

THOMAS TOWNSHIP MASTER PLAN







THOMAS TOWNSHIP MASTER PLAN 2021 UPDATE

TOWNSHIP BOARD

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| The Thomas Township Master Plan 2021Update was adopte | ed by Resolution | of the |
|--|--------------------------------|----------|
| Thomas Township Planning Commission on | by authority of the Michigan l | Planning |
| Enabling Act, Public Act 33 of 2008, after holding a public he | aring for this Master Plan on | |
| | | |

Rod Iamurri, Chair Planning Commission Thomas Township



THOMAS TOWNSHIP 249 N. MILLER ROAD SAGINAW, MI 48609

With Assistance from

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

1280992SG2019

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Appendix A – Comparison Communities Summary Chart

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INTRODUCTION

Thomas Township is a suburban community located in the Great Lakes Bay Region of Michigan near the cities of Saginaw, Midland and Bay City. The Township is characterized by a unique blend of residential, commercial, and industrial lands that are largely centered around the M-46 corridor west of the Tittabawassee River. Agricultural land fills in the landscape in the western and northern portions of the Township. Cultural and recreational opportunities enrich the local quality of life. These opportunities include sports and recreational programs, parks, hiking trails, fishing opportunities, summer fairs, festivals and concerts.





As a member of the East Central Michigan Planning and Development Regional Commission (Region VII), Thomas Township is directly affected by regional conditions and trends. The cities of Saginaw, Bay City and Midland function as a single metropolitan community. The Saginaw-Bay City-Midland Metropolitan statistical area is Michigan's fifth largest in terms of population.

PURPOSE OF A PLAN

Preparing a Master Plan is one of the major functions of a Township. The Michigan Planning Enabling Act (PA 33 of 2008) states "the planning commission shall make and approve a master plan as a guide for development within the planning jurisdiction". The Act requires that the plan be reviewed by the planning commission at least once every five years.

A Master Plan is a comprehensive document that is intended to guide a community through future growth and development decisions for the next 10 - 20 years. It is documentation of the goals and objectives that a community desires in terms of land use planning, natural resources preservation and various community development aspects. For a Master Plan to be successful it must accurately reflect the wants and needs of the community and coordinate with the values and ideals the local demographic holds.

A Master Plan serves to:

- Determine citizens wants and needs in accordance with services
- Provide a general statement of goals and objects
- Provide an overall perspective of the future of the Township
- Develop a future land use plan to guide future zoning decisions

- Guide the use of natural resources while preserving the environment of the Township
- · Promote public health, safety, and general welfare
- Encourage cooperation and economic improvement through the goals and objectives

MASTER PLANS AND ZONING ORDINANCES

A zoning ordinance contains a group of laws that mandate the regulation of land use. It differs from a Master Plan in that a Master Plan is a set of policies used to shape future development and determine how a community will grow and change. The Master plan outlines the community's vision of the future while the zoning ordinance contains the rules that govern the path to that vision. A Master Plan influences a zoning ordinance but is not law, however, State law requires that a zoning ordinance be based on an adopted plan. Also, zoning decisions that are consistent with the Master Plan are more likely presumed to be valid if challenged in the courts.

ABOUT THIS DOCUMENT

This document is an update of the November 2016 Thomas Township Community Master Plan. The Township chose to update selected sections of the 2016 plan.

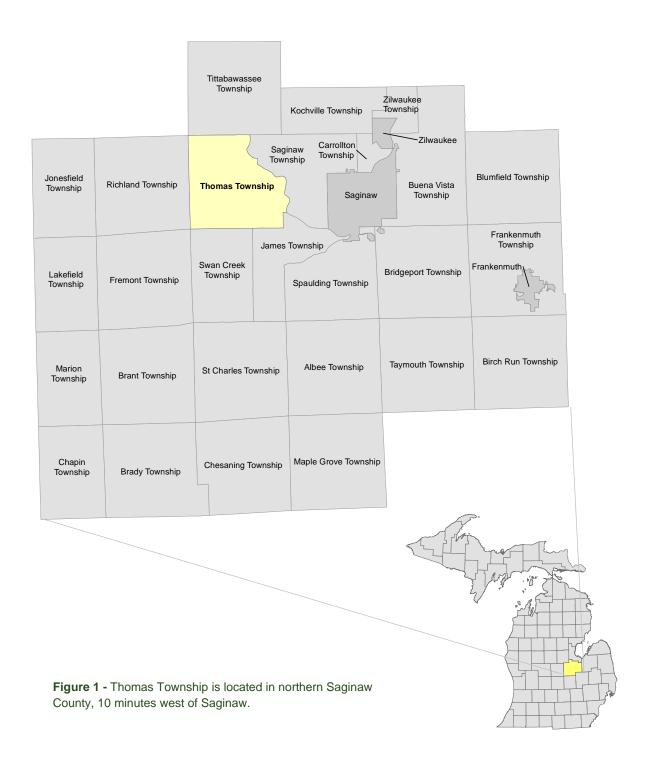
The sections that were updated and/or significantly changed in the 2016 plan include:

- Community Profile New discussion regarding Township Branding, Placemaking and the Business District North.
- Infrastructure, Services, and Facilities Update Recreational Facilities and Opportunities section to include Nature Center discussion and updated trails information.
- Future Land Use Plan New discussion regarding the Wind Energy overlay district
- Implementation Plan Updated

| Thomas Township contracted with Spicer Group of Saginaw to assist with the writing and development of |
|---|
| he plan. The consultant met with the Thomas Township Planning Commission three times during the |
| development of the plan. Meetings regarding key issues were also held with Thomas Township staff. The |
| Township Board approved to make the document available for the required 42-day review on |
| A public hearing was held on the Plan on The Thomas Township |
| Planning Commission approved the plan on |

COMMUNITY PROFILE

In order to successfully plan for the future, a community needs to understand its demographic makeup. Census data, historic trends and other resources were analyzed. This section of the Master Plan examines important factors such as population trends, housing characteristics and the local economy.



LOCAL CONTEXT

Thomas Township is located in the northwestern portion of Saginaw County in the Great Lakes Bay Region of the State of Michigan as shown in Figure 1. It is within a 30 minute drive to the major employment and commercial centers of Saginaw, Midland and Bay City. Thomas Township is bordered by the Tittabawassee River to the east. Tittabawassee Township is located just to the north, Saginaw Charter Township to the east, Swan Creek and James Townships to the south and Richland Township to the west.

POPULATION

The U.S. Census provides ample data on population characteristics. This report presents information from the two 2000 and 2010 Census, the 2014 American Community Survey and other Historic Census data.

POPULATION TRENDS

In general, the population in Thomas Township has been relatively stable since 1980.

Figure 2 shows how the population in Thomas Township has changed since 1960. The largest growth was seen between 1960 and 1980. The 1980 population was 11,184. The 2010 population is 11,985.

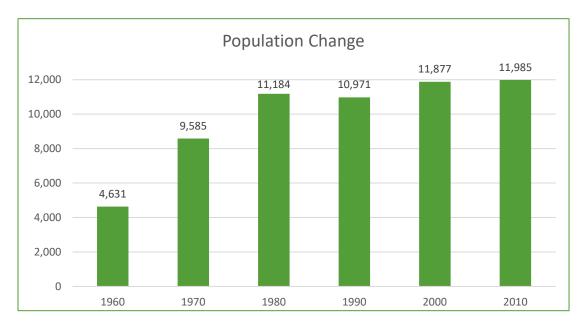


Figure 2 - The population in Thomas Township has been relatively stable since 1980

Source: U.S. Census

Figure 3 shows the population trends for Thomas Township, Saginaw County and Michigan. Thomas Township has had larger relative increases in populations than both the county and state.

Between 2000 and 2010, both the county and state saw decreased populations which is not surprising due to the recession that took place during this time period. However, Thomas Township saw an increase. This shows the resilience in the local economy and is probably a reflection of the growth of Hemlock Semiconductor during that period.

Thomas Township saw population growth of nearly 160% between 1960 and 2010. Michigan experienced an increase of 26% and the county's population increase 5% in the same time period.

Regional Population Change

| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | Change 1960 - 2010 |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------|
| Thomas Township | 4,631 | 8,585 | 11,184 | 10,971 | 11,877 | 11,985 | +159% |
| Saginaw County | 190,752 | 219,743 | 229,059 | 211,946 | 210,039 | 200,269 | +5% |
| Michigan | 7,823,194 | 8,881,826 | 9,262,044 | 9,295,297 | 9,938,444 | 9,883,640 | +26% |

Figure 3 - Thomas Township has seen large relative population growth since 1960 as compared to Saginaw County and the State of Michigan.

Source: U.S. Census

AGE DISTRIBUTION

Determining the age of the community allows for analysis of the public services and special needs a community requires. For example, if a community is full of young people, there may be a need for an increase of rental housing. This analysis may also be useful for policy decisions about filling gaps in services and future projects in housing, education, recreation and medical care. Following large generations such as the baby boomers and millennials helps a community be prepared as their needs change.

For this analysis, age groups were separated by life stages. The first is the preschool age group (0-5 years old), followed by school aged children (5-19 years old). People between the ages of 20-24 are just entering the workforce, furthering their education, or beginning a family. The age group 25-44 are the family formation years where children are born and living at home. The 45-64 age group is considered the empty nesters stage and 65+ is the age group of retirees.

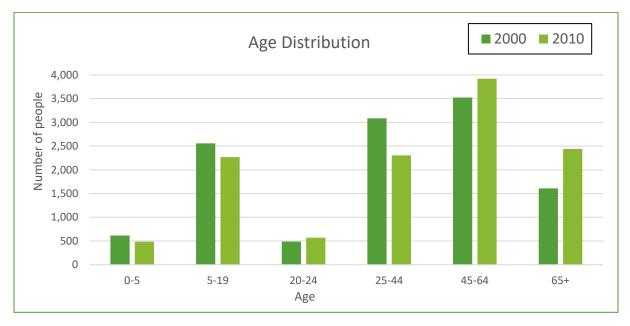


Figure 4 - Age Distribution of the Thomas Township Population in 2000 and 2010

Source: U.S. Census

As seen in Figure 4, the age distribution changes from 2000 to 2010 reflect that of an aging population. The number of young children decreased and the number of citizens in the empty nester and retirees age groups increased. An aging population has differing needs that can affect land use planning. Those include housing, transportation, and recreation.

The population of Thomas Township is older than that of Saginaw County and of the State of Michigan. The median age in Thomas Township is 47.1 years. This is significantly older than Saginaw County at 39.5 years and Michigan at 38.9 years.

DIVERSITY

Another important characteristic of a community is the racial make-up. Thomas Township is primarily White. Approximately 3.5% of the total population is African American or Hispanic. This is much less diverse than Saginaw County, which contains a 26.3% African American and Hispanic population. The population in the State is between these two at 18.4%.

The foreign born population in Thomas Township is small at 1.7%. Saginaw County contains a small foreign born population as well at 2.4%. The State has a larger percentage of foreign born population, at 6.1%.

HOUSEHOLD SIZE

The number of persons per household constitutes the household size. Since the 1970's household size has decreased across the county. There are many factors that have contributed to this phenomena including increased lifespan, lower birth rate, higher divorce rates and the growing number of non-traditional households.

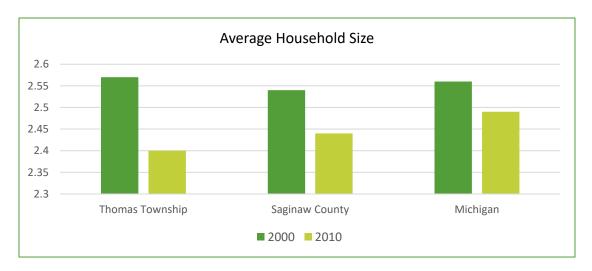


Figure 5 - Average household size has been decreasing across Michigan

Source: U.S. Census

The average household size is an important aspect of any community. It is useful when deciding on future development of housing types. For example, if the size of households is decreasing, it may mean that new housing types may be needed to accommodate smaller families. As seen in Figure 5, the decreasing household size in the Township, County, and State. As of 2010, Thomas Township has the smallest average household size of the three, unlike in 2000, when it had a slightly larger average household size than the county and state. The number dropped significantly between 2000 and 2010. This is largely attributed to the increasing population of empty nesters and retirees.

HOUSEHOLD CHARACTERISTICS

Along with the average household size, a community must know the type of families that are present. The household characteristics of a community helps demonstrate the need for specific types of housing. Families consist of people living in a single household who are related by blood, marriage, or adoption. Families vary in types according to the parental presence (single or couple). Non-families consist of a single person living alone or multiple people who are not related living together.

Figure 6 compares the household characteristics of the Thomas Township community to the county and state. In all three, the largest category is married couple families. Of the households in Thomas Township, 56.3% are married couple families. This is the largest percentage of the three groups. Both the county and state have just under 50% of total households filled with married couple families.

Single parent families account for just less than 20% of the total households in the county and state but only 13% of the total households in Thomas Township.

Household Type

| | Thomas Township | Saginaw County | Michigan |
|-----------------------------|-----------------|----------------|----------|
| Married Couple Families | 56.3% | 45.8% | 48.5% |
| Single Male Families | 3.9% | 3.9% | 4.4% |
| Single Female Families | 8.8% | 14.6% | 12.8% |
| Single Persons Living Alone | 27.7% | 30.7% | 28.7% |
| Other Non-Families | 3.3% | 4.9% | 5.6% |
| Total Households | 100% | 100% | 100% |

Figure 6 - Types of Households in Thomas Township, Saginaw County and Michigan

Source: U.S. Census

HOUSING

Housing is probably the most visible characteristic of any community. This section analyzes the housing stock by unit type, age, value and tenant type. This data helps a community determine the quality of existing housing and the potential need for new housing.

HOUSING CHARACTERISTICS

There are multiple types of housing that make up the housing stock in a community. The U.S. Census separates housing into five different categories: 1 Unit Detached (single-family homes), 1 Unit Attached (granny flats, single apartment unit connected to a single-family home), 2-4 Units (duplex units), 5 or more Units (apartment complex), and Mobile Homes or Trailer Units.

As previously mentioned, a large amount of households in Thomas Township are made up of married couple families which generally demand single-family homes. This correlates with the large percentage of

single-family homes found in the Township (75.5%), as seen in Table 7. These percentages are similar in Saginaw County and Michigan.

Housing Distribution

| Unit Type | Thomas Township | Saginaw County | Michigan |
|------------------------------|-----------------|----------------|----------|
| 1 Unit Detached Structure | 75.5% | 76.3% | 72.0% |
| 1 Unit Attached Structure | 4.1% | 3.4% | 4.6% |
| 2-4 Unit Structures | 3.3% | 6.3% | 5.1% |
| 5 or More Unit Structure | 8.3% | 10.3% | 12.8% |
| Mobile Home or Trailer Units | 8.7% | 3.7% | 5.4% |

Figure 7 - Types of housing in Thomas Township, Saginaw County and Michigan

Source: U.S. Census

Thomas Township has nearly equal percentages of 5 or more unit structures and mobile homes structures. The Township has a larger amount of mobile homes than the county and state but less structures with 5 or more units. Of the total housing in Saginaw County, 10.3% are structures of 5 or more attached units and 12.8% of the housing in Michigan is the same type.

AGE OF HOUSING

Generally speaking, the useful age of residential structures is approximately 50 years. Beyond that point, repairs can become costly and it may be difficult to provide the type of amenities that are considered

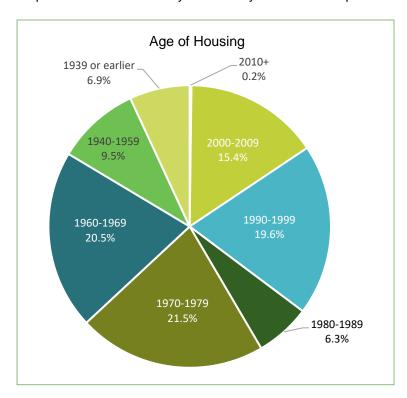


Figure 8 - more than 35% of the housing stock in Thomas Township is more than 50 years old.

Source: U.S. Census

standard for today's lifestyle. Therefore, determining the age of the housing located within a community is an effective way of measuring the quality.

As seen in Figure 8, 16.4% of the housing stock in Thomas Township was built in 1959 or earlier. Slightly over 20% was built in the 1960's. So, approximately 35% of the housing stock in Thomas is more than 50 years old. Code enforcement may be important to maintain its quality.

Between 1990 and 2010, Thomas Township saw a large amount of housing built (35.2%). This points to a strong real estate market which points to a strong local economy. If Thomas Township continues to grow, the community must be ready to accommodate the increased housing needs in residential areas of the Township.

HOUSING VALUE

Analyzing housing values is a way to determine both quality and affordability of housing. Most communities wish to maintain both quality housing as well as affordable housing to support a diverse community which will continue to attract new residents for future growth.

Thomas Township has a wide distribution in home values. The largest proportion of homes is valued between \$100,000 and \$149,999 as seen in Figure 9. The median home value in Thomas Township, according to the 2014 American Community Survey is \$126,500. This is higher than Saginaw County at \$94,800 and Michigan at \$120,200.

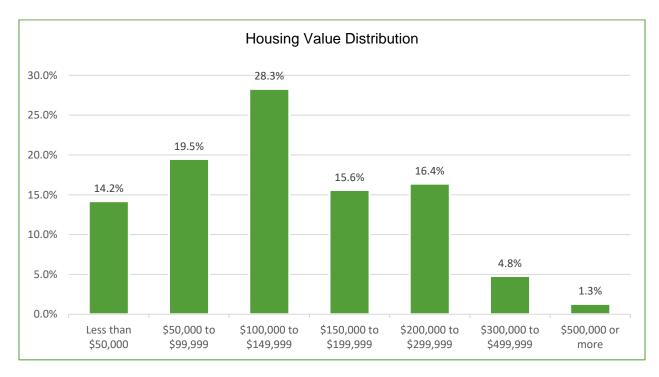


Figure 9 - Housing Value Distribution in Thomas Township

Source: 2014 American Community Survey

INCOME, EDUCATION, AND EMPLOYMENT

A large part of the U.S. Census consists of economic characteristics. Economic characteristics help a community determine the vitality and ability to support future commercial, residential, and industrial development. This data must be analyzed because it exposes the strengths and weaknesses of a community while alluding to trends that may aid or hurt the economic future. This economic analysis utilizes 2000 and 2010 U.S. Census data and 2014 American Community Survey.

INCOME AND POVERTY

Income and poverty trends help to measure the economic health of a community. Increases in income can show economic success while decreases show a time of economic misfortune. Two of the income levels measured by the U.S. Census measures income are median household income and per capita income. These measures are shown in Figure 10.

Household income is the measure of the total incomes of the persons living in a single household. Per capita income is the measure of the total income divided evenly for each person, regardless of age or employment, to receive an equal amount. It is this number that generally represents the overall wealth of a community. Thomas Township is wealthier in both measures than Saginaw County and Michigan.

Thomas Township has a relatively low percentage of individuals below the poverty line when comparing the community to the county and the state, as seen in Figure 10. Approximately 5% of the total population in Thomas Township is considered below the poverty line. In the county, 18.1% of the population falls in this category and in the state 16.9% of people are below the poverty line. Having such a large population above the poverty line is a major strength in Thomas Township. It points to a vital economy and strong workforce.

Median Income and Poverty Thomas Township and Region

| | Median Household Income | Per Capita Income | % Below Poverty |
|-----------------|-------------------------|-------------------|-----------------|
| Thomas Township | \$55,827 | \$30,815 | 5.3% |
| Saginaw County | \$43,566 | \$22,891 | 18.1% |
| Michigan | \$49,087 | \$26,143 | 16.9% |

Figure 10 - Income and Poverty Measures in Thomas Township, Saginaw County and Michigan

Source: 2014 American Community Survey

EDUCATION

Educational attainment measures the educational level of a community. It illustrates the skills and capabilities of the labor force. For example, if there is a high educational attainment level, it may attract a larger diversity of industries that require a degree for employment.

Figure 11 illustrates the percentages of persons who are high school graduates and individuals who have obtained a bachelor's degree or higher in Thomas Township, Saginaw County, and Michigan. All are relatively similar. Thomas Township has the greatest percentage of high school graduates. Michigan has the largest percentage bachelor's degrees or higher at 26.4%. Thomas Township has slightly less at 23.6% with bachelor's degrees or higher. Saginaw County is the lowest of the three at 20.1%.

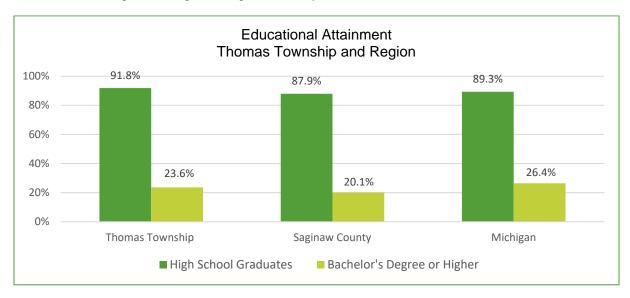


Figure 11 – Education Levels in Thomas Township, Saginaw County and Michigan

Source: 2014 American Community Survey

EMPLOYMENT BY INDUSTRY

The distribution of employment throughout various industries shows the diversity of an economy. If there is a large majority of a population employed in one industry, the economy will be majorly affected if that industry falls. The distribution of employment by industry is shown in Figure 12.

The two largest employing industries in Thomas Township are educational, health and social services (28.3%) and manufacturing (15.6%). Saginaw County and the State have the same top two employing industries. Percentages are similar to that of Thomas Township.

Overall, it appears that Thomas Township has a resilient economy when it comes to employment. There is a good amount of diversity in jobs in terms of industry type. This has likely been a large factor contributing to the success the Township has seen over the years in terms of population growth and relative economic stability.

Employment by Industry

| Industry | Thomas Township | Saginaw County | Michigan |
|---|-----------------|----------------|----------|
| Agriculture, forestry, fishing and hunting, and mining | 1.1% | 1.2% | 1.3% |
| Construction | 7.9% | 4.4% | 4.8% |
| Manufacturing | 15.6% | 15.5% | 17.4% |
| Wholesale trade | 2.7% | 2.5% | 2.5% |
| Retail trade | 9.4% | 13.6% | 11.4% |
| Transportation and warehousing, and utilities | 4.0% | 3.9% | 4.1% |
| Information | 1.7% | 1.6% | 1.6% |
| Finance, insurance, real estate, and rental and leasing | 4.8% | 5.1% | 5.5% |
| Professional, scientific, management, administrative, and waste management services | 9.4% | 7.9% | 9.3% |
| Educational, health and social services | 28.3% | 25.7% | 24.1% |
| Arts, entertainment, recreation, accommodation and food services | 7.0% | 9.9% | 9.5% |
| Other services (except public administration) | 4.9% | 5.1% | 4.8% |
| Public administration | 3.3% | 3.7% | 3.7% |

Figure 12 - Education, health, and social services employs the highest percentage of workers in Thomas Township.

Source: 2014 American Community Survey

PLACEMAKING AND BRANDING

"Placemaking is the process of creating quality places where people want to live, work, play, shop, learn, and visit."

According to the Michigan State University Land Policy Institute's Placemaking Guidebook, *Placemaking as an Economic Development Tool*, The term "placemaking" has been used by urban planners, landscape architects, and architects since the early 1970s, but has only recently begun to gain popularity among the general population. It has primarily been used as a community design and community development tool with a special focus on public spaces, such as sidewalks, rights-of-way, public squares, boulevards, parks, and recreation areas. It continues to have enormous utility in those locations, which when well-designed

and close to dense populations of people, are magnets for interesting activity. But, placemaking also has considerable utility as an economic development tool and can guide public infrastructure development as well."

In past years, Thomas Township has moved its planning efforts forward with a focus on Placemaking. For many years, Thomas Township has been known as the community of Shields. To many people, it is a place to drive through as one heads west out of Saginaw. Thomas Township wishes to be known as Thomas Township, a place where people can live, work, play, shop, learn, and visit – an interesting place in and of its own right. Community leaders want the community to be known as Thomas Township so that it reflects the entire township as opposed to the commercial areas centered around M-46.

Two sections of the Thomas Township Zoning Ordinance are being used as specific Placemaking Tools. The first is the Gratiot Road Design Guideline Overlay District. This overlay covers several different zoning districts along the Gratiot Road Commercial Corridor. Its intent is as follows:

It is vital that Thomas Township maintains a strong and growing business corridor to insure property values remain strong and shoppers continue to feel safe and to use the businesses in the area. To that end, measures are necessary to help improve and sustain the health and safety of the public utilizing the Gratiot Road Design Guideline Overlay District. They include setting strong architectural design requirements that mandate the use of materials and designs that will contribute to an improved and safer business district for visitors and residents alike. A strong business district will also contribute to developments that are better planned and potentially safer for shoppers and residents to visit and to enjoy for years to come.

Some of the guidelines used in the Overlay District that help to achieve a sense of place include:

- Encouraging the incorporation of defined outdoor spaces into the buildings and site designs of all new commercial development.
- Enhancing the rear of existing buildings to improve public access from parking lots.
- Requiring a sequence of continuous pedestrian activity.
- Encouraging visually interesting activities at the sidewalk edge, such as planters and murals.
- Encouraging pedestrian open spaces such as covered walkways, courtyards and plazas, as well
 as the development of open and attractive passageways between buildings and uses.
- Encouraging outdoor seating and dining areas
- Using stone columns and simulated black wrought iron fencing at key locations across the district.

The second section of the Zoning Ordinance that addresses placemaking is the **North Business District Overlay**. This district is located north of Gratiot Road and east of Kennely Road in the area behind the Home Depot and Carter Lumber stores. According to the Zoning Ordinance, "This area will consist of mixed uses such as residential, office businesses, and service businesses. The purpose of this ordinance is to implement a structure and to set guidelines that will promote a more uniform visual quality to the overlay district within the Township. It will encourage an attractive architectural theme and encourage a walkabout and pedestrian friendly business district."

The provisions of the North Business District Overlay will allow for a uniform look at a pedestrian level, connecting Shields Drive westward to Kennely Drive. The area is ready for development, with public water main having been installed in the past 15 years.

The Township envisions that the North Business District will eventually develop as a small "downtown style" combined commercial and residential area. The mixed uses with parking behind the buildings will have buildings constructed closer to the roadway than in other areas of the Township. A strong focus on pedestrian travel would be very visible. Buildings would be two to three stories tall with residential dwellings on the upper floors and commerce activity on the first floor. Shields Drive would include special features such as a faux bridge, parallel parking, and speed tables.



Figure 13 – The North Business District Overlay has been identified as a future mixed-use development area.



TAXABLE VALUE

The taxable value refers to the taxable value of all real and personal property within a community. As seen in Figure 13, the taxable value of Thomas Township decreased from 2014 to 2015 by a small percentage. The only other municipality that decreased in this group of neighboring communities was the City of Saginaw, which decreased by a more substantial 4.8%.

Taxable Value Thomas Township and Region

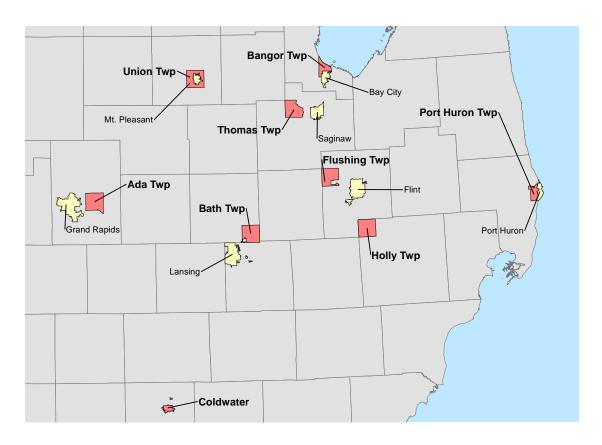
| Municipality | 2014 SEV | 2015 SEV | Percent Change |
|------------------------|-----------------|-----------------|----------------|
| Chesaning Township | \$115,783,692 | \$117,096,835 | 1.1% |
| Kochville Township | \$187,396,724 | \$195,277,045 | 4.2% |
| Saginaw Township | \$1,214,636,077 | \$1,218,394,440 | 0.3% |
| Thomas Township | \$480,118,994 | \$478,138,905 | -0.4% |
| Tittabawassee Township | \$278,252,576 | \$286,907,577 | 3.1% |
| Saginaw City | \$496,251,076 | \$472,509,842 | -4.8% |
| Frankenmuth City | \$267,169,388 | \$281,949,559 | 5.5% |

Figure 14 - Taxable Value of Thomas Township as compared to other communities in Saginaw County.

Source: Saginaw County Equalization

COMPARISON COMMUNITIES

To fully understand the characteristics of the Thomas Township community, it is worthwhile to benchmark it to similar communities across Michigan. Eight communities were chosen because they are similar in size to Thomas Township, and most serve as bedroom communities to larger cities.



| COMMUNITY | COUNTY | POPULATION | BEDROOM COMMUNITY FOR |
|-----------------------------|------------------|------------|--------------------------|
| Bangor Township | Bay County | 14,651 | Bay City |
| Ada Township | Kent County | 13,145 | Grand Rapids |
| Union Charter Township | Isabella County | 12,927 | Mt. Pleasant |
| THOMAS TOWNSHIP | Saginaw County | 11,985 | Saginaw |
| Bath Township | Clinton County | 11,598 | Lansing |
| Holly Township | Oakland County | 11,362 | Flint/Pontiac |
| Coldwater City | Branch County | 10,945 | NA |
| Port Huron Charter Township | St. Clair County | 10,654 | Port Huron |
| Flushing Charter Township | Genesee County | 10,640 | Flint |

This analysis includes a comparative assessment of the economic, social, and demographic conditions. Data was collected from the 2000 and 2010 U.S. Census and the 2014 American Community Survey. A summary chart is located in Appendix A.

POPULATION

The population of each comparison community is between 10,000 and 14,000 residents. The change in population of each community varied widely from 2000 to 2010. Union Charter Township grew by the largest amount at nearly 70%. Most of this growth is due to several new apartment complexes that were built, catering to Central Michigan University students. Much of Bath Township's growth of 54% is similar, with the addition of the Chandler Crossings complex which caters to Michigan State University students. Thomas Township's population was the most stable, with growth of approximately 1%. See Figure 15.

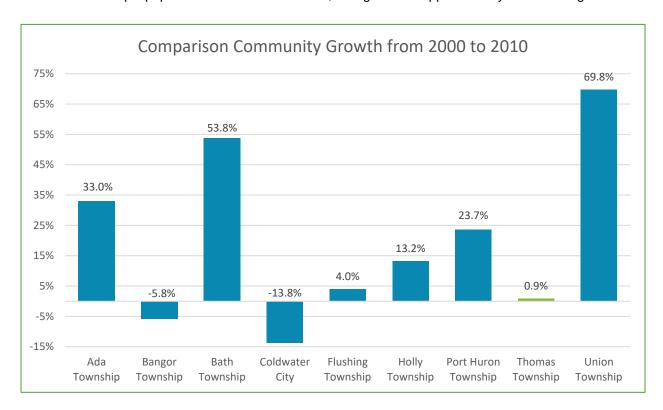


Figure 15 - Population change between 2000 and 2010.

Source: 2000 and 2010 U.S. Census

AGE

Thomas Township's median age of 47.1 is higher than any of the other comparison communities. See Figure 15. As stated in the demographic analysis above, an aging population has unique needs in terms of housing, health care, recreation, and other public services. Union Township's very young median age of 22.8 is influenced by the Central Michigan University student population.

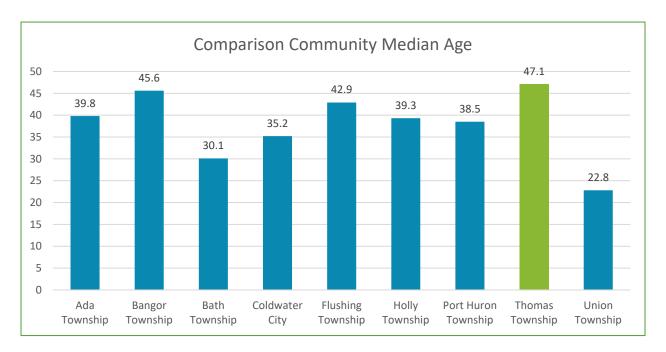


Figure 16 - Thomas Township's population is the oldest of all the comparison communities.

Source: 2014 American Community Survey

DIVERSITY

The communities that are being analyzed are primarily White. All contain a small percentage of ethnic and racial diversity.

All compared jurisdictions have African American and Hispanic populations of less than 10% of their total populations. Bath and Port Huron Charter Townships have the largest populations of African American and Hispanic persons at 8.6% and 8.3%, respectively. Thomas Township has one of the smallest percentages at 4.6%.

Ada Township has the largest percentage of foreign born residents at 5.6%. Again, Thomas Township contains one of the smallest populations at 1.7%. Most of the compared communities contain approximately 2% foreign born residents.

HOUSING

Most of the communities have a large majority of housing occupied by owners and small percentages of renter-occupied housing. See Figure 16. Port Huron Charter and Bath Townships, and Coldwater City have lower rates of owner-occupied housing between 60% and 70%. Union Charter Township has a much smaller owner-occupancy rate at 34.7%. Again, this is indicative of the large Central Michigan University student population. A large percentage of owner-occupied homes generally indicates a more stable community.

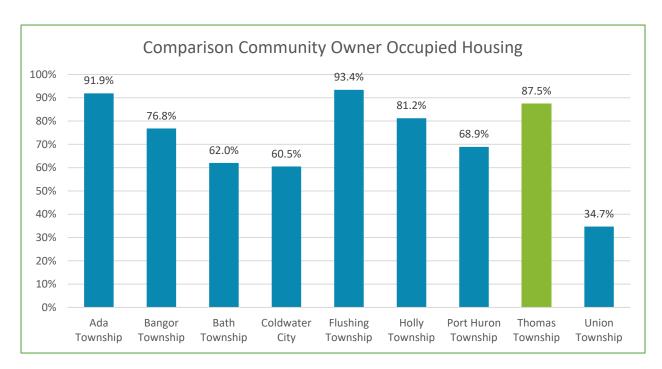


Figure 17 - Ada, Flushing, and Thomas Townships have a relatively high proportion of owner occupied housing.

Source: 2014 American Community Survey

In terms of value, the majority of the comparison communities have a median housing value between \$100,000 and \$130,000 with a few outliers above and below these values. The community most different is Ada Township with a very high median housing value of \$260,000. The City of Coldwater has the lowest median housing value at \$80,300. Thomas Township falls near the middle of the comparison group with a median housing value of \$127,400. See Figure 18.

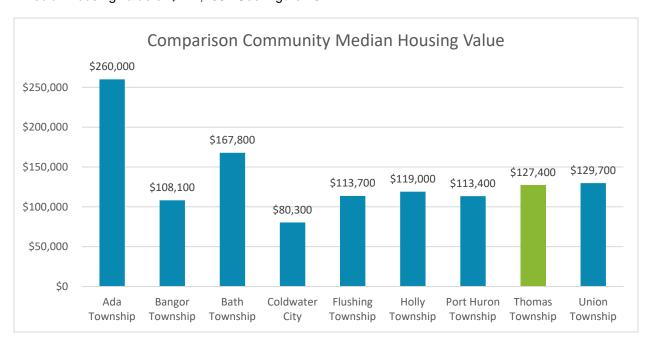


Figure 18 - Most of the comparison communities have median housing values between \$100,000 and \$130,000.

Source: 2014 American Community Survey

AGE OF HOUSING

Bath Township has the smallest percentage of homes built prior to 1980, at only 26.5%, followed closely by Union Charter Township which has 29%, as seen in Figure 18. The rest of the communities have an older housing stock with over 50% built prior to 1980. Coldwater has the highest percentage of housing (70.7%) in the same category. See Figure 18.

Out of the entire housing stock in Bath Township, 42.8% has been built since 2000. Union Charter Township has 35% of its total housing stock built since 2000. This is compared to the 15.6% that was built in that time period in Thomas Township.

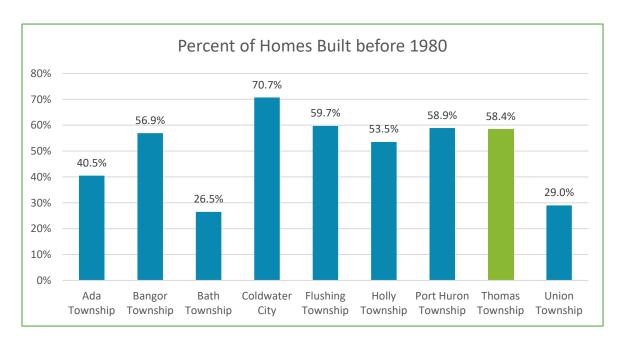


Figure 19 - The City of Coldwater has the oldest housing stock. Bath Township has the smallest percentage of homes built prior to 1980.

Source: 2014 American Community Survey

EDUCATION

The comparison communities show a good deal of variation in educational attainment. Ada Township has the largest percentage of residents that have earned a bachelor's degree or higher (56.7%). This is followed by 45% in Bath Township. The lowest percentage of residents with a bachelor's degree is 12.6% of the population in Port Huron Charter Township. Thomas Township is in the middle of the range at 21.8%. See Figure 20.

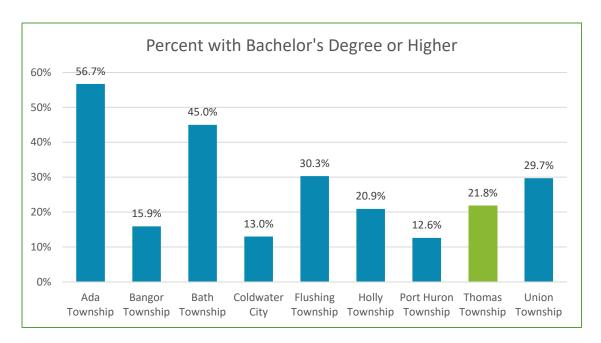


Figure 20 - Ada and Bath Townships have the highest percentage of residents with bachelor's degrees or higher. Thomas Township fall in the middle of the range.

Source: 2014 American Community Survey

INCOME

Median household income is shown in Figure 20. Thomas Township has a median income of \$55,203 which is about the average of the communities being compared. Ada Township once again shows its relative affluence with the highest median income at \$105,132. The smallest is in Union Charter Township at \$25,590. This is reflective of the high proportion of college students who live there that do not have a full-time income. A majority of the median incomes fall between \$30,000 and \$65,000.

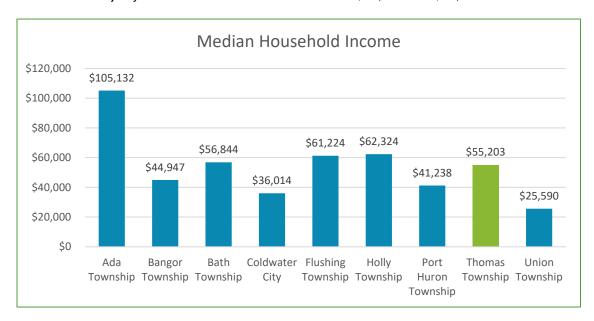


Figure 21 - Ada and Bath Townships have the highest percentage of residents with bachelor's degrees or higher. Thomas Township falls in the middle of the range.

Source: 2014 American Community Survey

Most of the comparison communities' median household income increased between 2000 and 2010. Union Charter and Port Huron Charter Townships are the only communities that saw a decrease.

EMPLOYMENT

The industries that employ the largest percentage of people vary slightly between the communities. One of the top two in each jurisdiction is the educational, health, and social services industry. The other of the top two industries is either 1) manufacturing or 2) arts, entertainment, recreation, accommodation and food services. Ada, Bangor, Bath, and Thomas Townships show very similar employment statistics as can be seen in Figure 22 below.

EMPLOYMENT BY INDUSTRY

| Community | Top Industry, by Percentage of Employment | Second Highest Industry, by Percentage of Employment |
|--------------------------------|--|--|
| Ada Township | Educational, health, and social services (26.4%) | Manufacturing (15%) |
| Bangor Charter Township | Educational, health, and social services (24.1%) | Manufacturing (13.7%) |
| Bath Township | Educational, health, and social services (26.9%) | Arts, entertainment, accommodation and food services (14.4%) |
| Coldwater City | Manufacturing (23.9%) | Educational, health, and social services (21.9%) |
| Flushing Charter Township | Educational, health, and social services (28.4%) | Manufacturing (12.7%) |
| Holly Township | Educational, health, and social services (21.3%) | Manufacturing (20.4%) |
| Port Huron Charter Township | Manufacturing (24%) | Educational, health, and social services (20.3%) |
| Thomas Township | Educational, health, and social services (27.1%) | Manufacturing (15.1%) |
| Union Charter Township | Arts, entertainment, accommodation and food services (32.3%) | Educational, health, and social services (24.2%) |

Figure 22 - The education, health, and social services industry is the largest employer in most of the comparison

STATE EQUALIZED VALUE

The State Equalized Value (SEV) is the total amount of real and personal property contained within a community. After the recession of 2008, communities across Michigan saw a drop in SEV. When looking at the comparison communities, this decrease was most drastic in Holly Township which had a drop of 37% in SEV from 2008 to 2012. All of the communities except Bangor Charter Township saw increases in SEV from 2012 to 2015. Thomas Township had the steadiest SEV from 2008 to 2015 and it was the only comparison community that had a growth in SEV from 2008 to 2012. See Figure 23.

STATE EQUALIZED VALUE

| Community | 2008 | 2012 | 2015 |
|-----------------------------|---------------|---------------|-----------------|
| Ada Township | \$991,336,100 | \$922,384,900 | \$1,050,142,500 |
| Bangor Charter Township | \$558,485,550 | \$452,548,550 | \$445,647,900 |
| Bath Township | \$500,177,250 | \$402,450,491 | \$451,258,900 |
| Coldwater City | \$383,641,408 | \$318,085,014 | \$347,892,219 |
| Flushing Charter Township | \$360,794,290 | \$264,820,000 | \$286,249,000 |
| Holly Township | \$427,697,710 | \$270,151,740 | \$312,855,650 |
| Port Huron Charter Township | \$326,301,100 | \$240,981,766 | \$249,068,500 |
| Thomas Township | \$497,530,400 | \$506,183,700 | \$499,796,800 |
| Union Charter Township | \$422,062,700 | \$375,654,723 | \$431,356,200 |

Figure 23 - After the Recession of 2008, the State Equalized Value fell in communities across the state. Thomas Township is only one of three comparison communities that had SEV growth from 2008 to 2012.

Source: Michigan Department of Treasury

NATURAL RESOURCES

The natural resources in a community are an important asset that must be analyzed in order to create a successful Future Land Use Plan which involves determining areas for future development and areas for preservation. The natural environment can have a significant effect on development. Conversely, development can have a detrimental effect on the environment and natural features of any community. If development and preservation are not coordinated, a community can see significant loss of vital natural systems and processes. For example, disrupting a watershed can result in flooding of the development and rerouting that storm water to another natural draining system can cause overflow problems. A Future Land Use Plan can help a community avoid disasters of this nature.

Thomas Township contains several environmentally significant natural resources that provide for an enhanced quality of life for all area residents. The Tittabawassee River, Swan Creek, agricultural soils, open space, clean air, woodlands and wetlands are natural features that will be affected as future growth and development continues to occur in the Township. The natural environment can have a significant effect on the costs and ability to develop. Likewise, excavation, fill, cleaning, grading, construction and other activities associated with the development of land significantly impacts the natural environment. Special attention must be given to environmentally sensitive areas to provide for the preservation of the Township's natural resources for present and future generations.

Identifying natural features help to determine land most suitable for development, which would require the least development costs and provide the maximum amenities without having adverse effects on existing natural systems. Secondly, identification of natural features will help identify lands most suitable for recreational conservation. The applicable natural features of Thomas Township are described below and the maps that are referenced are included at the end of this section.



SIGNIFICANT FEATURES

Thomas Township contains various significant features which can be defined as characteristics that serve to "shape the community". In some instances, these characteristics may hinder development in order to preserve the character. These significant features do, however, attract specific land use activities.

TOPOGRAPHY

The natural topography of Thomas Township which can be classified as nearly flat with a few steep or rugged areas. The Topography map shows land elevations that range from a height of about 698 feet above sea level near the intersection of Orr and Frost Roads, to a low of 582 feet above sea level north of Ederer Road in the southeast corner of the Township.

Steeper grade changes can be found along the Tittabawassee River, North River Road, and the Swan Creek. Such areas should be developed with caution in regards to potential erosion and drainage problems that might affect adjacent properties. Most of these steep grade changes also fall within the 100-year flood plain in Thomas Township, as well, which makes them unsuitable for development.

WOODLANDS

Woodlands are an important feature of many Michigan communities. Thomas Township has numerous woodland areas throughout according to the United States Geological Survey (U.S.G.S.) data. These likely second and third growth woodlands are valuable as wildlife habitats and for aesthetic and recreational enjoyment. Woodlands also moderate certain climate conditions, such as flooding and high winds, by protecting watersheds from siltation and soil erosion caused by storm water runoff or wind. Woodlands can also improve air quality by absorbing certain air pollutants, as well as buffer excessive noise generators. To the extent feasible, these woodlands should be protected from future land development.

The largest tracts of woodlands in Thomas Township are located in the western third of the Township and they are shown on the Woodlands map.



MAJOR BODIES OF WATER AND HYDROLOGY

There are a few manmade lakes in Thomas Township that appear to be made as a result of excavation activities that have occurred on site. Natural and artificial lakes provide several aesthetic and recreational benefits. Lakes also serve as natural retention areas for storm water runoff, act as a ground water recharge resource and tend to moderate the microclimate in proximity to its shores. Protection of these natural assets should be given high priority in future land use planning decisions.

The Tittabawassee River and the Swan Creek are the major watercourses in Thomas Township. The Tittabawassee River is the larger of the two. It flows southeasterly and forms the eastern border of the Township. It is a popular fishing and water recreation spot it the Township. Other minor drainage ways and creeks include Williams Creek, Hatch Run, McClellan Run, Abbey Drain, Badger Drain, Bebee Drain and Dice Drain. Their locations are shown on the Drains & Water Features Map.

These water courses are prone to flooding during major wet weather events. Development within flood prone areas must be carefully managed. Floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. The Federal Insurance Administration of U.S. Department of Housing and Urban Development has developed Flood Insurance Rate Maps for Thomas Township Flood Zone Map. They depict both the 100-year and 500-year flood boundary. This is considered the flood hazard area. The 100-year flood zone should be considered for recreation-conservation areas inasmuch as development within this zone is limited.

WETLANDS

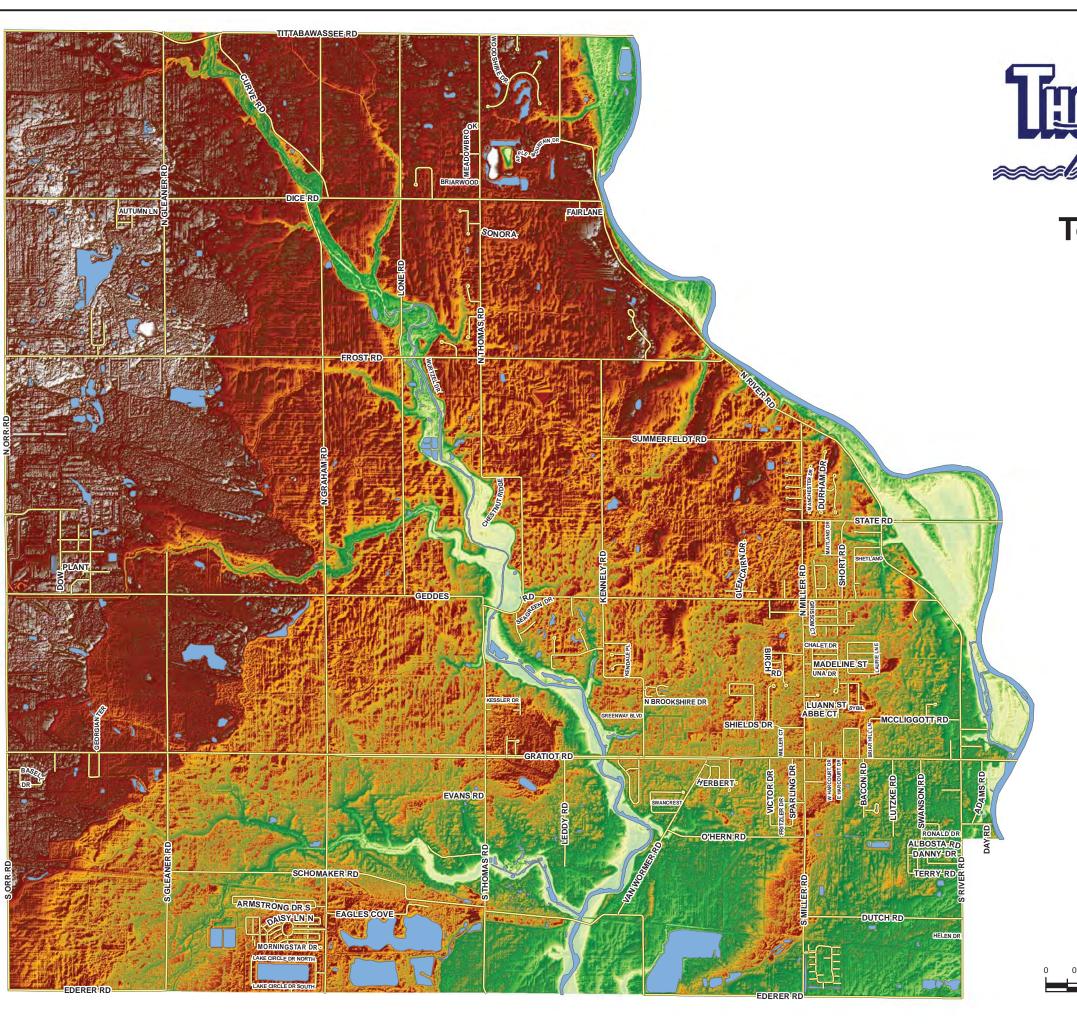
In 1979, the Goemaere-Anderson Wetland Protection Act was enacted by the State of Michigan. This legislation was passed to protect wetlands by restricting their use to certain activities including fishing, boating, and farming while permitting other activities only after permit approval by the State of Michigan. Permits are approved only upon a review of an environmental assessment filed by the petitioner and upon a finding that the activity is in the public interest. Most of the large tracts of wetlands in Thomas Township are located in the western third of the Township.

Under the Act, the following wetlands are protected:

- 1. Wetlands contiguous to an inland lake, pond, river, stream or similar natural water course.
- 2. Wetlands five acres in size or larger in counties which contain a population of at least 100,000 people.

PUBLIC ACT 116/FARMLAND, OPEN SPACE AND PRESERVATION ACT

Information provided by the Township Assessor's office indicates approximately 25 tracts of agricultural land in Thomas Township that are registered under the provisions of the Farmland and Open Space Preservation Act. Under the requirements of the Act, the land generally may not be developed or built upon for a certain amount of time in exchange for certain tax credits as described in the Act. Land enrolled in P.A. 116 in Thomas Township is subject to the development restrictions for a period of time ranging between 1 to 37 years.





Topography

Map 1

Legend



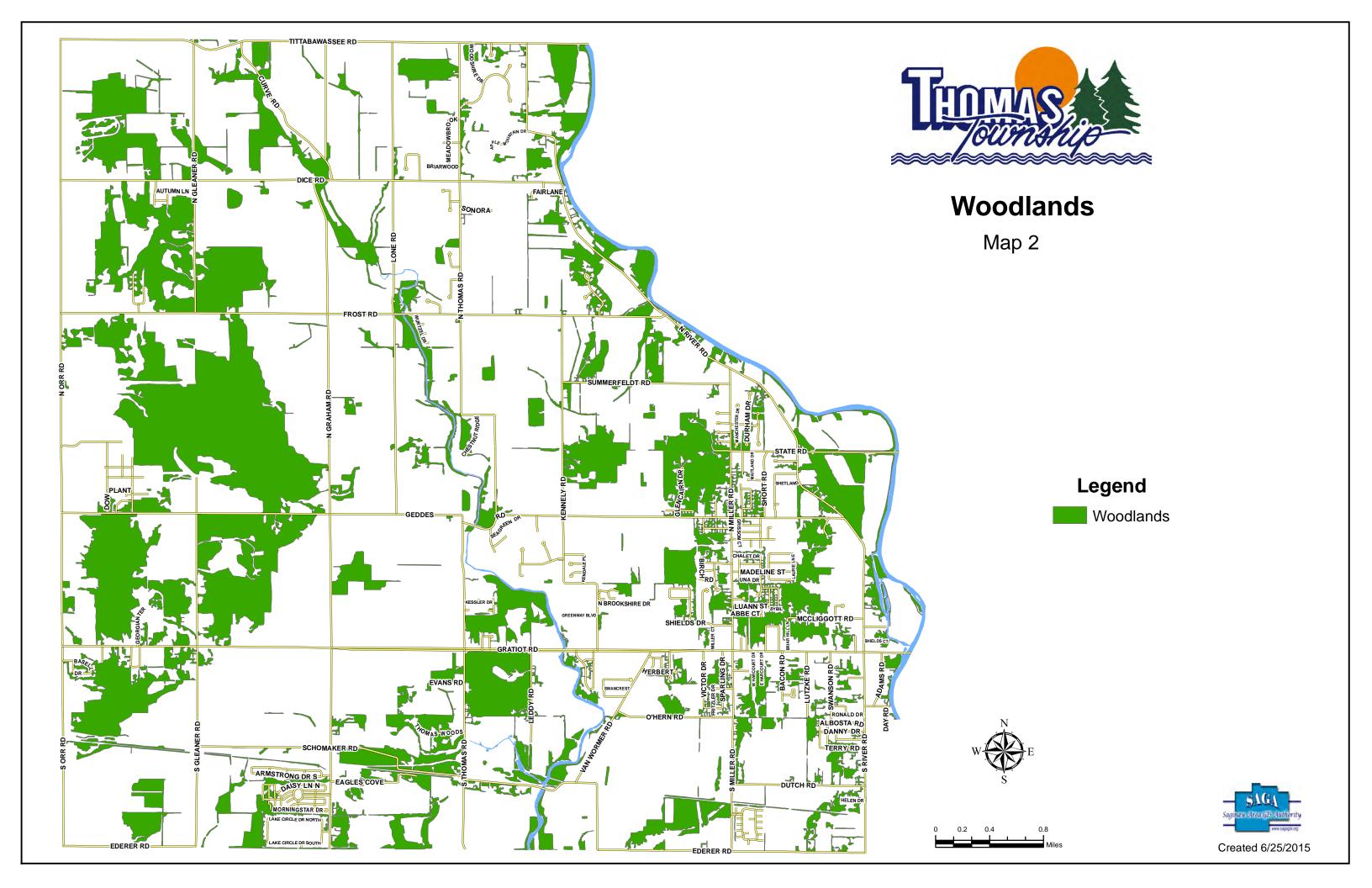
High: 698.719

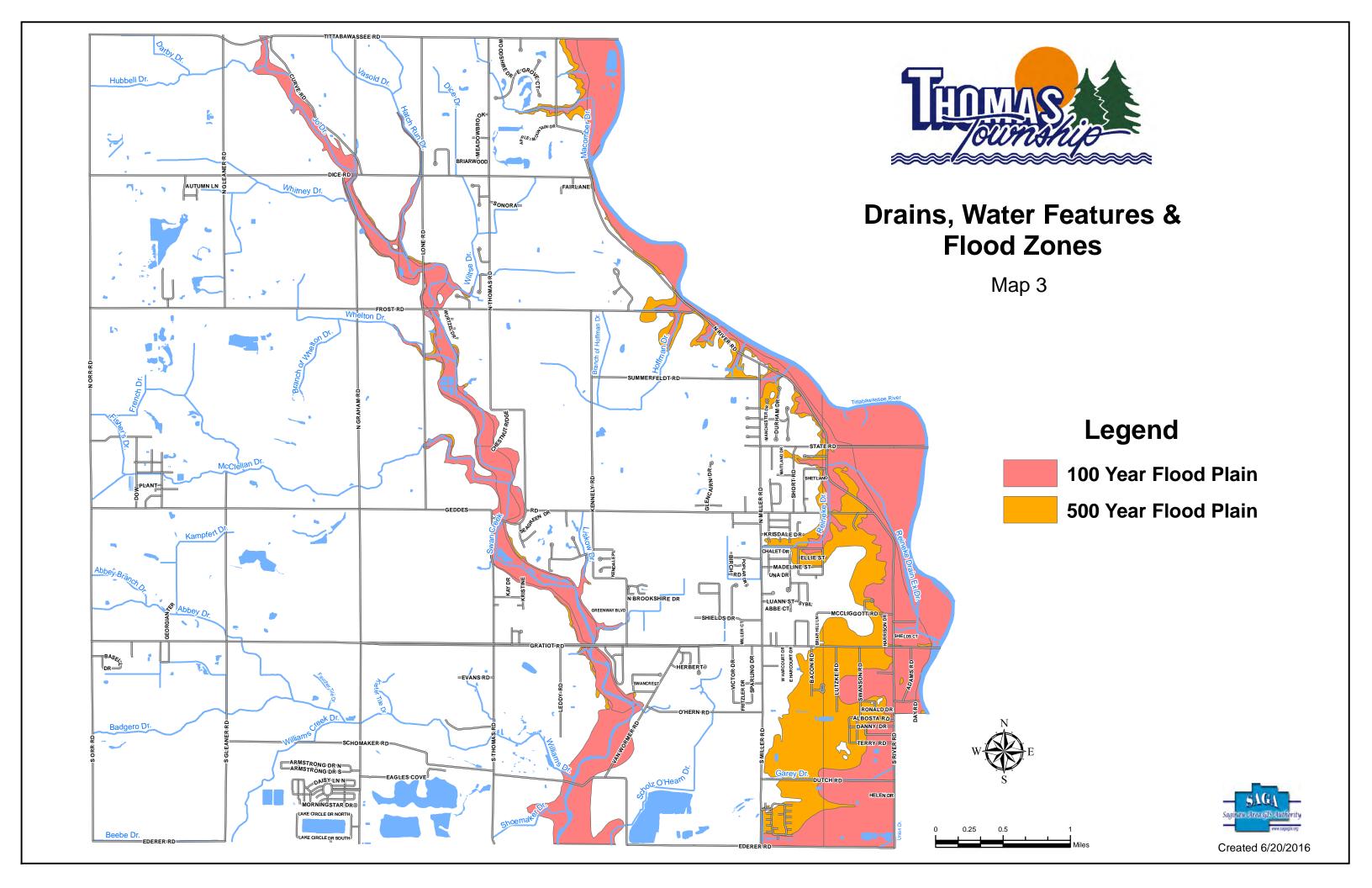
Low: 577.89

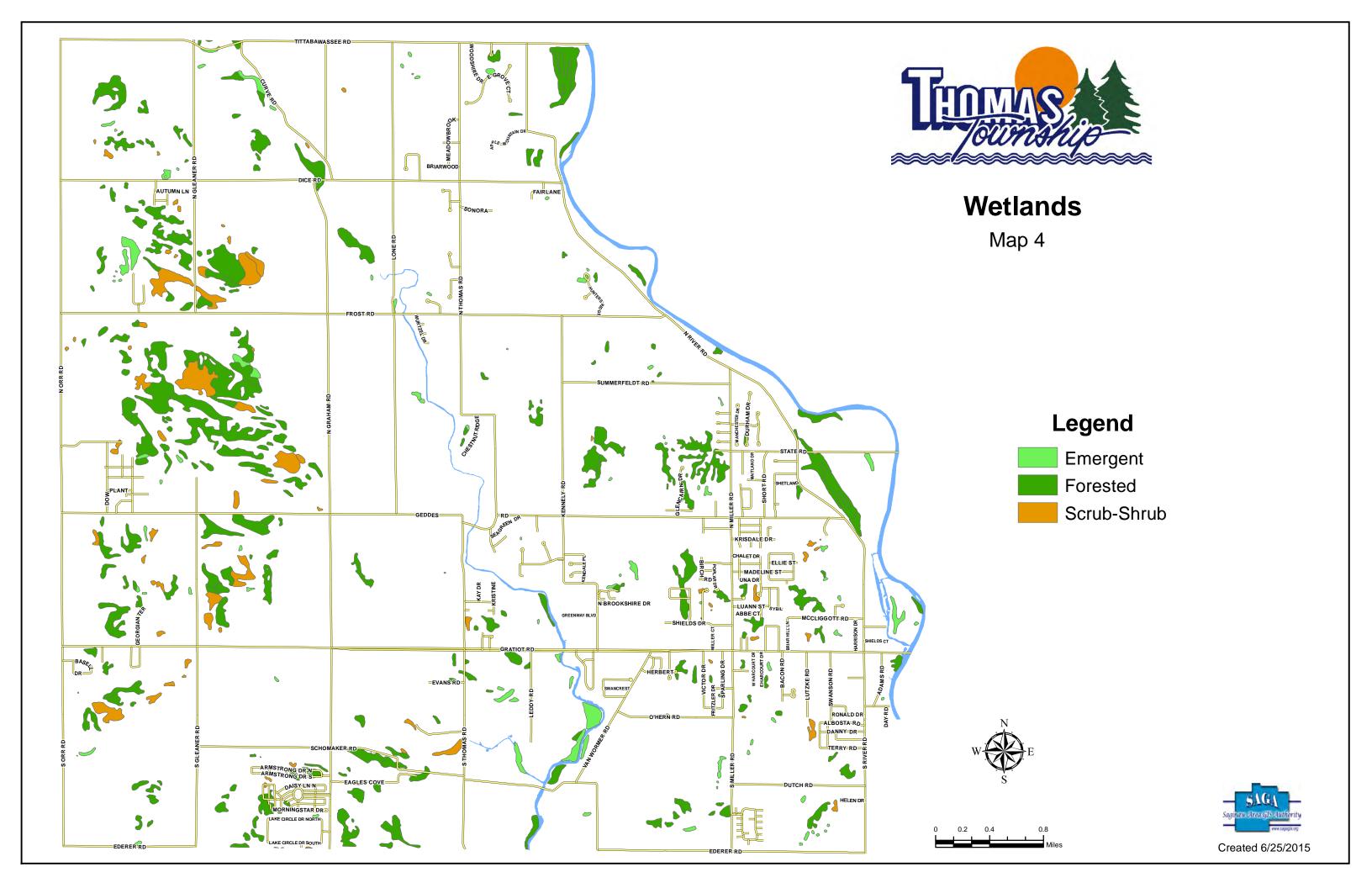


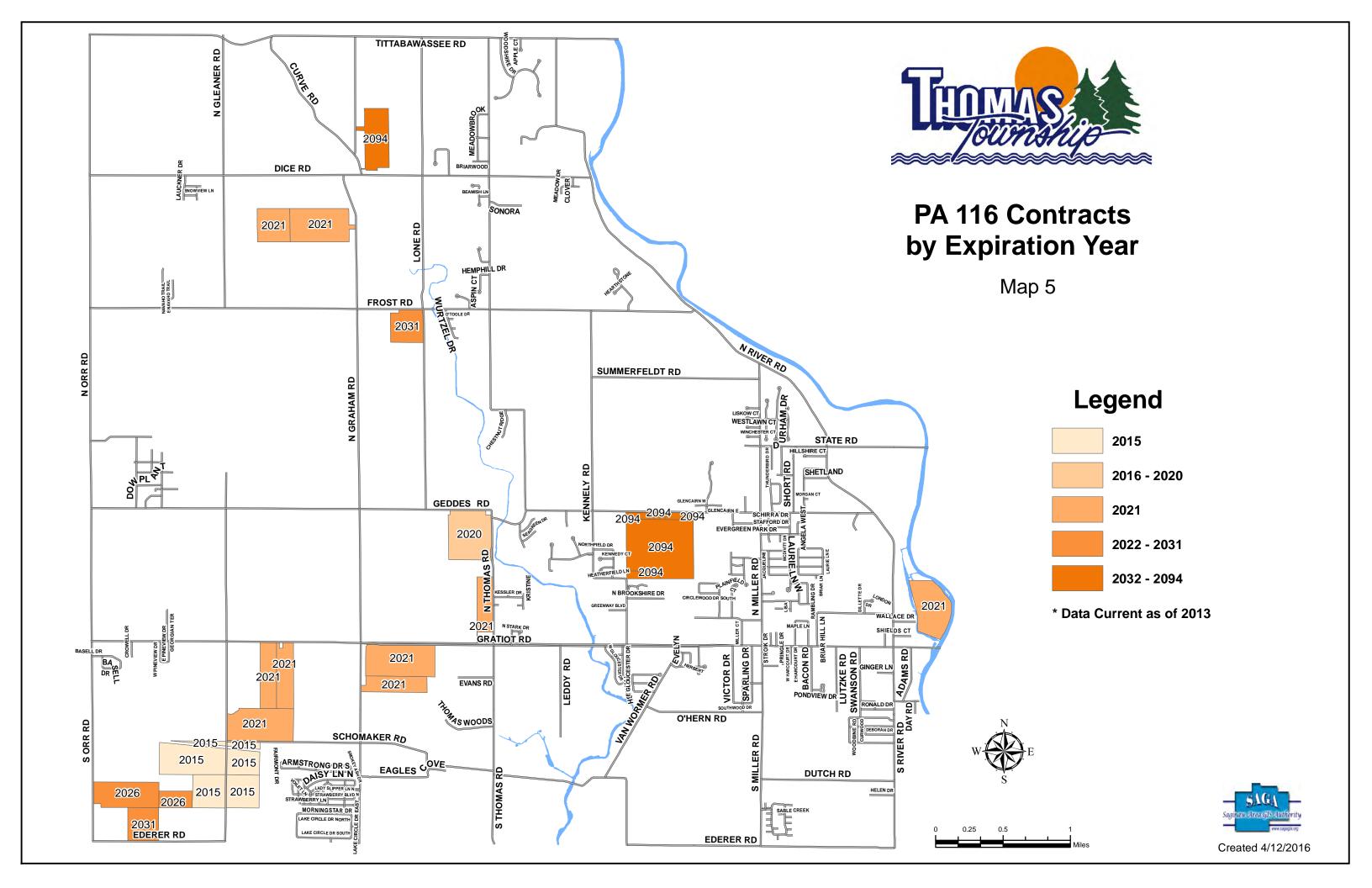












INFRASTRUCTURE, SERVICES, AND FACILITIES

PUBLIC INFRASTRUCTURE

WATER SYSTEM

The Thomas Township Department of Public Works operates, maintains, repairs and improves the drinking water system. As of 2019, the community water system included over 130 miles of water distribution and

transmission mains ranging in size from 4 inch to 20 inch in diameter and delivering **over 930 million gallons** of water per year. Most of the water infrastructure has been constructed since 1970 establishing Thomas Township's system as one of the youngest water distribution systems within the Saginaw Metropolitan area. The system provides safe drinking water to over 12,000 residents.

The water system has continually seen significant capital improvements to meet the community's water needs for today and tomorrow. Multiple water reservoirs provide redundant water supplies to the area including a 1.5 million gallon ground storage tank and a 1.5 million gallon elevated water tower. New water transmission mains and improvements to the water treatment plant have been recently constructed. Significant pumping improvements have been completed in the Township



to continually meet growing needs. The Public Works department has devised a comprehensive sevenyear Capital Improvement plan that continues to enhance the water distribution system.

Highly trained and certified teams work around the clock in the water treatment plant, laboratories and throughout the distribution system to support and provide potable water supply to the community. All



Federal and State water quality parameters are continually met, leaving the Township's water quality as one of the best in the region. The Township's dedicated water professionals provide safe, reliable drinking water to its customers, protects public health, provide fire protection, and enhances the quality of life "on tap" for the Township. A water system map is included in the Appendix.

SEWER SYSTEM

Thomas Township's sanitary sewer system collects and conveys roughly 1,200,000 gallons of sewage per day. This expansive system consists of 15 different sewer districts, sewage lift or pumping stations and over 65 miles of sewer mains, providing service for nearly 8,300 residents. The sewer system was constructed in the mid-1970's, with continual system wide expansions being completed to this day, establishing the system as one of the most modern in the metropolitan area. A sewer system map is included in the Appendix.

Significant system wide improvements have been incorporated since 2006, including the replacement or upgrading of the pumping capabilities of the individual sewage districts, major pipeline replacements, and adding additional treatment capacity at the wastewater treatment facility. Other improvements recently completed have included the installation of a universal remote monitoring system, pumping system controls, and a systematic, comprehensive inspection and cleaning program of all of the Township's sewer mains. A seven-year Capital Improvement plan has been devised outlining a logical, well-thought-out process of system improvements. It is continually updated year to year.

Dedicated Public Works staff continually monitors, repairs, replaces or improves the sewage system. Working with Saginaw Charter Township, all sewage is continually treated to meet Federal and State Discharge Standards. This highly trained team of professionals works 24/7 to insure the reliability of the entire sewer system and the protection the community's public health.



BUILDINGS, GROUNDS, CEMETERY, SIDEWALKS AND FACILITIES

The Department of Public Works assists in the maintenance and repair of 15 Township owned buildings, grounds and facilities including the Township's Owen Cemetery. These duties include landscaping, grounds-keeping, painting, general repairs, preventive maintenance and cleaning. Seasonal holiday and street decoration of the Township campus and Downtown area is also completed by Public Works staff.



Approximately 10.5 miles of sidewalks are installed along Township roadways and within subdivisions. Public Works staff routinely inspects and performs minor repairs on sidewalks throughout the community. The Township has a sidewalk/trail committee that has developed guidelines and a Master Plan for Sidewalk and Trail Development.

Thomas Township leaders have recognized for many years that its residents benefit from having a safe place to walk separated from motorized traffic. Many of the residents who responded to the Community Opinion Survey stated that sidewalks and trails were very

important to them and add to living in Thomas Township. In addition to creating a safe walking area along roads, sidewalks and trails provide many other benefits including mobility within the community for those unable to drive, a healthier environment, and a safe place for young and old to access the many benefits that the Township provides such as parks, library, shopping, playgrounds, ball fields, community swimming pool and schools to only mention a few. Each year the Sidewalk/Trail Committee meets to review past projects, and to evaluate the proposed future sidewalk and trail locations. An emphasis is placed on expanding the sidewalk and trail network in Thomas Township, so much so that a new project is planned every other year.

In addition, all newly created subdivisions in Thomas Township must install sidewalks along all lot frontages prior to completion of any construction on a lot. Outside of subdivisions, sidewalk agreements are obtained for those areas that may see sidewalk projects in the future. This long-term planning is necessary to insure that residents continue to enjoy the benefits associated with having a safe place to walk separated from motorized traffic for years to come in the future.

The Sidewalk and Trail Master Plan map is included at the end of this section. The guidelines are included in the Appendix.

The Township's Owen Cemetery is a full service and poignant grounds located on North River Road. The cemetery was officially established in 1875, however the area was designated as a burial ground prior to 1845. Many of the existing gravesites are occupied with the community's prominent forbearers and namesakes. Grounds-keeping, monument foundation construction and burials are completed by Public Works staff.

COMMUNITY SERVICES

POLICE

In the early years of the Township, up to four elected constables had specific statutory duties by state law. Constables were the only form of township law enforcement until May 4, 1970 when the Township Board adopted a resolution to create the Thomas Township Police Department. The first Police Chief, David Eimers and Patrol Officers, Edwin Matzke, William DeVinney, and Robert Frost were all part-time employees of the department.

As the Township grew and the need for more police protection became apparent, Chief Larry Sicard was appointed the first full-time employee of the department in April of 1975. He was assisted by a staff of three part-time officers.

Today, the department consists of eight full-time sworn personnel and one full-time clerical staff person. Supported by a two mil Public Safety Millage (Police & Fire), the department provides 24 hour-a-day, 7 day-a-week coverage to the citizens of the Township.



Working in close conjunction with our community partners such as the Swan Valley School District, Hemlock Semiconductor, and the ever growing number of commercial and retail businesses, the department strives to provide a safe and pleasant environment for those that work, play or travel through the community. The Department also partners with other law enforcement agencies, the Michigan Department of Transportation and the Saginaw County Road Commission to make local roadways safer and more pleasurable to travel whenever the opportunity presents itself.

FIRE

On September 1, 1963, the Thomas Township Fire Department was born after several community members spent two years creating its foundation. With this new addition to Thomas Township, two pumper trucks were purchased and housed in two fire stations. The stations were located at 249 N. Miller Road and 9970 Dice Road.

In 1967, an additional pick up was purchased for fighting grass and brush fires. In 1976, a new fire station was built at the N. Miller Road location along with the purchase of a Mack Tele-Squirt ladder truck. Both stations have been remodeled over the years. Station Two was expanded to meet current needs.

The Fire Department has remained fiscally responsible in updating fire equipment to meet the modern-day fire problems and ensuring the safety of our firefighters. The Township funds the fire department through two millages which fund and maintain 1) the fire department operations and 2) the fire trucks and equipment. This has allowed the department to not get behind in maintaining up to date equipment which is required of us. This also provides dividends to Township residents with lower homeowner's insurance premiums as the Township has a class 4 fire protection rating in the vast majority of the Township.

The Township Fire Department is staffed with two full-time employees (fire chief and inspector) three part-time (fire prevention, maintenance and administration) and 30 paid on-call/volunteer firefighters. These firefighters provided 24/7 coverage for both fire and specific medical emergencies within the community. The Township Fire Department is actively involved in mutual aid with neighboring fire departments.

The Township Fire Department currently has 10 pieces of equipment responding out of two stations which helps to ensure a rapid and adequate response to a variety of emergencies including but not limited to fires, medical emergencies, hazardous material, special rescue situations, water rescue and public assist calls. In addition to this, members train at least twice a month to keep up to date on their skills. The most recent purchase was a Pumper truck for Station #1 which replaced an aging fire truck. The Township responds to approximately 850 calls per year.

The Township Fire Department is also very involved in the community by conducting fire inspections and public safety educational programs. The firefighters have created a firefighters' association which helps support many community programs. For example, they each donate one hour of pay per pay period towards three high school scholarships which are given out each year.

The Fire Department bases its annual goals and budgets on trends and specific community needs. The Township continues to be a growing community which will requires the Department to continue to grow and continue to provide a quality service to its customers. At some point, the Township will need to consider adding a third station in the western part of the Township due to the anticipated growth in that area. This growth will come from residential use and from business and industrial uses at the Great Lakes Tech Park, which will continue to expand.

THOMAS TOWNSHIP DDA

On June 19, 2007, Thomas Township adopted Ordinance No. 07-G-01 creating and establishing the Downtown Development Authority of Thomas Township. The DDA was granted all powers permitted a Downtown Development Authority under the Act. In creating and establishing the DDA, the Township found that the DDA was necessary for the best interests of the public to halt property value deterioration and increase property tax valuation where possible in the Township's business district, to eliminate the causes of said deterioration and to promote economic growth.

In October of 2008, Thomas Township approved the collection of a 2-mill levy on all non-residential and non-agricultural parcels in the DDA District. Funds from this levy will be used to finance the activities of the DDA.

In June of 2010, the Township adopted the DDA Development Plan and TIF Plan. Funds collected from tax increment financing will be used for improvement projects that the DDA wishes to undertake through 2038. That project list is included in the Appendix. The DDA Map is at the end of this section.

RECREATIONAL FACILITIES AND OPPORTUNITIES

Parks and recreation services are often cited as one of the most important factors in surveys of how livable communities are. Parks provide gathering places for families and social groups, as well as for individuals of all ages and economic status, regardless of their ability to pay for access. Thomas Township has four parks, a trail, and an undeveloped nature park located across the Township. There are also an ample amount of recreation opportunities and events for residents to participate in.

DAY PARK

This park is located on South River Road, across from Shields Elementary School. It offers a great space for people of all ages. There is ample open space for various activities, two picnic table pavilions and a sledding hill for wintertime fun.

COMMUNITY PARK

This park is located at the Thomas Township Offices. It is equipped with two full size basketball courts and a roller hockey court. In

the winter there are two ice rinks located at this park as well.



ROETHKE PARK

Roethke Park is located on Leddy Road in the southern portion of the Township. It features a pool, day camp, train, fishing pond, play area, concerts and miles of walking trails. There are also pavilions for picnicking and restrooms.

ROBERTS PARK

This park is located on South Miller Road. It has been expanded recently to provide the community with many recreational opportunities. It is equipped with four baseball diamonds, three soccer fields, playgrounds, walking paths and two pavilions and restrooms.

THOMAS TOWNSHIP TRAIL

This 3.2-mile paved trail begins on North Miller Road just north of Area Drive. It heads westward through a Consumers Energy easement and then south to Shields Drive near the Thomas Township Public Safety Building. From there it continues south crossing Gratiot, O'Hern and Ederer Roads, where it connects to the Saginaw Valley Rail Trail. A trail map is included at the end of this section.

In 2015, Thomas Township constructed a trailhead building near Shields Drive to address the need for shelter and bathrooms for trail users. The building was funded with contributions from the Thomas McDonald Memorial Fund, Lions Club, Thomas Township Business Association, along with donated labor from Thomas Township staff and friends of Thomas Township.

THOMAS TOWNSHIP NATURE PRESERVE AND NATURE CENTER

The Thomas Township Nature Preserve is a 67-acre undeveloped park located adjacent to the Tittabawassee River on the east side of the Township. The Nature Center will be developed from a former

insurance office building that was acquired with the assistance of a Michigan Natural Resources Trust Fund Grant. It is located on Gratiot Road and is adjacent to the Nature Preserve Property. The Township's goal is to develop the complex into a indoor-outdoor regional draw for nature study, education, relaxation, and enjoyment. The Township is planning to work with other nature organizations such as the Shiawassee National Wildlife Refuge on interpretive programs and education.

The long-term plan is to develop the building into a Nature Center with interpretive areas and classrooms. The Preserve will be accessed through the Nature Center. The Nature Preserve will primarily focus on passive recreation with paths, observation decks and boardwalks through wetland areas. Construction on the first phase of development is scheduled to begin in 2021. It will include a new entry drive to the Nature Center, some building renovations, paths and an observation area behind the Nature Center.





Future home of the Thomas Township Nature Center.

RECREATIONAL PROGRAMS

The Thomas Township Parks and Recreation department provides the community with various events, programs and activities throughout the year. These include:

- Archery program
- Multiple Picnic in the Park concerts
- Soccer program
- Boys and girls basketball programs
- Floor hockey
- Day camps
- Senior citizen programs
- Men's and girl's softball

The Township regularly completes a 5-year Parks and Recreation Master Plan that is developed in accordance with the guidelines for Community Park, Recreation, Open Space, and Greenway Plans published by the Michigan Department of Natural Resources (MDNR). Please refer to that document for further information on park and recreation planning in Thomas Township

A map depicting Township owned property is included at the end of this section.

TRANSPORTATION NETWORK

ROADS

Thomas Township is served by a transportation system that contains two state highways and county roads.

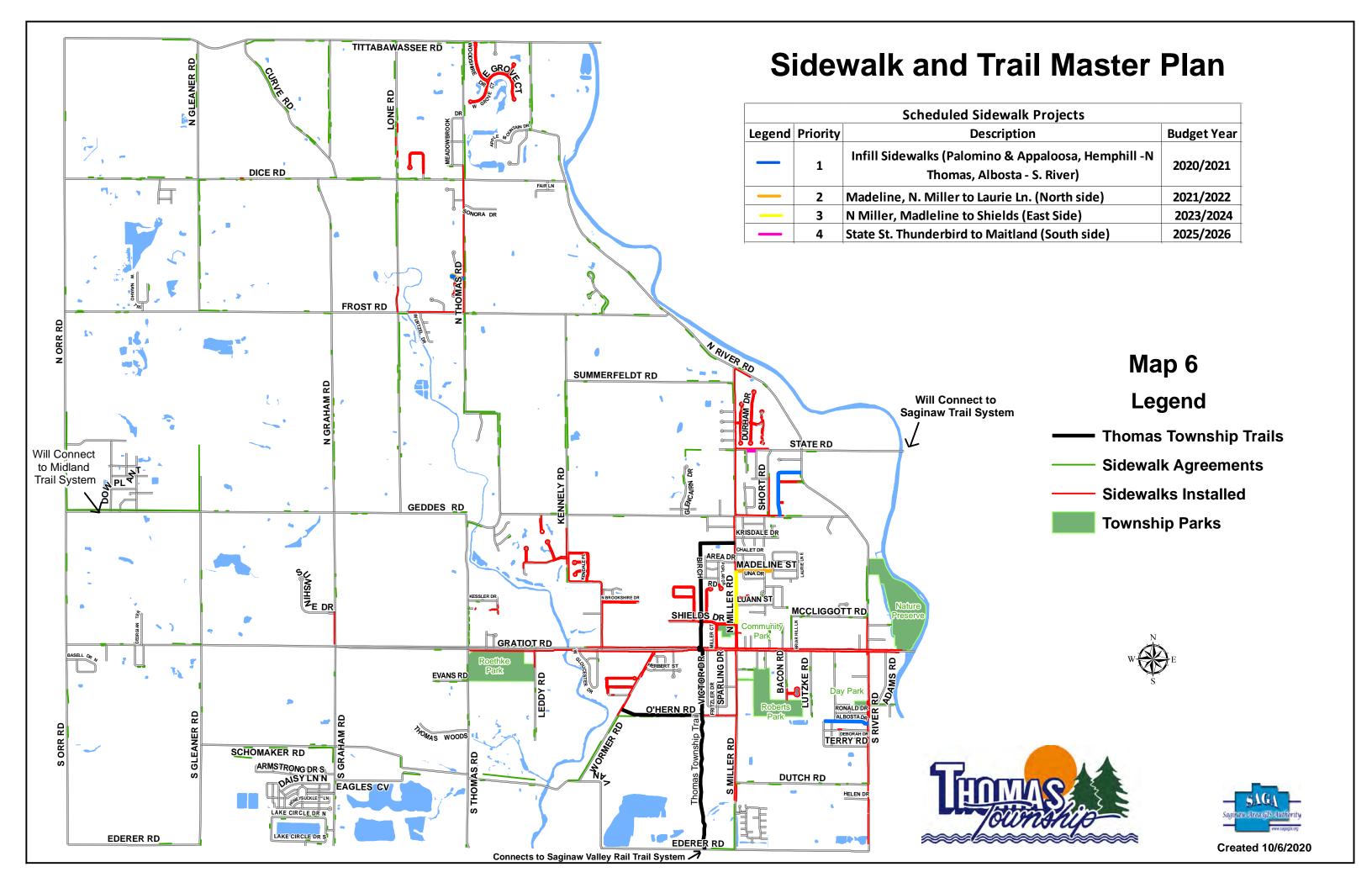
The major roads located within Thomas Township include M-46 and M-52. M-46 runs east to west across the entire State of Michigan. M-52 begins at its intersection with M-46 and carries traffic southward to Ohio. M-47 runs north just east of the Township across the Tittabawasee River. I-75 is located approximately 10 miles away from the Township and allows access to the southern and northern portions of the State.

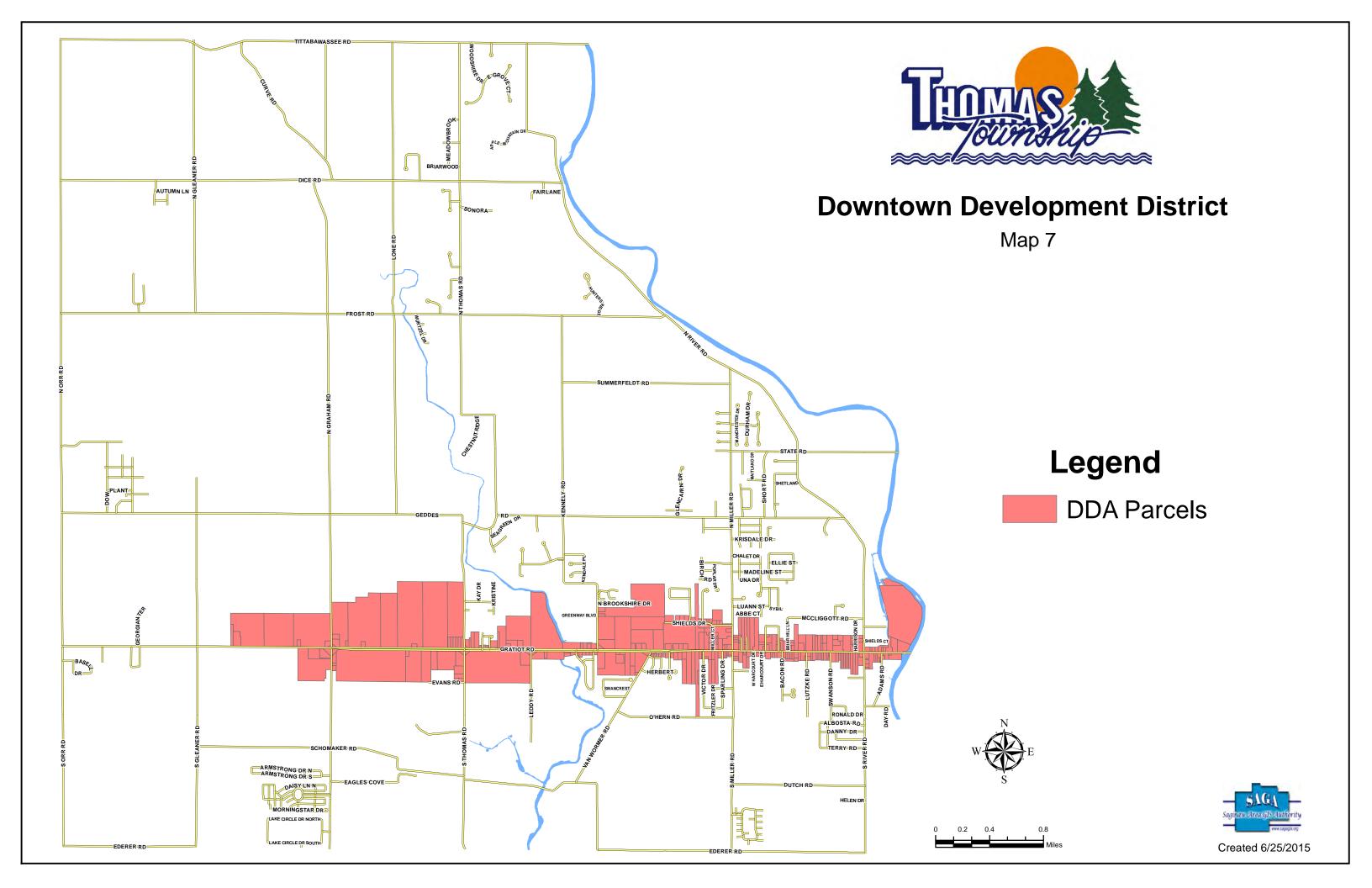
Other major roads within the Township that carry large amounts of traffic through the community are Geddes Road and Frost Road which run east to west, Thomas Road which runs north and south, and River Road which runs north west along the Tittabawassee River.

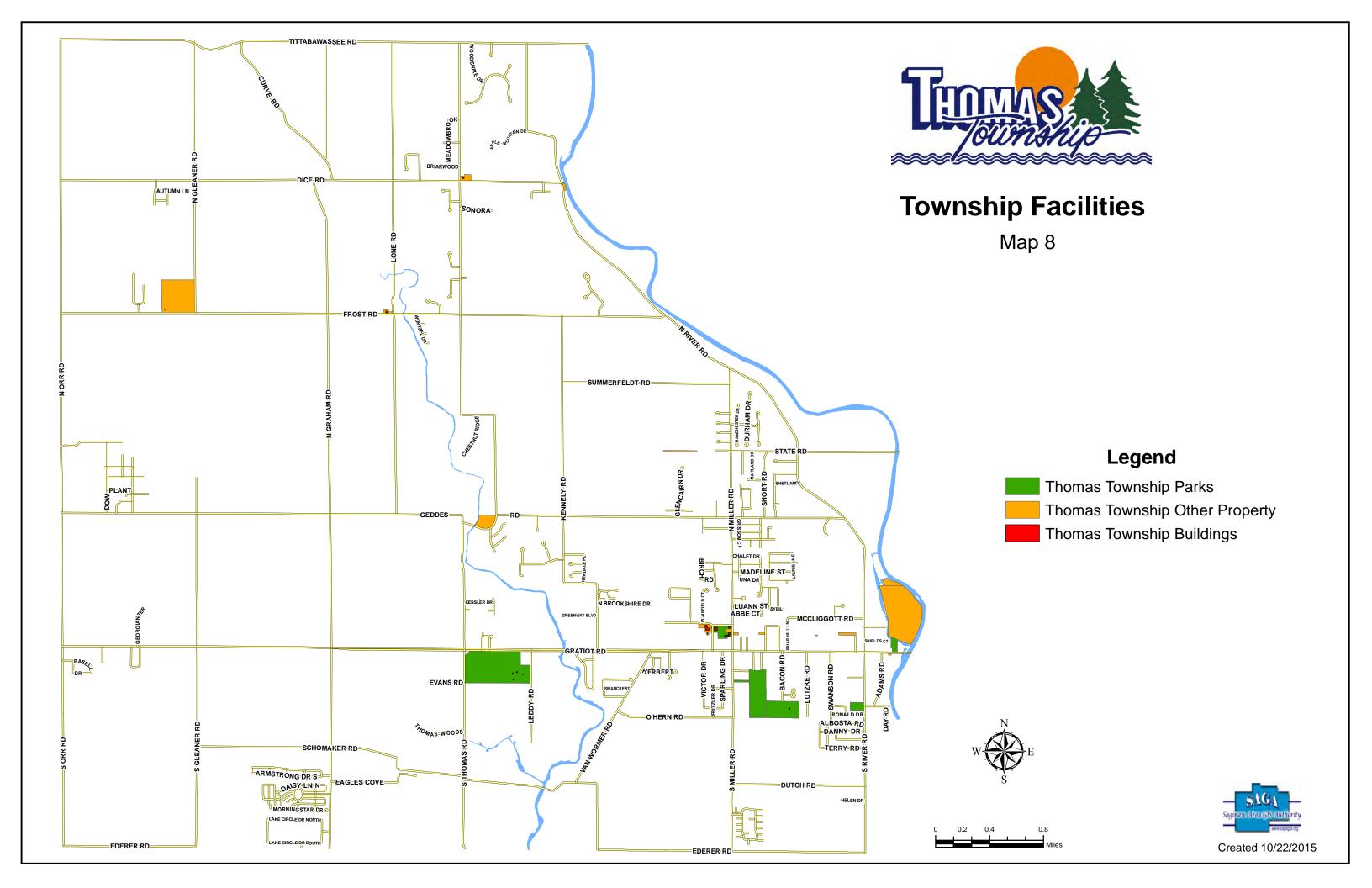


AIRPORTS

Thomas Township is located near two large airports. Saginaw County H.W. Browne Airport is the smaller of the two. It is county-owned and located in Buena Vista Township, approximately 15 miles east of Thomas Township. MBS International Airport is the largest airport located near the Township. It is located in Freeland, Michigan, approximately 10 miles north of Thomas Township and it is serviced by several major passenger airline carriers.







EXISTING LAND USE

One of the most important outcomes of a Community's Master Plan is creating a Future Land Use Plan. Before the Future Land Use Plan can be created, the existing conditions and relations between land uses must be examined and understood. This knowledge aids in the decision-making process concerning future residential, commercial, industrial, and public land use activities.

An existing land use map for Thomas Township was created in a two-step process. Initially, all parcels were classified according to five different tax identification codes. Those are agricultural, commercial, industrial, residential, and institutional. Then, the Township planning director reviewed the map and added two additional land use categories: open space and mobile home park. Parcels were placed into these two categories based upon his knowledge of the Township and by viewing aerial images. Some other parcels were reclassified on this basis, as well. For example, the Township technology park located northwest of Gratiot and Graham is classified as institutional by tax code because it is owned by the Economic Development Corporation. For existing land use purposes, it is classified as commercial because it is a technology park. Figure 23 shows the acreage of each of the existing land uses in Thomas Township.

A building footprints map is also provided at the end of this section. It is a visual representation of the development density across the Township.

| Figure 23 THOMAS TOWNSHIP EXISTING LAND USE | | | |
|---|--------|--|--|
| USAGE | ACRES | | |
| Agricultural | 8,148 | | |
| Commercial | 848 | | |
| Industrial | 590 | | |
| Residential | 8,108 | | |
| Open Space | 1,367 | | |
| Mobile Home Park | 240 | | |
| Institutional | 583 | | |
| TOTAL | 19,884 | | |

AGRICULTURE

Agricultural land includes land being utilized for agricultural purposes. This includes crop production, land lying fallow, pasture and grazing land, sod farming and orchards. It also includes farmsteads and related agricultural buildings.

RESIDENTIAL

This land use category includes all types of residential uses except mobile homes in a designated mobile home park. This comprises single family, two-family, and multiple-family dwellings. It includes the accessory buildings associated with these dwelling units such as garages and sheds.

MOBILE HOME PARK

Areas designated as mobile home parks are those lands which have been planned and improved for the placement of mobile homes for residential use.

COMMERCIAL

The commercial classification of the Existing Land Use Map includes offices and all types of commercial and wholesale businesses.

INDUSTRIAL

Included in this category are warehouses, processing facilities and manufacturing and non-manufacturing uses which are primarily industrial in nature. It may include land areas with or without buildings where raw or semi-finished materials are fabricated or those using or storing raw materials for primary production. Typical uses include warehouses and fabrication establishments.

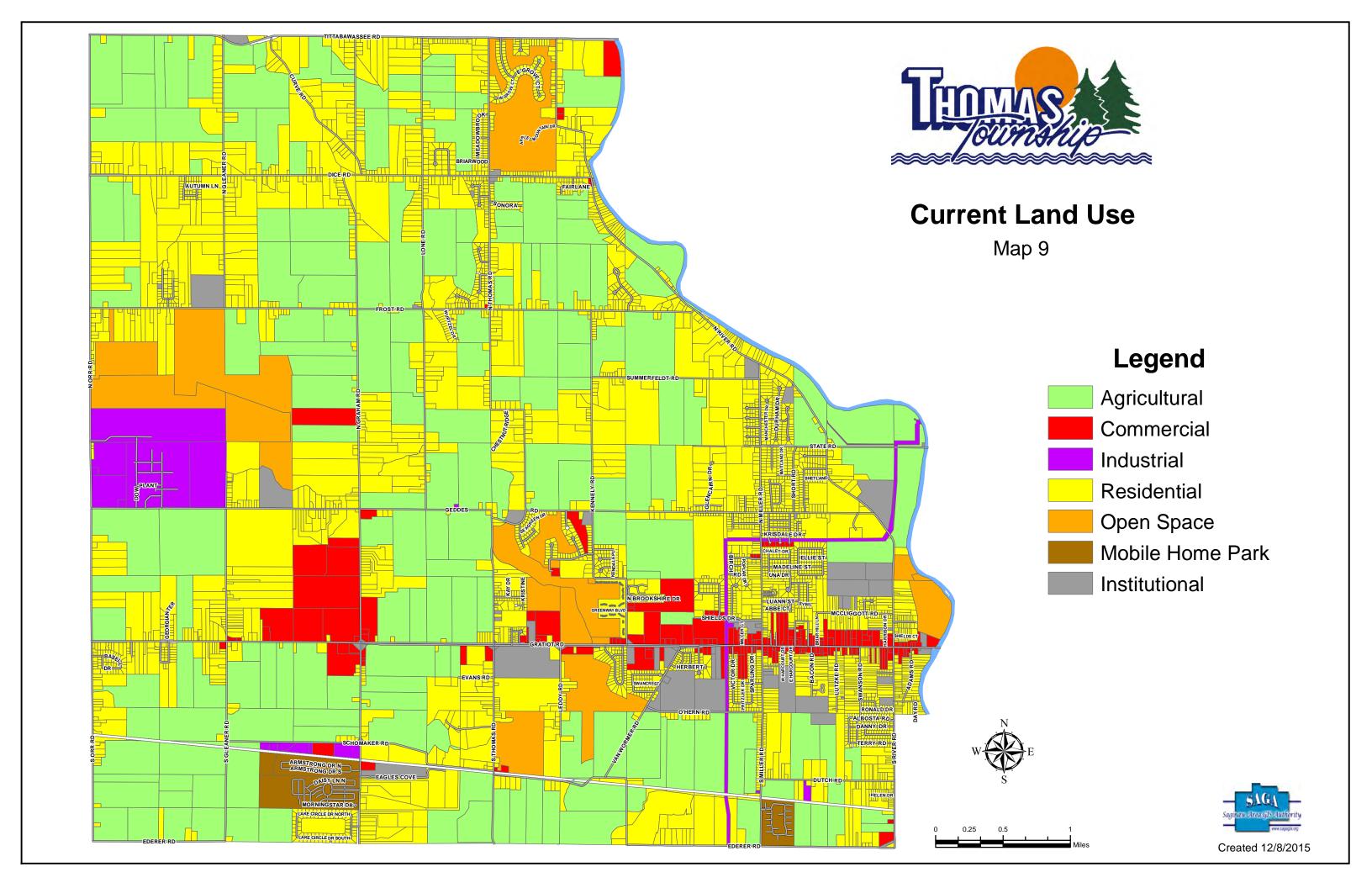


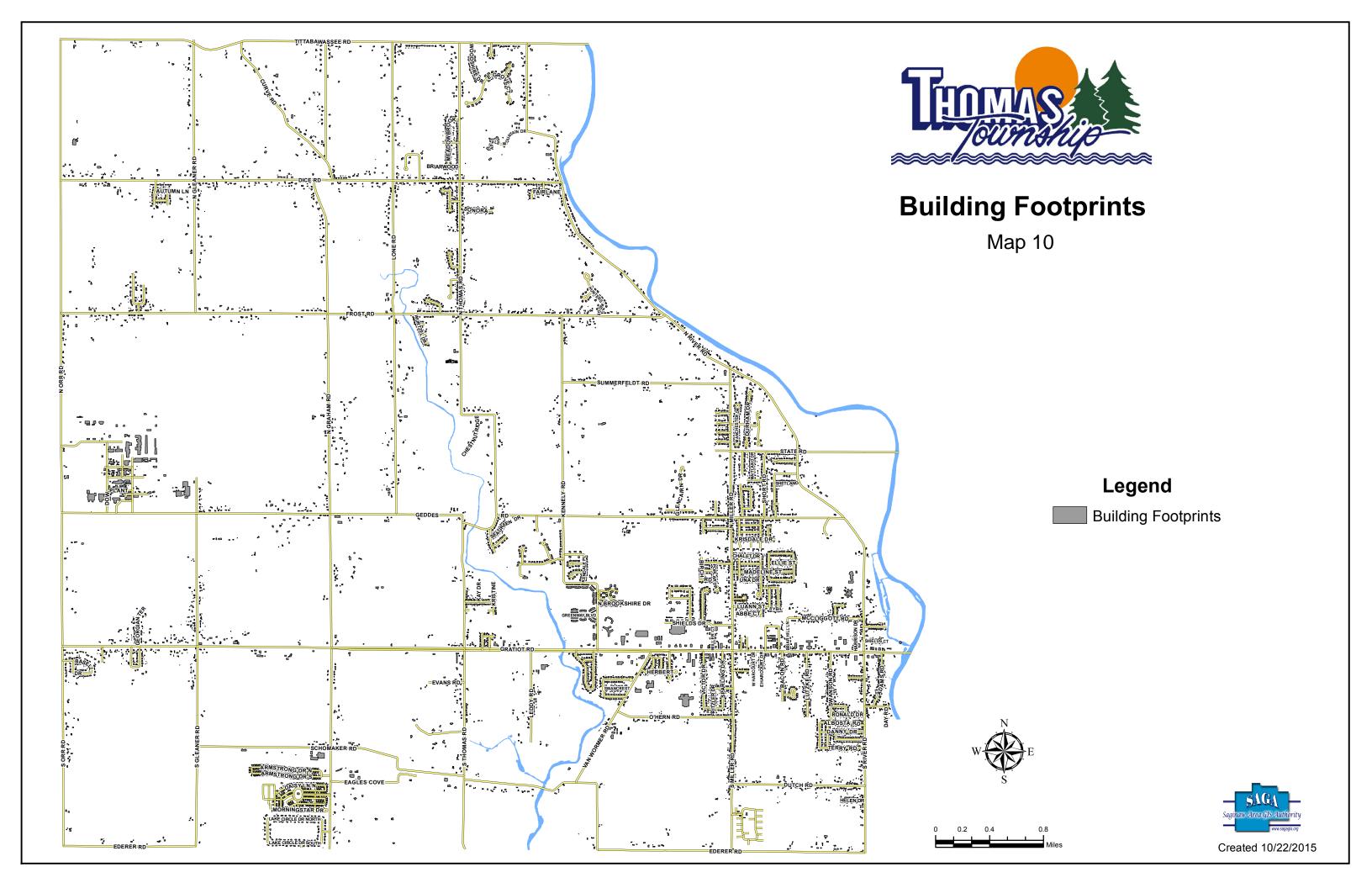
INSTITUTIONAL

Institutional uses are those classified as non-taxable for assessment purposes. Institutional land uses include parks, public assembly and recreational land, religious and educational uses, and governmental administration and service buildings.

OPEN SPACE

In Thomas Township, most of the land classified as open space consists of golf courses. Other open space is the large woodlands surrounding Hemlock Semiconductor on the west side of the Township. Another large parcel of open space is a former golf course adjacent to the Tittabawassee River on the east side of the Township.





COMMUNITY INPUT

One of the most important aspects of a community's Master Plan is the inclusion of the resident's thoughts, feelings, and opinions about how they see the future of their community. In order for a Master Plan to be successful, it must be the epitome of the ideals and beliefs of the community it was created for. Thomas Township and its planning consultant created a community survey to gather the vision of the community. The results helped to form the basis for goals and objectives to guide future residential, commercial, and industrial development. This section will summarize the survey results. A complete tabulation of the results is contained in the Appendix.

A second means of input was provided during the required public review period which was held from September 13, 2016 to October 24, 2016 and the public hearing which was held on November 16, 2016.

SURVEY

The Thomas Township Survey was an online instrument that was available from October 23, 2015 through November 30, 2015 under the web address ThomasTownshipSurvey.com. It was publicized with a variety of methods:

- Township Facebook page
- Direct e-mail blasts to Township residents
- Reminder in Township newsletter
- Postcard reminders for distribution
- News story in the Township View
- Notice on Township website

About the Respondents

Two hundred sixty-four respondents entered the survey and 242 respondents completed it. Two hundred twenty-three respondents were residents of Thomas Township. Forty-seven percent of the respondents were between the ages of 25 and 44. Thirty-two percent of the respondents were between the ages of 45 and 64. Another 20% were age 65 and older.

Quick Facts about the Survey

- Available online from 10-23-15 through 11-30-15
- 264 people entered the survey, 242 completed
- 223 respondents were Thomas Township residents
- 47% were between age 25 and 44
- 32% were between age 45 and 64

Reasons for living in Thomas Township

Question 1 offered 10 reasons for living in Thomas Township and it asked respondents to check those that apply to them. It also allowed respondents to write in their own reasons. The two most popular answers were Like the Community, which was indicated by 67% of the respondents, and Quality of Schools, which was checked by 65% of the respondents. Twenty-three respondents wrote in other reasons, low crime/safety were mentioned by several of those. See Figure 24.

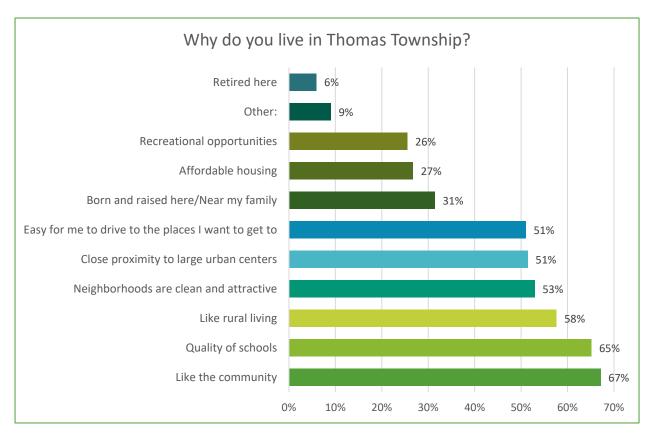


Figure 24 - Reasons people live in Thomas Township

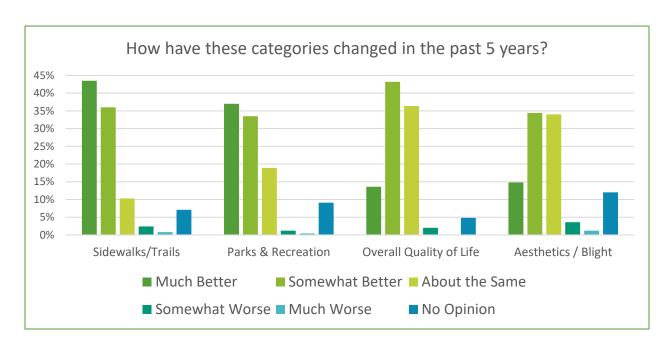
How is Thomas Township Changing?

Question 2 offered seven different aspects of life in the Township and asked respondents to rate them compared to five years prior. The aspects that were rated were:

- Road Conditions
- Parks and Recreation
- Aesthetics/Blight
- Gratiot Corridor
- Emergency Response
- Sidewalks/Trails
- Township Services
- Overall Quality of Life

Sidewalks/Trails and Parks and Recreation received the highest percentages of much better and somewhat better responses. Nearly 80% of the respondents responded that sidewalks/trails were much better or somewhat better than five years prior. More than 70% felt that parks and recreation were much better or somewhat better than five years prior.

The two aspects that received the largest percentages of worse and much worse were Road Conditions and the Gratiot Corridor. Approximately 28% of the respondents felt that road conditions were somewhat worse or much worse and 18% felt that the Gratiot Road corridor was somewhat worse or much worse.



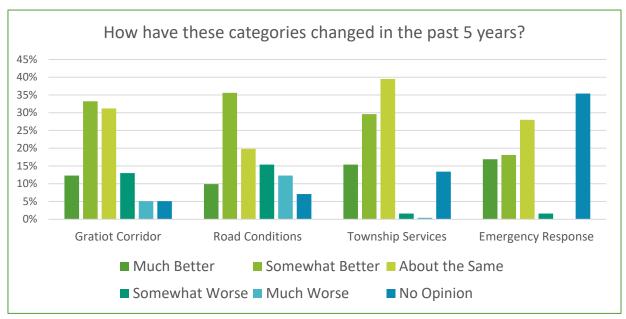


Figure 25 - The two charts above show the survey respondents generally think that these 8 categories are about the same or better than they were five years prior.

General Growth and Development

Questions 4, 5, and 6 asked about growth and development in Thomas Township in the coming years. The answers to these questions show that the survey respondents were generally quite positive about future growth in Thomas Township. More than 80% of the respondents agreed or strongly agreed that the Township would grow in population. Approximately 74% agreed or strongly agreed that the Township would have more commercial and residential development. Lastly 76% strongly agreed or agreed that they would still be living in Thomas Township in five years. See Figure 26.

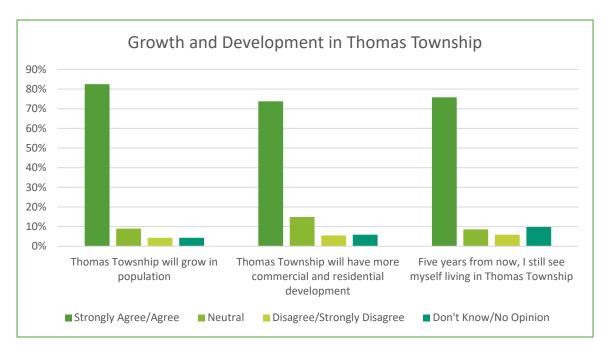


Figure 26 - Survey respondents were optimistic regarding future growth and development in Thomas Township.

Housing Choices

Question 8 asked about the type of housing choices the Township should plan for. Single family homes on large rural lots and single family homes in planned subdivisions were the most frequent responses.

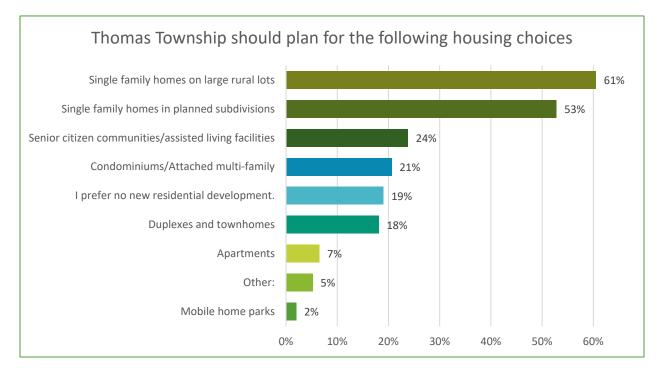


Figure 27 - Survey respondents chose single family homes most often as the housing option that the Township should plan for.

The third most popular response was senior citizen communities/assisted living facilities. This reflects the general aging population and people looking ahead for housing choices. See Figure 27.

Commercial Land Use

Question 11 asked respondents how they felt about the amount of commercial business in Thomas Township. Approximately half the respondents felt there was the right amount of business in Thomas Township. More than one-third felt there was not enough. See Figure 28

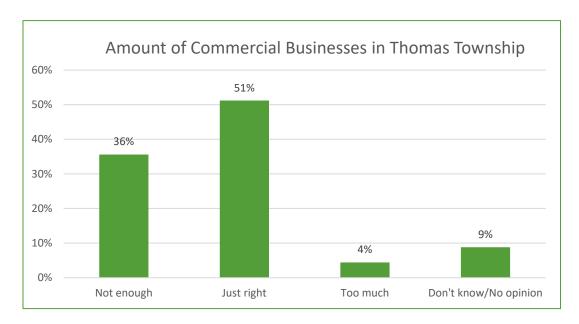


Figure 28 - More than half the survey respondents felt that the amount of commercial businesses in Thomas Township was just right.

Question 12 asked specifically about restaurants. More than 65% of the respondents agreed or strongly with the statement that the Township needed more restaurants. Question 13 asked respondents to select from six differing responses regarding their impression of the Gratiot Road corridor. More than three-fourths felt that the corridor looks better than it used to. More than one-third felt that it had more appealing and less obtrusive signs. Only 17% felt it was safer to bike and only 20% felt it was safer to drive. See Figure 29.

More than 65% of the respondents agreed or strongly agreed that Thomas Township needs more restaurants.

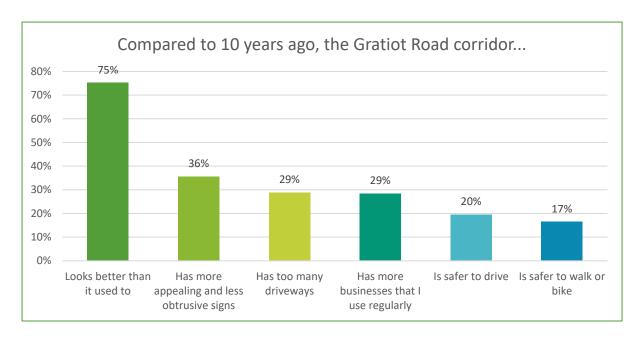


Figure 29 - More than three-fourths of the respondents felt the Gratiot Road corridor looks better than it used to but few felt that it was safer.

Industrial Land Use

Questions 14 and 15 asked about land use for industrial and technology based companies. Survey respondents generally had positive responses regarding these land uses. Question 14 asked about Hemlock Semiconductor. Nearly 86% of the respondents felt that the growth that Hemlock Semiconductor brought to the Township has been good for the Township.

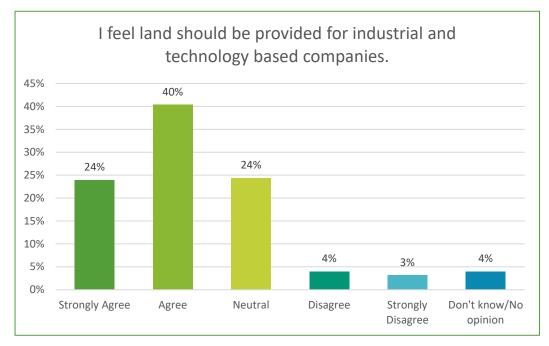


Figure 30 - Survey respondents felt that land should be provided for industrial and technology based companies.

In Question 15, approximately 65% of the respondents strongly agreed or agreed that land should be provided in Thomas Township for industrial and technology based companies. See Figure 30.

Agricultural Land Use

Question 16 asked respondents to provide their opinion regarding three statements about agricultural land use. In general, respondents felt that agriculture is important to the Thomas Township economy and that Thomas Township should preserve agricultural land. Opinions were mixed on whether it is appropriate to use agricultural land for new development. Approximately one third of the respondents strongly agreed or agreed that it was appropriate to use agricultural land to accommodate growth. The same proportion had a neutral opinion regarding that statement and another third disagreed or strongly disagreed with that statement. See Figure 31.

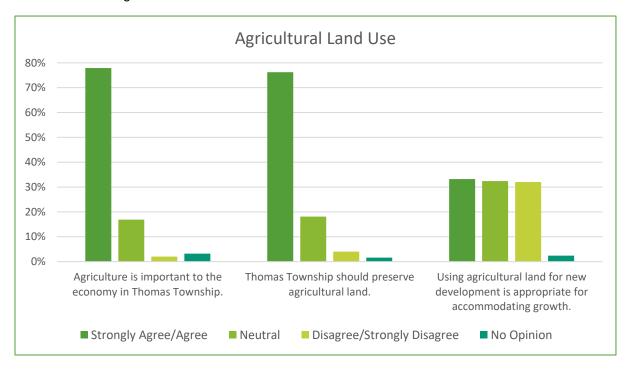


Figure 31 - Opinions regarding the use of agricultural land in Thomas Township.

Trails and Sidewalks

Questions 17 through 20 asked about trails and sidewalks in the Township. More than 60% of respondents had used the Thomas Township Trail that extends from the Saginaw Valley Rail Trail north to the Township Governmental Complex on Shields Drive. More than three-fourths of the respondents felt that the trail should be extended to the north where it would ultimately connect to Midland over the next 20-30 years. See Figure 32.

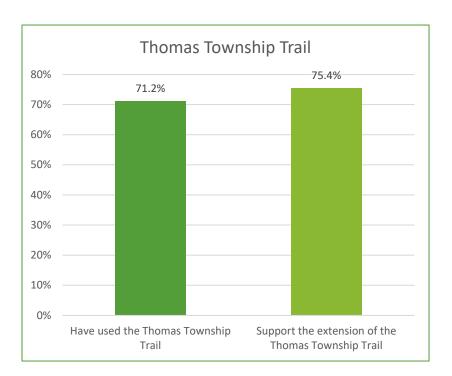


Figure 32 - Many respondents used the Thomas Township Trail and even more felt that it should be extended.

Slightly more than 70% of the respondents agreed or strongly agreed that it was important that the Township continue to construct more trails in the future. Lastly, almost 70% of the respondents strongly agreed or agreed that sidewalks should be installed along all streets in the community.

Tittabawassee River

The responses to Question 21 show that survey respondents care about the Tittabawassee River. More than 95% of the respondents agreed or strongly agreed with the statement that it was important to improve and protect the quality of the Tittabawassee River.

More than 95% of the respondents agreed or strongly agreed that it is important to protect the quality of the Tittabawassee River.

Open Ended Questions

Questions 22 and 23 asked respondents to fill in answers about what they liked best in Thomas Township and what they would do to improve Thomas Township. One hundred fifty-one respondents provided an answer about what they liked best. Common answers included:

- Safety/low crime
- Bike trails
- Small town feel
- School system
- Family oriented
- Sense of community
- Location
- Rural setting
- Neighborhoods
- Quiet
- Good police and fire
- Close to large city amenities

One hundred fifty-seven respondents provided an answer to what one thing they would do to improve the Township. Four common issues were mentioned:

- Gratiot Road Fifty-seven of the comments mentioned Gratiot Road. Many comments referenced the speed and the aesthetics of the corridor.
- Roads Forty-nine respondents mentioned roads. Most of the comments referred to the road conditions or the speed limits.
- 3. Restaurants Eighteen respondents mentioned the need for different or more restaurants in Thomas Township.
- 4. Sidewalks Fourteen respondents mentioned sidewalks in their responses.

What one thing would you do to improve the Township?

Sample answers...

- Drop the speed limit on Gratiot to 40 MPH.
- Stricter code enforcement on neighborhood blight brought on by run down homes, weeds and Recreational Vehicles parked in residential areas.
- More sidewalks on BOTH sides of the roads.
- Work at getting a more broad base business type, especially restaurants.
- Install a walk bridge over Gratiot Road for the rail trail.

COMMUNITY GOALS AND OBJECTIVES

Planning for the future of any community is very important. In order for Thomas Township to be successful, it has set goals and objectives it wishes to achieve within the next 10 to 20 years. The Township Planning Commission reviewed and studied the goals from the 2015 Master Plan. They modified the goals and objectives as needed based upon current conditions, community input, and demographic trends. Goal statements generally describe a desired condition or end state that a community seeks to achieve, while an objective statement can be described as a milestone or sub-element of a goal. The objective is more specific than the goal and should have some measurable aspect so that progress toward achieving them may be observed. This section of the Master Plan will outline the goals and objectives for Thomas Township.

OVERALL TOWNSHIP GOALS

- 1. Create an optimum human environment for the present and future residents of the Township that will offer variety, choice, opportunity for change and individual growth.
- 2. Develop an adequately balanced community-wide land use pattern to ensure diversity, stability and serve residents' needs.
- 3. Develop adequate guidelines to assure a reasonable balance between anticipated growth and development and the ability to provide necessary services.
- 4. Further improve economic conditions by encouraging locally compatible and desirable commercial, recreational and cultural activities which will attract business and industry in order to further reduce unemployment, increase the local standard of living and improve the local economy.
- 5. Encourage intergovernmental cooperation with surrounding governmental units in the growth of the Thomas Township area, particularly in the coordination of long-range planning efforts.
- Encourage the maintenance of an efficient thoroughfare system by regularly reviewing the traffic needs of the community in conjunction with the land use recommendations provided in the Master Plan.

RESIDENTIAL DEVELOPMENT

Goal

Promote the development of planned residential areas designed to offer a variety of identifiable living environments.

- 1. Maintain the "rural character" of Thomas Township through innovative mechanisms designed to conserve open space, protect the natural environment and preserve agricultural lands.
- 2. Encourage a cluster development pattern which builds upon existing urban development in a contiguous fashion, provides adequate space for future developments and encourages and supports rural lifestyles and agricultural pursuits.

- 3. Prevent the encroachment of commercial or industrial activity in established residential areas.
- 4. Encourage the removal of conflicting or undesirable land uses from residential areas.
- 5. Continue to provide suitable housing for the elderly population.
- 6. Promote preservation and code enforcement to maintain substantial residential neighborhoods.
- 7. Encourage creativity and innovation in the development of residential property through the Township's Zoning Ordinance, Subdivision Regulations, Condominium Regulations and other applicable ordinances.
- 8. Encourage "infill" development to occur prior to an unwarranted expansion of urban utilities.
- 9. Consider the establishment of land trusts and conservancies for the protection of open space



COMMERCIAL DEVELOPMENT

Goal

Provide for a full range of locally needed and compatibly located commercial facilities which are adequate to serve the residential population.

- 1. Continue to implement a subarea development plan for Gratiot Road to enhance the appearance and function of the commercial corridor.
- 2. Continue to work with the DDA to improve the business corridor.
- Encourage the development of clustered commercial and office facilities in close proximity to major street intersections, thus providing the opportunity to offer a variety of goods and services most conveniently.
- 4. Plan for additional commercial development along the M-46 corridor, specifically between Swan Creek and the intersection of M-52 and M-46, including parallel road development.

- Plan for infill and redevelopment of older nonconforming structures and nonconforming sites within the existing business district, specifically between the Tittabawassee River and Swan Creek.
- 6. Plan for and encourage the development of the area called Thomas Business District North, located north of M-46 and east of Kennely Road.
- 7. Maintain different classes of commercial zoning to minimize conflicts with residential and light industrial uses and to provide suitable locations for a wide variety of commercial business types.
- Encourage the use of landscaping, setback and marginal access drives to promote aesthetics and safety. Maintain sign regulations that will allow for less obtrusive signage along Gratiot Road and in all other areas of the Township.



INDUSTRIAL DEVELOPMENT

Goal

Encourage a variety of industrial development with attractive sites, such as the Great Lakes Tech Park, which will strengthen the tax base and provide a place of employment for area residents.

- Encourage the development of new types of industries, especially those that are economically associated with the existing industrial base and compatible with the environment and existing land use pattern.
- 2. Provide industry at locations which can be readily serviced by public utilities and which are easily accessible to the existing land use pattern.
- 3. Locate industrial areas where they have reasonable boundaries and are not subject to encroachment by incompatible uses.
- Incorporate and utilize the concept of development of industrial land in industrial parks or planned industrial districts with well-designed points of entrance and exit, controlled site and building design and adequate parking areas.

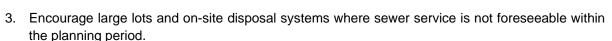
COMMUNITY FACILITIES

Goal

Provide adequate utilities and infrastructure so that Thomas Township may ensure managed and responsible growth and provide for the infrastructure needs of all Township property owners.

Objectives

- 1. Provide for public and semi-public use areas offering a variety of opportunities for human fulfillment in locations that are appropriate for their development and utilization.
- 2. Extend and stage future sewer and water facilities using a strategic long term approach.



- 4. Continue to plan for community facilities including fire stations, libraries, general utilities, community parks and Township offices.
- 5. Develop an annual Capital Improvements Program to schedule and prioritize future infrastructure needs.
- 6. Continue to pursue the development of a fee schedule that requires new development to share in the costs of new growth.

TRANSPORTATION

Goal

Plan for a network of roads by type and function that will provide a complete road system including major, secondary, collector and local roads. Include non-motorized transportation in transportation planning.

- 1. Cooperate with the Michigan Department of Transportation and Saginaw County Road Commission to ensure that a proper relationship exists between planned road improvements and the Township's desired future land use pattern.
- 2. Limit points of ingress/egress on major roads.
- 3. Provide a transportation system that recognizes the need for both auto and truck traffic and eliminates as many points of conflict between the two as possible.
- 4. Increase pedestrian safety by providing opportunities for pedestrian sidewalks along existing and planned road systems.
- 5. Continue to improve the local road system to better serve residences and businesses.

- 6. Utilize the federal/state street and highway functional classification system for purposes of classifying existing and future roads within Thomas Township.
- 7. Continue to develop non-motorized pathways as alternative transportation routes.
- 8. Continue to work toward development of an M-46 parallel road north of M-46.



RECREATION AND OPEN SPACE

Goal

Protect the natural resources of Thomas Township and provide for the recreational needs of all Township residents to preserve the quality of life for Township residents.

Objectives

- 1. Cooperate with the State of Michigan and adjoining communities in the development of recreation and community facilities.
- 2. Promote the development of existing recreational facilities and preserve sufficient open space to satisfy the needs of the Township residents.
- 3. Coordinate the review of plats and site plans with the Michigan Department of Natural Resources and applicable County offices.
- Preserve and enhance the water quality of and recreation opportunities on the Tittabawassee River.
- 5. Continue to develop recreational paths in the Township.
- all paths in the
- 6. Continue to work with Dow, the Michigan Department of Environmental Quality and the EPA on Tittabawassee River environmental issues.

Details regarding the parks and specific needs for the Thomas Township Park system are included in the most recent Thomas Township Parks and Recreation Master Plan, which is available on the Township website.

FUTURE LAND USE PLAN

Building on the goals and action items described in the previous section, a Future Land Use map depicts the desired form and character Thomas Township should take over the next ten to twenty years. The map depicting the future land uses for Thomas Township is shown on the following page at the end of this section. The descriptions of the future land use categories begin below. Thomas Township officials reviewed the Future Land Use map used in the 2009 plan and determined that no changes were needed at this time.

The Future Land Use map transforms the goals and action items into a graphic guide for land development and management in Thomas 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.

On the Future Land Use map, it should be noted 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 institutional 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 institutional land uses will be zoned.

Ultimately, the recommendations shown on the Future Land Use map are intended to help Thomas Township officials, property owners, and residents make zoning and development decisions that are in the best interest of the Thomas Township community. The Future Land Use map seeks to guide agricultural, residential, and commercial development into appropriate locations while maintaining the overall small-town character and appearance of the Thomas Township community.

| Figure 33 THOMAS TOWNSHIP FUTURE LAND USE Calculated January 2021 | | | |
|---|--------|-------------------------------|--|
| CATEGORY | ACRES | CORRESPONDING ZONING CATEGORY | |
| Agricultural | 10,516 | A-1 and A-2 | |
| Commercial | 1,554 | B-1, B-3, B-4, B-5 | |
| Industrial | 698 | M-1 | |
| Low Density Residential | 4,462 | R-1 | |
| Medium Density Residential | 416 | R-2 | |
| High Density Residential | 233 | R-3 | |
| Open Space | 1,789 | E-1 | |
| Public | 249 | Varies | |
| TOTAL | 19,932 | | |

AGRICULTURAL

Farming and other agricultural activities are the principal uses of the Agricultural District. Central sanitary sewer facilities are unavailable within the designated areas which also contain the majority of the protected farmland currently enrolled under PA 116.

The Agricultural District is designed to conserve, stabilize, enhance and develop farming and related resource utilization activities; to minimize conflicting uses of parcels, lots, buildings and structures detrimental to or incompatible with these activities; and to prohibit uses of parcels, lots, buildings and structures which require streets, drainage and other public facilities and services of a different type and quantity than those normally required by these activities. The district, in preserving areas for agricultural uses, is also designed to present proliferation of residential subdivision and urban sprawl. The largest areas of Agricultural land use are located in the western areas of the Township west of Swan Creek.



Agricultural properties may be used for general and specialized farming and agricultural activities including the raising or growing of crops, livestock, poultry, bees and other farm animals, products and foodstuffs. Buildings or structures may be located on such land and used for the day-to-day operation of such activities as the quartering, storage or preservation of crops, livestock, poultry, bees, animals, products and foodstuffs until consumed on the premises or until moved to a place of collection, distribution or processing; and for the incidental sale of crops, products and foodstuffs raised or grown on an agricultural lot. Any lot that is kept as idle cropland should be so treated as to prevent soil erosion by wind or water and so treated as to prevent excessive growth of noxious weeds and shrubs. Any lot kept as non-cropland should also be treated so as to present so as to prevent soil erosion by wind or water. Appropriate treatments for the prevention of soil erosion include the planting of grass and other ground vegetation, the planting or construction of wind breaks and the placement of straw bales at the perimeter of the property.

Wind Energy Overlay District

As large-scale utility grid wind energy systems expanded in Michigan, Thomas Township took a closer look at the appropriate areas for that land use in 2016. Using the zoning ordinance, the Township refined the area where utility grid wind energy systems would be allowed to an A-2 zoned area that includes four and one-half sections in the northwest corner of the Township. This is generally the most rural area of the Township that includes large tracts of agricultural and undeveloped land. See Figure 34.

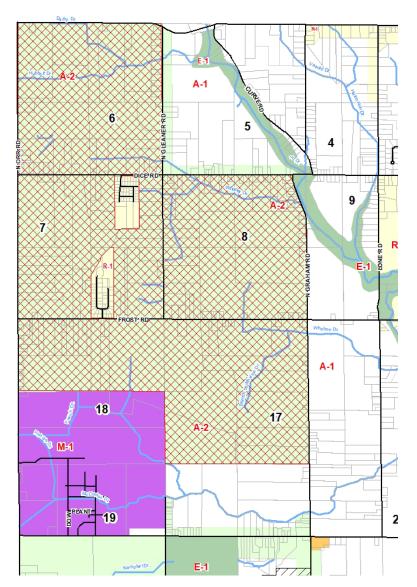


Figure 34 – Utility Grid Wind Energy Systems are allowed in Thomas Township is sections 6, 7, 8, 17, and the northern portion of Section 18.

LOW DENSITY RESIDENTIAL

This residential classification is intended to provide for suburban residential use of property. A minimum lot area of 14,000 square feet is recommended for single-family residential development.

The 2021 update of the Future Land Use map includes two new areas of Low Density Residential in Section 7 of the Township. These are areas of two residential subdivisions that had been shown with an agricultural future land use. The subdivisions have been there since the 1970's and the Township does not anticipate they will return to agricultural use.

MEDIUM DENSITY RESIDENTIAL

This residential classification is intended to provide for suburban residential use of property. The Medium Density Future Land Use includes single family homes and duplexes. Minimum lot sizes are smaller than that of Lowe Density Residential with a minimum of 10,000 square feet for single family dwellings and 12,000 square feet for two-family dwellings.

The 2021 Plan indicates two new areas for medium density residential development near the Apple Mountain complex. The first is along Dice Road east of Thomas Road and the second is on Thomas north of Dice Road. These areas had previously been shown as Low Density Residential but there may be a desire for more duplexes in this area so the Township wishes to look toward that with the Future Land Use Map.

Both Low and Medium Density Residential are more urban in nature with the following objectives:

- 1. To protect the residential character of areas so designated by excluding activities and land uses which are not compatible such as, but not limited to, principal commercial and industrial uses;
- 2. To encourage a suitable environment for family life by permitting appropriate neighborhood facilities such as churches, schools, playgrounds and open space;
- 3. To permit certain institutions and utility facilities considered necessary in or compatible with residential neighborhoods;
- 4. To preserve openness of the living space and to avoid overcrowding by requiring certain minimum yards and open spaces and by restricting maximum coverage and the bulk of structures;
- 5. To provide for access of light and air to windows, and for privacy, as far as reasonable, by controls over the spacing and height of buildings and other structures;
- 6. To protect residential areas from unnecessary traffic and to restrict volume of traffic to the greatest degree possible; and
- 7. To encourage development within residential areas that is attractive, consistent with family needs, and conducive to constantly improved environmental quality.

Although a significant amount of the Township is planned for single- and two-family residential land use, there is no reason why this type of development needs to be unimaginative in terms of the layout and design. For example, designing single-family units in small groups or clusters reduces lot sizes and increases common open space. The land area gained through the decrease in lot size can be used collectively for a park area available to residents of that subdivision.



Another concept which adds flavor to single-family neighborhoods is planned unit development. This incorporates a mixture of land uses such as single-family housing, multiple-family housing and common open spaces.

Cluster subdivisions and planned unit developments are alternative concepts which should be considered in future single-family development.

HIGH DENSITY RESIDENTIAL

Permitted uses within this district would include single-family homes, two family dwellings and multiple family dwellings including apartments, condominiums, townhouses and other multi-family structures. A multiple-family residential density of 15-20 dwelling units per acre is recommended.

OPEN SPACE/CONSERVATION

The area adjacent to both Swan Creek and the Tittabawassee River has been planned for future open space/conservation use. The areas are of significant importance from an environmental standpoint and should be preserved in their natural state, passive recreational facilities including river walks and pathways are uses that could be considered.

COMMERCIAL

Commercial development is an important aspect of the growth of any community, in terms of offering adequate commercial services to residents as well as providing a reasonable tax base and increased employment opportunities. The size of the potential market will ultimately determine the extent of the Township's commercial base. Some commercial uses are designed to serve a relatively small, local market and



depend almost exclusively upon the population residing within the community. Other retail sales and office developments, however, demand a much larger market extending well beyond the Township boundary.

Existing commercial development has developed in a strip or linear fashion along Gratiot Road, east of Swan Creek. Township residents have expressed a desire to improve the appearance and function of the Gratiot Road corridor through the community opinion survey conducted I conjunction with this planning effort. A corridor plan is recommended to accomplish the objectives. Future commercial development is recommended along Gratiot Road. This recommendation is made to acknowledge existing nonresidential development as well as consideration of the limited development potential for alternative users at these locations. A larger area designated for commercial use is proposed at the intersection area of North Graham and Gratiot Roads. The location of business uses is an important consideration in the Plan because of its economic importance and effect on traffic and neighboring land uses.

These proposals have been made on a basis which reflects future local population densities and acknowledges general regional trends and traffic patterns. Future commercial rezoning requests which are not in conformance with the Future Land Use Plan must be carefully analyzed in terms of their potential effect on the existing, vacant, commercially zoned properties. The indiscriminate rezoning of properties for commercial use will hinder the development of existing commercially zoned properties. The result will be a pattern of commercial development which does not adequately serve the local and regional populations.

INDUSTRIAL

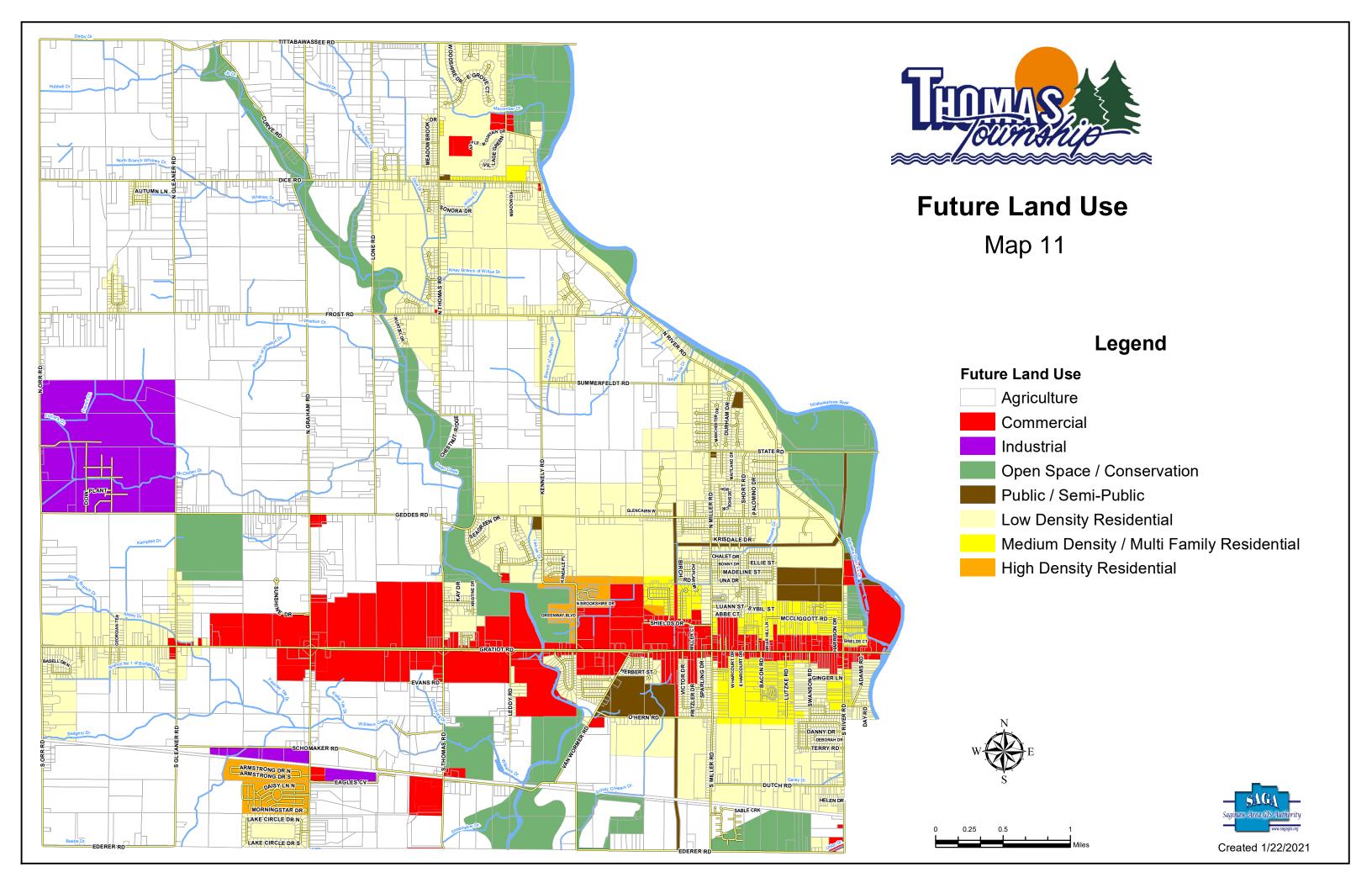
The Future Land Use Plan allows adequate space within the Township for industrial development. Areas designated for industrial use are reflective of existing uses to the north of Geddes Road; and adjacent to Schomaker Road, west of Swan Creek. The proposed districts are adjacent to rural estate residential districts. Due to this relationship, this district should allow for those uses which are generally compatible with or, which under the imposition of certain reasonable standards, may be safety and aesthetically located in close proximity to residential uses. Light industrial uses are recommended.

Light industrial uses include operations which are, in the main, confined within enclosed structures. Compliance with reasonable performance standards is required in an effort to reduce adverse effects on neighboring properties. Typical light industrial uses may include the manufacturing of products for component parts, parts assembly, food packaging, warehousing and tool and die shops.



PUBLIC/SEMI-PUBLIC LAND USE

Areas designated for public and semi-public uses are reflective of the existing schools, parks, churches and municipal buildings in the Township.



IMPLEMENTATION PLAN

Building on the community input, goals, and objectives described in this plan, the following action items have been developed for Thomas Township to focus upon in the next five years. The following action program is intended to assist in the implementation of the goals and strategies described in this Master Plan document. The action items encompass the specific projects and initiatives the Township wants to pursue in the foreseeable future. The Township must review this Master Plan every five years, per the requirements of the Michigan Planning Enabling Act, PA 33 of 2008, as amended.



In general, the action program should be used as a guide to ensure the Township is traveling down the right path in terms of implementing the goals and strategies described is this document. Each year, and then especially every five years, Township staff, the Planning Commission, and the Township Board must make a concerted effort to review the events of the past, the progress made and whether or not implementation efforts have been effective, and then revise and refocus as necessary. Throughout this action program, a number of different groups, committees and organizations will be working concurrently. It's important that this work is coordinated with and through the Planning Commission, along with the Township Board, for the implementation of this Master Plan.

In 2020, the Township reviewed the existing Implementation Plan and revised the action items. The updated Implementation Plan is provided below.

THOMAS TOWNSHIP MASTER PLAN IMPLEMENTATION PLAN

| Action Item | Leadership | Assistance from |
|---|--|------------------------|
| Continue working on extending the Thomas Township Trail system within the Township with access to adjoining communities. Use grants and other funding where possible. | Parks & Recreation Commission | |
| Develop plans for increased public access to the Tittabawassee River. | Parks & Recreation Commission | |
| Work with DDA to ensure zoning tools are in place to accommodate development. (On-going) | Planning Commission | DDA |
| with the DDA to increase placemaking within the Township by adding such items as gateway signage and encouraging seasonal lighting. | Township Manager, Planning Commission | DDA |
| Review and update Township Sign Regulations to reflect any new court cases. (On-going) | Planning Commission | |
| Share and publicize progress on M-46 corridor improvements. (On-going) | DDA | Township Staff |
| Continue to plan for future M-46 corridor improvements. | DDA | Planning Commission |
| Work with Saginaw County Road Commission on road improvement and traffic issues. (On-going) | Township Manager | |