High School: 220 Athletic Street, Vassar.
- Wolverine Alternative Education: 110 Commerce Drive, Vassar.

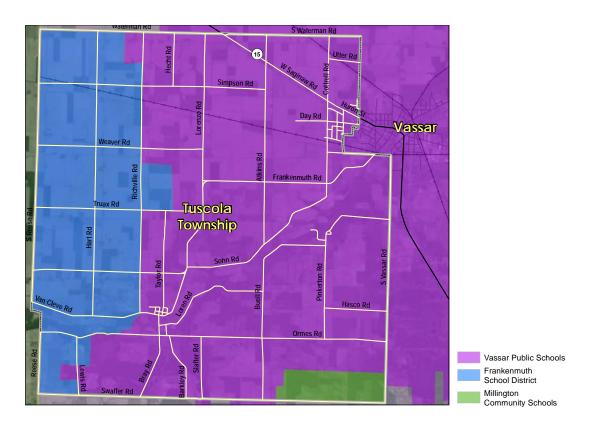


Figure 8. School districts serving Tuscola Township. Source: Michigan Geographic Data Library (MIGDL), 2014.

Public Safety

Police protection in Tuscola Township is provided by both the Tuscola County Sheriff Department and the Michigan State Police. Fire protection is provided by the City of Frankenmuth, Denmark Township, the City of Vassar, and the City of Millington. Locations of fire stations closest to Tuscola Township, and County and State police units, are found in Figure 9 below. A detailed view of fire service areas in Tuscola Township is shown on the following page in Figure 10.

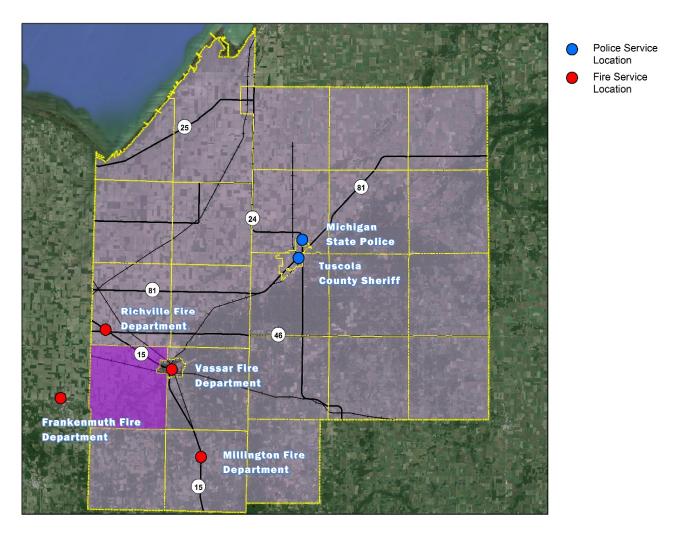
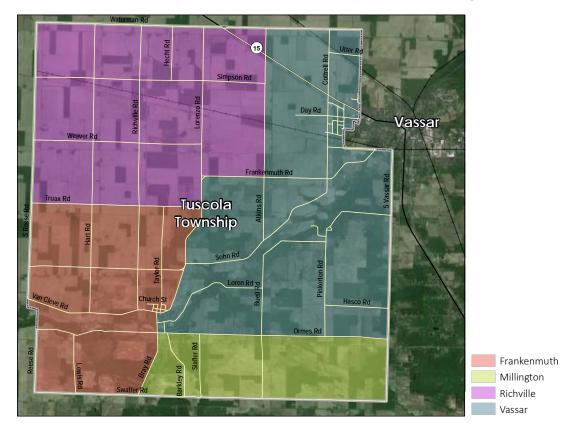


Figure 9. Police and fire service locations serving Tuscola Township. Source: Michigan Geographic Data Library (MIGDL), 2014.



Tuscola Township Facilities: Township Hall, Library, and Parks

Figure 10. Fire service jurisdictions in Tuscola Township. Source: Tuscola Township, 1996.

The Tuscola Township Hall is located near the center of Tuscola Township, adjacent to the Cass River, at 8561 Van Cleve Road. Residents of Tuscola Township utilize the Bullard Sanford Memorial Library in Vassar. Tuscola Township has a 14-acre park adjacent to the Township Hall and it is overseen be a 5-member Parks and Recreation Commission. The Township owns a 6.5 acre cemetery surrounding Loren Road on the southeast bank of the Cass River, across the river from the Township Hall and Park.

The Timbers Golf Course is a 90-acre private golf course and club on Bray Road near Ormes. See Figure 11 on the following page for a map of the community facilities.

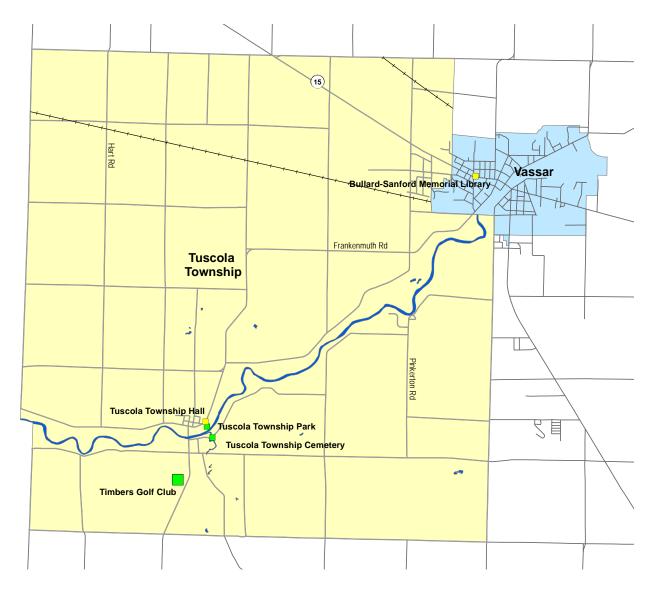


Figure 11. Tuscola Township area community facilities.

Roads and Transit Information

The roads and rail lines in Tuscola Township are depicted in Figure 12. This map shows a state highway, several principal arterial roads, minor arterial roads, residential courts / cul-de-sacs, general non-certified roads and certified road rights-of-way in Tuscola Township. M-15 is the only State highway in Tuscola Township. M-15 has unlimited vehicular access and retains speed limits at 55 miles per hour in the Township. M-15 transverses about 2.6 miles of Tuscola Township. The Township also has about 28.5 miles of principal arterial roads which include portions of Waterman, Simpson, Hart, Frankenmuth, Richville, Bray, Atkins, Vassar and Ormes Roads. Principal arterials carry long distance, through-travel movements and provide access to important traffic generators such as regional shopping centers. Minor arterial roads encompass most other

streets in Tuscola Township. Minor arterial roads carry trips of shorter distance and less traffic overall, but are otherwise similar in function to principal arterials. There are about 61.3 miles of minor arterials in Tuscola Township. Tuscola Township also has about 1.1 miles of general noncertified roads and a negligible length (less than 0.2 miles) of roads that have been classified by the State of Michigan as residential courts or cul-de-sacs and certified rights-of-way.

Railroads

The Michigan Central Railroad, which is owned by the Huron and Eastern Railway Company, has two lines which join near the intersection of Maple Street and Cass Avenue in downtown Vassar. These two lines transect northern portions of Tuscola Township. The Huron and Eastern Railway began service in 1986 along about 83 miles of rail lines in Michigan's Thumb region which previously belonged to the former Chesapeake and Ohio Railway. Between that time and the present, the railroad expanded to connect with the Bay City and Midland area as well as with Class I rail freight coming from the Canadian National (CN) railroad southeast of Vassar in Durand. Today, the Huron and Eastern Railway serves the Great Lakes Bay region and transports mostly agricultural and industrial goods including fly ash, cement, and chemicals.



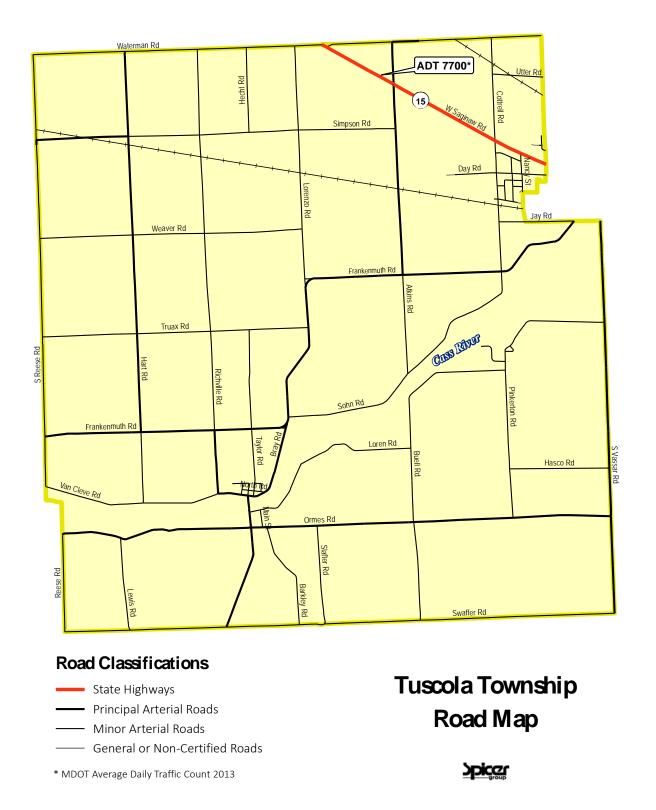


Figure 12. Tuscola Township roads and streets information. Source: Michigan Geographic Data Library (MiGDL), 2014.

Natural Features

Introduction

It is important to understand the natural features of a community when looking at how land may be used or developed in the future. For example, some natural features such as steep slopes or wetlands are natural barriers to development. Special attention must be given to the preservation of natural and environmentally sensitive areas during long-range planning. Environmentally sensitive areas can be defined as land areas whose disturbance or destruction will affect a community by 1) creating hazards such as flooding; 2) destroying important resources such as wetlands or woodlands; or 3) wasting important productive lands and renewable resources. The close proximity to the Great Lakes plays a major role in the definition of Tuscola Township's important natural features. The Township is about 16 miles south of the Quanicassee Preserve, situated on the southern shore of the Saginaw Bay. Glacial landforms played a major role in shaping the geology and soils of present-day Tuscola Township. According to maps produced by the United States Geological Survey (USGS) and Michigan State University (MSU), the Tuscola Township area contains large amounts of coarse lacustrine (lake-derived) sediments, likely as the result of glacial outwash that left coarse sediments at the edges of receding glaciers 10,000 or so years ago. Tuscola Township lies in an area that was historically defined by beech-sugar maple forest land cover composition.

Climate

Tuscola Township's proximity to the Great Lakes keeps the climate more moderate than other cities at similar latitudes. Summers are generally warm and humid, with an average high temperature in the in the low-80s. Winters are cold and snowy, with average lows in the low-teens. The area experiences considerable cloudiness and is breezy most of the year. Annual snowfall (about 38 inches) in Vassar, directly to the east of Tuscola Township, is less than in the State as a whole (about 51 inches). Annual rainfall in Vassar (about 34 inches) is slightly higher than in the State as a whole (about 32 inches). Wind speed in Vassar is consistent with the State as a whole, with an average wind speed of about 15 miles per hour. Average humidity in Vassar (78.24%) is slightly higher than in the State as a whole (74.78%).

Waterways and Wetlands

The 61.5 mile-long Cass River is the main waterway traversing Tuscola Township. According to the Cass River Greenway, the Cass River Watershed encompasses an area of 908 square miles. It also contains 1,352 miles of rivers and streams and hundreds of miles of county drains. According to a report published by the Natural Resources Conservation Service (NRCS) in 2008, there are 1,909 road stream / crossings in the Cass River Watershed, each of which is a point of potential maintenance considerations for ensuring a well-connected, properly drained watershed. Nearly 240,000 acres of cropland feed into the watershed as well.

There are about 98.8 lineal miles of waterways in Tuscola Township, including the Cass River, various creeks, and all major agricultural drains in the Township. About 759 acres of Tuscola Township, or about 3.6% of its total land area, including the portion of the Township covered by the Cass River, are within the 100-year floodplain.

The Township has conducted an extensive water quality study on the Cass River for E. coli over a period of four years, with plans to repeat the study periodically. Results of the study show that there is no contamination of the Cass River as it transverses Tuscola Township. Indeed, water quality is higher where it exits that Township than where it enters the Township. The Township is committed to high river quality and the recreational use of the Cass River in a healthy environment.

In September 1986, the River flooded experienced serious flooding and nearly 8 feet of water inundated storefronts and other buildings in downtown Vassar. The River, which has a normal crest of 4.5 feet and a flood stage of 14 feet, reached a flooding crest of 24.75 feet in a storm that was 60 by 100 miles in area, covering much of Michigan's Lower Peninsula. The Township should continue to exercise caution and proactive decision-making to encourage low-impact development, restrict development, or prohibit development in some cases, adjacent to the Cass River.

The Federal Emergency Management Agency (FEMA) has released maps which show the 100-year floodplain for major rivers throughout the United States. These maps help to illuminate information about flooding potential throughout the Township. A map showing the 100-year floodplain inside the borders of Tuscola Township appears in Figure 13 on the following page. According to the National Wetlands Inventory, Tuscola Township includes only about 10.3 acres of wetlands, which are outside of the Cass River. These wetlands account for less than 0.1% of the Township's total land area. These wetlands also appear on Figure 13 on the following page.



Tuscola Township Master Plan, 2015. Chapter 2: About Tuscola Township.

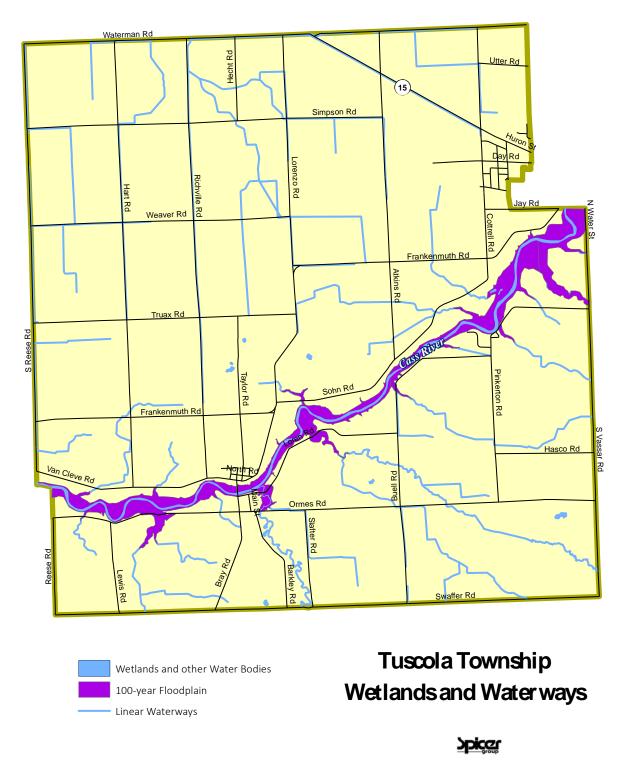


Figure 13. Tuscola Township floodplain and waterways information. Source: FEMA and the Michigan Geographic Data Library (MiGDL), 2014.

Slopes

Tuscola Township, like much of the surrounding landscape in Tuscola County, is considerably flat. Most slopes in Tuscola Township are between 0 and 2 percent. However, drainage ditches and other patterns of the agricultural landscape do provide some terrain in the area. Many areas adjacent to drainage ditches, streams, creeks, and the Cass River are relatively high-relief areas, having slopes between 2 and 8 percent, and even far above 8 percent in some locations. Higher relief areas are most prominent alongside both banks of the Cass River, as well as along the south side of Frankenmuth Road west of Bray Road, and along Barkley Road in the south end of the Township. A map displaying Township slopes, broken into three classifications, along with 5-foot contour lines, can be found in Figure 14 at the end of this chapter.

Soils

Soils play a huge role in the environment and the economic vitality of an agricultural community. Overall, Tuscola Township's soils are rich and highly suitable for agricultural use.



Soil Texture

Figure 15 at the end of this chapter shows the dispersal of different soil texture groups throughout the Township. Soils with fine-loamy texture are by far the most prominent of all groups, accounting for about 84% of soils in the Township. Generally, finer-textured soils with higher clay content have a greater ability to retain nutrients because of the relatively large overall surface area of clay particles and the negative charge generally held by these particles, and are thus desirable for crop cultivation. For this reason, soils with little or no clay content should generally not be considered for agricultural use. Sandier soils do not necessarily hold the same advantages for agricultural use, but do offer the advantage of having less potential for runoff.

Overall, Tuscola Township's soils have moderate rates of drainage and infiltration, relatively low runoff potential, and coarse texture in the surface layer. The distribution of different soil texture groups should be one of the key considerations used to determine the suitability of a particular land use. Portions of the Township exhibiting significant fine-textured soil content will be more conducive to agricultural land uses in the future, while areas with coarse-textured soils, such as the area near Bray Road and Swaffer Road near the south end of the Township, should be considered for alternative land uses. Because fine-textured, poorly-drained soils are often found under surface layers of coarse-textured soils, well-drained soils, as is the case for soils in the B/D hydrologic group, many of Tuscola Township's soils are poorly drained despite having low runoff potential. Drainage systems are very important for the continued operation of agriculture in the area.

Prime Farmland

The US Department of Agriculture (USDA) has developed a system for assigning "prime farmland" to different soil groups based on a variety of characteristics that make soils conducive to agriculture. As defined by the USDA, Prime Farmland is:

"The land that is best suited to food, feed, forage, fiber, and oilseed crops. It may be cultivated land, pasture, woodland, or other land, but it is not urban and built-up land or water areas. It either is used for food or fiber crops or is available for those crops. The soil qualities, growing season, and moisture supply are those needed for a well-managed soil to produce a sustained high yield of crops in an economic manner. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment."

Based on this definition, the USDA has assigned 28 types of soils as classified by their soil name as "prime farmland". Of these, 17 soil names in Tuscola Township constitute prime farmland. While nearly 68% of all land in Tuscola County has soils which constitute "prime farmland", nearly one-half of Tuscola Township has prime farmland soils. Some of the most common prime farmland soil classifications in Tuscola Township include the following:

- Sanilac silt loam.
- Rapson loamy fine sand.
- Cohoctah sandy loam.

A map showing the location of all prime farmland soils in Tuscola Township can be found in Figure 16 at the end of this chapter. It is clear that Tuscola Township's soils make it an ideal place for the agriculture we see being implemented throughout the community today.

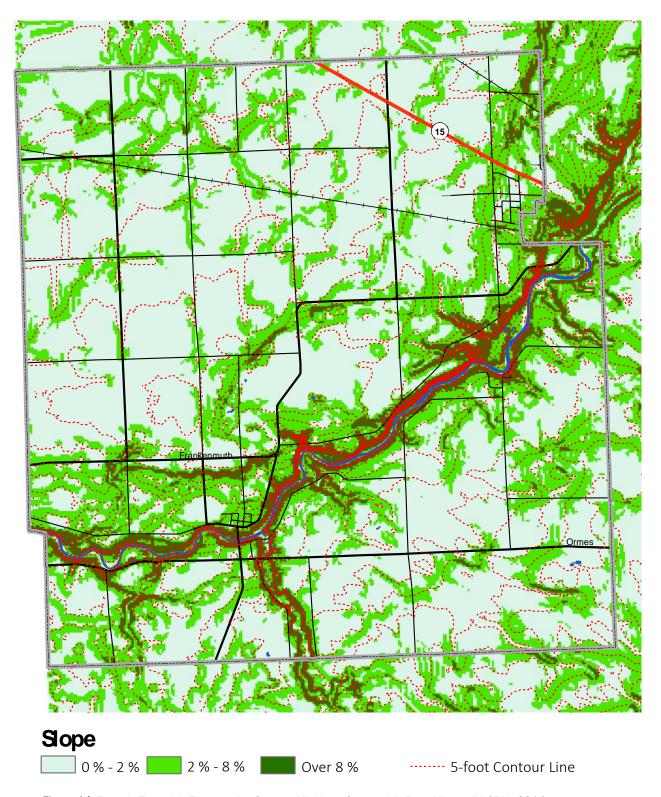
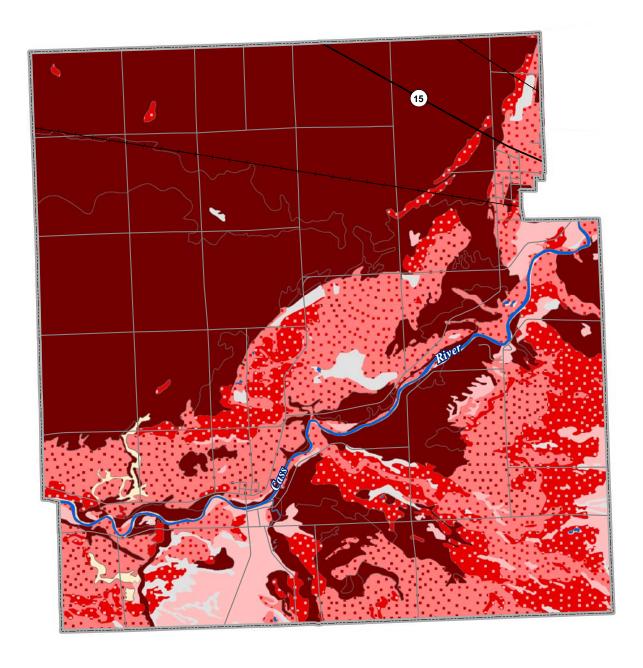


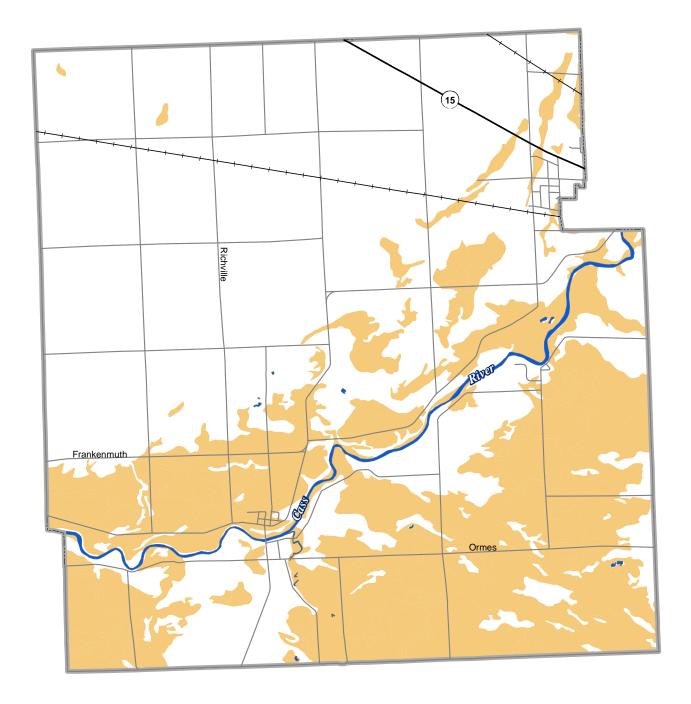
Figure 14. Tuscola Township Topography. Source: Michigan Geographic Data Library (MIGDL), 2014.



Soil Particle Size / Texture



Figure 15. Tuscola Township soil texture. Source: Michigan Geographic Data Library (MIGDL), 2014.



Prime Farmland Soils*

Prime Farmland Soils (classifications of soils considered "prime farmland" by the USDA)

Figure 16. Prime Farmland in Tuscola Township. Source: Michigan Geographic Data Library (MIGDL), 2014.

* Prime farmland refers to any of seventeen classifications of soils found in Tuscola Township which are found by the USDA to be capable of producing a sustained high yield of crops in an economic manner due to their high quality and moisture supply. The most prevalent types of "prime farmland" soils in the Township include the Sanilac silt loams, Rapson loamy fine sands, and Cohoctah loamy sands.

Chapter 3

Existing Land Use



Introduction

The existing land use in a community is one of the most important pieces of data to analyze during the Master Plan process. In many cases, the existing land uses have set a pattern that is unlikely to change. In other areas there may be vacant or underutilized land that can be evaluated for its development or conservation value.

An existing land use map is designed to provide a snapshot in time of how land in the Township is actually being used. Such a map is useful in developing a Master Plan since it provides a benchmark as to how property is being used, regardless of, or sometimes in contradiction to, zoning. It lets residents, township officials, and other stakeholders see patterns in growth and development.

The existing land use map was developed digitally with a parcel map and aerial image received from the Tuscola County GIS Department. It was verified with the Planning Commission at one of the Master Plan work sessions.

See Figure 17 for a land use analysis chart for Tuscola Township. An existing land use map is depicted in Figure 18 at the end of this chapter.

Land Use Classification and Analysis

The land uses in the Tuscola Township are divided into 8 categories for the purposes of mapping. General definitions of the uses follow. The parcels in Tuscola Township occupy an area of

approximately 21,000 acres. Agricultural land accounts for the largest category of land use in the Township, covering about 84% of the land in the community.

Agricultural

Agricultural is the largest land use category in the Township, occupying 17,721 acres. It includes land that is being used for crop production, grazing, and other related activities, including accessory farm buildings such as barns and equipment sheds. It also includes homes that are part of an agricultural parcel.



Residential

This land use category describes areas

composed of dwellings with accessory structures such as garages and sheds. Residential land use accounts for 1,822 acres or 8.7% of the land in the Township. Residential land use is scattered across the township but it is more concentrated in four general areas:

- The community of Tuscola
- West and south of Vassar in sections 12 and 13
- Along the Cass River
- South of Vassar along Vassar Road in sections 25 and 36

Most of the remaining residential land use is in small lots abutting road frontages.

Industrial

There is only one parcel of land used for industrial use in Tuscola Township. It is a former pickle processing plant that has been converted to a countertop manufacturing facility, located in Section 36.

Public/Semi-Public

Public and semi-public uses include cemeteries, churches, parks and municipal facilities. In Tuscola Township these are concentrated near the community of Tuscola and outside of Vassar. They account for approximately 75 acres in Tuscola Township.

Woodlands

Small areas of woodlands are scattered around the Township, comprising approximately 550 acres of land. The highest concentration of woodland parcels is near the Cass River and in the southeastern portion of the township. It should be noted that many of the residential parcels and some of the agricultural parcels also contain wooded areas. Woodlands improve air quality through absorption of carbon dioxide and they improve water quality by reducing storm runoff. They provide scenic views, increase privacy and they preserve habitat and natural aesthetics in a community.

Vacant

Vacant lands account for approximately 100 acres in Tuscola Township. They are non-wooded lands that are not used for agriculture. Some of the vacant lands in Tuscola Township are vacant residential lots in the Tuscola community and outside of Vassar.

Commercial

There are 44 parcels that are classified as commercial in Tuscola



Township. The largest commercial land area is that of the Timbers Golf Course on Bray Road in sections 32 and 33. The others are located along M-15 west of Vassar and three parcels in Tuscola.

Utility

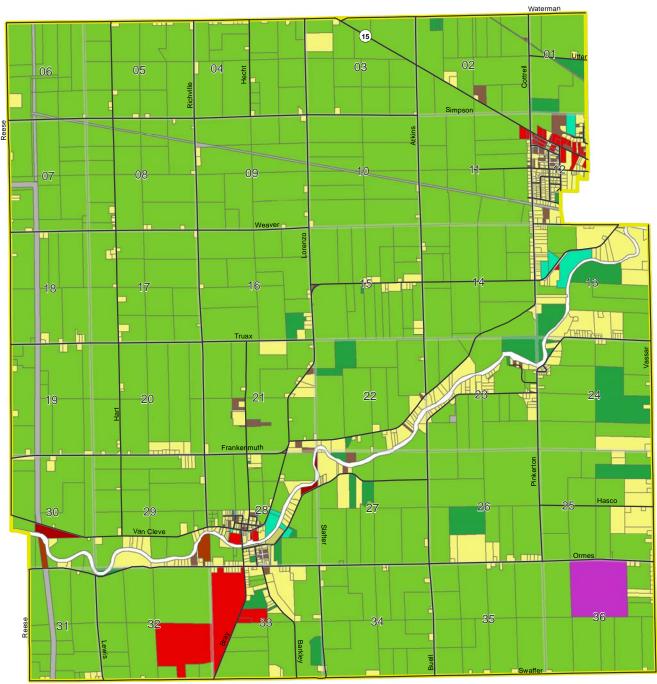
Commercial utility corridors are located in three areas:

- A commercial power line runs along the west side of the township
- A railroad line that runs east to west across the entire northern portion of the township
- A rail line in the northeast section of the township that runs diagonally across sections 1 and 2.

TUSCOLA TOWNSHIP EXISTING LAND USE					
Land Classification	Acres	Percentage			
Agricultural	17,744	84.39%			
Commercial	327	1.56%			
Industrial	169	0.80%			
Public/Semi-Public	86	0.41%			
Residential	1,824	8.68%			
Utility	225	1.07%			
Vacant	96	0.46%			
Wooded	553	2.63%			
TOTAL	21,024	100%			

Figure 17. The vast majority of land in Tuscola Township is used for Agricultural purposes.







Chapter 4

Community Input



Basis for Community Input

To be effective, a Master Plan should incorporate the input and ideas of the local population. By basing the Master Plan on the goals and objectives of its residents, land use management decisions become politically feasible and represent the intents and vision of the community. In Tuscola Township, citizens were offered an online community input survey early in the master planning process. When the draft was complete, they could also respond and offer input at the public hearing held on December 9, 2015.

Online Survey

The online survey was made available from February 24 through May 5, 2015. The intent of the survey was to establish an easy means of communication where residents and stakeholders of Tuscola Township could provide input about the existing community conditions and the need for future improvements. The public was notified of the survey with notification in the local newspaper and a mailing to residents. All notifications included a QR code so the survey could be taken via mobile device. Paper copies and notifications were also provided at the Township Hall and events including the February election and a pancake supper. Approximately 130 responses were received. Complete survey results are given in the Appendix. A summary of significant highlights is given in the paragraphs below.

Current Conditions versus 5 years ago

The first question on the survey asked respondents to evaluate seven factors related to services and quality of life in Tuscola Township:

- Road conditions
- Traffic
- Aesthetics/Blight
- Fire Department
- Quality of Life
- Garbage Collection
- Emergency Response

Fire Department, Quality of Life, Garbage Collection, and Emergency Response all scored well with 8% or less of the respondents saying that those factors were worse or much worse than 5 years ago. Garbage collection, in particular, stood out with 53% of respondents saying it was better or much better than 5 years ago. The most frequent responses to all of the categories was no change. Aesthetics/Blight had the most mixed response with 34% saying it was worse or much worse than 5 years ago, 30% responding no change, and 31% saying it was better or much better than 5 years ago.

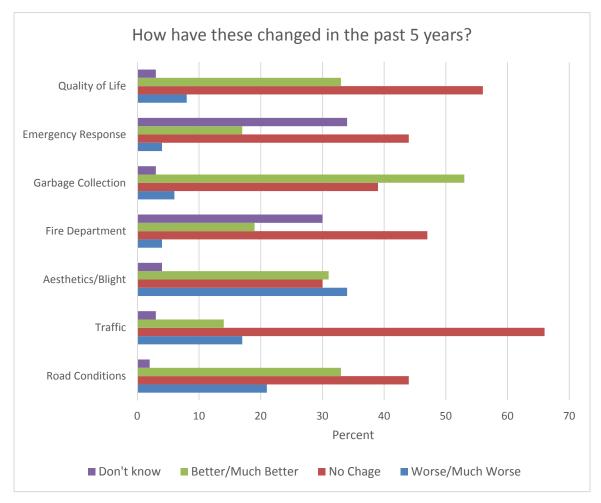


Figure 19. Respondents felt that most attributes had stayed the same or improved in the past 5 years in Tuscola Township.

Question 2 asked respondents about the three school districts that serve Tuscola Township. Nearly 50% of the respondents felt that Vassar Public Schools were worse or much worse. Thirty-six percent of the respondents felt that the Frankenmuth School District was better or much better.

Potential Land Use Issues

Question 4 asked respondents to evaluate seven potential issues in Tuscola Township as to whether or not they were a problem. The largest response to five of the issues was "not an issue". The two issues that were seen as more of a concern were 1) overgrown weeds/tall grass and 2) trees and overgrown branches too close to roads. Overgrown weeds/tall grass was considered somewhat of a problem by 49% of the respondents and a big problem by 14% of the respondents. Trees and overgrown branches too close to roads was considered somewhat of a problem by 44% of the respondents and a big problem by 15% of the respondents. See Figure 20.

What is your opinion regarding the extent of these issues in Tuscola
Township?

	Not an issue	Somewhat of a problem	A big problem
Trash and debris	54%	38%	9%
Trees and overgrown branches too close to roads	41%	44%	15%
Overgrown weeds/tall grass	37%	49%	14%
Housing quality	54%	38%	9%
Junk cars on yards	47%	41%	12%
Temporary signs	72%	24%	5%
Abandoned homes	47%	45%	8%

Figure 20. Tuscola Township opinions regarding potential land use issues in the Township.

Growth and Development

When asked their opinion about population growth in Tuscola Township, 44% of the respondents agreed or strongly agreed that the Township should grow in population. Approximately onethird had no opinion and 22% disagreed or strongly disagreed that the Township should grow in population. When asked if more housing is desirable in Tuscola Township, the responses were mixed. Thirty-eight percent of the respondents said yes, 33% said no, and 29% were not sure.

When asked their opinion regarding new development in Tuscola Township, respondents had stronger favorable responses. Sixty-one% of the respondents agreed or strongly agreed that the Township should encourage new development. Twenty-one percent were neutral, and 18% strongly disagreed or strongly disagreed that the Township should encourage new development. See Figures 21 and 22.

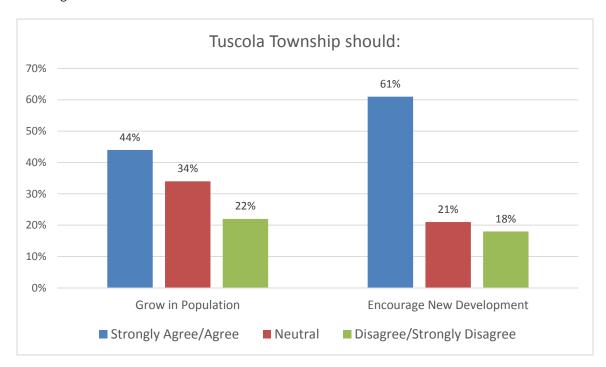


Figure 21. Tuscola Township opinions regarding growth and development in the Township.

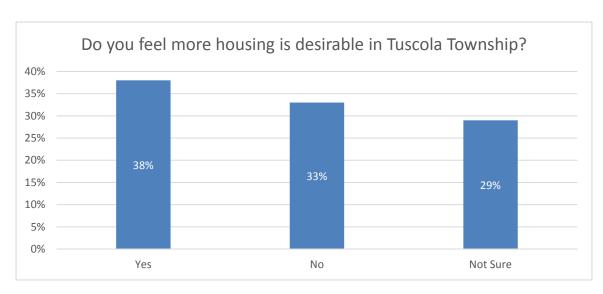


Figure 22. Respondents to the survey had mixed opinions on desirability for more housing in the Township.

Residential Land Use

When asked what types of residential development they prefer, single-family homes on large residential lots was the most popular response. Thirty-five percent chose senior housing and 24% chose single-family homes clustered together, leaving open space undeveloped. See Figure 23.

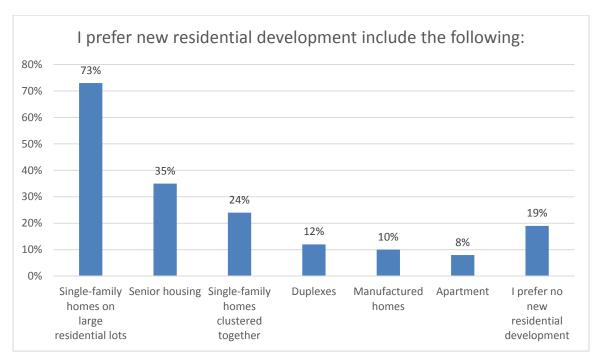


Figure 23. Nearly three-fourths of the survey respondents felt that single-family homes on large residential lots was a preferable type of housing development in Tuscola Township.

Commercial Land Use

When asked about commercial land use, respondents were mixed about the current amount of commercial business in Tuscola Township. Fifty-two percent of the respondents felt there was not enough 46% felt the amount was just right and 3% felt there was too much. However, when asked about commercial growth in the future, 61% of the respondents felt it should be encouraged, 25% felt it should be neither limited nor encouraged and 14% felt it should be limited. See Figure 24.

In the next five years, commercial growth in Tuscola Township should be:

Response	Percentage	Count
Limited	14%	17
Encouraged	61%	74
Neither limited nor encouraged	25%	31

Figure 24. Sixty-one percent of the respondents feel that commercial growth should be encouraged in Tuscola Township in the next five years.

Agricultural Land

Respondents felt that agriculture is important to the economy in Tuscola Township and that agricultural land should be preserved. Their opinions were mixed on whether it was appropriate to use agricultural land for new development to accommodate growth. See Figure 25.

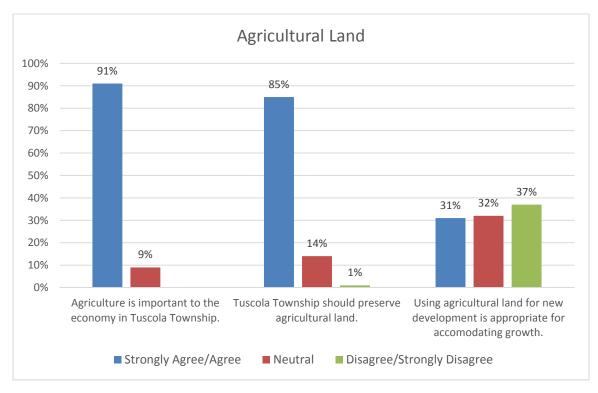


Figure 25. Survey respondents felt that agriculture is important to the township and should be preserved.

Likes and Dislikes

The last two opinion questions on the survey asked respondents what they liked about Tuscola Township and what they would do to improve Tuscola Township. The first of these questions garnered 87 responses and the second received 84.

Common responses to what respondents liked about Tuscola Township were:

- Peaceful
- Quiet
- Safe
- Clean
- Friendly
- Rural
- Cass River

The 84 responses for what could be improved in Tuscola Township were more varied than those of what respondents liked. However, some of the more common themes/answers were:

- Reducing blight/improving appearance of homes
- Improving roads/clearing weeds and growth from roads
- Adding walking and biking paths
- Improving access to the Cass River

About the Respondents

Forty-seven percent of the respondents were from two-person households. Thirty percent were from households of three to five people. Forty-four percent of the respondents were between the ages of 45 and 64. Another 34% were 65 and older. Ninety-three percent of the respondents lived in Tuscola Township. Another 2% owned property in the Township but did not live there.

Chapter 5

Goals



A Vision for Tuscola Township

Determining the direction and desires for a community for the next ten to twenty years can be a challenge. Being able to articulate what needs to be improved, what should be preserved, and what should be substantially changed is successful only when based on sound public participation and detailed analyses. In Tuscola Township, this goal-setting process was accomplished by a thorough review of existing characteristics in the Township and the results of the input survey. Based upon this information, a number of goals were established. These goals are a major component of this Master Plan, which is intended to be the primary policy document for Township officials when considering matters related to land use, development proposals, and other community improvements.

Tuscola Township's goals are listed below and they relate directly to the issues identified as priorities by the residents, the Planning Commission, and the Board of Trustees. Goals for Tuscola Township address overall community character, residential land use, commercial land use, and Township services to the community.

GOALS

The citizens and officials of Tuscola Township recognize the importance of the Township's unique rural environment characterized by the Cass River and rich agricultural land. Maintaining this environment is key to the future quality of life in Tuscola Township.

General Goals

PROTECT THE RURAL QUALITY OF THE TOWNSHIP.

Objective 1: Maintain a majority of the Township's residential land area in low density development consistent with current development patterns, as well as the public's stated desire to retain Tuscola Township as a rural community.

Objective 2: Growth will consist of well-organized physical development expanding out from the existing established areas of Tuscola and Vassar.

DEVELOP TUSCOLA TOWNSHIP AS AN ATTRACTIVE PLACE TO RAISE A FAMILY.

Objective 1: Create awareness of benefits that Tuscola Township has to offer its residents.

Objective 2: Market Tuscola Township as a safe, rural community, with a variety of schools and proximity to entertainment, shopping, and other services.

Objective 3: Promote awareness of the Township's recreational facilities.

Objective 4: Continue to enhance the park and its amenities.

Objective 5: Obtain additional park land if available.



Residential Goals

MAINTAIN THE QUALITY OF THE TOWNSHIP HOUSING STOCK.

Objective 1: Promote preservation and code enforcement to maintain residential housing stock.

Agricultural Goals

CONTINUE TO SUPPORT AGRICULTURE AND AGRICULTURE LAND USE AS A VITAL COMPONENT OF THE TUSCOLA TOWNSHIP ECONOMY.

Objective 1: Productive agricultural lands are zoned to protect agriculture from potential problems created by non-farm uses.

Objective 2: Review zoning ordinance periodically for consistency with Michigan's Right to Farm Act and Generally Accepted Agricultural Management Practices (GAAMPS).

Commercial and Industrial Goals

ENCOURAGE COMMERCIAL AND INDUSTRIAL GROWTH IN TUSCOLA TOWNSHIP IN APPROPRIATE LOCATIONS.

Objective 1: Investigate the feasibility of development of water and sewer systems in areas designated for commercial and industrial use on the Future Land Use map.



Infrastructure Goals

MAINTAIN A QUALITY ROAD SYSTEM IN TUSCOLA TOWNSHIP.

Objective 1: Work with the Tuscola County Road Commission and continue to investigate options for maintaining roads.

PROMOTE THE DEVELOPMENT OF COMMUNITY WATER SUPPLY SYSTEMS THAT MAY ALLOW FOR ACCESS TO BETTER WATER SOURCES OR EXTENSIVE TREATMENT.

Natural Resource Goals

PRESERVE AND PROTECT THE NATURAL RESOURCES IN TUSCOLA TOWNSHIP, ESPECIALLY THE CASS RIVER.

Objective 1: Increase awareness of the Cass River as a recreational resource.

Objective 2: Promote the Cass River and Cass River access as an attractive feature for residents and potential residents.

Objective 3: Protect the Cass River from nutrient overloading and erosion by encouraging the retention and protection of natural vegetative buffers.

Chapter 6

Future Land Use



Introduction

Building on the goals and action items described in the previous section, a Future Land Use map depicts the desired form and character Tuscola Township should take over the next ten to twenty years. The map depicting the future land uses for Tuscola Township is shown at the end of this chapter. This map transforms the goals and action items into a graphic guide for land development and management in Tuscola Township. The Future Land Use map serves as a guide to decision making – it does not specify how every lot, parcel, or site should be used or zoned. While the Future Land Use map can provide a framework for site-specific land use or zoning decisions, it does not translate directly to specific zoning districts. For example, the Future Land Use map may indicate a business area, and yet it may not be zoned commercial until a property owner requests that zoning change and the Township approves the change.

Future Land Uses

On the Future Land Use map, it should be noted that future land use categories are slightly different from the existing land use categories. This difference is attributed to the fact that future land use is developed with an eye toward the zoning classification that will be needed to actually move toward the implementation of this plan. For example, while the Existing Land Use map described wooded and wetlands existing land uses, these uses are not described on the

Future Land Use map. These existing land uses are combined into various other future land use categories because the future land use categories reflect how these wooded and wetland land uses will be zoned. Ultimately, the recommendations shown on the Future Land Use map are intended to help Tuscola Township officials, property owners, and residents make zoning and development decisions that are in the best interest of the Tuscola Township community. The Future Land Use map seeks to guide agricultural, residential, and commercial development into appropriate locations while maintaining the overall rural character and appearance of the Tuscola Township community. Descriptions of the future land use categories begin below.

Tuscola Township land uses have been fairly stable over the past 20 years and the Township does not expect major changes in land use in upcoming years. In general, there are there few changes proposed on the future land use map that differ from the existing zoning. Each future land category is described in more detail below. These descriptions include a discussion of how each future land use category corresponds to zoning.

Agricultural

Through the input survey, residents made it clear that agriculture is an important component of the rural appeal of their Township. This category includes single-family dwellings and related accessory structures, as well as agricultural and undeveloped parcels in the Township. In general, Agricultural corresponds to the Agricultural zoning district. The Future Land Use map shows that most of those areas would remain as agricultural. Three specific areas are shown to be a different land use in the future:

- 1. The west side of Vassar Road from Pinkerton to Swaffer is currently zoned Agricultural but it is shown to be Residential/Agricultural in the future.
- 2. The northern portions of Sections 29 and 30 between Frankenmuth Road and Van Cleve Roads are currently zoned Agricultural but are shown to be Residential/Agricultural in the future. The Township felt that more residential land use may be needed in the future. Sections 29 and 30 are located within the desirable Frankenmuth School district and they have coarse silty soil which can accommodate septic fields.
 - In examining the zoning behind items 1 and 2 above, the Residential Agricultural (RA) zoning category is quite similar to the Agricultural Zoning category. Uses by right are the same. Some of the uses with a conditional use permit are different. For example, feed lots, and sand and gravel extraction are uses permitted by conditional use in the Agriculture Zone and they are not permitted in RA. Communal buildings and Planned Unit Developments are allowed by conditional use in RA, but are not allowed in Agriculture. Dimensional regulations are also very similar. An RA minimum lot size is slightly smaller than an Agriculture minimum lot size and the lot depth is shallower in RA.
- 3. M-15 frontage in Sections 2 and 3 is shown to be commercial in the future. This is a natural extension of uses that are already there extending northwest from Vassar.

Residential/Agricultural

This land use category is for rural residential settings that exist with continued agricultural activities. This area corresponds to the Residential/Agricultural Zoning District. As mentioned above, the west side of Vassar Road from Pinkerton to Swaffer is currently zoned Agricultural but it is seen to be Residential/Agricultural in the future and the northern portions of Sections 29 and 30 are shown as Residential/Agricultural in the future.

Low Density Residential

Low Density Residential is primarily for single family residences on lots that are smaller than Residential/Agricultural areas. It occurs on both sides of the Cass River except in the Tuscola village area. It corresponds to the Residential/Agricultural zoning category. There is no proposed change in lands zoned for this purpose.

Medium Density Residential

Medium Density Residential in Tuscola Township is the area that is directly west of Vassar. It

corresponds to the Medium Density
Residential zoning category. The general regulation for Medium Density Residential are the same as for Low Density Residential.
However, some of the uses are different. For



example, duplexes, boarding houses and hospitals are allowed in Medium Density Residential Land Use as a use by right. Apartments and townhouses are allowed with a conditional use permit. None of these uses are allowed in the Low Density Residential District.

Mixed Development

Mixed development is generally intended to provide for a mixture of commercial and residential land uses. It is used primarily for the downtown Tuscola area. It corresponds to the mixed development zoning category which allows for the smallest lot size, shortest frontage width and smallest setbacks. No change in the existing mixed development zoning area is anticipated in the future.

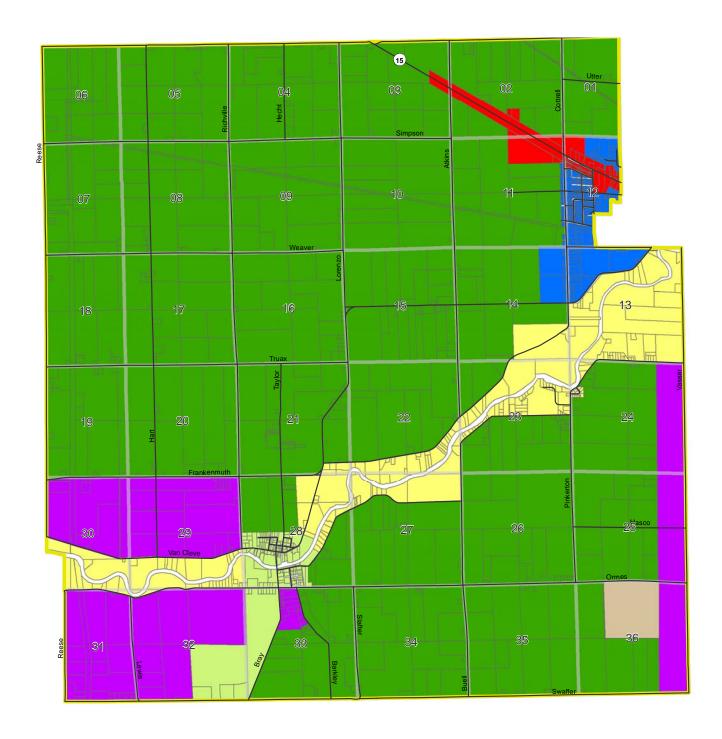
Commercial

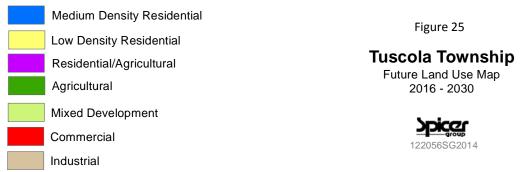
Commercial land uses in Tuscola
Township are centered around M-15
west of the City of Vassar. The
commercial future land use category
corresponds to commercial zoning.
Tuscola Township envisions
commercial land uses extending
further west along M-15 than the
area that is currently zoned
commercial.



Industrial

One parcel of land in Section 36 is shown to be used for industrial purposes in the future. It is a countertop manufacturing facility. It corresponds to the Industrial Zoning District.





Chapter 7

Conclusion



Using the Plan

The key to a well-planned community is the actual day-to-day use of planning documents, like this Master Plan. Because this plan is to be the basis for future zoning and planning decisions, it is imperative that the plan be available to Tuscola Township staff, elected and appointed officials, as well as business owners, developers, stakeholders from Tuscola County and the region, and the general public.

The implementation of this Master Plan depends on its continual use by the Planning Commission and the Board of Trustees. In its best form, implementation of this plan will result in the achievement of the goals. Implementation is often the most difficult portion of the planning process because while the intentions of the Township and its residents and stakeholders are clear, the legal ways and available planning tools are often not. The following provides a review of additional tools available to Tuscola Township and the ways in which they can be used to ensure that the goals of this plan are met. The following tools can help ensure the continued progress toward the implementation of this plan.

Zoning Changes and Ordinance Updates

With a new Master Plan in place, the Township has an opportunity to update its current zoning ordinance where necessary to reflect the goals adopted in this plan.

Regional Cooperation

Development, growth, and changes within Tuscola County will affect its quality of life and growth within the Township itself. Communities near Tuscola Township have experienced a variety of changes – some experiencing growth and others experiencing a loss of population and declining housing value. Tuscola Township is rightly concerned with the effect that these changes can have

on the Township. The Township has the opportunity to pursue cooperative and mutually beneficial relationships with all the surrounding communities and Tuscola County. Cooperative relationships between and among Tuscola Township and neighboring communities can provide an opportunity for the full impact of new or expanding developments to be considered, as well as provide an opportunity for communities to pool resources and skills to tackle similar challenges. At the least, Tuscola Township should actively participate with the review and opportunity for comment on neighboring communities' Master Plans. Further, the Township should invite comment and suggestions from neighboring communities on major developments within Tuscola Township.

Local Planning Capacity

Good planning practice and State law require the Township to review its plan every five years and update it, if deemed necessary by the Planning Commission. A cursory review of this Master Plan should take place annually by both the Planning Commission and the Board of Trustees. This provides an opportunity to consider the goals and intent of the plan against pending capital improvements, budget requests, and other developments that may impact the community. Tuscola Township provides important planning and zoning services with limited staff. When change confronts the community, it will be necessary to review the time and effort expended by the staff to address development proposals. Adjustments in fees and changes in the application processes may be necessary in order to cover the costs associated with new or expanding development.

Grant and Funding Opportunities to Support Proposed Capital Improvements

There are many different grant and loan programs that can be used to fund proposed capital improvements that may be suggested by the Master Plan. At the Federal level, there is the Housing and Community Facilities Programs, the Public Works and Economic Development Program, and the Water and Wastewater Disposal and Grant Program, to name a few. At the State level, a potential funding source may be the Michigan Department of Natural Resources, which offers grants from the Land and Water Conservation Fund and the Michigan Natural Resources Trust Fund. The Michigan



Department of Environmental Quality's Water Pollution Control Revolving Fund and the Drinking Water Revolving Fund can provide low-interest loans for water and sewer project. The Michigan Department of Transportation also administers Federal funds appropriated for transportation

alternatives. Additionally, local funding programs, as initiated by Tuscola Township, such as a special assessment, can also be used for infrastructure or related community improvement projects.

Additional Implementation Tasks

Many of the steps necessary to ensure the successful implementation of this Master Plan might not be obvious or are not part of an established Township fund. The implementation efforts that have been described in this section focus on the residents, landowners, and other stakeholders



in Tuscola Township. To date, Tuscola Township has taken steps to keep residents and others involved and informed regarding Township issues. The successful implementation of this plan depends greatly on Township officials using the plan and residents being aware of the plan, knowing its purpose, and understanding how they might be able to use it. This can be accomplished by consistently referring to the document when making zoning decisions and even referencing the plan, when appropriate, during site plan reviews and variance decisions. Further, the Township should keep a copy of the Future Land Use Map on display and have a copy of the plan available for review at the Township Hall at all times.

Appendix A: Community Input Results

TUSCOLA TOWNSHIP MASTER PLAN - Community Input Survey Results

Survey distributed 3-8-15 to 5-5-15

1. In the following categories, how do you feel Tuscola Township has changed in the past 5 years?

	Much Worse	Worse	No Change	Better	Much Better	Don't Know
Road Conditions	3%	18%	44%	24%	9%	2%
Traffic	1%	16%	66%	12%	2%	3%
Aesthetics / Blight	8%	26%	30%	21%	10%	4%
Fire Department	0%	4%	47%	13%	6%	30%
Quality of Life	0%	8%	56%	25%	8%	3%
Garbage Collection	1%	5%	39%	33%	20%	3%
Emergency Response	1%	3%	44%	10%	7%	34%

2a. How do you feel each of the school districts serving Tuscola Township has changed in the past 5 years?

	Much Worse	Worse	No Change	Better	Much Better	Don't Know
Frankenmuth School District	2%	4%	24%	21%	15%	35%
Millington Community Schools	3%	19%	20%	5%	3%	50%
Vassar Public Schools	16%	33%	18%	6%	2%	25%

2b. Please list any additional comments about the schools listed previously.

FRANKENMUTH

- they do not want to teach children the basics!
- 2 They have good schools that I know.
- 3 Too cold day's overused.
- 4 Meal scores have fallen
- 5 getting too liberal and politcally correct
- 6 Great school
- 7 recognized nationally as one of the best
- 8 Frankenmuth schools continue to offer students a excellent education.
- 9 n/a
- 10 best in area

- 11 Racial issues for our young girls.
- We don't hear about neg. things from Franken.

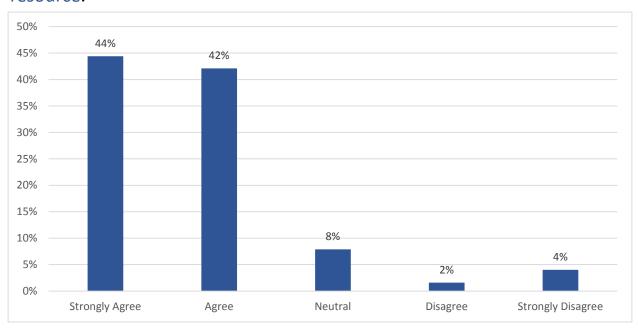
MILLINGTON

- 1 Headed the same direction as Vassar
- 2 Don't know. Probably worse w/ sharing superintendent.
- Feel both are a combination of administration & parental expectations/guidance (lack thereof)
- 4 Administration does not set good examples for students
- 5 They dwell too much in sports. Education should come first
- 6 With regard to education Millington schools are struggling.
- 7 n/a
- 8 I think better!

VASSAR

- 1 Student success scores are lower, according to information I hear.
- 2 Vassar Schools lack effective leadership.
- Going downhill. Need new superintendent. Some positive things. Robotics classes. Spending all money foolishly.
- 4 Feel both are a combination of administration & parental expectations/guidance (lack thereof)
- Vassar needs teachers that want to teach and not just collect a paycheck. Most of the newer ones play on their phones or play games on their computers.
- 6 Vassar public schools have declined notablity over the last five years in all areas of education.
- 7 Could use a super that was for the schools and not himself,,he's too one sided
- 8 need new superintendent
- 9 Staff work hard for the success of all students.
- 10 getting better
- Dishonest superintendent and lying principal, ineffective board members, some hardworking/caring teachers but still many ineffective lazy teachers. Public schools have to wake up that it is a new world and like other business', you have to be productive to continue. Accountability for poorly taught students must be dealt with.
- 12 Need to work on children's education and not so much on sports
- 13 needs bond to pass
- 14 Vassar school district is struggling in all arenas.
- 15 n/a
- 16 Anx to Frankenmuth
- the superintendent has really brought the morale in our school system down
- was worse but this year is starting to make improvements
- anti drug policy and zero tolerance need to be enforced more vigorously.
- 20 need new adminstration
- The programs seem like they are mis guided now, teachers are short with students, need more attention to the curriculum. less movies in classroom, kids can get that at home. no questionable music should be played on buses when you have little young one riding.
- very sad.
- 23 I hope!

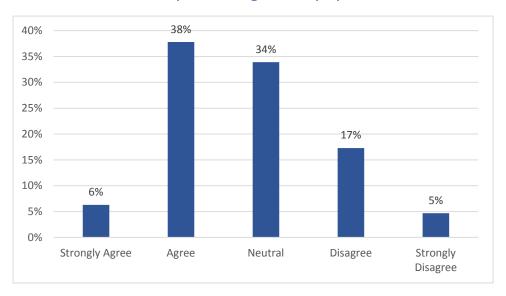
3. How do you feel about the following statement? I believe the Cass River should be preserved and protected as an important natural and recreational resource.



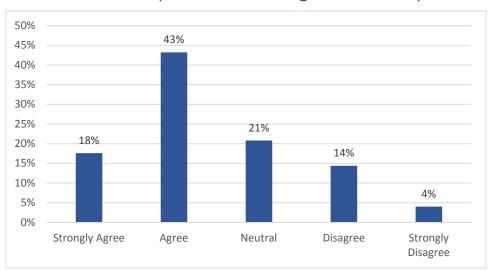
4. What is your opinion regarding the extent of these issues in Tuscola Township?

	Not an issue	Somewhat of a problem	A big problem
Trash and debris	54%	38%	9%
Trees and overgrown branches too close to roads	41%	44%	15%
Overgrown weeds/tall grass	37%	49%	14%
Housing quality	54%	38%	9%
Junk cars on yards	47%	41%	12%
Temporary signs	72%	24%	5%
Abandoned homes	47%	45%	8%

5. Tuscola Township should grow in population.



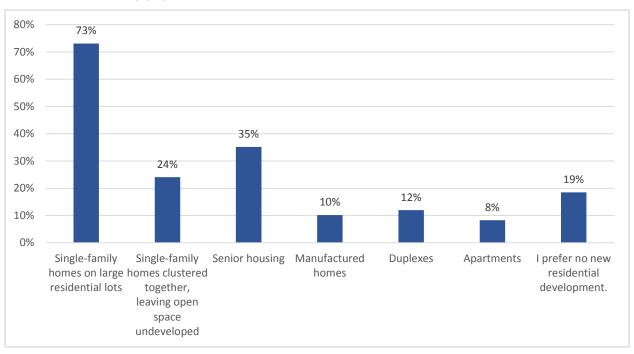
6. Tuscola Township should encourage new development.



7. Do you feel that more housing is desirable in Tuscola Township?

Response	Percentage	Count
Yes	38%	48
No	33%	42
Not Sure	29%	36
		126

8. I prefer that new residential development include the following (please check all that apply):



9. Which describes how you view the amount of commercial businesses (retail and services) in Tuscola Township?

Response	Percentage	Count
Not enough	52%	63
Just right	46%	56
Too much	3%	3

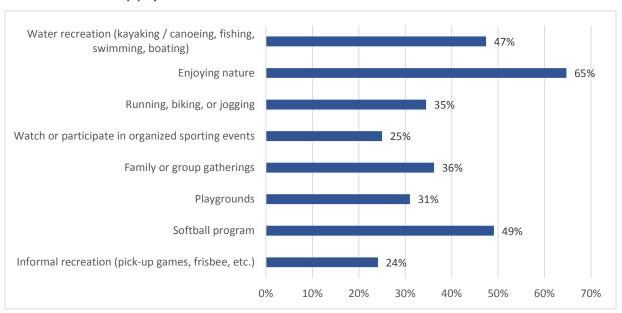
10. In the next five years, commercial growth in Tuscola Township should be:

Response	Percentage	Count
Limited	14%	17
Encouraged	61%	74
Neither limited nor encouraged	25%	31

11. What are your feelings regarding the agricultural land use statements below?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Agriculture is important to the economy in Tuscola Township.	63%	28%	9%	0%	0%
Tuscola Township should preserve agricultural land.	47%	38%	14%	1%	0%
Using agricultural land for new development is appropriate for accommodating growth.	4%	27%	32%	28%	9%

12. Why do you visit public parks or recreational facilities in the area? Please check all that apply.



13. What do you like about Tuscola Township?

Response

- 1 Quiet
- 2 rural living without needless rules and laws
- 3 Its commitment to improving the Cass River and recreation on the river.
- 4 no traffic congestion.

- 5 It is a quiet, safe, comfortable place to live. It is close enough to larger cities that offer business, medical services, and entertainment. I like it that I can be as involved as I choose to be in the life of the community.
- 6 Friendly, helpful residents. Fiscally responsible leadership. Old time, country atmosphere.
- 7 countryside
- 8 Lower taxes than City of Vassar. Good businesses on M-15 on hill. Small town living. Note on Q12: The development along Cass in Tuscola with tables & other things by softball fields good job.
- 9 Quiet.
- 10 A nice quiet place to live.
- 11 I like living in a rural area. I came from a big city where you didn't know anyone.
- 12 that they enforce their regulations.
- 13 Neighbors but have wide spaces about most of property.
- 14 Quiet country living.
- 15 Peaceful scenic easy going Relaxing Clean air Quiet
- Overall Tuscola Township takes pretty good care of itself. I believe some growth is healthy and should be encouraged. Blight should be corrected as needed.
- 17 low taxes, a twp board with a vision for the future
- 18 Always feel welcome when visiting Tuscola. Enjoy driving through.
- 19 it's peaceful and quiet.
- 20 That the township is a friendly community. Most of the people would help if you needed it.
- 21 It is a nice clean area with well maintained roads and parks.
- 22 small
- 23 A high level of integrity of our Township Board membership, very good heads & generally very nice people.
- 24 nothing
- 25 clean, peaceful, friendly
- 26 Friendly, spacy, clean, quiet, play equipment at the twp. hall for all to use.
- 27 good place to live
- 28 Friendly people and country living
- 29 quiet
- 30 It's very peaceful most of the time
- 31 Rural living, low property taxes, quiet
- 32 It's been home to our family for generations
- 33 The schools
- 34 country living, quiet, no crime, not overpopulated
- 35 Country atmosphere
- it is guiet, beautiful, safe and a good place to raise a family.
- 37 blight control
- 38 home town feeling
- 39 rural
- 40 quiet and simple nothing
- 41 Honest hard working people and a sense of family
- 42 Simple and quiet
- 43 good roads not much crime
- 44 Rural, safe environment

- 45 No Industrial Wind Turbines
- 46 Natural beauty
- 47 Rural type setting but close to many thinks and and major highways
- 48 its quiet and safe
- 49 I can watch the deer & turkeys out my front window
- 50 rural and quiet
- 51 clean, good roads, quiet and nice kept up homes
- 52 The Cass river and beautiful colors in the fall season.
- 53 Softball Program and being able to grab an ice cream at C&K
- 54 Quiet safe place to live. Close to town but country setting
- 55 rural lifestyle. Towmship gov. does not hassle me.
- rural living yet close to all things.....growth potential in the village of tuscola....cass river access.......the history.....and my neighbors
- 57 the friendly are
- 58 The small town feel and home
- 59 That it's not City of Vassar
- 60 No blight & small government
- 61 I live there.
- 62 The smallness, friendliness
- 63 Peace and quiet
- 64 not a whole lot of gvt regulation
- 65 we like living here along the Cass River enjoying nature
- Nice place to live; quiet. But it is becoming blighted because of people leaving the area and the school is not as good as it used to be. There are no businesses/jobs therefore why would people want to live here?
- 1) business area is concentrated in one area on M-15 just outside Vassar; 2) kayak launch is nice; 3) crime is pretty much non-existent; 4) not too many kids running around; 5) roads seem to be in very good shape; 6) populated primarily by political conservatives; 7) Boad of Trustees seem to be very prudent, careful, and conservative; 8) nice development of recreational facilities on Township Hall grounds.
- 68 It has changed not to benifits residents, only a few.
- 69 access to water recreation
- 70 Rural community, safe, limited traffic
- 71 Quiet
- 72 Agriculture land
- 73 The Cass River and fine farm land
- 74 The people here. It well taking care to other townships.
- 75 The relative location and close proximity to Saginaw, Bay City and Flint
- 76 quiet, safe, neighborhood
- The Living in the country. We moved from Buena Vista 40 years ago. I do not miss it one bit. I would like more wooded areas in the thumb though. It's too open in some areas.
- 78 That its very rural beautiful farm country very good people. Several very nice businesses. Park is beautiful expand it to river perhaps.
- 79 Has about the right mixture of agriculture, residential, and commercial.
- 80 The softball complex that's offered to the kids in the area.

- 81 Clean not junkie
- 82 We have good people running the township.
- 83 Small friendly town. Clean. Few trailers
- 84 Small, personal, quiet. Don't want to be Frankenmuth.
- 85 Howard Trinklein are paying 2 bills on one property. The fire & ambulance billing us taxes in the township and the city. I need to talk to somebody about this.
- 86 It is a very friendly area to live in. I think our people in the Township are aware of the needs. Roads parks e4tc.
- 87 Small town feel

14. What is one thing you would do to improve Tuscola Township?

Response

- 1 Add a taco bell
- 2 Bike path and walking path, very busy roads and need a place for kids to ride bikes and adults to exercise
- 3 blight control
- 4 But river land for public use
- 5 clean the ditches and drains out
- 6 clean the river.
- 7 Clean up agricultural blight of non functioning farm equipment
- 8 clean up some old homes yards
- 9 Clean up the homes, yards, junk cars and make the look more pleasant. Over the past five years the town of Tuscola has continued to crumble and people in the town need to take more pride in maintaining what they own.
- 10 Clean up the sides of the roads
- 11 Clear vision area at all cross-roads. Especially the pine trees at the crossroad of Bray & Ormes Rd.
- 12 Clear vision area at dangerous cross roads. Tree removal &/or flashing lights. 1) S. Vassar Rd & Ormes Rd. 2) Bray Rd & Ormes Rd.
- 13 Continue moving forward while honoring your past; work with surrounding towns to improve and strengthen area.
- 14 Continue to work on blight
- 15 Continue to work together, as a unit for the overall good of the community. Note on Q10: On the paper survey, both "limited" and "encouraged" are marked; "encouraged was entered". Note on Q16: "Family owns" property in Tuscola Twp, "grew up here, family lives here, and I'm a real estate broker who cares about the area."
- 16 Corn fields too close to roads/corners. Sohn/Franken. Richville/VanCleve Weaver corners Truax corners All corners Q4 (overgrown weeds): corn fields
- 17 cut wages of board members
- 18 Develop the river for more activities for residents and tourists. Encourage hiking, biking, canoeing, fishing. Develop some rustic campsites near the river. Enhance historical sites to encourage community pride and attract tourism. Thank you for asking!
- 19 dog park
- 20 Encourage business & individuals like Blasius Inc. to develop more quality driven jobs.

- 21 Encourage growth & create a pleasant environment
- 22 encourage growth and upkeep of current residential dwellings
- 23 Encourage homeowners/property owners to improve buildings/landscaping.
- 24 encourage more commercial businesses.
- encourage new business in the village area to attract visitor interest...we are less than 4 miles from michigans #1 tourist spot...this could be very good for our area
- 26 Encourge growth
- 27 enforce rules about keeping property kept up
- 28 enforce the blight laws and clean up trash on side of road
- 29 Establish bike-walking trails along Cottrell Rd, Day Road, and Sohn Rd.
- 30 Extended natural gas and city water lines for residents
- 31 Garbage/recycling people should not empty baskets while moving; don't spill into ditches
- 32 -
- Get rid of blight. Make people clean up yards of junk cars & high grass. Promote small business. People take pride in home like Frankenmuth. Note on Q1 Aesthetics/Blight: need to put in Blight Control Policies. Note on Q1: everything cost so much. Cost living bad for all people. Note on Q7: No nice senior housing one floor. Note on Q9: Have room for more.
- 34 Get rid of junk cars, trash in ditches, large camping trailers parked in yards or driveways
- Have more convenient hours at the township office for working people. Force cleanup of blight especially along Bray Rd. between murphy lk and swaffer.
- 36 Have recycle every other week!!!
- 37 Having it look a little nicer, more upkeep
- Help low income to keep up their property. Less unnecesary snow plowing and less destruction during plowing.
- 39 I would have sidewalks put in on M-15 from Vassar city limit out to Cottrell road, or at least to Nancy Street because it's dangerous for people to be walking on M-15 and a lot of people do in that area.
- 40 I would like to see roadsides mowed and some more roads fixed. Pass Proposal 1. Comment on Q4: We mow our roadside. Q6: Depends on what & where.
- 41 Improve schools, become more desirable location for families
- 42 improve snow removal
- 43 Improve the ditches so there is proper drainage on the corner of Riverview & Pinkerton.
- 44 Increase available jobs locally, jobs that pay well enough that people feel they can afford to stay here.
- 45 k9 unit, funding for fire dept. school security officer
- 46 Keep it more rural than developed. As stated, I don't really want to have my local neighborhood developed into a more residential or commercial area. If people want to move here, let them move into town. Also don't like when people move to the country and then complain that there is no city water or sewer system. Such as the Denmark township water project mess.
- 47 Keep road sides cut back.
- 48 Keep yards and shoulders of roads mowed. Crossroads are dangerous when weeds get high
- 49 leave residents alone if the are not hurting anyone
- 50 Low taxes & fix roads.
- 51 lower property tax !!!!!!!!!!
- 52 More access to the river
- 53 More activities perhaps a campground
- 54 more police presence
- 55 more smaller business & higher class of people

- 56 Mow side roads & spray brush at road intersections
- 58 not much
- 62 nothing, keep it the same!!!
- 63 out door furnace min stack height
- 64 plow/salt Cottrell better/more often
- 65 promote the use of the river and our open areas
- 66 Reduce blight, improve appearance of housing in Tuscola Twp at Bray/VanCleve area.
- 67 roads
- 68 Seek more people to serve on Township positions instead of one person serving on two or three boards.
- 69 Some houses/yard have blight that needs to be taken care of.
- 70 Some of the roads are in need of repair or paving. ie. The unpaved mile of Swaffer
- 71 some run down dumpy looking farms and residences need cleaning up
- 72 Spend more money on road. Stop free ball for other townships.
- 73 Start addressing the poor water issues (taste, smell, etc.) alternative choices like city water.
- 74 Take care of the burned out hose on Sohn Road.
- 75 Tar the cracks in the pavement on Lewis Rd. from Ormes to Swaffer so the road will be in good shape for many years to come.
- the police force...this isn't the wild west..they shouldn't be sitting somewhere spying on people ..they should be sitting at the light down town to cut down on the stupid drivers waiting to get through the lights...most of them are doing something illegal just to get through the lights
- 77 The roads
- 78 to much blight, looks terrible needs to be more enforced
- 79 Tourism
- 80 Try to attract a major food chain
- 81 water & sewer in commercial area
- 82 We need more for the people to do here. Somewhere safe to walk.
- 83 we would like to see a more up to date playground by the township hall and softball fields
- When u have rules and building codes make all abide not just a few quality people. Also cable and Internet should be expanded not locked in for years Charter has done nothing they promised years ago. Put it up for bids.

15. How many people live in your household?

Response	Percentage	Count
1	18%	22
2	47%	58
3-5	30%	37
6 or more	6%	7
		124

16. What is your relationship to Tuscola Township?

Response	Percentage	Count
I live in Tuscola Township.	93%	116
I own property in Tuscola Township but I do not live there.	2%	3
None of the above.	5%	6
		125

17. What is your age?

Response	Percentage	Count
under 18	0%	0
18 - 29	2%	3
30 - 44	19%	24
45 - 64	44%	55
65 and up	34%	43
		125

Appendix B: Adoption Documentation

Public Notices

State of Michigan PROBATE COURT County of TUSCOLA Notice to Creditors EILE NO. 15-35161 Decedent's Estate Estate of Keith J. Valentine. Date of birth: 06/26/1929

TO ALL CREDITORS: NOTICE CREDITORS: The decedent. Keith Valentine. 06/17/2015.

Creditors of the decedent are notified that all claims against the estate will be forever barred unless presented to Keith J. Valentine. personal representative, or to both the probate court

at 440 N. State St., Dept. 4 Caro, MI 48723 the personal representative within 4 months after the date of publication of this notice.

11/05/2015 Todd H. Nve P59301 3975 W. Federal

Hwy., Ste. 1 Roscommon. 48653

(989) 821-1225 Keith J. Valentine 6448 Mikado St. Oscoda, MI 48750 (989) 739-0561

OF STATE MICHIGAN COUNTY TUSCOLA

ACCEPTING BIDS Snow Removal/Salting

Dr. McDougall, 12675 E. Washington, Reese will be accepting bids until November 20, 2015 for snow removal & parking lot salting.

> Bids may be mailed to Dr. McDougall, P.O. Box 385 Reese, MI 48757

NOTICE CREDITORS Decedent's Trust

In the matter of: THE IRENE J. ZAK REVOCABLE LIVING TRUST, dated July 2. 1996, as amended.

Date of Birth: April 28, 1924, NOTICE CREDITORS:

The decedent, Irene J. Zak. whose last known address is 7148 Slafter Road, Vassar,

TO Michigan 48768, died on October 26, 2015.

Creditors of the decedent are notifed that all claims against the Trust will be forever barred presented to Michael G. Martinka. Successor Trustee at 7224 Slafter Road, Vassar, Michigan 48768 within four (4) mounths after date of publication of this

November 6, 2015

Saturday, Nov. 14 at 9:45 am, the Reese **Unity District Library** is hosting an Essential Oils class involving the Endocrine System.

Smith Boyill, P.C. Danelle F. Harrington P78748

200 St. Andrews Road

Saginaw, MI 48638 (989) 792-9641

Michael G. Martinka 7224 Slafter Road Vassar MI 48768 (989) 860-1570

PUBLIC HEARING FOR TUSCOLA TOWNSHIP

A Public Hearing will be held at Tuscola Township Hall, located at 8561 Van Cleve Rd., Vassar, MI 48768, on December 9, 2015, at 6:30 p.m., for the purpose of receiving public comments concerning the proposed draft of the Tuscola Township Master Plan. Copies of the Master Plan are available for review at the Tuscola Township Hall on Wednesdays. between 9:00 a.m., and 12:00 p.m., or on the Township's website. tuscolatownship@tds.net

"This meeting is open to all members of the public under Michigan's Open Meetings Act."

Juniata Township Public Notice Yard Sale Ordinance

The Juniata Board of Trustees presents a Yard Sale Ordinance for the health and welfare of Juniata residents.

DEFINED: This ordinance limits "vard sales" (not single item sales) to two per calendar year: "Yard sale" includes all sales. types commonly referred to as tag, rummage, garage, estate. junk, attic, moving or vard sale. Yard sales may not be operated for commercial purposes or for resale of non-personal property.

LOCATION: The sale location must be on a single parcel, no closer than 20 ft to the property line and must not impede traffic or cause a dangerous condition. Sales shall not operate for more than three consecutive days. All sale materials and displays shall be set out only for the days of the actual sale.

SIGNAGE: Yard signs must meet the following criteria: One sign erected at the sale location, not exceeding 6 sq. ft. not artificially illuminated. Two additional signs may be erected within two miles of the sale location. All signs must be free standing, have the permit number, and dates of the sale. All signs must be removed within twenty-four hours of the end of sale.

PERMIT: A yard sale permit is required (no cost) and is available from the township clerk. The permit must be on display in a conspicuous location.

VIOLATIONS: Ordinance violations may be assessed up to a \$100 dollar fine for each day the violation continues plus prosecution fees.

This ordinance takes effect 30 days after publication.

The full text of this ordinance can be received by contacting the clerk at 989-863-0680, writing to the clerk at 3741 Wilder Rd. Vassar, or by download at the township web page, www.juniatatwp.org

Heidi Stark, Clerk

Published in accordance with Act 245 of 1945

ARE The First 48. Deadly En-The First 48: Rocky Road; The First 48: Cranked III The First 48: Calling for a The First 46: For a Quick

Direk DV-Drick DAрпск р. рпск р. Drick Dy-TRUBBILLIO ... Law & Order Special Vic- Chicago P.D.: Forget My
three Unit (E) Supple Show (CC)

Resolution of Adoption

Master Plan for Tuscola Township By the Tuscola Township Planning Commission

Whereas, the Tuscola Township Planning Commission may adopt a Master Plan for the physical development of the Township as empowered by the Michigan Planning Enabling Act No. 33 of 2008, as amended, and

Whereas, the Tuscola Township Planning Commission reviewed the current Master Plan, adopted in 1995, and determined revisions were necessary, and

Whereas, the Tuscola Township Planning Commission sought public input on the proposed Master Plan via a well-advertised survey that was distributed in spring of 2015 with questions pertaining to land use and the future of Tuscola Township, and

Whereas, the Planning Commission has developed a Master Plan consisting of research, maps, and analyses dealing with land use, demographics, development, transportation, community facilities, and other pertinent topics, and

Whereas, the Planning Commission submitted the plan to the Township Board for review and comment; and

Whereas, on September 15, 2015, the Tuscola Township Board received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan, and

Whereas, the public was given a well-advertised opportunity and reasonable accommodations to review the draft plan for a period of at least 63 days, and

Whereas, the Tuscola Township Planning Commission held a public hearing on the proposed Master Plan on December 9, 2015, for all residents to express opinions, ask questions, and discuss all aspects of the Plan,

Now, therefore be it resolved that the Tuscola Township Planning Commission hereby adopts the Master Plan for Tuscola Township.

Motion by: John Bishop Supported by: Gerald Peterson

Ayes: 6 (Sarah Barber, Larry Kern, Carol Smith, John Bishop, Gerald Peterson, Thelma Bushong)

Nays: 0

Absent: 0

Resolution declared adopted on the 13th day of January, 2016.

Thelma Bushong, Chair

Tuscola Township Planning Commission