

MASTER PLAN 2022



GRAYLING CHARTER TOWNSHIP

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GRAYLING CHARTER TOWNSHIP

Grayling Charter Township Master Plan

Crawford County, Michigan

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Purpose & Planning Process

The purpose of the Grayling Charter Township Master Plan is to provide guidelines for future development, while protecting the natural resources and rural character of the Township. The background information was analyzed to identify important characteristics, changes and trends occurring in Grayling Charter Township. Community concerns were identified based on public input and input from the Township Planning Commission. Goals and policies were updated to guide future development based on the background studies, key land use trends, community issues and public input. These goals, along with a detailed map of existing land use, provided the basis for the Future Land Use Map which specifies where the various types of future development ideally will be located in the Township. This plan also provides suggestions for implementation of the identified goals and policies. The guidance provided by this Master Plan will be utilized in reviewing, and updating, as needed, the Zoning Ordinance for Grayling Charter Township.

Location & Regional Setting

Grayling Charter Township is located in the central portion of Crawford County, which is situated in the north-central region of Michigan's Lower Peninsula. Grayling Charter Township comprises 175 square miles of the County's 558 square miles of land area. Geographically, Grayling Charter Township consists of five government survey townships, T26N-R4W, T26N- R3W, T27N-R3W, T26N-R2W and T27N-R2W.

The Township is bounded on the north by Frederic, Maple Forest and Lovells Townships, on the east by Lovells and South Branch Townships, on the south by South Branch Township and Beaver Creek Townships and on the west by Kalkaska County, see **Figure 1-1** for a location map.

The Status of Planning and Zoning in Grayling Charter Township

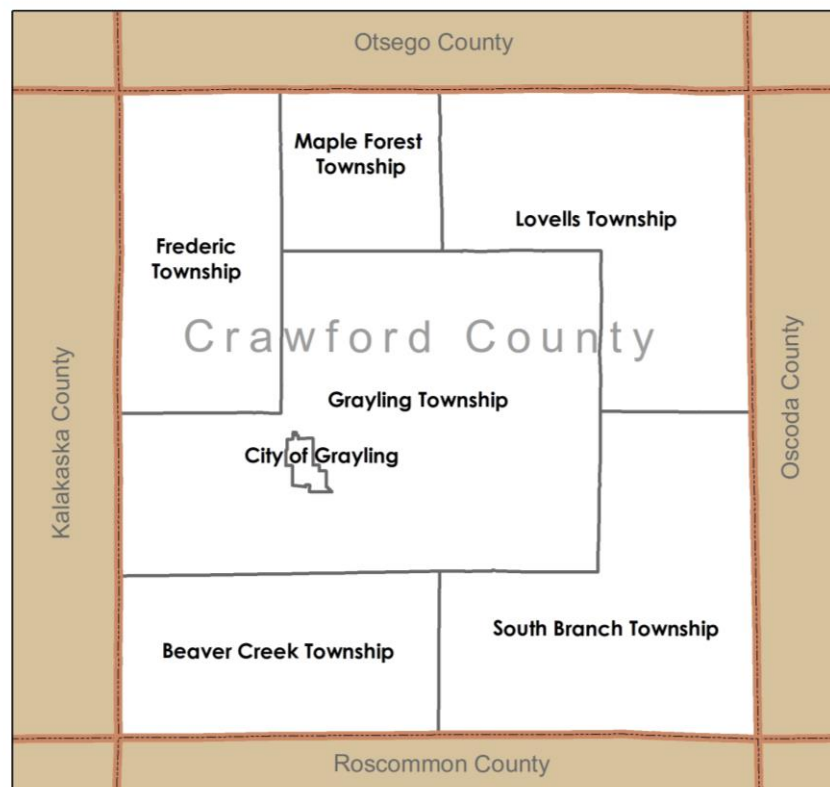
Grayling Charter Township initially adopted a master plan in 1997 and has since updated it several times, but the Township has administered a township zoning ordinance since initial adoption in 1982. Updated zoning ordinances supported by up-to-date master plans are considered the main tool Michigan communities have at their command to control land use patterns and development pressures. Since Grayling Charter Township administers a Township Zoning Ordinance, it is advisable that the Township maintain an up-to-date Township level Master Plan to guide future development and provide an enhanced legal foundation for the Grayling Charter Township Zoning Ordinance. The Zoning Ordinance was comprehensively updated in 2019.

A number of special land use issues are present today in Grayling Charter Township. The Michigan National Guard (Camp Grayling) utilizes more than 48,520 acres or 75.8 square miles of land in Grayling Charter Township for military maneuvers and training exercises. This amounts to 44.3 percent of the Township's total

area. Vacation and seasonal home construction brings visitors along with the pressure for tourist and commercial development. Certainly the water frontage available in the Township is also seen as prime for new residential development, both year-round and seasonal. In light of these growth and development possibilities, the Township needs to establish clear land use policies and development procedures through the comprehensive planning and zoning update process.

In recent years, local governments have taken a fresh look at the value of preserving a high-quality natural environment. Grayling Charter Township is fortunate to have an extensive and rich natural environment, including waterfront property along a major river tributary and several inland lakes, massive amounts of public forestlands and a pleasing rural setting. Through land use and zoning controls, the Township can preserve local property values and provide a high quality living environment for residents, while protecting valuable natural resources.

Figure 1-1 Location Map



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Public Input

The Township Planning Commission commissioned a township-wide survey that was available online to township and surrounding area residents to ensure the township's master plan reflects the goals of the community. Beginning in November of 2020 and ending January 31, 2021, the Township posted the community survey on their website and made hard copies available at the Township Office. The survey was advertised in the newspaper. Input was requested on several major issues, including Quality of Life, Land Use and Development, Community Services, Roads and Transportation, and Economy and Business.

Survey Results

The following is a summary of survey results. The full survey results are found in the Appendix.

Demographics

- 100.0% of respondents own their own home in the township while 3.9% also own a business in the township.
- 38.5% of respondents have lived or own property in the township for more than 20 years.
- Age of respondents was relatively evenly split but all were over 30 and under 80.
- 50.0% of respondents occupy the professional/managerial category, 20.8% are retired, and 16.7% are in sales.
- 68.4% of respondents work in Grayling with 21.1% working in the County outside of Grayling.

Information Flow

- 66.7% of respondents get information from the newspaper
- 57.1% of respondents get information from social media (e.g. Facebook, Twitter, etc.)
- 52.4% of respondents stated they get information from family and friends
- 28.6% of respondents get information from the internet

Township Assets

The residents of Grayling Charter Township value the rural community and accessibility to the area's natural resources. Other assets that were mentioned include safety, low taxes, trails and other outdoor recreation, the friendly people, wide open spaces, the quiet, and proximity to family,

Township Problems

Survey respondents identified a number of issues that they felt should be addressed in the township including road conditions, PFAS in the groundwater, blight enforcement, access to internet/cell service, lack of recycling options, lack of a sport recreational facility/fitness center, affordable housing, lack of child care, and the need to travel for shopping opportunities. Specifically, 43.5% of respondents felt that water quality was a big problem in the township. Access to high speed internet/cell services and also condition of roads were identified as a big problems by 54.2% (for each issue). 50.0% ranked lack of employment as a medium problem.

SATISFACTION: 73.9% of respondents are satisfied or very satisfied living in Grayling Charter Township.

BLIGHT: 73.9% of respondents felt that blight is a problem in the township. Specific areas were noted as well as a need for increased enforcement.

HOUSING: Just over half of respondents feel the quality and range of housing options in the township is moderate (52.2%) while 26.1% felt there were poor options. 86.4% of respondents supported the development of single-family homes on large residential lots. 31.8% see the need for senior housing, 27.3% would like to see single-family homes clustered with undeveloped open space surrounding, and 22.7% would like to see apartments.

COMMERCIAL DEVELOPMENT: 100% of respondents indicated that they would like to see increased retail development in the township while 21.7% would like to see more personal service establishments. One comment included mention of a big box store and also increased development in downtown Grayling. 43.5% of respondents supported the idea of neighborhood businesses locating within residential areas with 30.4% against this idea.

ECONOMY AND REAL ESTATE: 45.5% of respondents felt that the real estate market is stable, while 22.7% said it was weak. Only 13.6% felt it was strong. 63.6% of respondents felt that there are adequate job opportunities in the township or surrounding area. 66.7% favor partial tax abatements to attract or retain new jobs and businesses.

SERVICE PROVISION: 45.5% of respondents felt services provided by the township government were adequate while 40.9% said they were good to excellent. Additional services desired included a sports facility with pool, county-wide recycling, restricting junk on residential property, and bike paths.

LAW ENFORCEMENT, FIRE PROTECTION, AND EMERGENCY SERVICES: 78.3% of respondents said they are satisfied with law enforcement, 87.0% are satisfied with fire protection, and 87% are satisfied with emergency services. One comment noted that the lack of a full-time fire department increases their insurance rate.

INTERNET AND CELL SERVICE: 73.9% indicated that the cellular network was inadequate and 73.9% indicated that high speed internet access is inadequate.

SOLID WASTE AND RECYCLING: 63.6% of respondents are satisfied with solid waste disposal methods in the township. Comments indicated a need for more recycling options.

ROADS AND TRANSPORTATION: 72.7% of respondents said that they are not satisfied with road maintenance, road construction, and road conditions in the township. A list of unsatisfactory roads was submitted by respondents including Jones Lake Road (which was the most often cited), Stephan Bridge Road, 4 Mile Road, Airport Road, Chase Bridge Road, County Road 612, Staley Lake Road, Beaver Island Road, Crescent Drive, Wellington Way, Karen Woods Road, Dale Street, Banbury Drive, Evergreen Drive, and Pembroke Drive. 77.3% indicated they are satisfied with snow removal. 77.3% indicated they are satisfied with public transportation options.

CAMP GRAYLING: 56.5% of respondents feel that they are not affected by activities at Camp Grayling. However, 43.5% are concerned by ground water contamination due to PFAS. 13.0% feel that noise affects them negatively. One comment indicated that the helicopters fly too low. When asked if they felt there should

be a military overlay zone to limit residential development within the Camp Grayling noise contour line area, 43.5% said they did not support that idea. 47.8% answered that they did not know or were neutral on the idea. 82.6% of respondents said that they did not feel that proximity to Camp Grayling did not affect their property value or ability to sell their homes.

Goals & Strategies

The primary goal of this plan is to maintain and foster the growth and advancement of Grayling Charter Township as a quality place to live, work and visit. The following goals and strategies were developed based on the township's existing characteristics (social and economic features, natural resources, available services and facilities, housing, and existing land use) and public input.

Land Use

Goal:

Maintain an ecologically sound balance between human activities and the environment to retain the Township's scenic and rural character.

Strategies:

1. Actively engage in strategic planning to implement the Master Plan's goals and objectives and to balance the township's rural character with its future growth and development.
2. Maintain an up-to-date Zoning Ordinance consistent with the Township Master Plan.
3. Encourage the managed growth of the Township through good planning and appropriate development controls. Collaborate with other appropriate partnering agencies to ensure coordination.
4. Guide new development to appropriate areas for new residential, commercial, and industrial land uses, consistent with the natural limitations of the land to maintain the Township's rural character.
5. Encourage access management standards, open space and landscape requirements for new development, appropriate setbacks, retention of green space, buffer zones between differing land uses, screened parking areas, roadside landscaping, the retention of open space and scenic vistas with PUD's, clustering, and conservation easements.
6. Maintain on-going and open dialog with the MDNR, EGLE, EPA, US Forest Service, and Camp Grayling representatives to monitor future potential public land transfers.
7. Maintain road end access sites for public use on rivers and lakes.
8. Continue expansion of the non-motorized trail system including connections to Michigan's Iron Belle Trail.
9. Ensure regulations and enforcement procedures are in place to eliminate issues of accumulating junk and abandoned vehicles and blight, thereby improving the quality of housing and protecting property values.
10. Continue to allow for mixed land uses in appropriate areas.

Infrastructure & Public Service

Goal:

Maintain and improve the Township facilities, programs and systems consistent with the community needs, and the ability to finance the improvements.

Strategies:

1. Develop and implement an annual Capital Improvements Plan. Include planned improvements to community facilities and public infrastructure in the plan.
2. Hold meetings between the Planning Commission and the Township Board to coordinate the maintenance and improvement needs of the community facilities and infrastructure, and to identify services in need of attention. A meeting will be held each year at the February Planning Commission meeting. Additional joint meetings will be held as needed.
3. Continue to support the local emergency service including the local Fire Departments.
4. Continue road improvements consistent with the Township's priority list and funding ability.
5. Continue comprehensive waste management efforts with emphasis on expanding the recycling program.
6. Continue the operation of the Township compactor stations.
7. Monitor and explore the needs for the expansion of water, sewer, septage disposal/treatment, and natural gas services, and electric services as more development occurs, including the maintenance of the Beaver Creek/Grayling Township Utilities Authority.
8. Develop expanded utility infrastructure including high speed internet/broadband to better serve the Township.
9. Monitor any oil and gas exploration and/or extraction, as well as power generation activities proposed or active in the area. Promote on-going groundwater testing in such areas to assess any impacts to the water quality in order to protect the natural resources.
10. Work with County Road Commission to pursue road upgrades to provide a Class A designated route utilizing 4-Mile Road to Military to provide an alternative truck route. In addition, work to pursue road upgrades on North Down River Rd from MATES to Headquarters Road.
11. Seek funding to implement feasible strategies contained in the Grayling Area Transportation Study.
12. Establish and maintain on-going communication with adjacent Townships regarding planned projects in order to facilitate joint projects, such as road improvements where wider shoulders could facilitate a cooperative and coordinated bicycle connector route.
13. Work with Lake State Railway Company to develop procedures and precautions for the storage, loading, and unloading of hazardous materials. Work to develop procedures which requires notification of the Emergency Manager when hazardous materials are being transported through the Township. Ensure railroad tracks are being maintained and a buffer strip is cleared of combustible material to prevent forest fire hazards. Ensure emergency services are able to be provided along the railroad tracks by maintaining clear access.

Recreation & Public Lands

Goal:

Preserve and improve access to public lands, water, recreation trails, public parks and recreation facilities for the safe enjoyment by residents, visitors, and future generations.

Strategies:

1. Pursue improvements to recreational opportunities within the township by implementing action items identified in the Grayling Charter Township Recreation Plan.
2. Ensure public recreational facilities and activities are open and accessible to all.
3. Work cooperatively with appropriate agencies and units of government to develop and maintain an extensive network of trails and the necessary support facilities for each including hiking, biking, horseback riding, x-c skiing, snowmobiling, and ORV.
4. Work cooperatively with appropriate agencies and units of government to establish and maintain access sites for canoe/kayak use and fishing access, and promote the local water trails.
5. Work cooperatively to promote recreational opportunities in the area and the related economic benefits for the region, including providing support for the Trail Town initiative.

Wildfire Protection

Goal:

To protect human life and reduce property loss due to catastrophic wildland fires in Crawford County.

Strategies:

1. Encourage adequate fire prevention, fire-safe construction, and pre-suppression activities on private lands in Wildland Urban Interface areas (WUI) using Firewise Landscaping and Construction standards. The foundation of this objective will be building partnerships with the county, local units of governments, MDNR, USFS, MSUE and other interested organizations.
2. Continue to assist and encourage communities within the county to participate in the Community's Wildfire Protection Plan.
3. Fuel Management - manage forests to maintain fuel loads within the range of natural specific ecosystem variability in order to minimize adverse effect to ecological and socioeconomic values.
4. Implement Firewise planning and zoning strategies Work to implement the recommendations of the Crawford County Wildfire Protection Plan.

Natural Resources

Goal:

Preserve the natural environment by protecting groundwater, surface water, forests, wetlands, clean air, fisheries and wildlife.

Strategies:

1. Work cooperatively with communities, agencies and organizations to develop studies and institute programs to address watershed, woodlands, wildlife and ecosystem management.
2. Coordinate with County departments to effectively administer and enforce county ordinances, such as soil erosion and sedimentation control.
3. Encourage and support community organizations to identify critical resources, wildlife habitat, ecological corridors, scenic areas, vistas, and existing protected areas to more effectively work with the township to implement strategies to protect such resources.
4. Maintain on-going open dialog with the Michigan Department of Natural Resources (DNR), EGLE, US Forest Service, and Camp Grayling representatives to monitor future potential public land transfers.
5. Promote or facilitate community educational forums on topics which could impact the locally important natural resources, such as hydrologic fracturing (fracking), large volume water withdrawal, threats from invasive species, purchase of development rights and conservation easements.
6. Continue to monitor any fracking activity proposed and/or active in the area.
7. Promote on-going groundwater testing in such areas to assess any impacts to the water quality in order to protect the natural resources.
8. Continue to participate in the Camp Grayling Restoration Advisory Board and continue to work with Camp Grayling and the State of Michigan to monitor PFAS/PFOA contamination sites and restoration strategies and ensure the implementation of a corrective plan for contaminated sites.
9. Work with DNR to pursue improvements to Hartwick Pines State Park and other State of Michigan recreational facilities in the area. .

Economic Development

Goal:

Improve the competitiveness of the township's economy to enhance employment opportunities for residents and the profitability of businesses and industries.

Promote a varied business environment, and encourage retention, expansion and enhancement of business and industry to meet the needs of residents and tourists, while preserving the natural environment and rural character of the community.

Strategies:

1. Work cooperatively with Kirtland Community College to provide worker training opportunities.
2. Promote economic development opportunities in Grayling Charter Township and coordinate efforts with the Crawford County Economic Development Partnership (CCEDP), local businesses, and organizations, with support from regional and state organizations, to enhance the economic prosperity of Grayling Charter Township.
3. Continue to work with economic development organizations, local communities, and the Chamber of Commerce to promote the area for natural resource based recreational tourism and as a prime location to live, work and play!
4. Promote Pure Michigan Trail Town initiative county-wide to promote the area for the recreational trails including water, hiking, biking (including the Iron Belle Trail), skiing, snowmobiling and ORV trails.
5. Work with the Chamber of Commerce and local businesses to develop and/or promote a shop local program.
6. Acquire property from the State of Michigan and encourage development of businesses near 4-Mile Road to include Industrial Drive north to the City of Grayling, which complement existing development.
7. Work to expand commercial and industrial opportunities in the township. Support development that expands sustainable job opportunities.
8. Pursue the expansion and maintenance of infrastructure such as roads and utilities to facilitate commercial and industrial expansion.
9. Support efforts to attract goods, services, childcare/daycare facilities, recreation, and business opportunities to retain and attract individuals and families.
10. Ensure township regulations and policies which support existing commercial and industrial centers and which direct new commercial and industrial development to Grayling Charter Township.
11. Continue to use sound planning and zoning techniques to support local commercial business, such as clustering, shared parking, access management and landscaping standards.

12. Promote education and training programs in coordination with Kirtland Community College and the Crawford AuSable School District.
13. Assist with worker development and attraction efforts to ensure local businesses have the necessary workforce. Work with the City of Grayling/Grayling Chamber to create packages to distribute to potential workforce members which highlight the benefits of living in the Grayling area. Make these packages available online.
14. Consider allowing marijuana establishments and facilities in the township through a licensing process including marijuana growers, processors, safety compliance facilities, and secure transporters.
15. Ensure that available development properties within the township are uploaded onto the MEDC's Zoom Prospector website and respond to property needs requests posted on the MEDC Zoom Prospector website.

Residential

Goal:

Encourage a variety of suitable housing opportunities to meet the lifestyle needs of all, regardless of economic circumstances or age.

Strategies:

1. Continue to develop areas appropriate for all types of residential housing including single family, multi-family, condominium, low to moderate-income rental complexes, tiny homes, accessory dwelling units, senior housing, and extended care facilities, especially near community facilities and shopping areas.
2. Support and promote the Crawford County Housing Commission and Michigan State Housing Development Authority (MSHDA) programs to rehabilitate substandard housing and to provide needed moderately priced housing in the County.
3. Preserve the integrity of existing residential areas by protecting them from intrusion of incompatible uses. Continue to enforce zoning regulations to protect and maintain the tranquil quality of the existing residential areas from the intrusion of incompatible uses.
4. Promote the ability to operate home occupations in the township.
5. Encourage quality infill development to strengthen residential areas that is compatible with surrounding housing stock and the township's rural character.
6. Establish short term rental regulations to encourage rentals which have a low impact on neighboring residences.
7. Review the county-wide Target Market Analysis to determine desired and missing housing types in the township.

Camp Grayling (Joint Land Use Study)

Goal:

Promote civilian and military communication and collaboration to promote public health, safety, quality of life, and the economic viability of the region.

Background:

A Joint Land Use Study (JLUS) for Camp Grayling and the surrounding communities was completed in 2017-2019. The study was funded by the United States Department of Defense with matching funds from the State of Michigan and administration was provided by the Northeast Michigan Council of Governments. Joint Land Use studies have been funded across the country to address compatible land use issues between the military and local communities. The study was completed through a cooperative effort between Camp Grayling, the Alpena CRTC, local units of government, local housing and environmental groups, and local, regional, and state agencies.

The purpose of the study was to promote civilian and military communication and collaboration and promote public health, safety, quality of life, and the economic viability of the region. The study analyzed detailed information on the communities, military operations, land use, and zoning. The following strategies were identified as recommendations to address the issue areas identified during the JLUS process.

Strategies:

1. Work with Camp Grayling officials to effect changes to military operations in order to mitigate negative impacts on the surrounding area.
2. Participate in the Camp Grayling Community Council to work collaboratively with the camp, surrounding communities, and state, federal and local agencies toward the strategies identified in the JLUS, if appropriate (summarized below):

	Issue	Recommendations
Noise	Impact of aircraft noise on communities	<ol style="list-style-type: none"> 1. Conduct a noise study. 2. Educate the public on residential sound attenuation. 3. Establish no-fly zones over sensitive areas. 4. Conduct analysis of property ownership under restricted airspace and near the airfield. 5. Noise reduction for buildings within 65 ADNL noise area.
	Tree cutting reduces noise buffer	<ol style="list-style-type: none"> 1. Plant trees in areas where it is appropriate and allowed. 2. Assess and publicize timber harvest effects on noise attenuation. 3. Enhance public awareness of forestry management plans, operations, and impacts.

Military Operations	Flight paths over homes	<ol style="list-style-type: none"> 1. Create sensible military overlay zones around Camp Grayling JMTC. 2. Educate the public on existing established flight paths.
	Noise/vehicular disruption - MATES	<ol style="list-style-type: none"> 1. Educate the public on traffic routes and needs.
	Noise and vibration from night training	<ol style="list-style-type: none"> 1. Educate and inform the public about night training. 2. Identify specific locations where night training is particularly disruptive and identify alternatives. 3. Confine military arms testing and range use to areas adjacent to state-owned lands.
	Population growth may encroach on the mission	<ol style="list-style-type: none"> 1. Establish zoning regulations that prevent encroachment, particularly near potentially dangerous and noise-generating activities. 2. Purchase land around installations to control growth.
Environmental	PFOS and PFOA contamination of groundwater	<ol style="list-style-type: none"> 1. Improve public outreach and access to information.
	Impacts on groundwater/drinking water	<ol style="list-style-type: none"> 1. Provide information to the public on groundwater contamination.
	Impacts and effects on surface water systems: lakes, rivers and streams, and wetlands	<ol style="list-style-type: none"> 1. Control runoff and support bioassessment surveys to monitor ecological and aquatic community health. 2. Support water quality and aquatic ecology communications.
	Effects on the health of wildlife populations	<ol style="list-style-type: none"> 1. Ongoing ecological assessment and community outreach and engagement.
	Wildfire management	<ol style="list-style-type: none"> 1. Increase public awareness of ongoing wildfire management efforts and gather public input.
	Resource use and sustainability	<ol style="list-style-type: none"> 1. Public outreach to increase awareness of sustainability measures at Camp Grayling JMTC. 2. Consider the creation of a recycling/sorting station.
Transportation and Infrastructure	Effects of growth on utilities	<ol style="list-style-type: none"> 1. Continue to monitor capacity and community growth.
	Improve internet access	<ol style="list-style-type: none"> 1. Encourage the growth and use of high-speed internet services.
	Poor cellular reception	<ol style="list-style-type: none"> 1. Grow cellular services.
	Traffic and road network	<ol style="list-style-type: none"> 1. Streamline Camp Grayling traffic.

		<ol style="list-style-type: none"> 2. Improve traffic flow and safety throughout the Grayling area. 3. Improve the I-75/North Down River Road interchange. 4. Create a landmark and a symbolic entrance to Camp Grayling JMTC.
	Recreational access	<ol style="list-style-type: none"> 1. Ensure appropriate recreational access and increase public outreach.
	Poor road condition	<ol style="list-style-type: none"> 1. Improve road network. 2. Increase funding for road projects and maintenance.
Community Partnerships	Communications/education	<ol style="list-style-type: none"> 1. Document a comprehensive standard operating procedure (SOP) for communications/community relations at Camp Grayling JMTC. 2. Use Blarney Broadcasting as a model for expanding media reach. 3. Develop a public education program on UXO. 4. Ensure web resources include access to Camp Grayling contact information and resources.
	Public relations/community involvement	<ol style="list-style-type: none"> 1. Inform community partners on process to request Camp Grayling JMTC tours and participation in community events. 2. Expand Camp Grayling JMTC community relations staff. 3. Develop an interpretative visitors' center/history center at Camp Grayling JMTC. 4. Revise zoning ordinances for governmental entities within the APZ. 5. Collaborate on joint use conference/community center.
Economic Development	Effect on property value mostly perceived as neutral or positive	<ol style="list-style-type: none"> 1. Develop communication materials that highlight the potential impacts from Camp Grayling JMTC for future home buyers.
	Significant contributor to local economy	<ol style="list-style-type: none"> 1. Conduct a fire protection services needs study. 2. Set local purchasing goal for Camp Grayling JMTC. 3. Expand public transportation from Camp Grayling JMTC to surrounding communities to support military tourism. 4. Expand commercial and/or general aviation uses of the Grayling AAF.
	Economic incentivizing and monitoring	<ol style="list-style-type: none"> 1. Implement economic tracking and reporting mechanisms to quantify annual military tourism impact. 2. Create economic incentives to generate military tourism.

3

Chapter 3

Existing & Future Land Use

Existing Land Use

Existing Land Use Statistics

According to the US Bureau of the Census, Grayling Charter Township's land area is 171.1 square miles (and is essentially five geographic Townships in size). The map of existing land use, shown as **Figure 3-1**, illustrates the distribution of land uses within the Township. **Table 3-1** breaks down the percent of the township in each land use category. The existing land use map was derived from an analysis of parcel data from the Crawford County Equalization Department, tax classifications from the Grayling Township Assessor, and aerial photo interpretation by the Northeast Michigan Council of Governments.

Table 3-1
Existing Land Use

Land Use	Acres	Percent
Residential	14,944	13.5%
Commercial	460	0.4%
Industrial/Utility/Extractive	917	0.8%
Institutional (Private Recreation, Clubs, Religious, Education, Non-Profit)	3913	3.5%
Federal Land/National Forest/Grayling Army Airfield	8,082	7.3%
State of Michigan Land	24,904	22.5%
Camp Grayling	45,101	40.7%
County and Local Government	529	0.5%
Vacant	9,420	8.4%
Water	2,499	2.3%
Total	110,774*	100%

*Total acreage for the township is slightly larger than the actual acreage because some water features are included in the water category in addition to being included in the State and residential land categories in the Crawford County parcel layer.

Existing Land Use Categories

Residential

As can be seen from **Table 3-1**, the amount of land being used for residential purposes is 13.5% percent of the township. The location and pattern of residential development within the Township is shown in **Figure 3-1**. Residential use has been clustered in a number of locations in the Township. Additionally, small tract land divisions continue to occur along many of the Township roads. Residential uses are concentrated around Lake Margrethe, the City of Grayling, and the southeast portion of the township. While small lot development is prevalent throughout the township, there are also a large number of large parcels that are being used for residential. It should be noted that large parcels were counted as residential if a residence is present even if the majority of the parcel is made up of forested or open land.

Commercial

Table 3-1 shows that the amount of land developed as commercial in Grayling Charter Township is 0.4 percent and, as shown in **Figure 3-1**, the commercial uses are primarily clustered around the City of Grayling. In addition, some commercial uses are scattered in the more rural areas of the township.

Industrial/Utility/Extractive

Table 3-1 shows a combined percent for industrial, utility, and extractive uses. As of 2021 this land category makes up 0.8 percent of the Township. The locations of the industrial uses and extractive uses are shown in **Figure 3-1**. The majority of industrial uses are found south of the city limits and east of I-75/along 4 Mile Road.

Institutional/Private Recreational

This land use category totals approximately 3.5 percent of the Township. Land uses in this category include the VFW, churches, land own by educational entities such as the Crawford Au Sable School District, Kirtland Community College and Michigan State University, and clubs/organizations such as game clubs and sportsmen's clubs. Recreational uses on State and Federal land are counted within the Public Land category.

Public Land

The three largest land owners in the Township are the Military (over 45,000 acres), followed by the State of Michigan with nearly 25,000 acres, and the US Government (over 8,000 acres). These three entities have large areas of contiguous undeveloped land, and, in the case of the State-owned and Forest Service-owned land, much of the acreage is currently being maintained for recreation, conservation, and educational purposes.

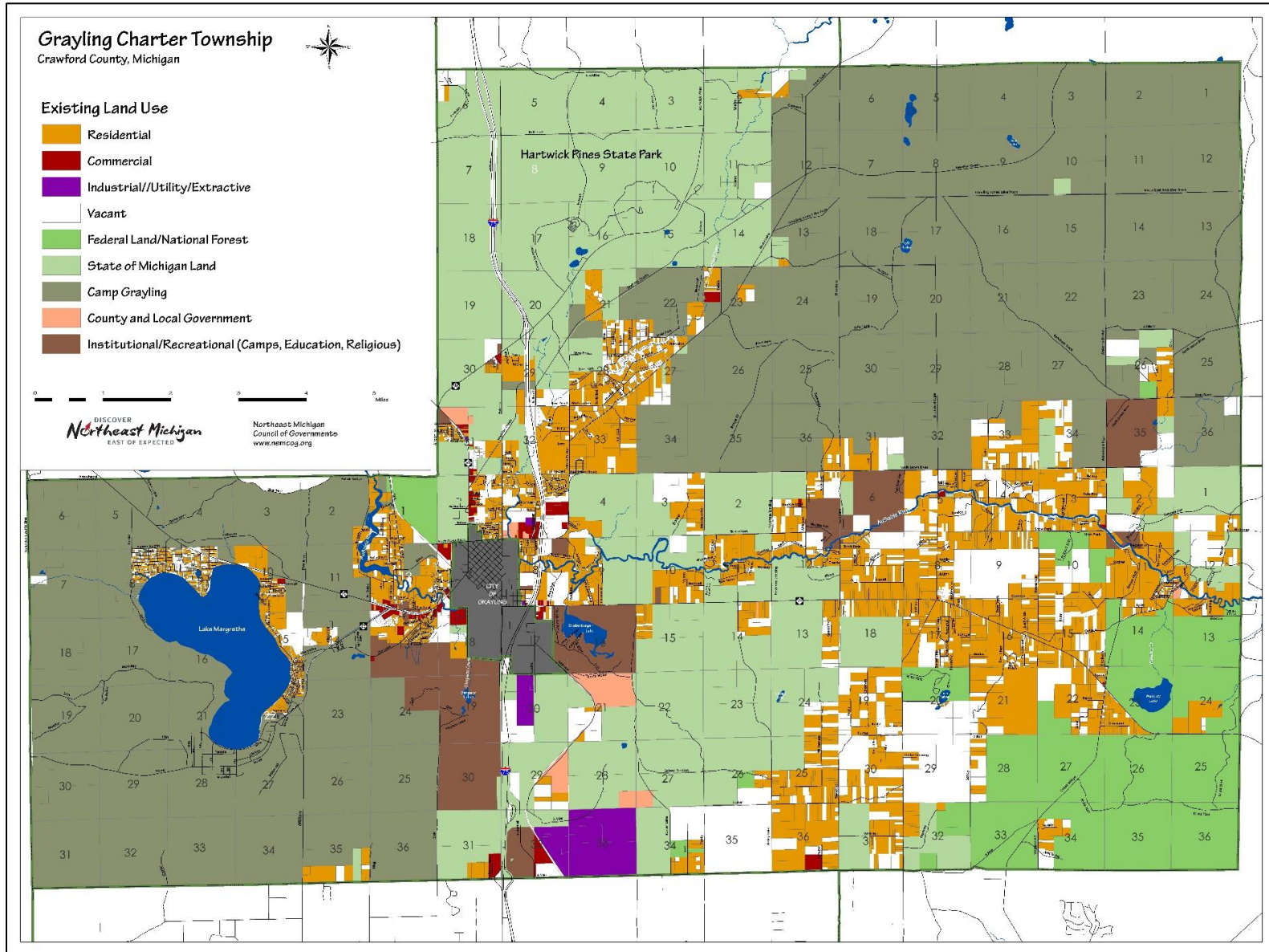
Camp Grayling is the largest military training center in the country. It supports a wide cross-section of military personnel, including active-duty and National Guard forces. It provides a large ground training area, an air-to-ground range, and a large airspace all in the same complex. Nonmilitary organizations as well as international partners also use the ranges and other facilities there. The area mapped as Military land use category in **Figure 3-1** is the area which is developed and/or actively used for military operations or owned by the Military. The military land category comprises 41 percent of the total land use in Grayling Charter Township. Some of this area is available for public recreational use when maneuvers are not being conducted. Military land is found in the southwest portion and northeast portion of the township. The northeast portion contains Range 30 and Range 40 Complexes, while the southeast portion contains a series of ranges and a cantonment area.

Within the township, 0.5 percent of land is owned by Grayling Charter Township, the City of Grayling, Crawford County, and the Crawford County Road Commission.

Water

The water land category consisting of the lakes and rivers within the Township comprise 2.3 percent and includes Lake Margrethe, small lakes, and the Au Sable River.

Figure 3-1



Future Land Use

The Planning Commission reviewed the future land use classifications from the 2015 Grayling Township Master Plan in consideration and analysis of several factors including: existing land use patterns, social and economic characteristics, environmental conditions, available community services and facilities, existing land division patterns, property ownership, existing zoning, and community goals and objectives. In addition, the Planning Commission reviewed the current zoning districts from the Zoning Ordinance of 2019.

The future land use categories in this plan correspond to the current zoning districts. **Figure 3-2**, Future Land Use Map, illustrates the distribution of future land uses by category (this map is essentially the zoning map but with airport-related use areas designated). Activities anticipated within each of these land use categories are discussed below. It should be noted that the desired future land use plan may be adjusted in the future based on changing conditions within the community while maintaining compatibility with the goals and objectives of this Master Plan.

Residential

Low to Medium Density Residential

Residential development is primarily designed to accommodate detached single-family dwellings on lot sizes typically 12,000 square feet and larger. Community uses such as parks, churches, adult foster care (small group), family and group child care facilities, and cemeteries are expected in this area. Home occupations and home offices are also compatible in these areas provided the residential character of the neighborhood is preserved. This future land use category corresponds to the R-1 (Single-Family Residential) Zoning District in the Zoning Ordinance.

The residential designation is intended to preserve existing residential development where land has already been subdivided into smaller lots and to expand specific areas for future residential growth. In addition to areas identified for residential development on the future land use map, this document recognizes that rural residential development has occurred and will continue to occur in certain locations within the public land areas of the Township.

Medium Density Residential

Residential development is primarily designed to accommodate attached and detached single-family in addition to two-family dwellings and multiple-family dwellings on lots which are 12,000 square feet or greater. Manufactured housing communities are also permitted. Community uses such as parks, churches, schools, libraries, government buildings, and cemeteries are also expected in this area if designed to be compatible with the residential setting. Home based businesses and home offices may also be compatible in these areas provided the residential character of the neighborhood is preserved. In addition, this area allows for convenience stores and various human care facilities including small group adult foster care, assisted living facilities, and family and group child care facilities. The medium density residential future land use category corresponds to the R-2 (General Residential) Zoning District. In addition, this category corresponds to the R-3 Zoning District (General Residential Association District) which also allows for clubhouses and marinas/dock facilities associated with a subdivision or site condominium development.

Recreational-Forest

The recreational-forest area comprises the majority of the Township and includes all public lands. The intent of this category is to promote the proper use, enjoyment, and conservation of the forest, water, and land areas of the Township. This category corresponds with the Recreational-Forest Zoning District and has a minimum lot area of two and a half acres unless a lesser lot size is approved by the Planning Commission on a case by case basis. Uses expected in this area vary greatly and include public uses such as military uses, campgrounds, and parks. In addition, this category anticipates some public lands transferring to private ownership, so many private uses are allowed including private recreational uses such as cabin courts, resorts, camps/clubs, golf courses, private campgrounds in addition to agri-business, game preserves, and other animal-related uses. Forest product processing and gas and oil process are also expected. Human care uses such as adult foster care, assisted living homes, and family and group child care in addition to public buildings and community centers. All types of residential uses are encouraged in addition to ancillary residential uses such as home occupations and home offices. Limited commercial uses are planned for including convenience stores, transportation facilities, warehousing, and storage.

Commercial

The planned commercial areas in the township occur generally surrounding the City of Grayling and also along 4 Mile Road near I-75.

General Commercial

General commercial areas are planned for along M-72 west of the city limits to the Township line, along M-93 north to the Township line, along M-72 east for approximately 1/3 mile, and along I-75 near Industrial Drive and 4 Mile Road. The intent of this category is to allow a large variety of general commercial establishments which cater to the community and to the needs of highway and tourist traffic including offices, services, retail, recreation uses, entertainment uses, agribusiness, lodging, food services, and wholesale. This category also allows transportation, storage, and warehousing in addition to a limited amount of manufacturing. Community buildings and a wide range of human care facilities are also allowed. The minimum lot area in this category is 12,000 square feet. This area corresponds to the General Commercial Zoning District (C-1).

Heavy Commercial

The primary heavy commercial services areas in Grayling Charter Township are designated along I-75 north of North Down River Road and along M-72 east on the south side of the road. The intent of this category is to allow heavy commercial uses which are compatible with light industrial uses. Many of the uses which are intended in General Commercial are also intended for Heavy Commercial (with the exception of recreational uses and some human care uses). However, a wide variety of manufacturing and industrial uses are intended for Heavy Commercial. The minimum lot area (30,000 square feet) is slightly larger than General Commercial in order to accommodate the more intense uses allowed. This area corresponds to the Heavy Commercial Zoning District (C-2).

Airport-Related Uses

In addition to the commercial and industrial areas designated on the Future Land Use map, the township has also designated a general area of future airport-related uses along M-93 and a small area of North Down River

Road. This area is desirable for the future location of airport-related businesses, industries, and agencies. The area designated is intended to remain general and flexible in geography to accommodate future development related to the airport.

Industrial

While a small area of planned industrial is located south of North Down River Road at the western edge of the city limits, the majority of the industrial is found east of I-75 south of the city limits. This includes a large area along 4 Mile Road. This category serves the general industrial needs of the community and is intended to be isolated from other uses. A very wide variety of industrial/manufacturing uses are allowed in addition to some commercial uses and agribusiness. The category also intends for construction uses, trade schools, forest product uses, freight terminals, and other such uses which support industrial uses. A 30,000 square foot minimum lot area is required. This area corresponds to the Industrial Zoning District.

Mixed Uses

The Township has planned for a variety of mixed uses to occur in the following areas:

Recreational-Forest Commercial Mixed Use

The intent of the Recreational-Forest Commercial Mixed Use area is to designate areas that allow for an appropriate mix of residential and commercial uses in the Township (in addition to uses which support those uses). Along M-72 west and along M-93 north, this overlay is designated on each side of the road for 500 feet. These areas allow a mix of uses which are listed in the Recreational-Forest and General Commercial categories. It is the intent of the Planning Commission to assess each proposed use for compatibility and to determine the need for buffering for those uses on a case by case basis. This area corresponds to the Mixed Use Recreational-Forest and Commercial Overlay District (MU-RC).

General Residential - Commercial Mixed Use

The intent of the General Residential - Commercial Mixed Use area is to designate areas that allow for an appropriate mix of residential and commercial uses in the Township (in addition to uses which support those uses). Along M-72 west north of Lake Margrethe, this overlay is designated on each side of the road for 500 feet and is adjacent to Recreational-Forest Commercial Mixed Use future land use category on the north side of M-72 and is adjacent to the General Commercial future land use category on each end of this segment. The proposed areas allow a mix of uses which are listed in the General Residential and General Commercial categories. It is the intent of the Planning Commission to assess each proposed use for compatibility and to determine the need for buffering for those uses on a case by case basis. This area does not yet have a corresponding zoning district in the current Grayling Charter Township Zoning Ordinance.

Commercial Mixed Use

The Commercial Mixed Use category allows for all uses listed in the General Commercial and Heavy Commercial categories. This use is planned in Sections 21 and 28 east of the railroad corridor. This area corresponds to the Mixed Commercial District (MU-CC).

Mixed Heavy Commercial and Industrial

The Mixed Heavy Commercial and Industrial category allows for all uses listed in the Heavy Commercial and Industrial categories. This use is planned in Section 34 north of 4 Mile Road. This area corresponds to the Mixed Heavy Commercial and Industrial District (MU-CI).

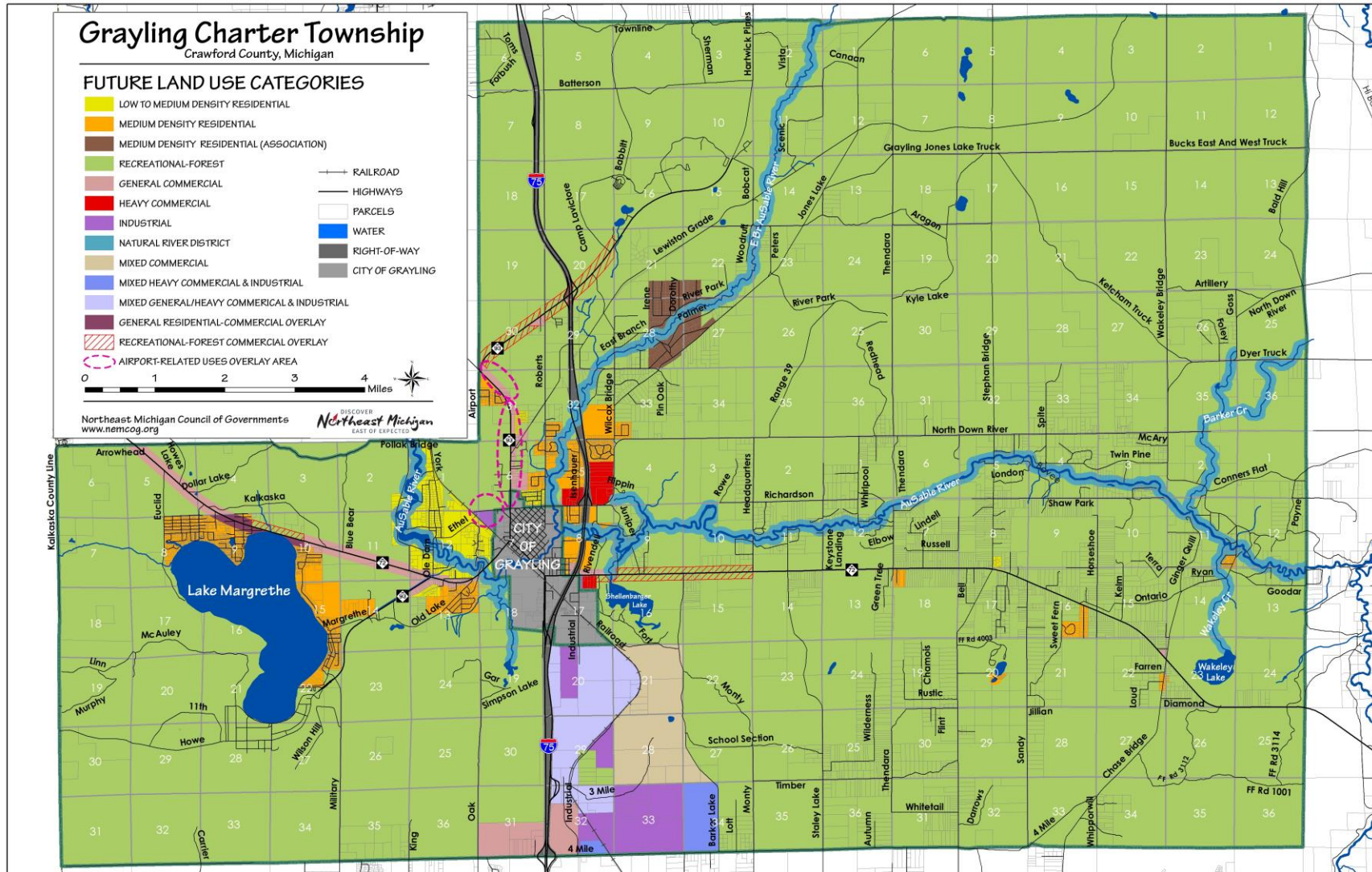
Mixed General/Heavy Commercial and Industrial

The Mixed General/Heavy Commercial and Industrial category allows for all uses listed in the General Commercial, Heavy Commercial, and Industrial categories. This use is planned in Sections 20, 29, and 32 east of I-75. This area corresponds to the Mixed General/Heavy Commercial and Industrial District (MU-CCI).

River Protection

The Au Sable River is designated as a wild and scenic river under the authority of Part 305 of Public Act 451 of 1994. The Department of Natural Resources administers the Act, and they recommend special Natural River District zoning regulations, which Grayling Charter Township has adopted in the Township Zoning Ordinance and administers locally. In the future land use map, a river protection category is designated to promote and support the protection of water resources and adjacent riverfront land. This future land use category is mapped in **Figure 3-2** along the mainstream and the east branch of the Au Sable River. The river protection area designates a buffer area of 400 feet from the river shoreline. The Natural Rivers environmental protection requirements in the Township Zoning Ordinance should be reviewed and updated as necessary. Recommended protection requirements may include, but are not limited to: erosion protection measures on shorelines, protection of water views, water quality protection measures, waterfront density, or access controls.

Figure 3-2



Chapter 4

4

Socio-Economic Characteristics

An important step in understanding the future needs of a community is an analysis of population, housing, income, education, and employment characteristics. The following chapter contains socio-economic data for Grayling Charter Township.

Population

The 2019 American Community Survey lists Grayling Charter Township’s population at 5,739. **Table 4-1** shows Grayling Charter Township’s population has been declining between 2000 and 2018. Lovells, South Branch, Beaver Creek, and the City of Grayling also saw increases in their population between 2000 and 2019. Grayling and Frederic Townships have seen a population decline between 2000 and 2019. Since 1980, Grayling Charter Township’s population has increased by 42.8% from 4,019 to 5,739.

Municipality	2000 Population	2010 Population	2019 Population	% Change (2000-2019)	Numeric Change (2000-2019)
Grayling Charter Township	6,516	5,827	5,739	-11.9%	-777
Maple Forest Township	498	653	799	60.4%	301
Frederic Township	1,401	1,341	1,142	-18.5%	-259
Lovells Township	578	626	727	25.8%	149
South Branch Township	1,842	2,007	1,896	2.9%	54
Beaver Creek Township	1,486	1,736	1,608	8.2%	122
City of Grayling	1,952	1,884	1,981	1.5%	29
Crawford County	14,273	14,074	13,892	-2.7%	-381

American Community Survey 5-Year Estimates (U.S. Census Bureau)

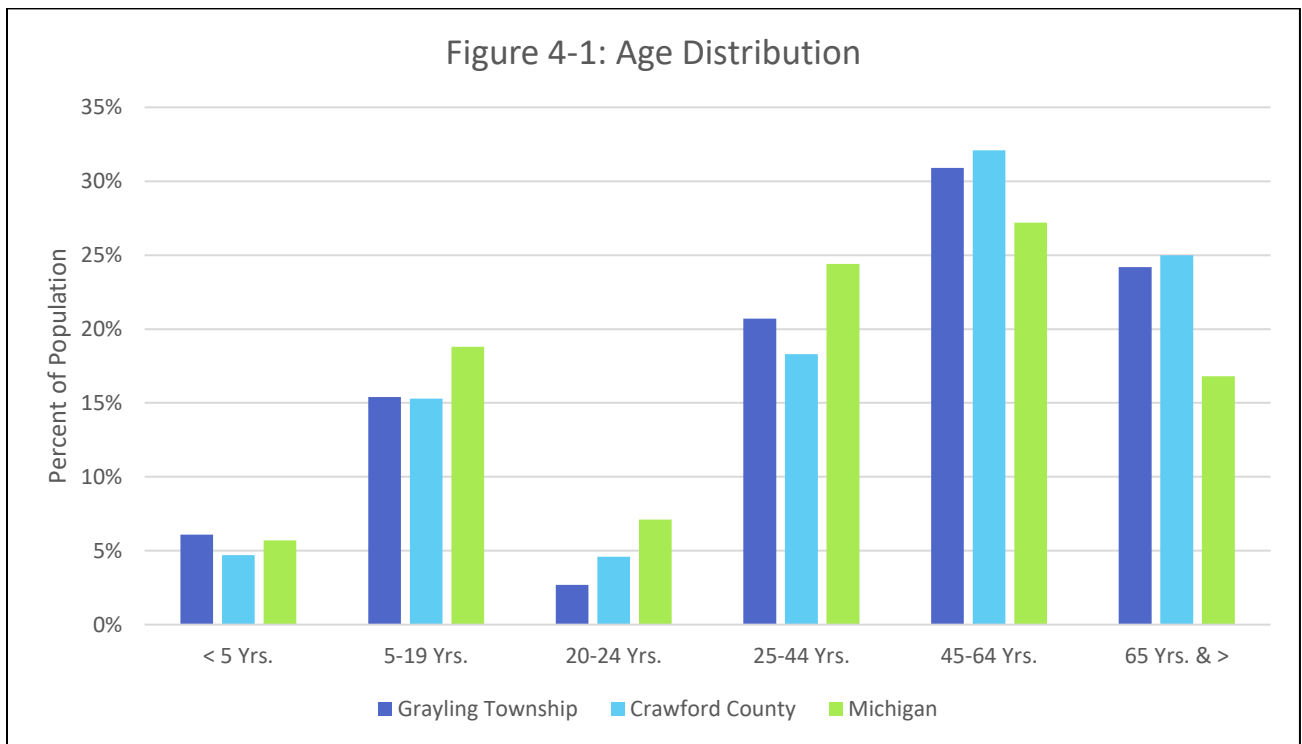
Seasonal Population

In 2019, the American Community Survey reported that there were 4,121 homes in Grayling Charter Township. Of these, 1,585 homes were classified as seasonal. A rough estimate of the number of seasonal residents can be calculated by multiplying the number of seasonal housing units (1,585) by the township’s average household size (2.3), for a total of 3,646 persons. This figure does not include those seasonal visitors or tourists staying in area motels, campground, etc. It is

beyond the scope of this plan to obtain accurate count of the number of the tourists who annually visit the area.

Age Distribution

Table 4-2 illustrates age groups and median ages for Grayling Charter Township, Crawford County, and the State of Michigan. The township’s median age in 2019 was 49.9 years as compared to 39.7 years for the State as a whole. The township’s median age is slightly lower than Crawford County (50.8). The median age increased between 2000 and 2018 for most communities in Northeast Michigan including Grayling Charter Township (median age was 40.6 years in 2000). 21.5% of the total population in the township is under nineteen years of age while 24.2% is 65 years and over. The township’s age distribution is more similar to the County than to the State. **Figure 4-1** compares age groups of the Township, County, and State.



**Table 4-2
Age Distribution By Municipality For Crawford County - 2019**

	< 5 Yrs.	%	5-19 Yrs.	%	20-24 Yrs.	%	25-44 Yrs.	%	45-64 Yrs.	%	65 Yrs. & >	%	Median Age
Grayling Charter Township	352	6.1	880	15.4	155	2.7	1,186	20.7	1,774	30.9	1,392	24.2	49.9
Crawford County	649	4.7	2,132	15.3	642	4.6	2,549	18.3	4,459	32.1	3,461	25.0	50.8
Michigan		5.7		18.8		7.1		24.4		27.2		16.8	39.7

Source: 2019 American Community Survey 5-Year Estimates (U.S. Census Bureau)

Household Characteristics

Table 4-3 presents information on household characteristics gathered in the 2019 American Community Survey. Information includes total number of occupied households, average household size, householder living alone, households with one or more people under the age of 18, and households with an individual 60 years & older. According to the 2019 American Community Survey, of the 2,430 total occupied households in Grayling Charter Township, 556 were reported as householders living alone. There were 596 households with one or more people under the age of 18 and 968 households with someone 65 years or older. The average household size is 2.3 as compared to Michigan where the average household size is 2.5.

**Table 4-3
Grayling Charter Township and Crawford County: Household Characteristics - 2019**

MUNICIPALITY	Total Occupied Households	Avg. Household Size	Householder Living Alone	Households with 1 or more people under 18 yrs.	Households w/ 1 or more people 60 yrs. & older
Grayling Charter Township	2,430	2.3	22.9%	24.5%	51.6%
Crawford County	6,141	2.2	27.1%	23.0%	50.8%
Michigan	3,935,041	2.5	29.6%	28.7%	40.7%

Source: 2019 American Community Survey 5-Year Estimates (U.S. Census Bureau)

Housing Characteristics

The majority of the housing units (84.5%) are single family, detached structures while 11.9% are mobile homes. The remaining housing units are classified as multi-family structures or apartment complexes. 58.9% of the housing units in the township were constructed prior to 1980, with 8.2% having been constructed prior to 1950 (**Table 4-4**). Older housing stock generally requires upgrades and renovations. The median home value for housing units in Grayling Charter Township was listed as \$105,000 in the 2019 American Community Survey.

Of the 4,121 housing units reported in Grayling Charter Township (**Table 4-5**), 2,430 (59.0%) were occupied and 1,691 (41.0%) were vacant. Of the occupied units, 1,997 (82.1%) were owner-occupied and 433 (17.8%) were rentals. Of the 1,691 vacant units, 1,585 (93.7%) were classified as “seasonal, recreational, or occasional use.”

Year Built	Percent
2014 or later	0.9
2010 – 2013	1.5
2000 – 2009	7.5
1990 -1999	17.1
1980 – 1989	14.1
1970 – 1979	28.4
1960 – 1969	11.1
1950 – 1959	11.2
1940 – 1949	5.3
1939 or earlier	2.9

U.S. Census Bureau

Area Name	2019					
	Total	Occupied	Vacant	Percent Vacant	Seasonal	* Percent Seasonal
Grayling Charter Township	4,121	2,430	1,691	41.0	1,585	38.5
Maple Forest Township	515	317	198	38.4	176	34.2
Frederic Township	1,144	548	596	52.1	551	48.2
Lovells Township	1,108	356	752	67.9	727	65.6
South Branch Township	1,947	909	1,038	53.3	948	48.7
Beaver Creek Township	1,408	760	648	46.0	598	42.5
City of Grayling	950	821	129	13.6	47	4.9
Crawford County	11,193	6,141	5,052	45.1	4,632	41.4

* Percent of total housing

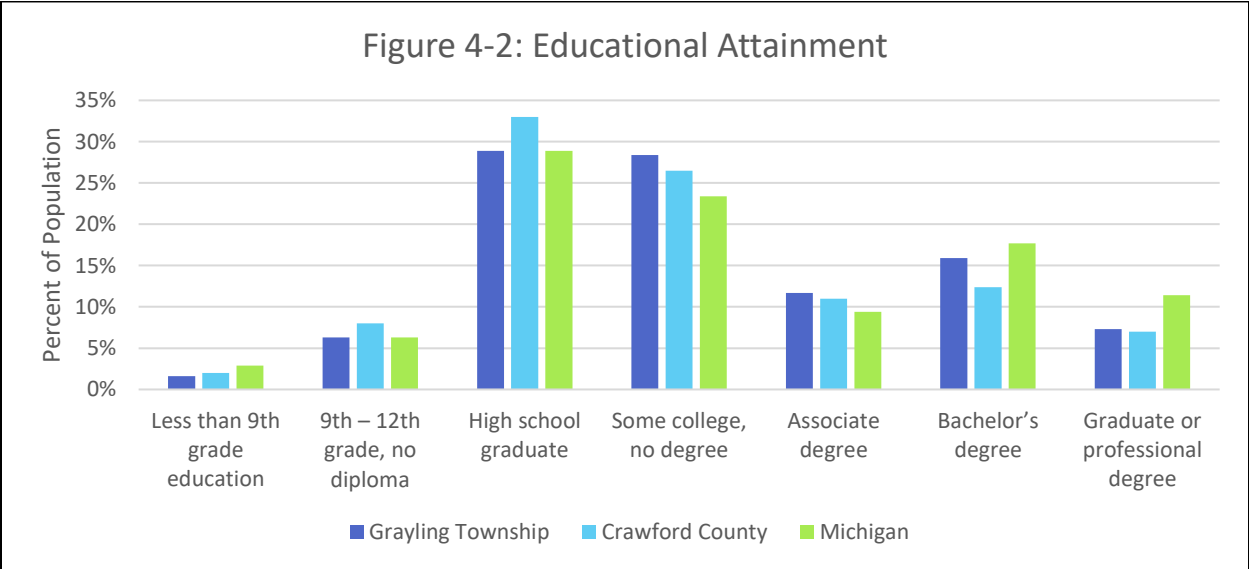
Source: 2019 American Community Survey 5-Year Estimates (U.S. Census Bureau)

Educational Attainment and School Enrollment

According to the American Community Survey, out of the 4,352 township residents 25 years and older, 92.1% were high school graduates or higher, while 23.2% held a Bachelor’s Degree or higher. Crawford County residents as a whole show similar education levels. The percent of people with a bachelor’s degree or higher within the township and the County is lower than the State as a whole (Table 4-6 and Figure 4-2).

Table 4-6 Educational Attainment			
	Grayling Charter Township	Crawford County	State of Michigan
Population 25 years and over	4,352	10,469	6,813,480
Less than 9 th grade education	1.6%	2.0%	2.9%
9 th – 12 th grade, no diploma	6.3%	8.0%	6.3%
High school graduate	28.9%	33.0%	28.9%
Some college, no degree	28.4%	26.5%	23.4%
Associate degree	11.7%	11.0%	9.4%
Bachelor’s degree	15.9%	12.4%	17.7%
Graduate or professional degree	7.3%	7.0%	11.4%
Percent high school graduate or higher	92.1%	89.9%	90.8%
Percent bachelor's degree or higher	23.2%	19.4%	29.1%

Source: 2019 American Community Survey 5-Year Estimates (U.S. Census Bureau)



School Enrollment

In the 2019-2020 school year there were 1,626 students enrolled in Crawford AuSable Schools. Of these 1,626 students, 950 were classified as economically disadvantaged and 209 were identified as having a disability. **Table 4-7** shows there was an initial decline in students attending Crawford AuSable Schools, but student enrollment has remained relatively steady since the 2014-2015 school year. From 1,783 students in 2010-2011 to 1,626 students in the 2019-2020 school year, there has been an overall loss of 157 students (an 8.8% decline).

School Year	Enrollment
2019-2020	1,626
2018-2019	1,571
2017-2018	1,622
2016-2017	1,623
2015-2016	1,585
2014-2015	1,590
2013-2014	1,656
2012-2013	1,645
2011-2012	1,683
2010-2011	1,783

Source: mischooldata.org

Disability Status

Data shown on **Table 4-8** provides data from the 2019 American Community Survey and gives an indication of disabled people residing in Grayling Charter Township, Crawford County and Michigan. Persons with disabilities include those with a hearing difficulty, a vision difficulty, a cognitive difficulty, an ambulatory difficulty, a self-care difficulty, and an independent living difficulty. The percent of the population of persons with disabilities in Grayling Charter Township is similar to Crawford County, but is higher than the State as a whole. Note there is a fairly high margin of error listed for this dataset on the US Census website.

	% Disabled persons	% of Disabled under 5 Years	% of Disabled 5-17 Years	% of Disabled 18-64 Years	% of Disabled 65+ Years
Grayling Charter Township	19.2	0.0	0.4	49.3	50.4
Crawford County	19.1	0.0	6.5	67.3	26.1
Michigan	20.4	0.0	4.8	52.4	42.9

Source: 2019 American Community Survey 5-Year Estimates (U.S. Census Bureau)

Income

According to the American Community Survey data showing income for the past 12 months, Grayling Charter Township's median household income is \$56,698, over \$8,700 more than the County and \$446 lower than the State income levels. The same pattern can be found for median

family income and per capita income. See **Table 4-9**.

	Grayling Charter Township	Crawford County	Michigan
Median Household Income	\$56,698	\$47,977	\$57,144
Median Family Income	\$68,465	\$59,651	\$72,600
Per Capita Income	\$28,211	\$26,294	\$31,713

Source: 2019 American Community Survey 5-Year Estimates, U.S. Census Bureau

Table 4-10 shows a breakdown of income sources within Grayling Charter Township, Crawford County and the State of Michigan. The estimates show, within the township, 65.1% received earnings from employment, 48.2% received Social Security income, and 33.0% received retirement income. The lower percentage of people receiving income from employment as compared to the State relates to an older population structure. The percentage of people in Grayling Charter Township who receive retirement income or get food stamps/SNAP is similar to the percentage in Crawford County, but is higher than the State.

Income Sources	Grayling Charter Township		Crawford County		Michigan	
	<i>Estimate</i>	<i>Percent</i>	<i>Estimate</i>	<i>Percent</i>	<i>Estimate</i>	<i>Percent</i>
<i>Subject</i>						
With earnings	1,581	65.1%	3,796	61.8%	2,923,374	74.3%
Mean earnings	\$66,803		\$56,766		\$80,809	
With Social Security	1,172	48.2%	3,028	49.3%	1,365,683	34.7%
Mean Social Security income	\$21,437		\$20,857		\$20,657	
With retirement income	802	33.0%	2,033	33.1%	932,709	23.7%
Mean retirement income	\$22,416		\$22,938		\$24,096	
With Supplemental Security Income	201	8.3%	505	8.2%	241,441	6.1%
Mean Supplemental Security Income	\$9,785		\$9,960		\$10,343	
With cash public assistance income	32	1.3%	129	2.1%	92,166	2.3%
Mean cash public assistance income	\$753		\$1,112		\$2,607	
With Food Stamp/SNAP benefits in the past 12 months	397	16.3%	997	16.2%	522,475	13.3%

Source: 2019 American Community Survey 5-Year Estimates, U.S. Census Bureau

Poverty

Information from the American Community Survey shows poverty rates, based on income levels for the past 12 months in Grayling Charter Township, Crawford County and Michigan (**Table 4-11**). All three have similar percentages of individuals overall and individuals 65 years and over living in poverty, but Grayling Charter Township has less families living in poverty. However, families with a female head of household fare better in the county and the State than in Grayling Charter Township.

	Grayling Charter Township	Crawford County	Michigan
Families	7.4%	10.5%	9.9%
Families w/ female head of household	40.6%	36.1%	28.5%
Individuals	13.3%	16.3%	14.4%
Individuals 65 years and over	10.9%	10.8%	8.4%

Source: 2019 American Community Survey 5-Year Estimates, U.S. Census Bureau

Labor Force

Employment and Unemployment

The civilian labor force is defined as all civilian individuals over age 16 who are employed or actively seeking employment. Labor force numbers can change rather quickly in response to economic conditions. During prolonged periods of unemployment, unsuccessful job seekers can drop out of the work force by going back to school, leaving the area in search of work elsewhere or by stopping the search for work. **Table 4-12** shows the labor force participation rate for Grayling Charter Township. Out of 4,758 people in the labor force in Grayling Charter Township, 2,443 are over the age of 54 (51.3%).

Age	Labor Force Participation Rate	Number in Labor Force
16 - 19 years	49.0%	251
20 - 24 years	97.4%	155
25 - 29 years	90.0%	380
30 - 34 years	91.0%	279
35 - 44 years	74.0%	527
45 - 54 years	73.9%	723
55 - 59 years	65.3%	562
60 - 64 years	52.6%	489
65 - 74 years	17.9%	837
75+ years	1.6%	555

Source: 2019 American Community Survey 5-Year Estimates, U.S. Census Bureau

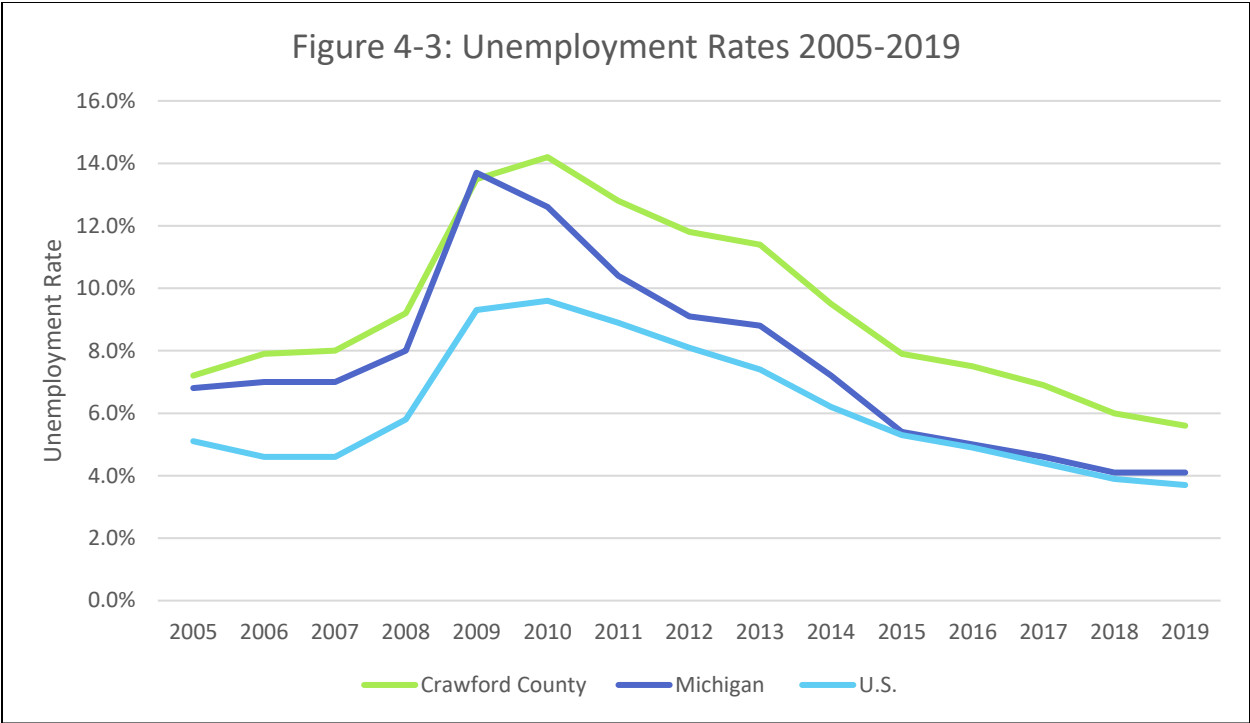
Table 4-13 presents information on labor force, employment and unemployment for Crawford County from 2005 to 2019. Unemployment rates experienced a significant increase in 2009 as a

result of the recession in 2008. The jobless rate peaked in 2010 at 14.2% and had dropped to 7.2% in 2019, which is still high compared to the State of Michigan and US. Additionally, the number of persons in the labor force began to fall in 2007. The economic downturn continued to feed this trend. Even though unemployment rates are lower than in 2006, the civilian labor force has not returned to 2006 levels. Unemployment rates in Crawford County generally mirror those in the State and U.S., however, they are consistently at a higher level (**Figure 4-3**). At the time of this writing, the impact of the COVID-19 pandemic is being assessed. In August 2020, Crawford County had a jobless rate of 10% as a result of the partial shutdown of the economy in order to deal with the pandemic, but that rate is still not nearly as high as it reached in 2009 during the recession. As of October 2020, Crawford County’s unemployment rate fell to 5.0%. It is unknown whether the impact will have a lasting effect on the economy in Northeast Michigan.

Table 4-13
Employment Information Crawford County 2005 - 2019

Year	Civilian Labor Force	Number Employed	Number Unemployed	Unemployment Rate
2019	5,599	5,285	314	5.6%
2018	5,534	5,202	332	6.0%
2017	5,410	5,037	373	6.9%
2016	5,368	4,963	405	7.5%
2015	5,271	4,857	414	7.9%
2014	5,337	4,830	507	9.5%
2013	5,375	4,760	615	11.4%
2012	5,368	4,736	632	11.8%
2011	5,498	4,793	705	12.8%
2010	5,631	4,832	799	14.2%
2009	6,390	5,527	863	13.5%
2008	6,459	5,864	595	9.2%
2007	6,655	6,120	535	8.0%
2006	6,811	6,274	537	7.9%
2005	6,800	6,313	487	7.2%

Source: Michigan Bureau of Labor Market Information and Strategic Initiatives



Employment Sectors and Wages

Grayling Charter Township’s largest occupational sector is the management, business, science, and arts occupations, while the occupational sector with the least number of employees is the natural resources, construction, and maintenance occupational sector. As can be seen in **Table 4-14**, management, business, science, and arts occupations is the largest occupation type in both the township and county.

Category	Grayling Charter Township	Crawford County
Civilian employed population 16 years and over	2,461	5,482
Management, business, science, and arts occupations	779	1,551
Service occupations	505	1,194
Sales and office occupations	591	1,211
Natural resources, construction, and maintenance occupations	211	566
Production, transportation, and material moving occupations	375	960

Source: 2019 American Community Survey 5-Year Estimates, U.S. Census Bureau

The State of Michigan Quarterly Census of Employment and Wages (**Table 4-15**) reports that retail trade makes up the largest number of establishments in Crawford County while healthcare and social assistance has the greatest number of employees. Workers in the construction and state government industries make the highest average weekly wages. Employees in the manufacturing and administrative and waste services rank third and fourth in making the highest average weekly wages.

Industry	Number of Establishments	Avg Employment	Avg Weekly Wages
Agriculture, forestry, fishing and hunting	3	11	\$812
Mining	**	**	**
Utilities	**	**	**
Construction	26	114	\$1,269
Manufacturing	18	678	\$1,119
Wholesale trade	5	121	\$1,060
Retail trade	43	511	\$506
Transportation and warehousing	6	55	\$935
Information	4	34	\$526
Finance and insurance	10	103	\$856
Real estate and rental and leasing	11	18	\$688
Professional and technical services	17	69	\$976
Administrative and waste services	11	50	\$1,119
Educational services	**	**	**
Health care and social assistance	24	865	\$950
Arts, entertainment, and recreation	5	11	\$654
Accommodation and food services	41	516	\$294
Other services, except public administration	33	162	\$555
Unclassified	**	**	**
Federal government	4	141	\$1,032
State government	8	236	\$1,184
Local government	13	442	\$852

Source: Michigan Bureau of Labor Market Information and Strategic Initiatives
 Quarterly Census of Employment & Wages – 4th Quarter 2019
 **Data was not included in database.

Commuting to Work

According to the 2019 American Community Survey, 80.8% of Grayling Charter Township residents drive alone to work, while 11.7% of workers carpool (**Table 4-16**). The majority of workers traveled less than 10 minutes to get to their jobs, which may be attributed to the location of Camp Grayling, the City of Grayling, and the Arauco Plant.

Mode of Transportation	Number	Percent
Drove Alone	1,946	80.8%
Carpooled	282	11.7%
Public Transportation (Excluding Taxicab)	5	0.2%
Walked	45	1.9%
Bicycle	6	0.2%
Taxicab, Motorcycle, or Other Means	27	1.1%
Worked At Home	96	4.0%

American Community Survey 5-Year Estimates
U.S. Bureau of the Census

State Equalized Value

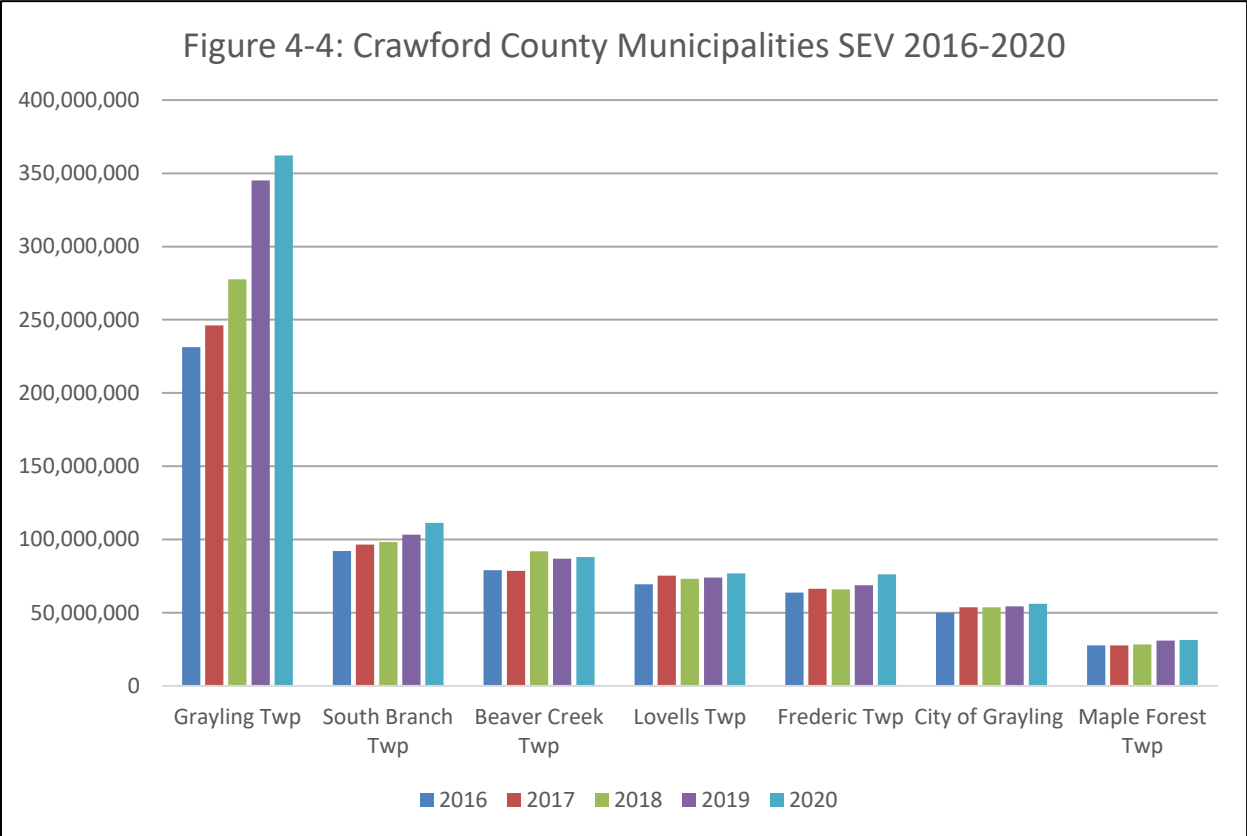
By analysis of the State Equalized Value (SEV), characteristics of property values can be obtained (broken down by townships). As shown by **Table 4-21**, Grayling Charter Township's SEV has increased overall each of the past five years. **Table 4-22** and **Figure 4-4** show overall SEV in the Townships located in Crawford County.

Year	Agricultural	Residential	Commercial	Industrial	Personal Property	Real + Personal Property
	\$	\$	\$	\$	\$	\$
2020	0	251,566,700	12,552,700	85,474,500	12,544,700	362,138,600
2019	0	236,713,700	12,218,600	84,794,700	11,360,900	345,087,900
2018	0	222,296,800	11,498,300	32,724,100	11,181,700	277,700,900
2017	0	216,082,000	9,179,000	12,831,600	8,003,900	246,096,500
2016	0	205,432,300	9,222,000	9,074,500	7,590,200	231,319,000

Source: Michigan Department of Treasury

Table 4-22 Crawford County Assessed Value: 2016-2020					
	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$
Grayling Twp	231,319,000	246,096,500	277,700,900	345,087,900	362,138,600
South Branch Twp	92,078,300	96,545,400	98,351,100	103,167,700	111,364,300
Beaver Creek Twp	79,048,100	78,644,750	92,007,700	86,830,300	87,901,425
Lovells Twp	69,482,600	75,330,900	73,225,600	73,891,600	76,753,100
Frederic Twp	63,740,169	66,260,900	65,832,025	68,744,580	76,281,000
City of Grayling	50,062,800	53,627,800	53,706,800	54,400,600	56,167,000
Maple Forest Twp	27,674,510	27,574,700	28,309,600	31,043,400	31,299,700

Source: Michigan Department of Treasury



Grayling Charter Township Finances

Munetrix (www.munetrix.com) is an online system which displays fiscal data for local units of government in order to provide transparency and an understanding of local unit finances to the public. The Munetrix "Stress Meter" provides an overview of Indicator Scores used to calculate the financial stress of a municipality. The Indicator Score gives an overall picture of the soundness of local governments, the trend of stability over time, and allows the identification of local units that are most in need of help. Scores are generated based on the criteria of population growth, real taxable value growth, large real taxable value growth, general fund expenditures as a percent of taxable value, general fund operating deficit, prior general fund operating deficit, size of general fund balance, fund deficits in current or previous year, and general long-term debt as a percent of taxable value. The lower the number the more fiscally sound a local unit is determined to be. **Figure 4-5** shows the indicator scores for all municipalities in Northeast Michigan (the region covered by the Northeast Michigan Council of Governments – the sponsor of the Munetrix data). The graph shows a trend of more moderate regional fiscal stress in 2008, 2009, 2011, 2012, 2014, and 2015 with financial stress lessening through 2019. However, most municipalities remain in the Fiscally Neutral category throughout. **Figure 4-6** shows the indicator scores for municipalities within Crawford County. As can be seen, with the exception of 2013, 2014, and 2015, most municipalities in Crawford County are in extremely low fiscal stress. The effect of Covid-19 in 2020 has yet to be determined at the time of the drafting of this plan. **Table 4-23** shows Grayling Charter Township has maintained a low fiscal stress score.

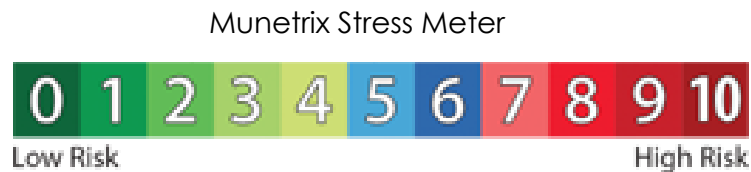


Figure 4-5

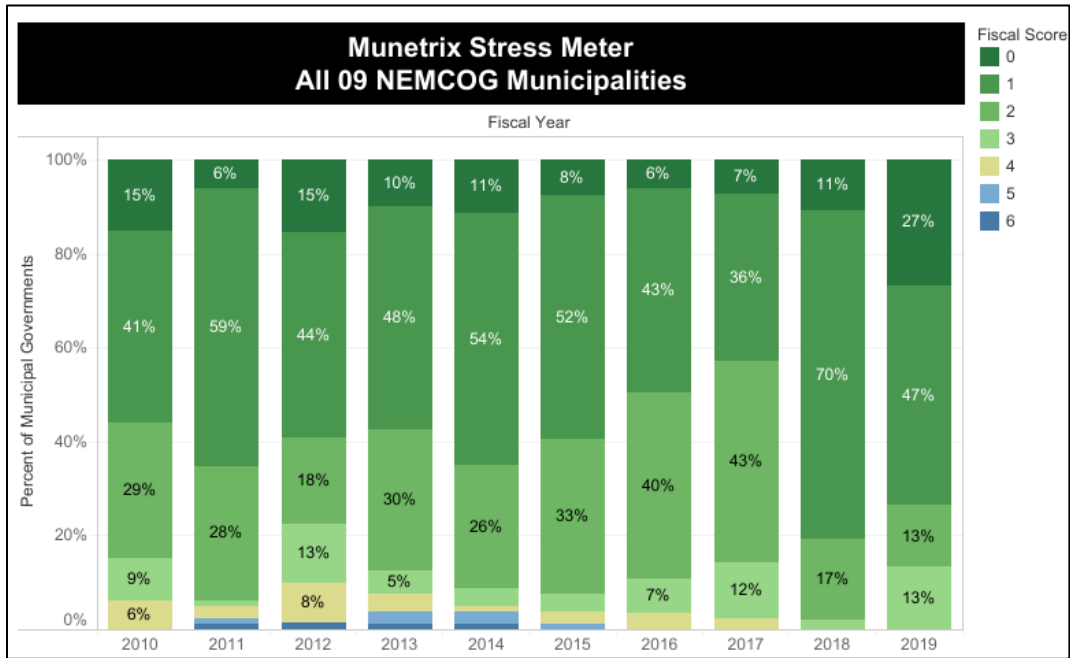


Figure 4-6

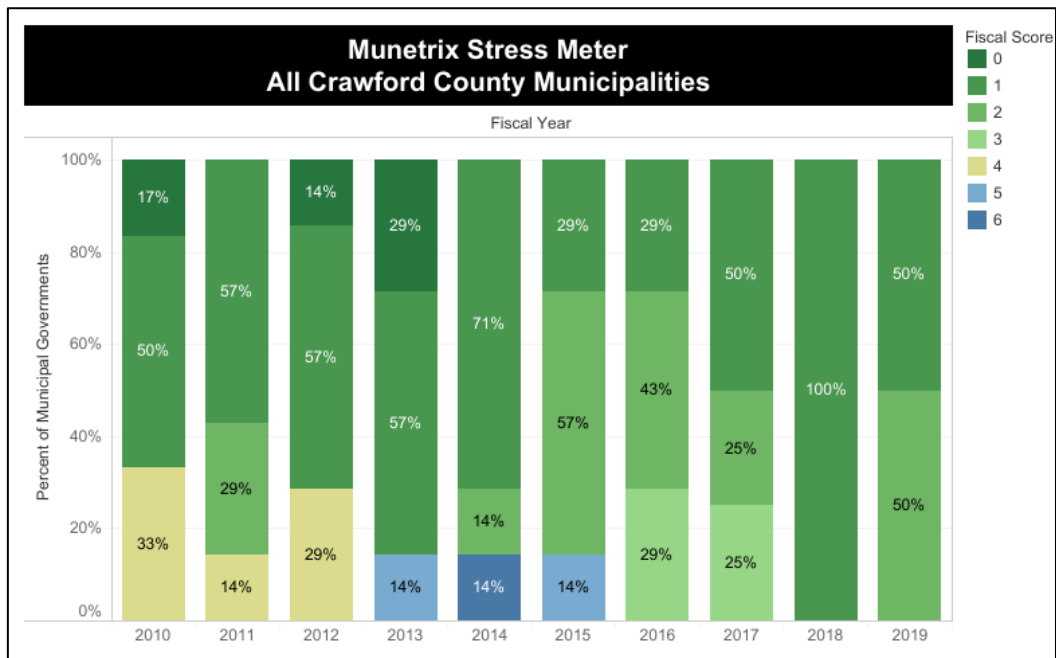


Table 4-23 Financial Health Overview – Grayling Charter Township							
Year	Indicator Score	Population	Revenues	Expenditures	Fund Balance	Long Term Debt	Taxable Value
2019	0	5,800	\$1,596,940	\$1,541,606	\$1,258,237	\$165,424	\$211,446,098
2018	1	5,742	\$1,611,261	\$1,266,190	\$1,202,903	\$163,301	\$204,268,383
2017	1	5,742	\$1,476,655	\$1,419,900	\$857,832	\$218,493	\$198,425,742
2016	2	5,686	\$1,209,934	\$1,119,957	\$801,077	\$63,184	\$192,921,056
2015	2	5,726	\$1,118,669	\$1,093,003	\$711,100	\$113,229	\$190,547,179

Source: Munetrix LLC 2019

Revenues & Expenditures

Revenue is generated from tax dollars received from residents and businesses which are generated from the millage rate multiplied by property valuations. Revenue is also generated from other sources such as State and Federal grants, permits, and fees. **Figure 4-7** shows the sources of revenue for Grayling Charter Township. The largest sources of revenue are “state revenue sharing,” “property taxes,” and “other revenue.” **Figure 4-8** shows where expenses are incurred. The categories where the most funds are expended are “general government,” “community and economic development,” and “utilities”. **Figures 4-9** through **4-15** give an indication of the financial health of the township. **Figure 4-9** shows Grayling Charter Township’s available reserves as a percent of total expenditures well above the indicator trigger of fiscal distress. **Figure 4-10** shows that expenditures are less than revenues, which results in an increasing fund equity. **Figure 4-11** assesses Grayling Charter Township’s general fund expenditures as a percent of taxable value and shows it above the indicator trigger. **Figure 4-12** shows the change in taxable value throughout the years. Grayling Charter Township’s taxable value has fluctuated somewhat but is above the indicator trigger in 2019. **Figure 4-13** indicates that Grayling Charter Township does not currently have a general fund operating deficit. **Figure 4-14** shows the general fund balance as a percent of fund revenues well above the indicator trigger. **Figure 4-15** shows long term debt as a percent of taxable value. Grayling Charter Township’s long term debt is well below the indicator trigger of fiscal distress. Overall, the financial records show Grayling Charter Township has stable fiscal health.

Figure 4-7

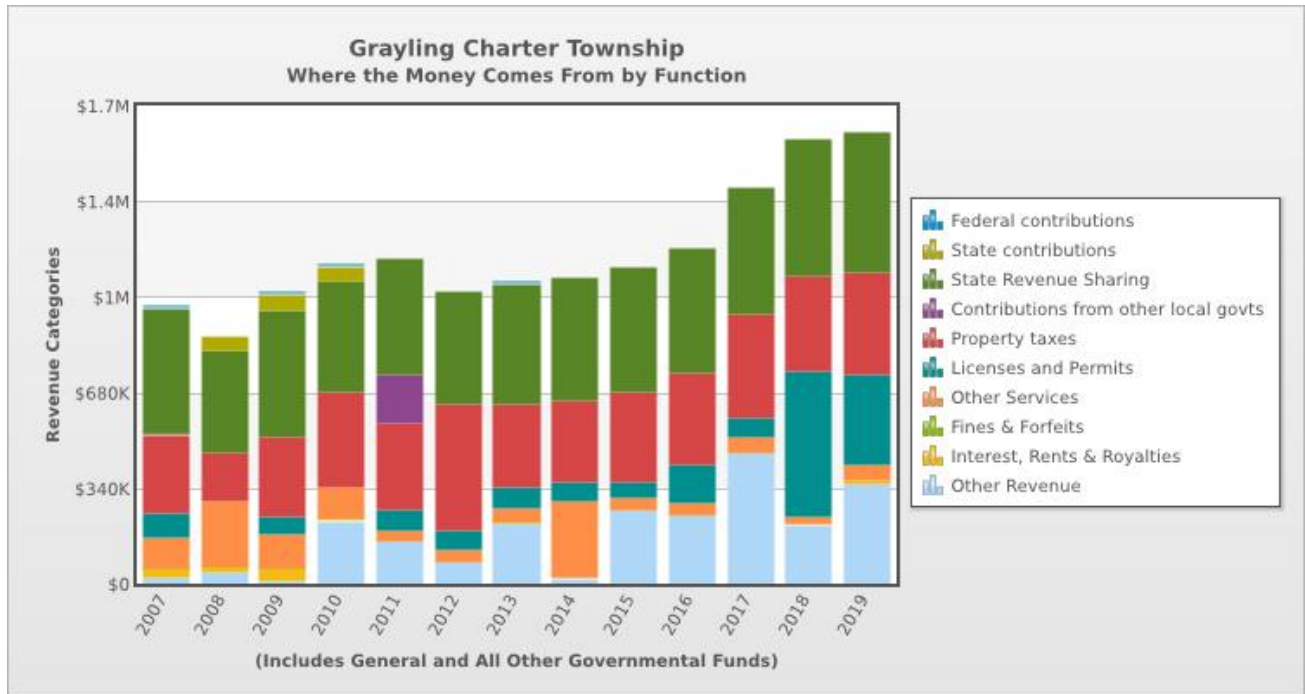


Figure 4-8

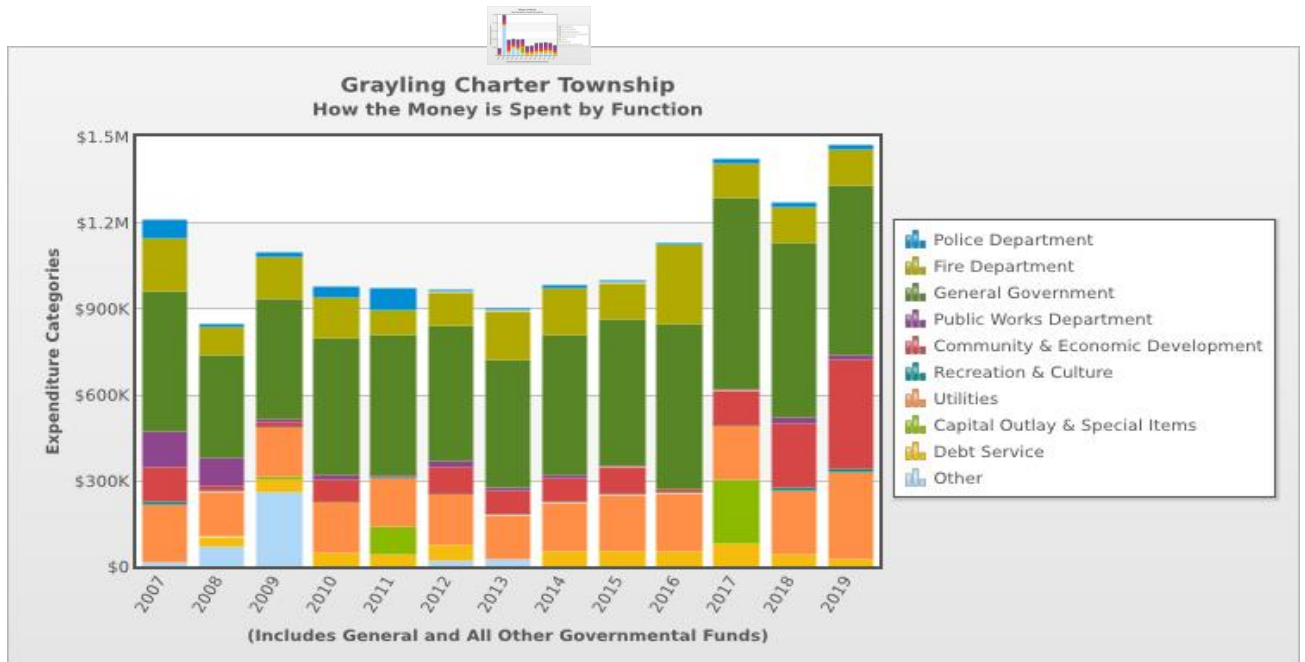


Figure 4-9

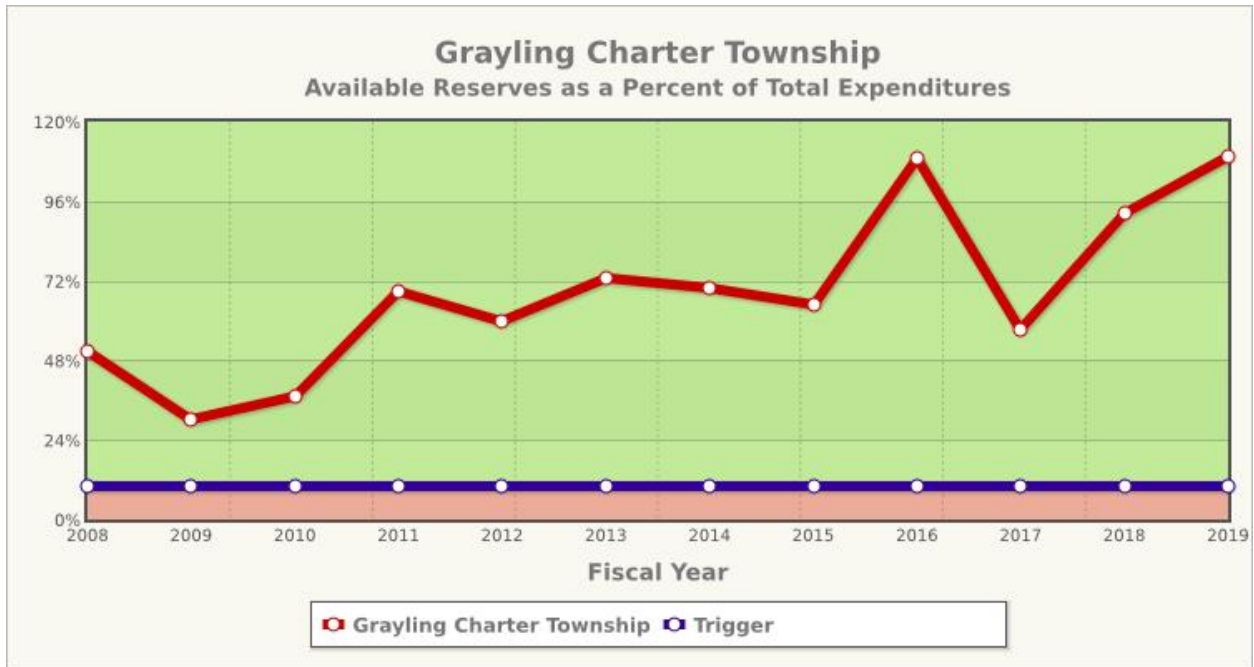


Figure 4-10

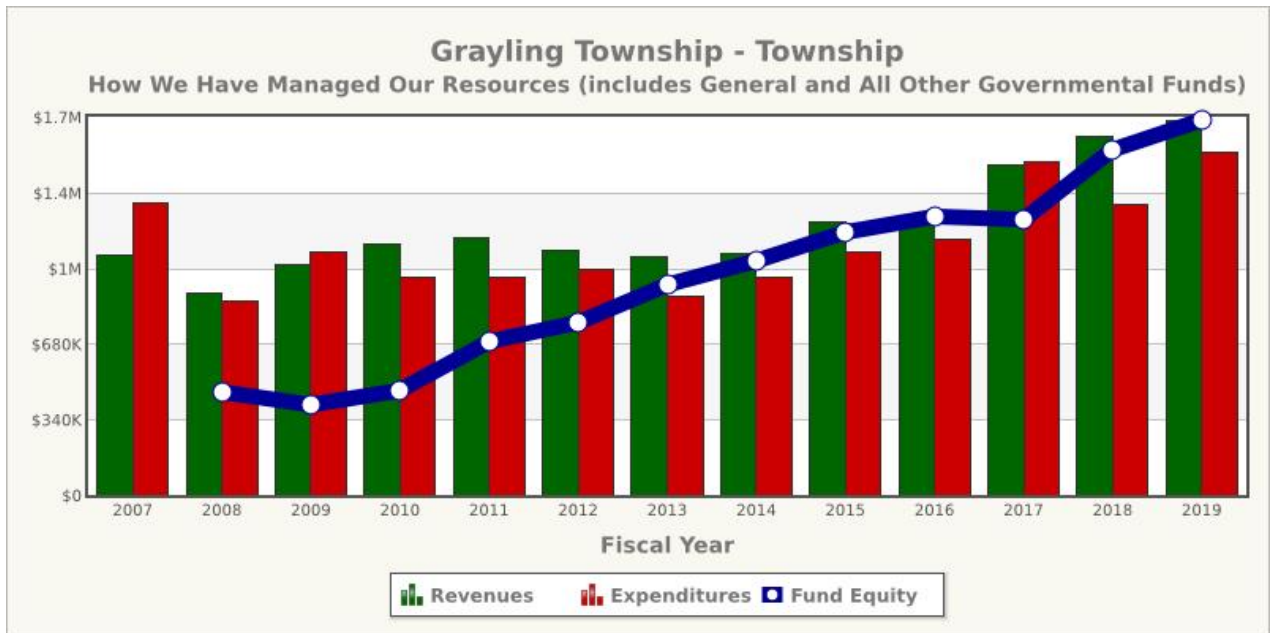


Figure 4-11

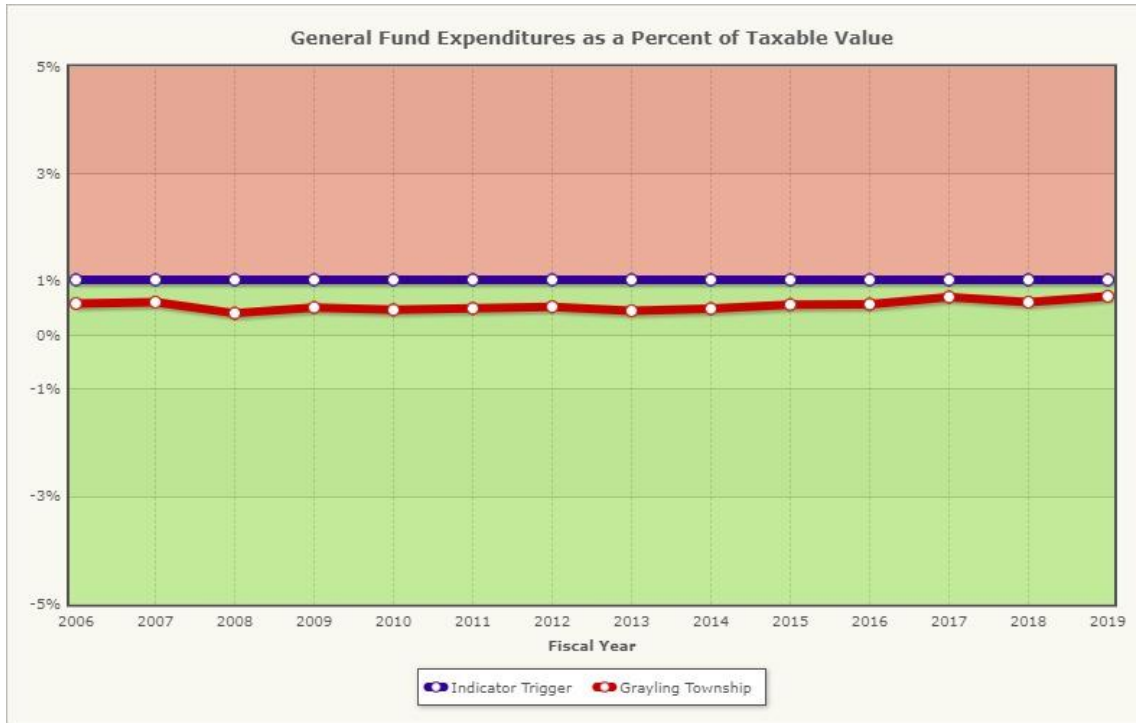


Figure 4-12

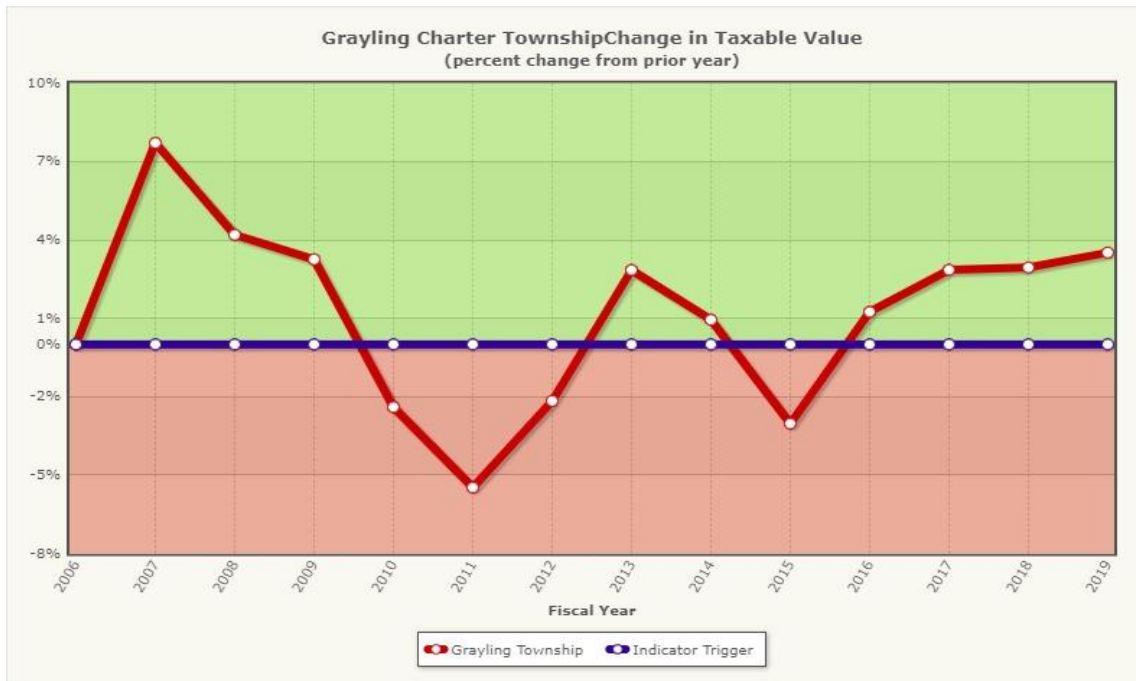


Figure 4-13

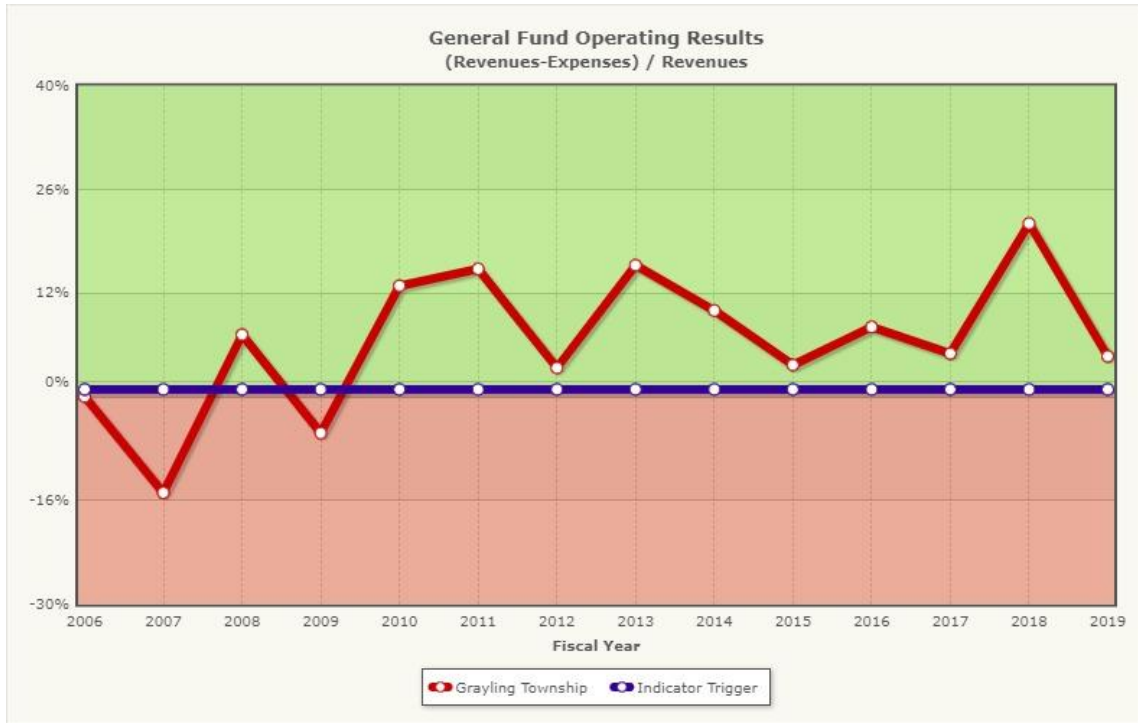


Figure 4-14

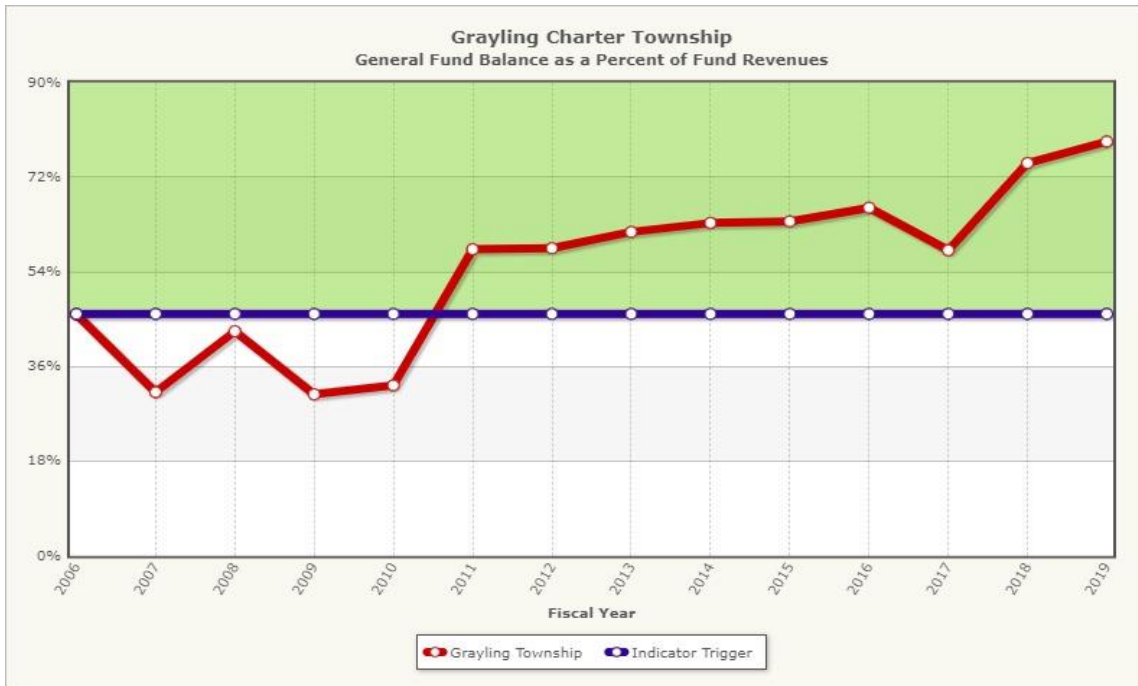
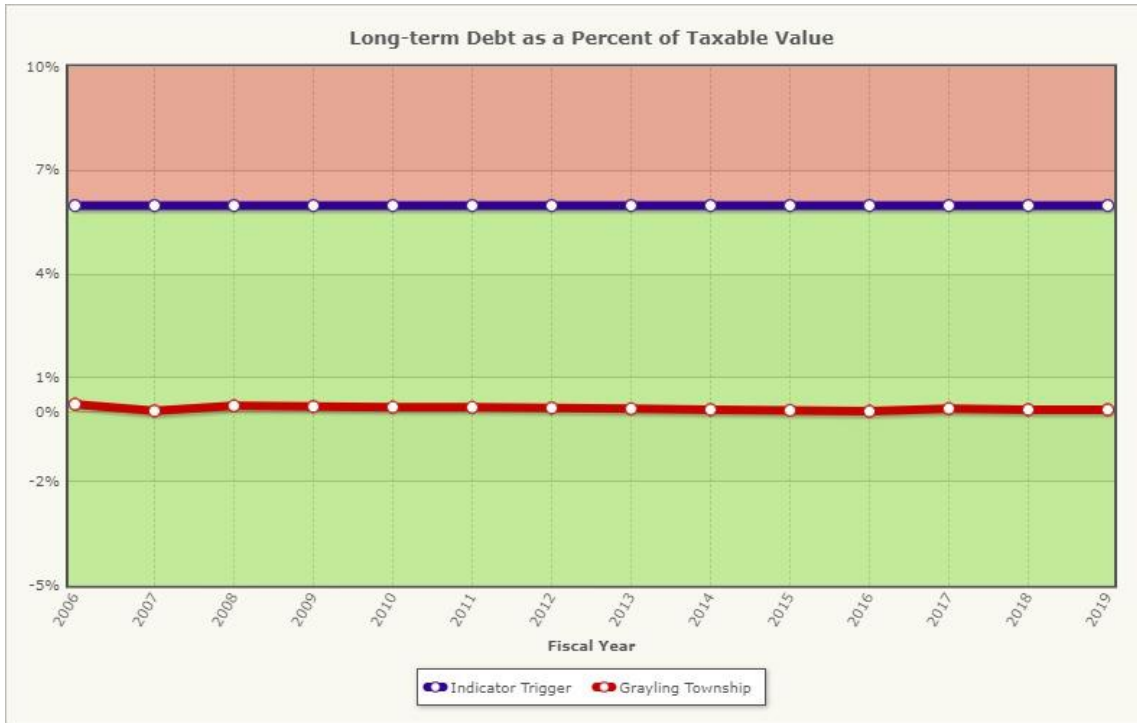


Figure 4-15



Crime and Traffic Crashes

Data related to crime and traffic crashes is also tracked through the online Munetrix system. Data from **Figure 4-16** indicates that crime rates have remained steady over the years. Society crimes are typically the highest percentage of crime in the township. **Figure 4-17** shows that most crashes within the township are non-injury crashes.

Figure 4-16

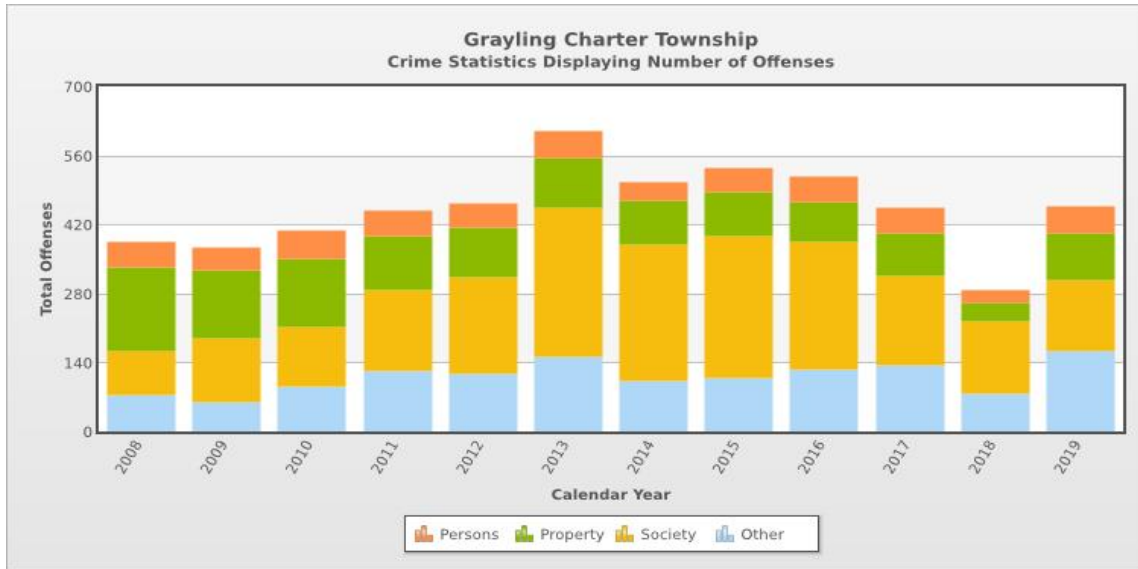
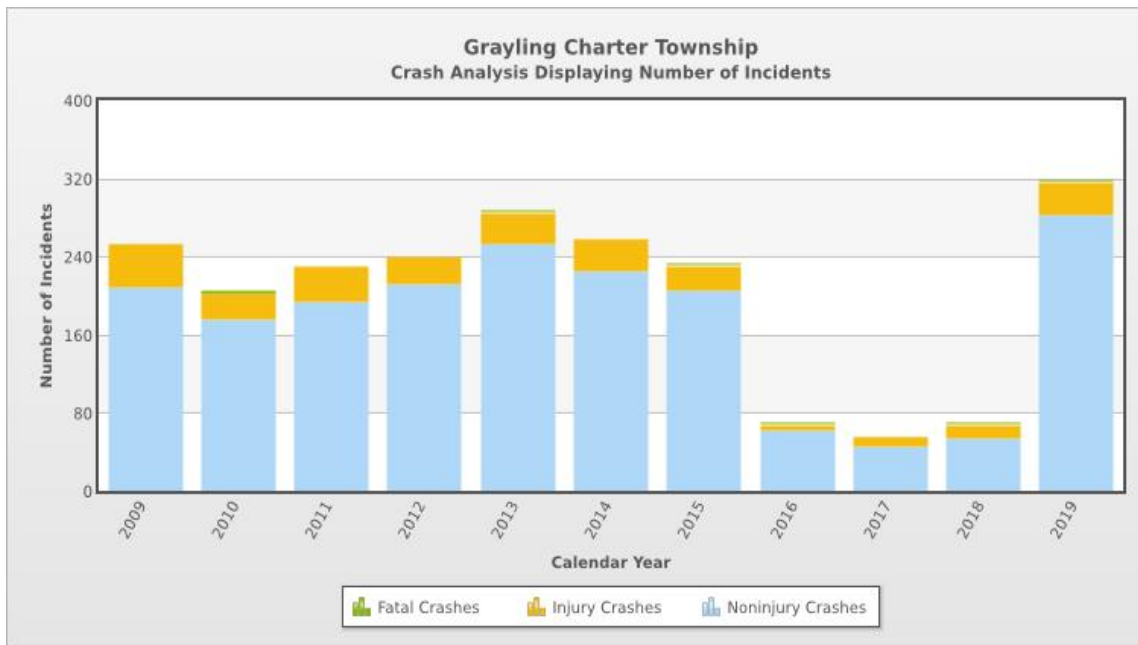


Figure 4-17



Chapter 5

Community Services

5

Key factors that contribute to the quality of life of a community are the type and variety of services available to residents and visitors. Unlike more populated communities, smaller rural communities do not have the financial resources to provide many of the services that would normally be considered essential. In the case of fire and ambulance, many rural communities work cooperatively with adjacent communities to provide essential services.

This chapter of the Master Plan will identify the types and extent of services available to residents and businesses in Grayling Charter Township. Although these services may be sufficient for the needs of the current population, future development may increase the demand to upgrade or expand the services and facilities to maintain a satisfactory living environment.

Public Water Supply

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has primary enforcement authority in Michigan for the Federal Safe Drinking Water Act under the Michigan Safe Drinking Water Act. EGLE has regulatory oversight for all public water supplies including approximately 1,400 community and 10,000 non-community water supplies. The program also regulates drinking water well drilling. Michigan has over 1.12 million households that are served by private wells, with approximately 15,000 domestic wells drilled each year.

Crawford County's only source of drinking water is groundwater. The county's public water system consists of private wells, community water systems, non-transient non-community water systems, and transient non-community water systems. Most of the county is served by private wells with 2,645 wells supplying water to residents. If drinking water comes from a private well, the owner is responsible for the water's safety. Even though EPA rules do not apply to private wells, the EPA recommends well owners test their water annually. There are five active community water systems in the county that serve approximately 2,776 people year-round. One community water system is the City of Grayling system, which supplies drinking water to 1,952 city residents and is maintained by the City of Grayling Department of Public Works. There are fifteen non-transient non-community water systems in the county that serve 1,986 people, but only part of the year (e.g. schools with their own water system). Transient non-community water systems do not consistently serve the same population. Examples of these water systems include rest stops, campgrounds, gas stations, motels and convenience stores that are not hooked into a community water system, and wells that are not considered private wells. The county has approximately 80 transient non-community water system wells that serve about 20,000 people.

Grayling Charter Township co-owns and operates a municipal water system with Beaver Creek Township. The system includes water and sewer and is located on 4 Mile Road. The system can pump 1,100 gallons per minute and has a 750,000 gallon storage tank. Other areas in the township are served by wells and septic systems. The system was designed with additional capacity to accommodate future expansion.

There is concern about perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) contamination of groundwater and drinking water in the wells for Camp Grayling the surrounding community. Currently, the

installation and maintenance of water filters on contaminated wells is being used to remove PFOA and PFOS from the water. More information about perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) contamination can be found in Chapter 4 in the Water Resources section.

Sewage Disposal

The City of Grayling Department of Public Works provides sewer services to the City of Grayling. Residents and business owners in the remainder of the County must rely on private onsite septic systems for wastewater disposal. Currently there are 7,641 households and businesses using these private systems throughout the County. There are several septage haulers in Crawford County that dispose of septage through land application. District Health Department #10 regulates and maintains a permitting system for private wells and septic systems and is responsible for inspections of commercial septic systems and septage haulers.

Waste Disposal

In Crawford County, residential and commercial solid waste is collected by commercial haulers and individuals who transport their own waste to transfer stations or the landfill. Several private hauling companies provide residential and commercial service pick-up through private agreements with customers as well as servicing the township transfer stations. The Waste Management Landfill in Maple Forest Township straddles the border between Otsego and Crawford Counties, and is the primary solid waste disposal facility for Crawford County. Along with Beaver Creek, Frederic, Lovells, and South Branch Townships, Grayling Charter Township hosts a transfer station.

Grayling Charter Township Compacting/Recycling Center is located west of I-75 on North Down River Road. The facility has eight employees who assist with unloading and recycling. Additionally, the facility sells its own recycling and has storage areas. The recycling center only accepts recyclable material from Grayling Charter Township residents. Future plans for the facility include expanding the recycling center to become a regional recycling center.

Utility Services

Gas and Electricity Providers—DTE provides natural gas service for the Township while Consumers Energy and Great Lakes Energy provide electricity. Three-phase service is throughout the County.

Telephone, Television, and Internet Providers— Frontier, Spectrum, and AT&T are the primary service providers in the township. However, there are areas in the township that do not have access to high speed internet. For example, the natural river district does not have access to high speed internet through cable or fiber, but it is available through satellite.

Transportation

Roads

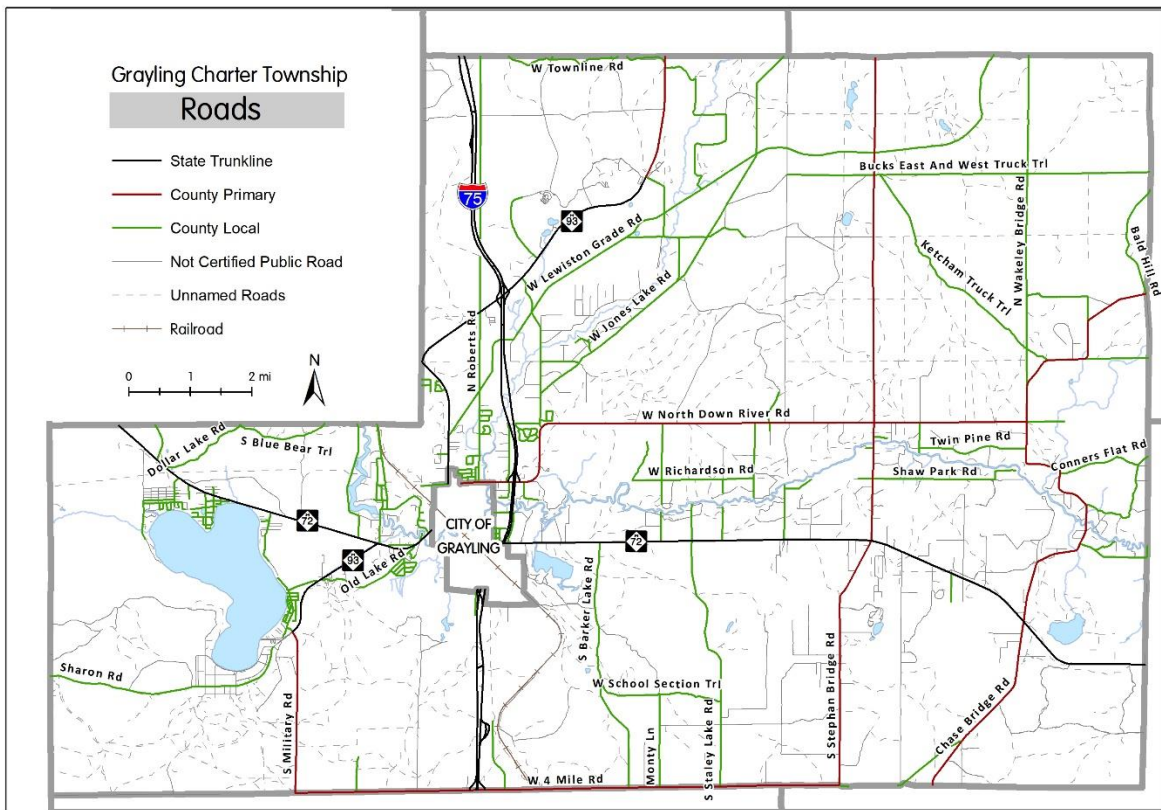
The transportation network consists of an interstate highway; county primary and secondary roads; seasonally maintained, unimproved public roads; private roads and military roads. **Table 6-1** list the types of roads in Grayling Charter Township.

**Table 5-1
Types of Roads**

Road Type	Miles
State Trunkline	53 miles (includes northbound and southbound I-75)
County Primary Roads	47 miles
County Local Roads	139 miles
Not Certified Public Roads	179 miles

I-75 traverses north- south through the township and is under the jurisdiction of the Michigan Department of Transportation. The interstate highway provides a vital link bringing goods, services and people to and from the region. Three interchanges are located at 4 Mile Road, North Down River Road, and M-93. Types of roads are shown on **Figure 5-1**.

Figure 5-1



Primary and secondary public roads are under County jurisdiction, and are maintained by the Crawford County Road Commission. Money for maintaining county roads comes from state and local sources, including Grayling Charter Township. The Township pays 100% of the cost of upgrading roads to a paved surface. Roads on State Military lands are not open to the public during maneuvers. The Crawford County Road Commission works cooperatively with Camp Grayling and maintains these roads.

Public Transit

The Crawford County Transportation Authority (CCTA) provides affordable public transportation services to Crawford County. The CCTA is a demand-response Dial-A-Ride service with a fleet of sixteen wheelchair-lift equipped buses and three vans. It serves Grayling, and the outlying areas of Roscommon and Frederic, Maple Forest, Beaver Creek, and South Branch Townships.

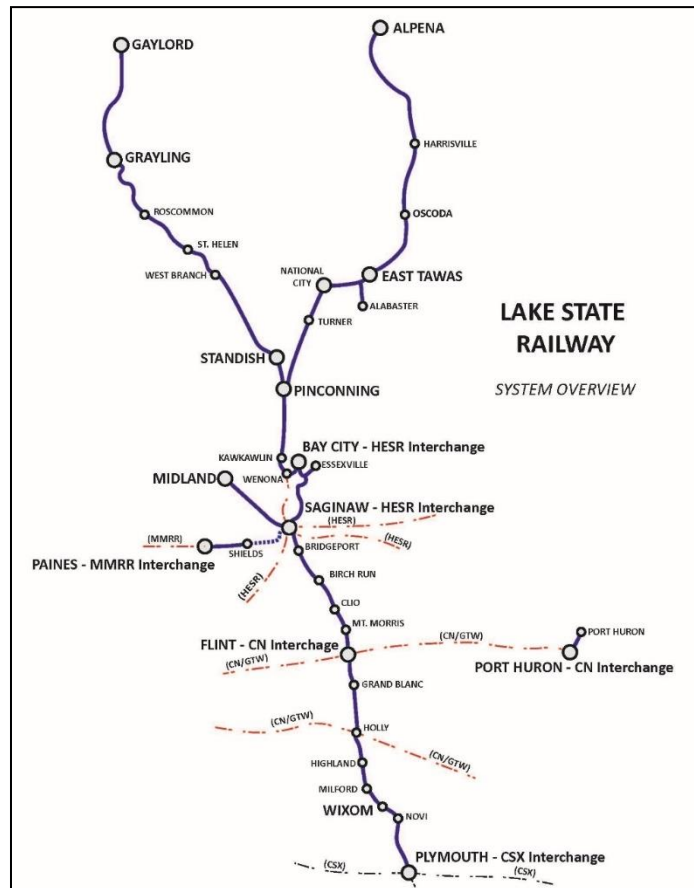
Munson Healthcare also provides transportation for medical or non-medical appointments, transfers home after hospital discharge, and to and from skilled nursing facilities, outpatient appointments, family events and other non-medical transportation. Munson Healthcare Transportation manages its own fleet with each vehicle having the ability to transport up to two wheelchairs.

Air Travel

Regional air service is available at Pellston Regional Airport in Pellston and Cherry Capital Airport in Traverse City. In addition Gaylord and Grayling have airport facilities for private planes.

Railroad

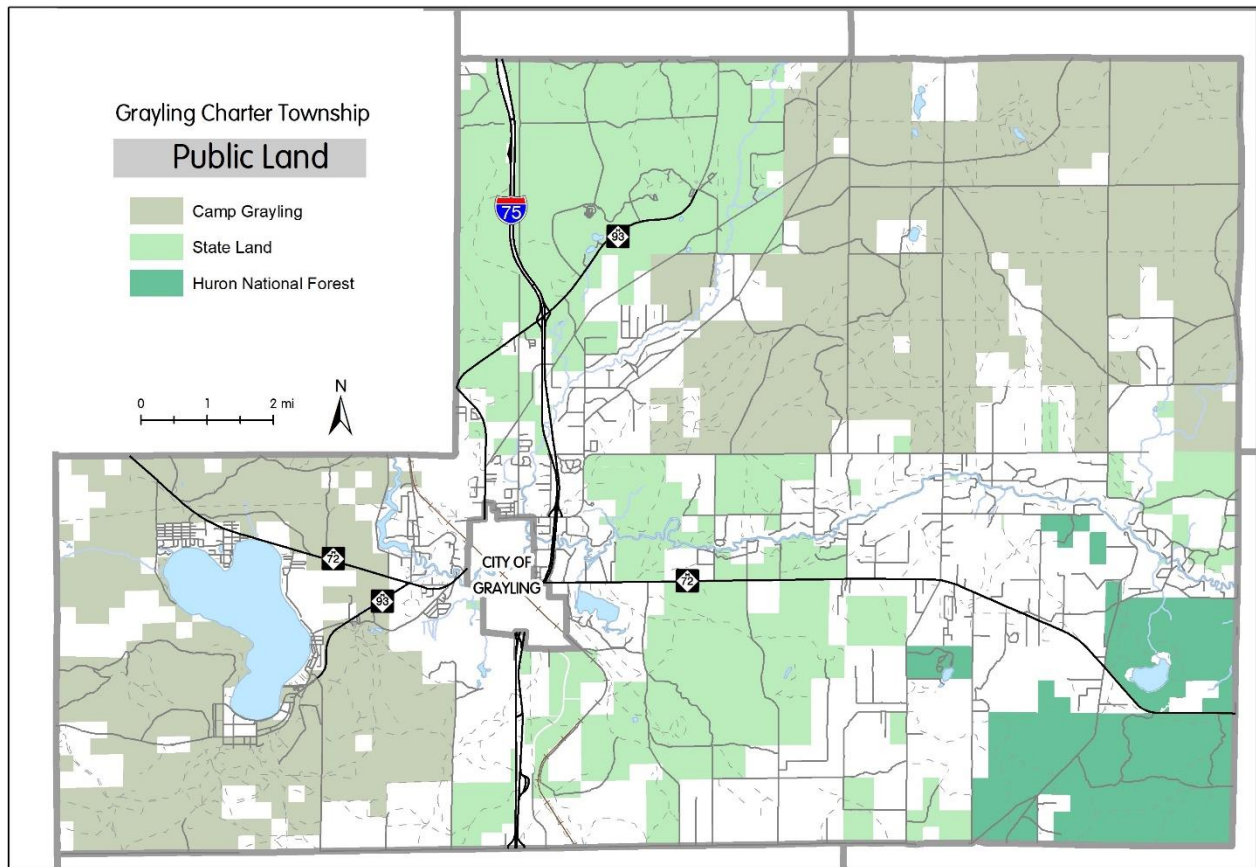
Lake State Railway Company (LSRC) operates an active freight railroad that traverses through Beaver Creek Township, Grayling Township, the City of Grayling, Frederic Township, and Maple Forest Township. The rail line connects to LSRC’s 400-mile system, which has Class I railroad connections at Plymouth (CSX) and Flint (CN) for national rail access. LSRC operates a 24 acre transload (truck-to-rail and rail-to-truck reload) facility in Gaylord on Milbocker Road that allows for freight rail uses to load or unload railcars if they do not have a rail spur serving their property or facility directly. Common commodities include liquid and dry bulk, as well as various forest projects such as lumber and pulpwood. Infrastructure can be installed or constructed to allow for reloading of other commodities as well. LSRC’s Grayling Yard at Four Mile Road in Beaver Creek Township can also allow for transloading of certain commodities.



Public Lands and Buildings

The Grayling Charter Township Hall is the only public building owned by Grayling Charter Township. The majority of land in Grayling Charter Township is public land and the amount and uses of the public lands in the Township will continue to play significant roles in the character and future of the community. Approximately 84 percent of the land in the Township is in public ownership in the following: Huron National Forest (11 square miles), State of Michigan (non-military – 75 square miles), and Camp Grayling (60 square miles).

Figure 5-2



Schools, Libraries, and Museums

K-12

Grayling Charter Township is located in the Crawford AuSable School District, which serves approximately 1,600 students. Three schools are present in this district: Grayling High School, Grayling Middle School, and Grayling Elementary. The Crawford AuSable School District is part of the Crawford, Ogemaw, Oscoda, and Roscommon (COOR) Intermediate School District. The ISD provides special education, career and technical education, information technology and general education programs and services on request that local districts find difficult or impossible to provide. Additionally, Great Lakes Online Education is a virtual school that assists individuals with choosing a curriculum that fits their educational needs.

College

Kirtland Community College (KCC) operates three campuses: Roscommon, Grayling Charter Township, and Gaylord. KCC is a two-year institution that serves the higher education needs of area residents. In Fall 2021, KCC plans to transition out of the Roscommon campus. The campus in Grayling Charter Township offers courses in automation process control, cosmetology, health sciences, English, math, history, chemistry, electrical, welding, and wood science technology.

The University Center at Gaylord offers partner programs through Kirtland Gaylord M-TEC, Ferris State University, Madonna University, Northwood University, Michigan State University, and Spring Arbor University. Programs include certification, dual enrollment, general education, bachelor of arts, bachelor of

science, masters of arts, masters of science, lifelong learning and associates degrees. Post high school education is also available at Northwestern Michigan College in Traverse City, Central Michigan University in Mt. Pleasant and Mid-Michigan Community College in Harrison.

Cemeteries

Elmwood Cemetery is owned, managed and operated by the City of Grayling. Grayling Charter Township participates cooperatively in the use and operating expense. The general office for Elmwood Cemetery is within the Grayling City Office Building. A database of certificate holders and burial records is maintained at this location.

Public Safety

Law Enforcement

Crawford County has two local law enforcement agencies, the Sheriff Department, located at 200 W. Michigan Avenue in Grayling and the City of Grayling Police Department located at 1020 City Blvd. in Grayling. The County 911 system is co-located in the Sheriff Department as well as the Crawford County Jail. The County receives Michigan State Police support assigned to the Houghton Lake Post and the Kalkaska Detachment. There are troopers that are assigned to Crawford County that start and end their shifts at the Michigan State Police Crime Lab located on the I-75 business loop in Grayling. Camp Grayling will provide some law enforcement to Crawford County if needed.

Emergency Medical Services

Crawford County maintains Emergency Medical Services (EMS) throughout the county. Advanced life support service is provided by Mobile Medical Response (MMR) a private company based in Grayling. The Countywide enhanced 911 emergency services, operated from Crawford County Central Dispatch, is available for all county residents.

Fire Services

Crawford County has eight fire departments (five local departments, one department in Camp Grayling, and two DNR field offices). The local fire departments provide fire protection in the county, while Camp Grayling's fire department only provides fire protection to Camp Grayling residents. However, the Camp Grayling fire department will assist local fire departments with wildland fires. Grayling Charter Township is served by the Grayling City-Township Fire Department, which has mutual aid agreements in place.

- **Grayling City-Township Fire Department**, 1041 City Blvd. in Grayling
 - Partially paid/some paid fire department covering 180 square miles
 - Providing fire protection to approximately 8,468 persons
 - Medical response provided by MMR and Station 1-Frederic EMS
- **Frederic Township Fire Department**, 6547 Frederic St. in Frederic
 - Paid fire department covering 108 square miles and covering 486 square miles for EMS
 - Provides fire protection to approximately 2,096 persons
 - Provides emergency medical services to approximately 7,974 persons
 - Provides fire and advanced life support to Maple Forest and Lovells Townships
- **Beaver Creek Fire Department**, 8972 S. Grayling Rd. in Grayling
 - Partially paid fire department covering 72 square miles

- Provides fire protection to approximately 2,000 persons
- **Lovells Township Fire Department**, 8405 Twin Bridge Rd. in Grayling
 - Partially paid fire department covering 108 square miles
 - Provides fire protection to approximately 626 persons
 - Provides fire and first responder services to the entire township
- **South Branch Township Fire Department**, 5245 N. M-18 in Roscommon
 - Partially paid fire department covering 108 square miles
 - Provides fire protection to approximately 2,000 persons
 - Provides ambulance protection within the fire department
- **Camp Grayling Fire Department**
 - Fire suppression funded through the military and provides fire protection to Camp Grayling residents only
 - Contracts with Frederic Township and Grayling Fire Departments for structure fire suppression
 - Seasonal crew from May to September for first response on wildfire suppression
- **DNR Grayling Field Office**, 1955 Hartwick Pines Rd. in Grayling
 - Covers the northern two thirds of the county
- **DNR Roscommon Field Office**, 8717 North Roscommon Rd. in Roscommon
 - Covers the southern one-third of the county

Medical Facilities

Clinics, doctor and dentist offices are located in Gaylord and Grayling. For health care services not available at these facilities, residents travel to Northern Michigan Hospital in Petoskey, Munson Medical Center in Traverse City or in Grayling and Otsego Memorial Hospital in Gaylord.

District #10 Health Department is often able to fill health care needs of the community, which are not available or affordable elsewhere. The Health Department service area includes Crawford, Kalkaska, Missaukee, Otsego and Wexford Counties. There are three categories of programs offered by the Health Department: home health care services, environmental health services and personal health services.

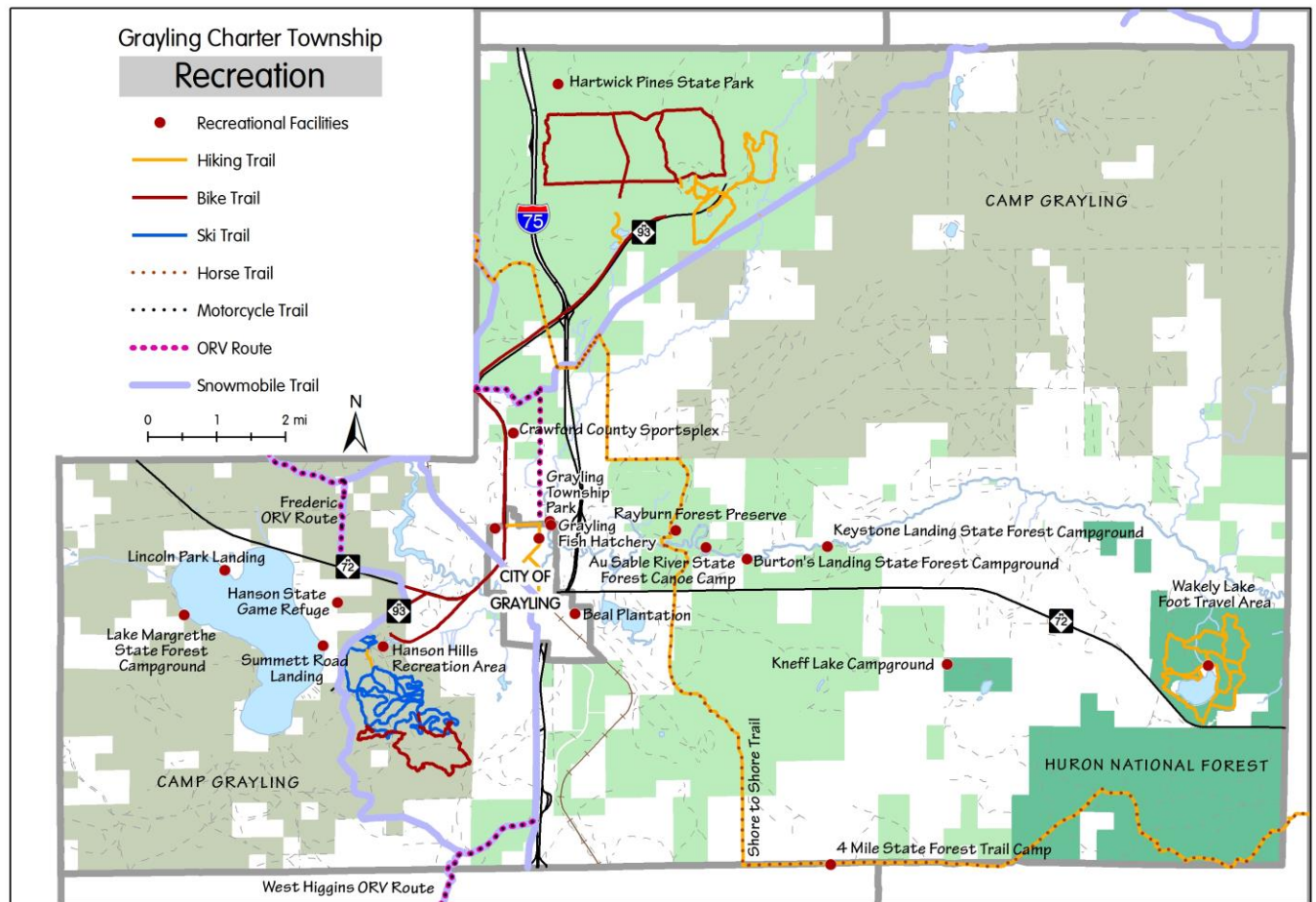
North Central Community Mental Health provides support services to developmentally disabled persons as well as persons needing mental health services. The North Central Community Mental Health service area covers Crawford and Roscommon Counties.

Troop Medical Clinic located within Camp Grayling addresses troop related medical issues. The Clinic has minimal staff much of the year and is only fully staffed during troop training.

Recreational Facilities

The abundance of natural resources combined with four seasons provide an ever-changing backdrop for enjoying the outdoors. The variety of recreational facilities along with other publicly owned State Forest lands and campgrounds and privately owned recreation facilities offers a wide range of passive and active recreational opportunities. Specifically owned by Grayling Charter Township is the Fish Hatchery and Nature Park. **Figure 5-3** shows all recreational facilities that are located within Grayling Charter Township. A segment of the Shore to Shore Trail, a hiking and equestrian trail that connects Lake Huron to Lake Michigan, traverses the township. In addition, many hiking, biking, snowmobile and ORV trails can be found in the township.

Figure 5-3



Chapter 6

Natural Resources

6

The woodlands, open spaces, wildlife, water, and rolling hills are several key resource values that draw people to both recreate and live in the County. Abundant public lands offer access to thousands of acres of recreational lands for hunting, hiking, wildlife viewing and snowmobiling. Lakes, creeks and streams, especially the Manistee and Au Sable Rivers provide opportunities for fishing, boating and water sports. Special recreation areas such as the Mason Tract are additional draws to the County.

A rural landscape, abounding with views of forestlands and wetlands, typifies the community character of Crawford County. Forestlands are important to the local economy; recreational use and production of forest goods bring dollars into the Community. Many long time visitors decide to move to the area upon retirement. These renewable yet priceless resources warrant special considerations when planning for future growth.

The protection and wise use of these natural resources are central to maintaining a sustainable community. Along with planning for the built-up infrastructure like roads and utilities, a community needs to plan for the green infrastructure; the forests, wetlands, farmland and water. Development, without consideration of carrying capacity of the land, can have long term negative impacts on the resources. When planning for future growth, the community must identify environmental constraints, such as wetlands, steeply sloped areas, ecological corridors and ground water recharge zones. This chapter will analyze the physical environment to assist local officials in developing a desired future of the County. Natural resources addressed include climate, geology, topography, soils, water, vegetation and wildlife.

Climate

The climate is yet another reason why people are drawn to the area. Typical of northern Michigan, the distinct four seasons offer an ever-changing landscape. Long snowy, cold winters; and moderately warm summers are separated by a cool, green spring and a cool colorful fall. Located in the north central part of the northern lower peninsula, Crawford County is approximately 35 miles inland from Lake Michigan and 55 miles inland from Lake Huron. Given this geographic location, with the exception of lake effect snowfall, the weather is not significantly influenced by the lake moderating effect of both Great Lakes.

Table 6.1 shows the average temperature and precipitation by month calculated over a 30-year period. Moderately warm temperatures dominate summers. The warmest days occur in the month of July and between the years of 1981-2010, there was an average of six days per year that exceeded the 90-degree mark. There were no temperatures over 100 degrees in the 30-year period and temperatures in the high 80's have occurred as early as April and as late as October. Normal temperatures for the area range from the high 70's to the low in the high 40's in the summer and from the high 20's to single digits in the winter. The following temperature extremes for the station in Crawford County are: maximum, 104 F, recorded July 11, 1936; minimum, -45 F, recorded February 3, 1898; warmest monthly mean, 75.5 F recorded in July of 1921; and coldest monthly mean, 4.4 F was recorded February 1904.

**Table 6-1
Temperature and Precipitation Summary 1981-2010**

Period	Temperature Averages (Degrees Fahrenheit)			Precipitation Averages (Inches)	
	Maximum	Min	Mean	Precipitation	Snow
January	25.8	7.9	16.8	1.71	30.1
February	28.8	8.0	18.4	1.30	20.7
March	38.8	15.4	27.1	1.72	14.7
April	53.4	28.8	41.1	2.77	4.6
May	66.0	39.3	52.7	3.27	0.8
June	75.8	49.2	62.5	3.69	0.0
July	79.8	53.9	66.8	3.58	0.0
August	77.6	51.9	64.7	3.68	0.0
September	69.5	43.7	56.6	3.75	0.0
October	56.0	33.9	45.0	3.77	3.4
November	42.4	25.3	33.8	2.61	12.6
December	30.5	15.6	23.1	1.76	26.5
Annually	53.7	31.1	42.4	33.62	108.0

Source: Midwestern Regional Climate Center, Champaign IL, Station 203391 Grayling MI

In the summer, precipitation comes mainly in the form of afternoon showers and thundershowers. Most precipitation occurs in the months of April-October, which received an average of 24.51 inches or 73 percent of the average annual total for the 1981-2010 period. During this same period the average wettest month was October that averaged 3.77 inches, while the average driest month was February which averaged 1.30 inches. The average seasonal snowfall was 108 inches.

During the 1971–2000 period, 123 days per season averaged one inch or more of snow on the ground, but varied greatly from season to season. The greatest one-day precipitation total was 5.02 inches, recorded August 8-9, 1965; greatest monthly total, 12.51 inches, recorded September 1986. The least monthly total, 0.00 inches, was recorded April 1889. Soil moisture replenishment during the fall and winter months plays an important role in the success of agriculture for this area. While drought occurs periodically, the Palmer Drought Index indicated drought conditions reached extreme severity only two percent of the time.

Based on the 1971-2000 period, the average date of the last freezing temperature in the spring was May 30, while the average date of the first freezing temperature in the fall was September 17. The freeze-free period, or growing season, averaged 110 days annually.

Geology

The rolling hills, river valleys, swamps and lakes were created by glacial activity as the last continental glacier left the landscape some 12,000 years ago. Beneath a thick mantle of the glacial deposits lays a foundation of layered sedimentary bedrock. This section will describe the glacial landforms or quaternary geology and the underlying bedrock geology.

Starting some 2 million years ago, during the Pleistocene era, continental glaciers formed in the Hudson Bay area. Several times, over this two million year period, the massive sheets of ice built up and inched their way south across what is today Michigan. The massive ice sheets, more than one mile thick, advanced in a southerly direction, bulldozing their way across the landscape. The glacier pushed material in front of it,

incorporated rocks and soil into the debris laden ice; and scraped, ground, and broke apart the sedimentary bedrock of the Michigan Basin.

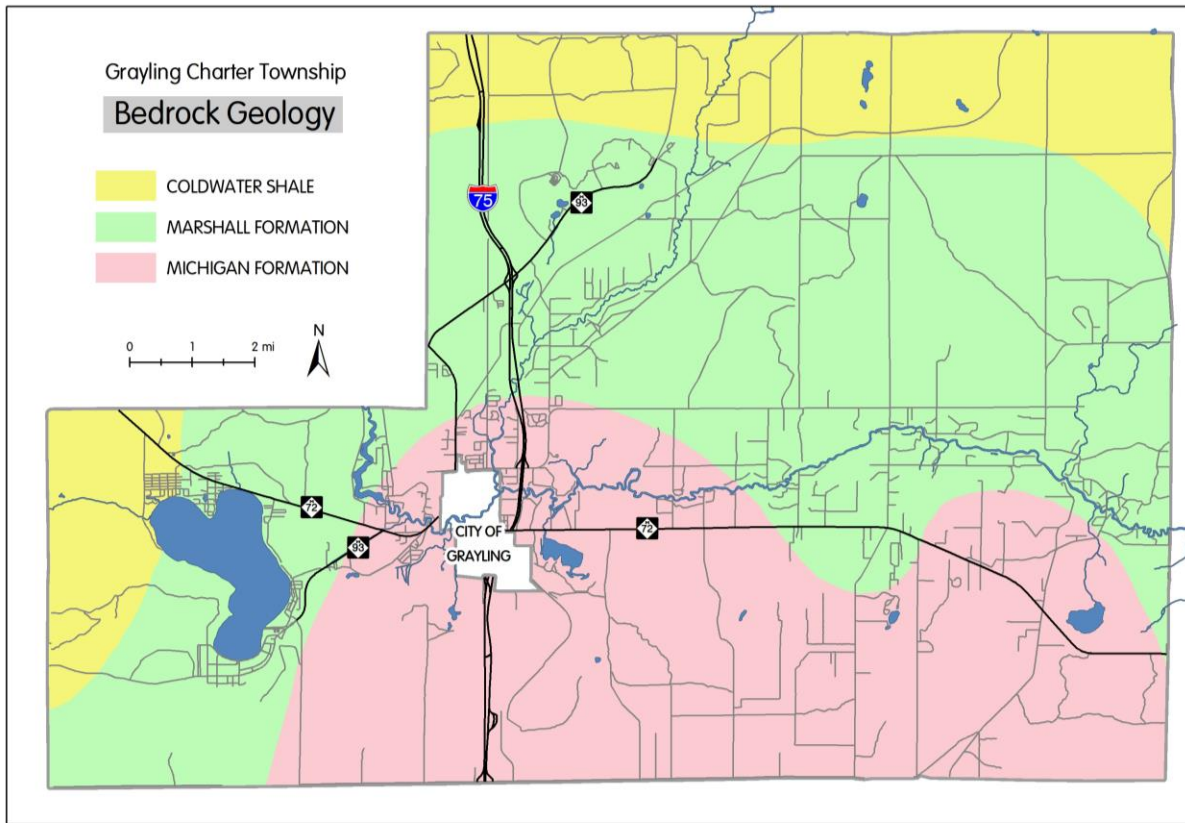
Each advance and retreat of the continental glaciers took tens of thousands of years. This reoccurring process shaped and reshaped the land; obliterating and then creating hills, valleys, rivers and lakes, swamps and marshes. The last glacial period, called the Wisconsin era, created the landscape we know today. The glacier left behind boulders, rocks, cobble, sand, gravel, silt, clay and loam. In some areas, the material was deposited in unsorted masses called till plains, ground moraines and end moraines. Water flowing from the melting glaciers also sorted materials, creating outwash channels, sand deltas, kames and eskers. Fine materials, captured in the fast moving glacial meltwater, settled to the bottom of expansive glacial lakes creating lacustrine clay and silt plains.

According to the USDA Crawford County Soil Survey, the county has three main physiographic regions. The northwestern and north-central parts of the County are characterized by a series of four high plateau-like remnant moraines that were dissected by glacial meltwater. The remnant moraine landforms have a north-south linear orientation and are referred to as the Grayling fingers. The second landform region is located in the central and northeastern parts of the county. These areas are characterized by nearly level to gently sloping outwash plains. The mainstream and north branch of the Au Sable River are located in this region. The streams have cut shallow valleys in the outwash materials. The third landform region, located in the south part of the County, consists of a nearly level to gently sloping plain that is interrupted by a series of high kame moraines. Much of the gently sloping plain is over washed with sand. The kame moraines have a general east-west orientation. Some of the highest elevations in the county are found on these kames. There are several small postglacial lake plains, dominated by loam and clay, in the County.

At the front of the massive retreating glaciers, large streams originated from the melting ice. The debris laden water carved through moraines creating wide drainageways and outwash channels. The Au Sable River and Manistee River further to the west are located in the glacial drainageways. These areas are dominated by sands and organic muck soils. As the continental glaciers melted, huge blocks of ice became separated from the retreating ice front. The ice blocks became embedded in the glacial debris deposited by the retreating glacier. The embedded ice blocks eventually melted and left depressions (kettle holes) which are today's inland lakes, associated wetlands and bogs.

Beneath the glacial deposits, some 200 to 300 feet below the surface, is sedimentary bedrock that was created during the Late Mississippian ages of the Paleozoic Era. The bedrock was formed in ancient seas, which covered the area some 310 - 345 million years ago. The shallow marine seas deposited layers of silt, clay, sediments, marine animals, plants, coral, and other calcareous materials. These deposits formed shale, sandstone and limestone bedrock. According to the 1987 Bedrock Geology of Northern Michigan map, prepared by the Geological Survey Division of the Michigan Department of Environmental Quality, the upper layer of bedrock is Coldwater shale. Other bedrock formations beneath the glacial overburden include the Michigan Formation and Marshall Formation (**Figure 6-1**). Natural gas deposits have been discovered in the Michigan and Marshal formation.

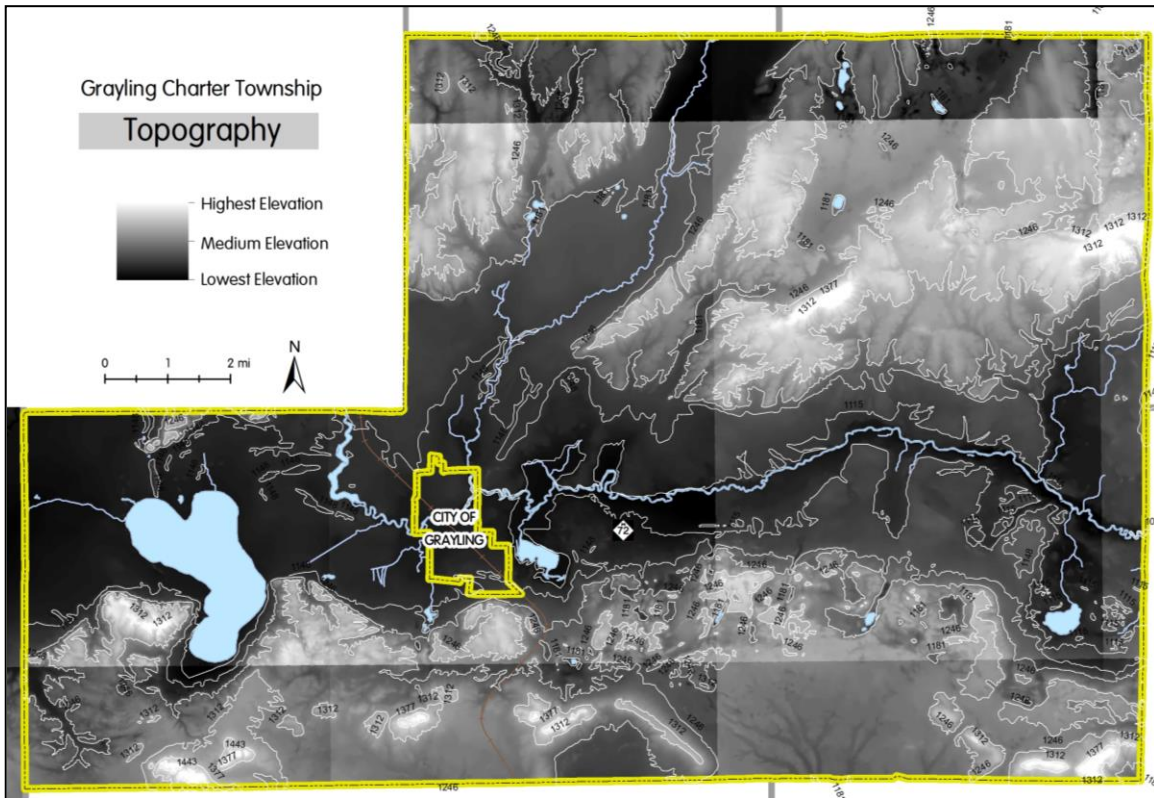
Figure 6-1



Topography

As shown in **Figure 6-2**, most of the county is nearly level or gently rolling. Local differences in elevation are slight, in a few places exceeding 100 feet, although the hills and plateau-like ridges appear to rise above adjacent sand plains when viewed from a distance. Slopes of hilly land are both long and expansive or, where the relief is choppy, smooth and rounded. There are no steep slopes except along watercourses. The northern part of the county consists of three broad highland plateaus, having a general north-south direction, three complementary broad sand valleys, and a wide sandy plain on the east. The central part, from eastern to western boundaries, is a wide level sand plain through which the AuSable River and its tributaries have cut valleys. Several detached swells or ridges, irregular in outline but having general east to west trends, characterize the southern part of the county. Here the general relief is gently rolling or moderately hilly. Level sand plain and swamps intervene between masses of higher land. The highest elevation, ranging from 1,300 to 1,480 feet above sea level, can be found on kame moraines in the southeastern parts of the county. The lowest elevation of 1,010 feet above sea level, noted on USGS quadrangle maps, is located in the eastern edge of the County where the main branch of the Au Sable River flows into Oscoda County. The highest elevation in Grayling Charter Township is south of Lake Margrethe where the land peaks at 1,443 feet.

Figure 6-2



Soils

The soils of Crawford County are generally sandy with low fertility and low moisture-holding capacity. Few loamy soils are found in the northwest portion of the county. Portions of the county have building limitations due to poor filtration of septic effluents. The two predominant soil associations in Crawford County are: Grayling-Rubicon (nearly level to undulating, well drained sandy soils on outwash plains); and Grayling-Graycalm- Montcalm (rolling to hilly, well-drained sandy soils, on uplands). Found in the northwest portion of the county are significant beds of a third association, Kalkaska-Blue Lake (sloping to steep, well-drained sandy soils, on the side of ridges and escarpment-like features enclosing upland valleys).

When planning for types and intensity of land uses, soil types and slopes are two important factors that determine the carrying capacity of land. The construction of roads, buildings and septic systems on steeply sloped areas or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

The Natural Resource Conservation Service completed a detailed soil survey of Crawford County. A digital version of the soil survey maps was acquired from the Michigan Department of Natural Resources, MIRIS program. Using information contained within the published soil survey book, a series of maps are presented that depict hydric soils, steep slopes, soils with building limitations and soils with septic system limitations.

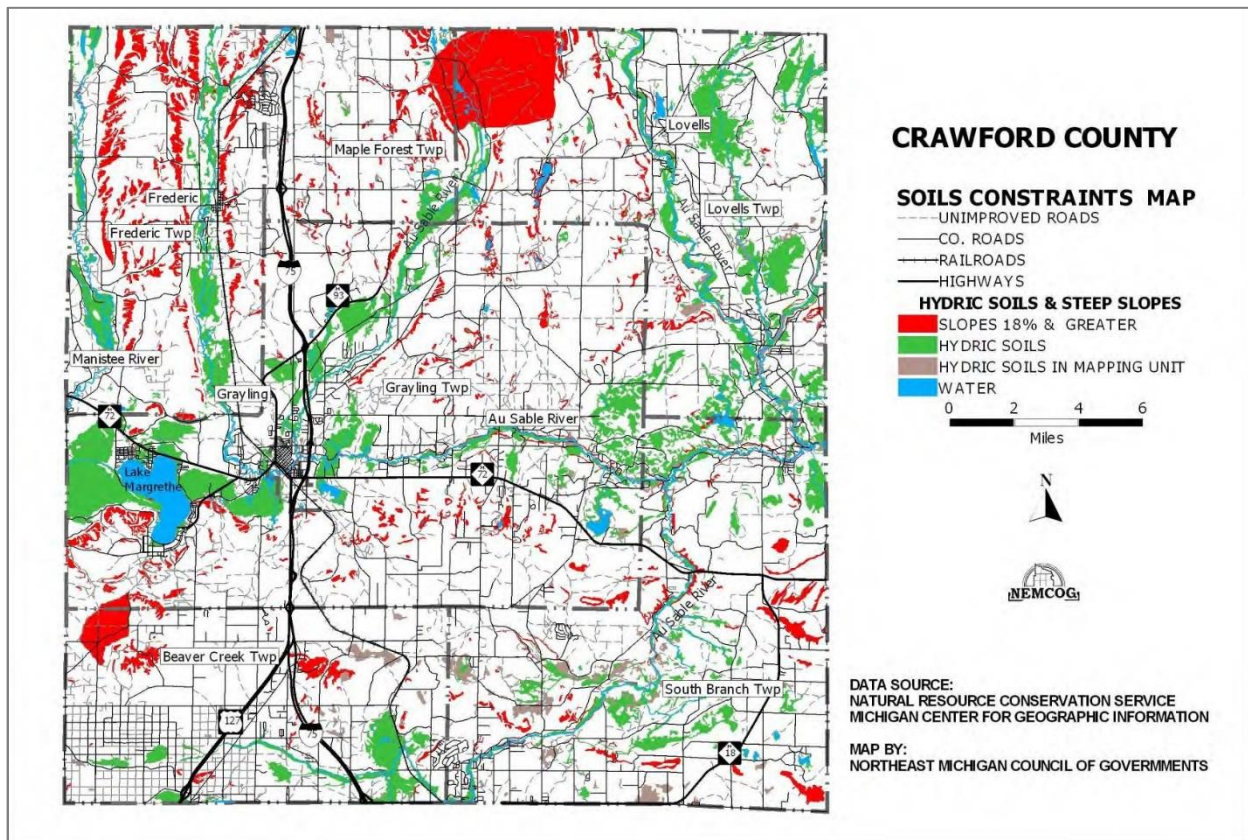
Hydric Soils and Steeply Sloped Areas

Figure 6-3 shows hydric soils and soils on steep slopes. Lower density and less intensive development should be directed to these areas with severe building constraints. Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. Hydric soils have poor potential for building site development and sanitary facilities. Wetness and frequent ponding are severe problems that are difficult and costly to overcome. Sites with high water tables may be classified as wetlands and a wetlands permit would be required to develop these areas.

The hydric soils are mainly located adjacent to streams and lakes. Hydric soils are typically drained by creeks and streams that in turn empty in the major rivers. This connectivity of riparian wetlands and surface water features can be seen throughout the landscape.

Hills and steeply rolling terrain may provide opportunities for spectacular views of the landscape. However, steeply sloped sites have severe building constraints, are more difficult and costly to develop. Maintenance costs tend to be higher on steeply sloped terrain. Special design standards such as erosion control measures, limiting size of disturbed areas, retaining natural vegetation, revegetation, slope stabilization and on-site retention of water run-off from impervious surfaces would all serve to minimize resource impacts. According to information presented in the Crawford County Soil Survey areas with slopes 18 percent and greater are minimal. Of greatest concern are steeply sloping hillsides adjacent waterways. Steeply slopes areas are depicted in red on **Figure 6-3**. Note the large area mapped as steep slopes in the northern part of the county. This anomaly is related to the bombing range of Camp Grayling.

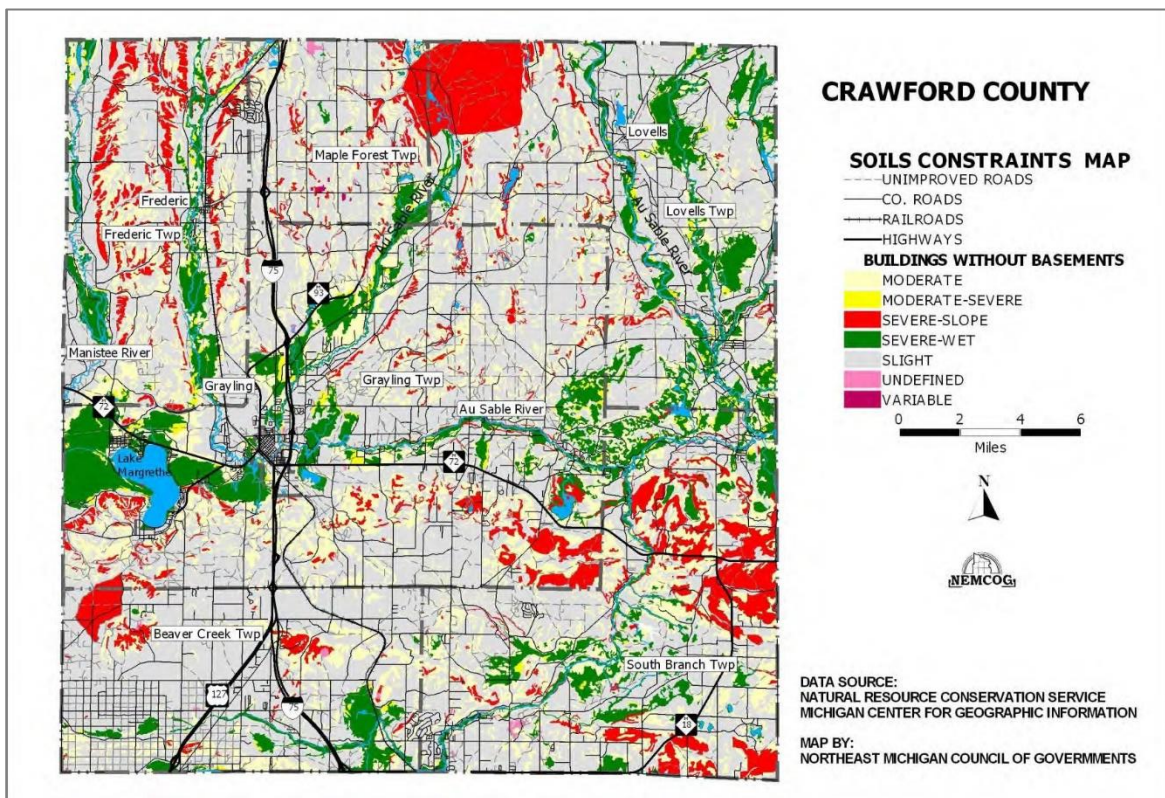
Figure 6-3



Building Site Development

The USDA soil survey of Crawford County rates soils for various uses such as building site development and identifies the limiting factors such as steep slopes or high water table. The rating system is slight, moderate and severe limitations. Using the rating system developed by USDA, soil limitations for buildings without basements have been mapped and are displayed in **Figure 6-4**. Areas with well drained soils and slopes less than 10 percent tend to have slight limitations for building development. Areas with steep slopes, high water tables and organic soils have severe limitations. Lands with severe constraints are scattered throughout the County, but tend to be more prevalent near streams and in the northeast and southeast parts of the county. Due to the prevalence of sandy soils in Crawford County large areas have slight to moderate limitations for buildings.

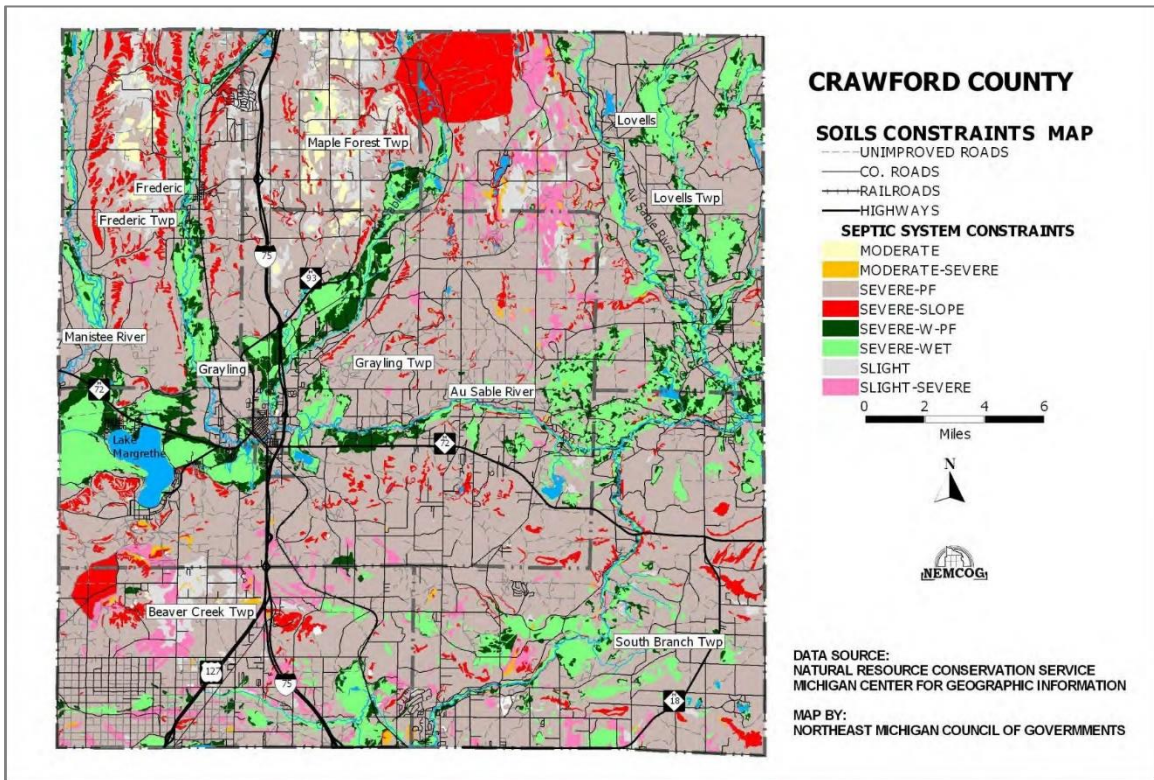
Figure 6-4



Septic Systems

Using a computer mapping system soils maps have been color coded to show areas with slight to severe septic system limitations as defined by the USDA Natural Resource Conservation Service. Criteria include depth to water table, wetness, filtering capacity and ability to perc water. **Figure 6-5** is a septic system limitations map. Much of the County is classified as having severe limitations. Clearly the greatest limiting factor is the prevalence of sandy soils with severe limitations due to poor filtration of septic effluents. This is a critical issue when the water table is close to the surface or when high density development occurs. Limiting types and density of development or making public water and sewer available for high density development are likely the best options for protecting the groundwater resources.

Figure 6-5



Forests

A large amount of land in Crawford County is in public ownership in the form of the Huron National Forest and the Au Sable State Forest. According to 2001 statistics from the U.S. Forest Service, Crawford County has a total land area of 364,347 acres. Forestland totals 324,274 acres (approximately 90 percent of the county's total land area). 36,183 acres are classified as nonforest, while 5,186 acres are classified as water.

Table 6-2 shows that the major forest species found in the county are Jack Pine (27%), Oak/Hickory Group (23%) and Aspen (21%). The Maple/Beech/Birch Group totals 12 percent. A small amount of forestland is comprised of Black Spruce (6%), Balsam Fir (4%), and Red Pine (4%). Smaller acreage of Eastern White Pine, White Spruce, Northern White Cedar, White Pine/Red Oak/White Ash, and Paper Birch are also present. **Figure 6-6** shows the forest cover types on state forest land. The abundance of Jack Pine and Oak forests dramatically increase the wildfire hazard for Crawford County. **Figure 6-7** shows wildfire risk areas overlaid with zoning districts (generalized) in Grayling Charter Township. More information on wildlife risk in Crawford County can be found in the Crawford County Wildfire Plan.

The majority of forestland in the county is in public ownership - 52 percent state owned and 16 percent federally owned. Most of these lands are managed under a multi-use concept, which is directed toward recreation. The use of military forestland is not geared toward commercial forest production. Some areas have been determined as refuge areas for the endangered Kirtland's Warbler. The next largest ownership class is in individual ownership 32 percent.

Table 6-2
Crawford County – Acres of Timberland by Forest & Ownership Type

	National Forest	State	Private	Total	Percent
Jack Pine	25936.6	39744.8	22953.5	88634.9	27.3%
Red Pine		11318.4		11318.4	3.5%
Eastern White Pine	1459.8			1459.8	0.5%
Balsam Fir	5839.0	1296.5	4382.2	11517.7	3.6%
White Spruce	1459.8			1459.8	0.5%
Black Spruce		10372.0	9169.0	19541.0	6.0%
Northern White Cedar			2593.0	2593.0	0.8%
Oak/Pine Group		1491.4		1491.4	0.5%
White Pine / Red Oak / White Ash			739.0	739.0	0.2%
Oak / Hickory Group	5839.0	32433.9	37194.1	75467.0	23.3%
Maple / Beech / Birch Group	4379.3	24908.3	10188.0	39475.6	12.2%
Aspen	6331.7	46127.0	15558.0	68016.7	21.0%
Paper Birch			1263.1	1263.1	0.4%
Non-stocked		1296.5		1296.5	0.4%
Total	51,245.2	168,988.8	104,039.9	324273.9	

Source: U.S. Forest Service 2001

Figure 6-6

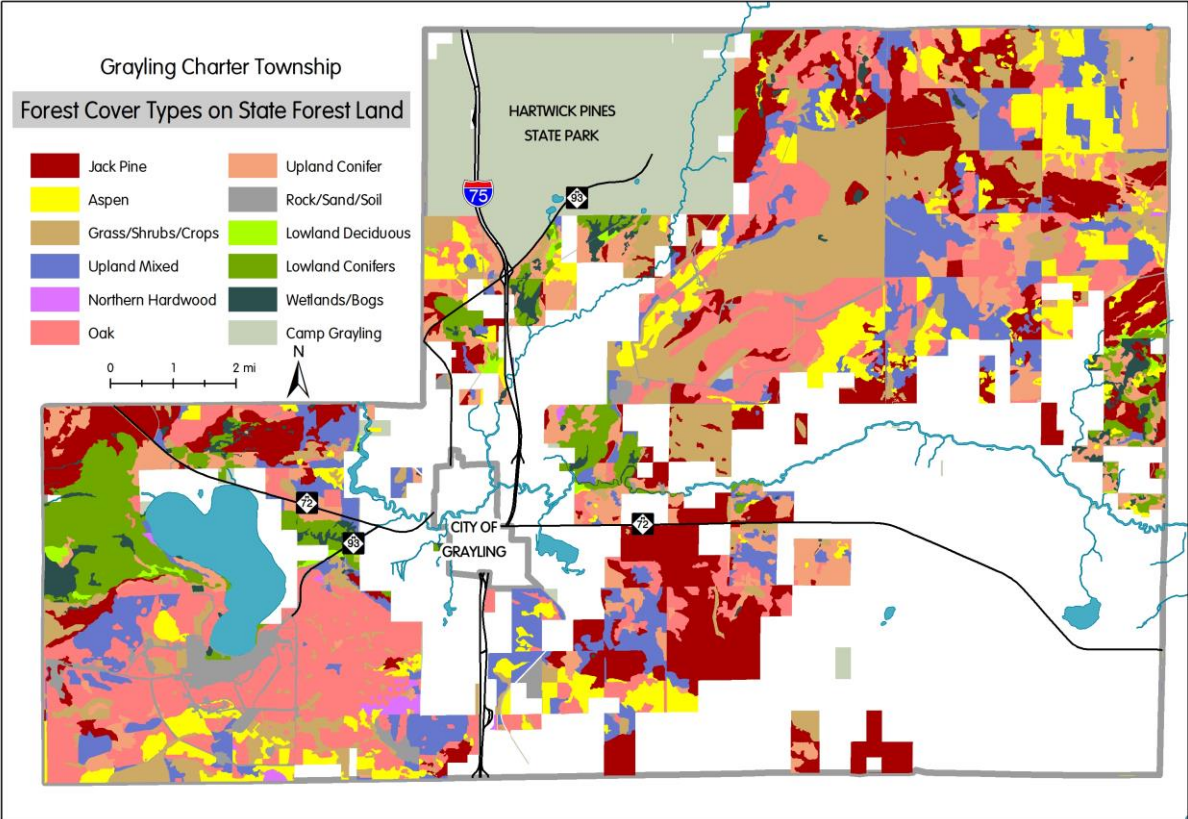
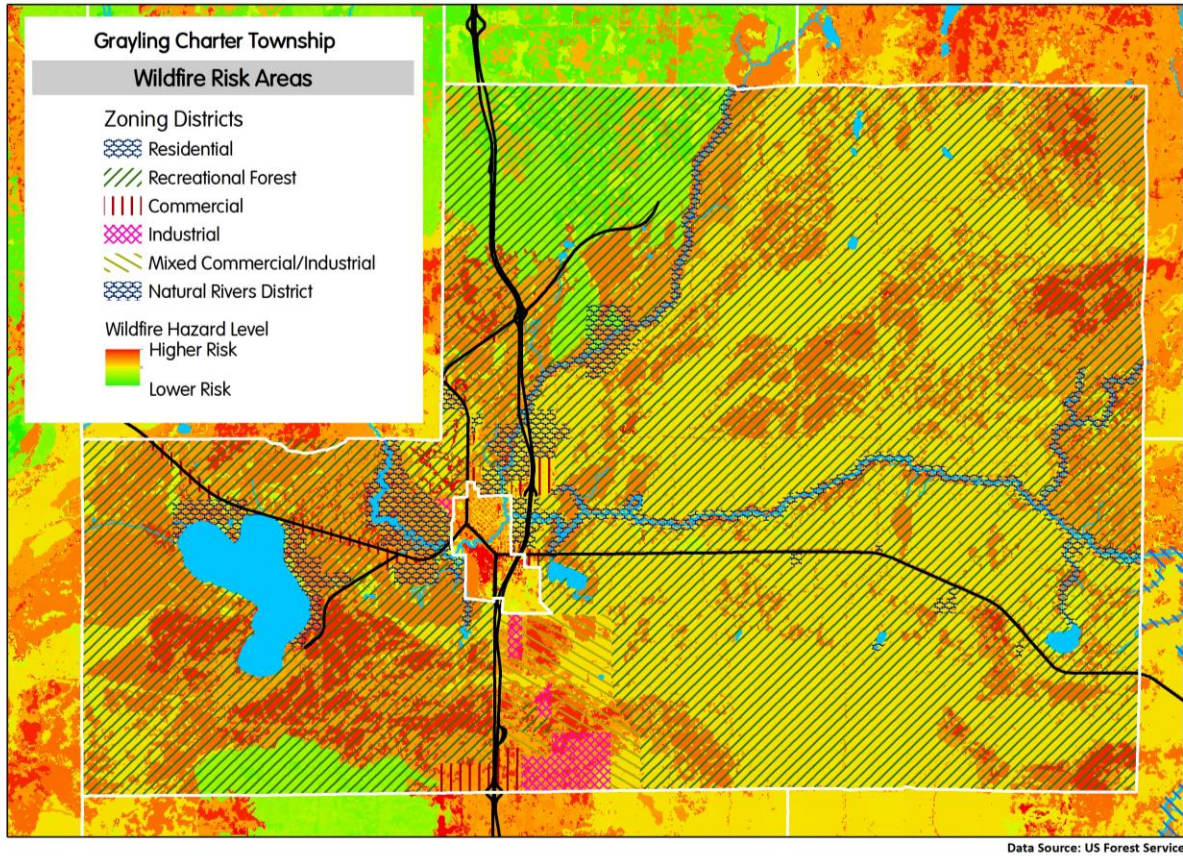


Figure 6-7

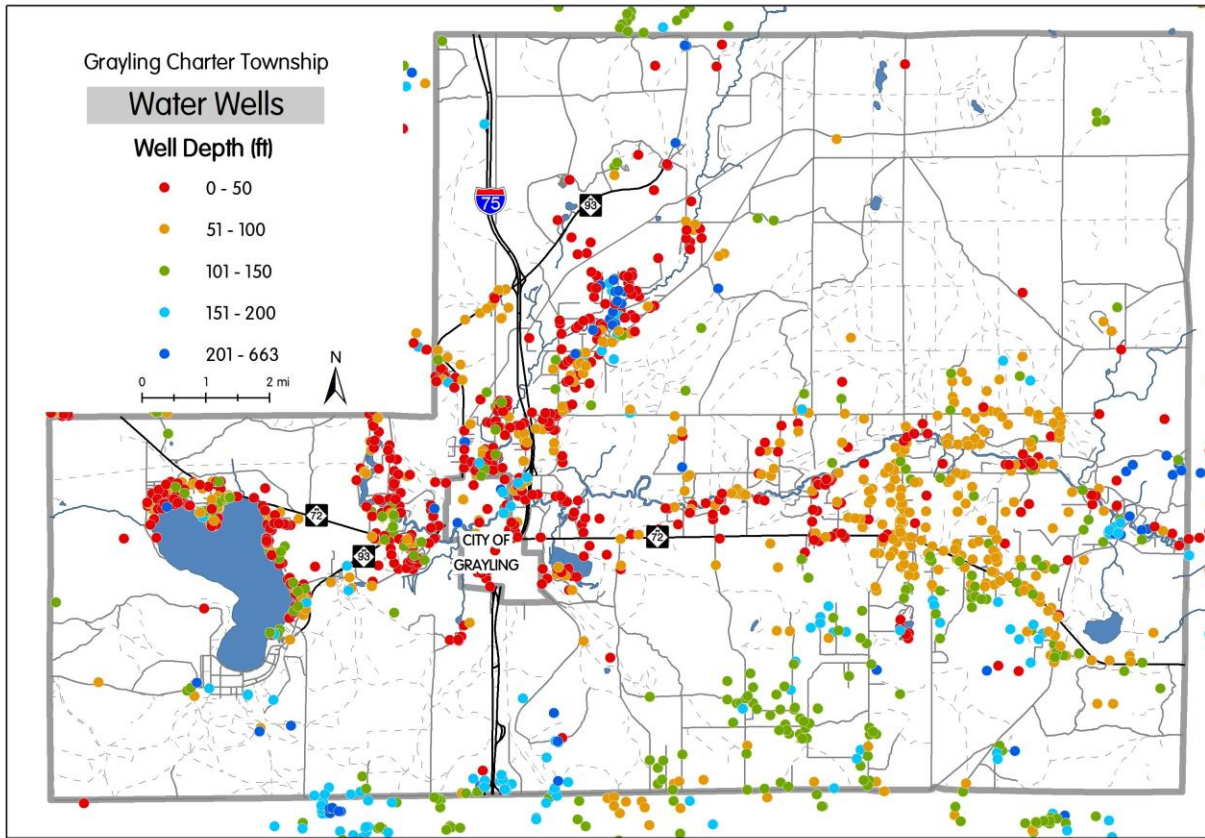


Water Resources

Groundwater

Groundwater can be found in the deep glacial deposits of sand and gravel throughout the county. The availability of groundwater appears consistently good, ranging from 400 to 500 gallons per minute from wells ten inches in diameter. Ground water provides the only source of potable water for the county. Because of the deep sand and gravel underlying the county, the aquifer is quite vulnerable to contamination from surface and subsurface discharges. **Figure 6-8** shows the depth of water wells in Grayling Charter Township

Figure 6-8

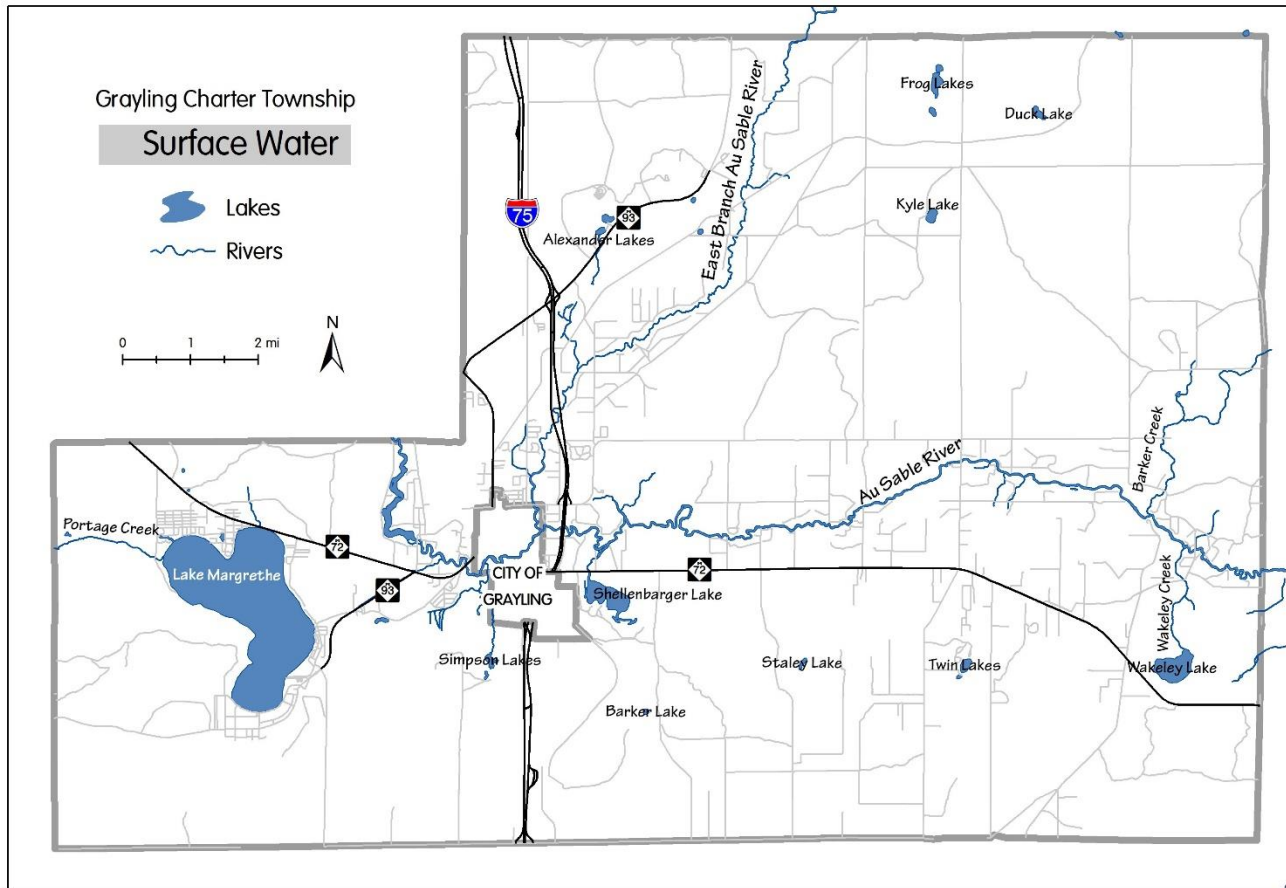


Surface Water

Grayling Charter Township has an abundance of surface water (**Figure 6-9**). The largest body of is Lake Margrethe with a surface area of 1,928 acres, an average depth of 16 feet, and a maximum depth of 65 feet. The lakes and streams in Grayling Charter Township and Crawford County are popular tourist attractions and are heavily used in the summer and winter months. Canoeing and fishing are very popular on the rivers, with swimming and boating being popular on the larger lakes.

The Au Sable River watershed drains approximately 1,932 square miles within portions eight counties. The main branch enters Crawford County in the northwest corner and flows out of the southeast corner. An eight mile stretch of the Main Branch of the Au Sable, east of Grayling, from Burton's Landing downstream to Wakely Bridge, is designated flies-only, no-kill water. This segment is known as "the Holy Water." The East Branch, North Branch and South Branch all flow into the Crawford County and empty into the main stream as it traverses the County. The Au Sable is rated as a "Blue-Ribbon" trout stream and is designated as a Michigan Natural River. Since 1947, the Au Sable River Canoe Marathon, a yearly 120 mile (190 km) pro-am canoe race, runs the river from Grayling to Oscoda.

Figure 6-9



PFAS/PFOA

Contamination of groundwater and drinking water from wells from perfluoroalkyl and polyfluoroalkyl substances (PFAs, also known as PFCs), is an environmental concern for Camp Grayling and the surrounding community. The principal contamination source in the Camp Grayling area is considered to be perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) contamination from use of now discontinued aqueous film forming foam (AFFF) fire suppressants. On the national level, PFA/PFC compounds are emerging unregulated contaminants of concern with suspected but largely unknown negative human health effects.

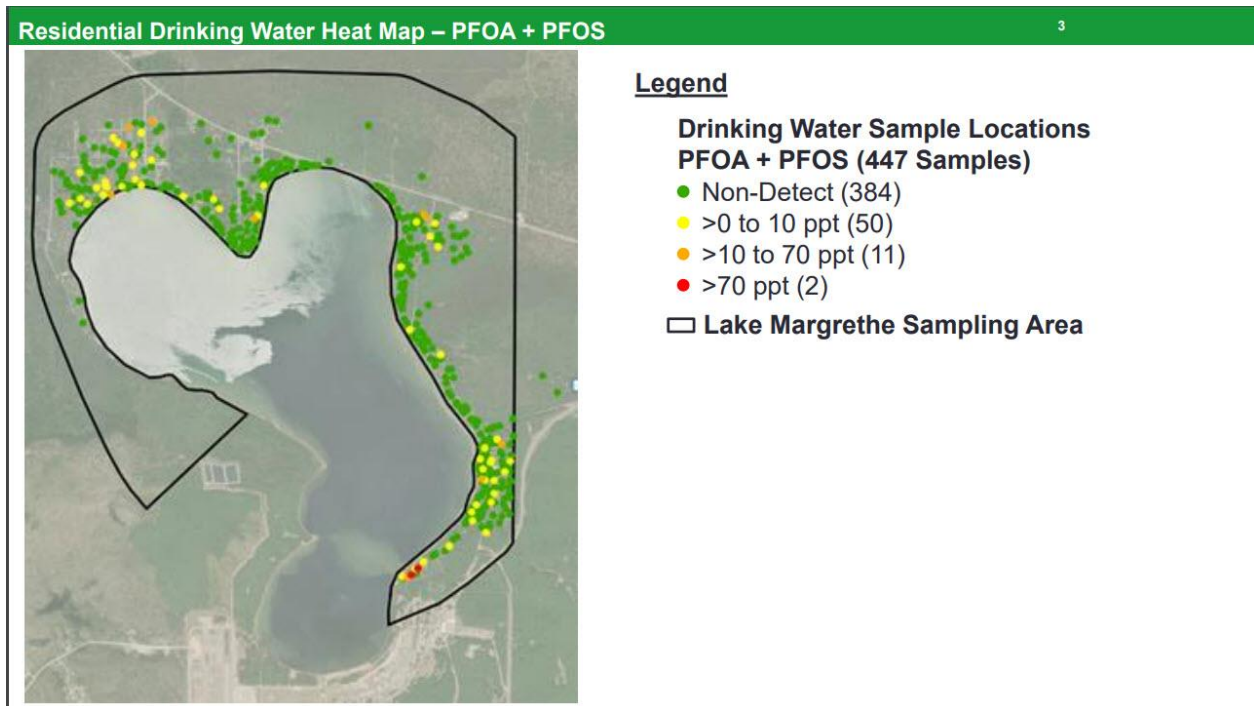
Information about the contaminants, forms to request well testing, and options for homeowners whose wells have been found to contain the substances, may be found on the state web site: <https://www.michigan.gov/pfasresponse>. PFAS reports are routinely given to the Camp Grayling Restoration Advisory Board - a stakeholder group that meets regularly to discuss environmental restoration.

The following PFAS sites in Crawford County are listed on the PFAS Response Website:

Camp Grayling – Lake Margrethe

This site area is residential and recreational, with the Camp Grayling Joint Maneuvering Training Center on the south end of the lake (Figure 6-10). A sampling program involved residential wells, groundwater, and surface water. Round 1 of residential well sampling is nearing completion. Households with detections have been provided filters and replacement cartridges by District Health Department #10. AECOM is continuing to monitor new residential well sampling requests and will prepare a Phase II Remedial Investigation Report.

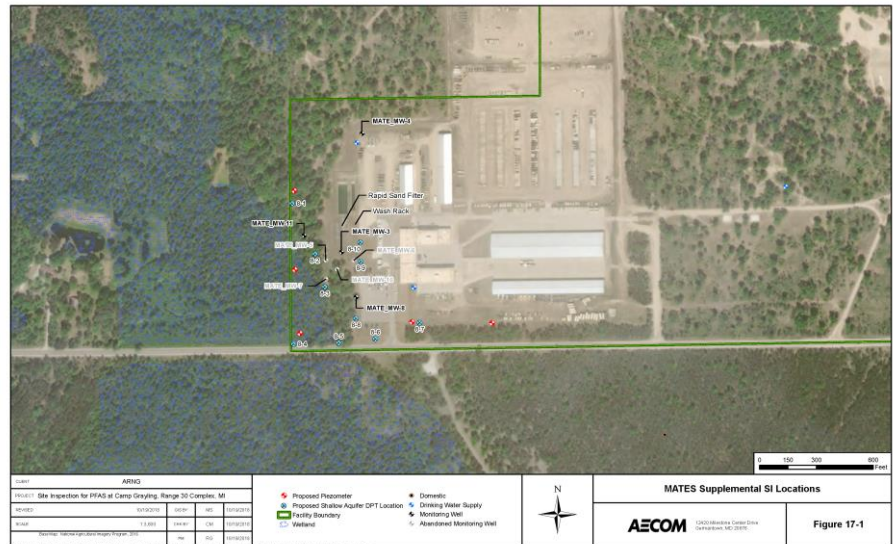
Figure 6-10



Camp Grayling – MATES at Range 30

The Camp Grayling – Maneuver Area Training Equipment Site (MATES) at Range 30 is located approximately 2.5 miles northeast of downtown Grayling and is part of the 147,000-acre Camp Grayling property (Figure 6-11). The official address is 2450 W. North Down River Road. According to the Army National Guard (ARNG), the Preliminary Assessment Report and associated interviews did not identify any releases of Aqueous Film Forming Foam (AFFF) at the MATES facility, therefore no timeframes or quantities can be determined.

Figure 6-11

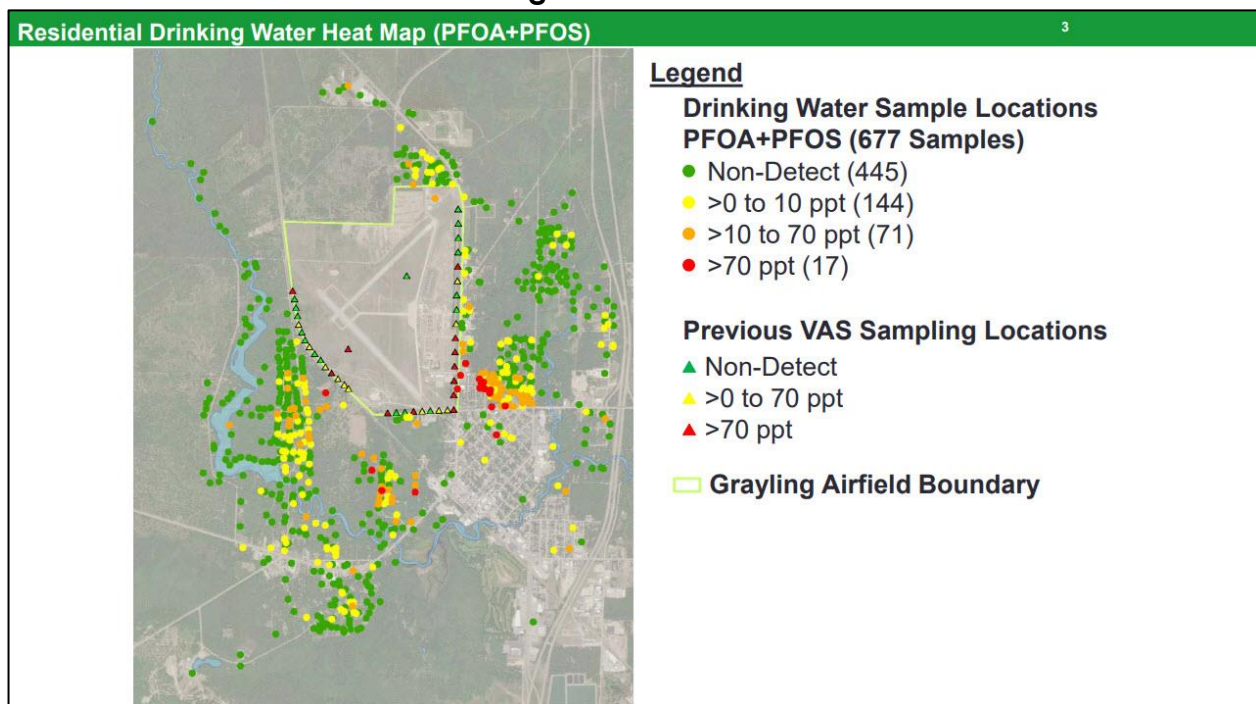


The site has 12 previously existing monitoring wells that were sampled for PFAS in August 2018 by the ARNG. A total of 23 private residential drinking water wells (closest receptors near the MATES facility) were sampled between November 8, 2018 and February 28, 2019. To date, results from all 23 residential well samples have been received. To date, residential well results indicate no exceedances of the USEPA Lifetime Health Advisory (LHA) level of 70 ppt PFOS+PFOA. Groundwater flow is generally south to southeast towards the Au Sable River, located one mile south of the MATES facility.

Grayling Army Airfield

Grayling Army Airfield is a 923-acre area owned by the United States Army where aqueous film forming foam (AFFF) was used and stored (**Figure 6-12**). The area is just outside the northern boundary of Grayling and is surrounded by residential and commercial properties. In May 2017, the MDMVA notified the Michigan Department of Environment, Great Lakes, and Energy (EGLE) that groundwater samples on the Grayling Army Airfield tested positive for PFOA/PFOS. Households with detections of PFAS have been provided point of use filters and replacement cartridges by District Health Department #10. All residential well testing has been conducted by EGLE. DHHS is nearing completion of round 1 of residential resampling. They are compiling data and will be sending out results letters. EGLE will continue to monitor new residential sampling requests and call residents to set up sampling dates and times. AECOM will prepare a Phase II Remedial Investigation Report.

Figure 6-12



Grayling Wastewater Treatment Facility Discharge Fields Grayling

The city of Grayling operates the Grayling Wastewater Treatment Facility (WWTF). The WWTF is an approximately 35-acre wastewater treatment system that went into operation in 1990. The WWTF includes 5 wastewater lagoons that are lined with a PVC membrane and underlain by geosynthetic clay liner. The wastewater lagoons discharge to irrigation fields approximately 145 acres in area and three-quarters of a mile east of the WWTF at the south end of Industrial Street. The irrigation fields have monitoring wells that are sampled biannually in accordance with the groundwater discharge permit issued by EGLE's Water Resources Division (WRD). The results of the analyses are submitted to WRD as required. Historically, analyses required by the groundwater discharge permit have not included PFAS.

On June 11, 2020, at the request of EGLE's Remediation and Redevelopment Division (RRD), the city of Grayling allowed EGLE contractors to sample the groundwater using two of the WWTF's monitoring wells at the northern end of the irrigation fields. RRD's request was based upon recent reports of foam on Shellenbarger Lake and the possibility that Grayling Army Airfield (MPART site) contamination was making its way into the sanitary system.

The sampling results identified PFOA, PFOS, and other PFAS compounds in the two groundwater monitoring wells. PFOA and PFOS were identified at concentrations exceeding newly adopted Part 201 Drinking Water Cleanup Criteria for PFOA and PFOS at 8 ppt and 16 ppt, respectively.

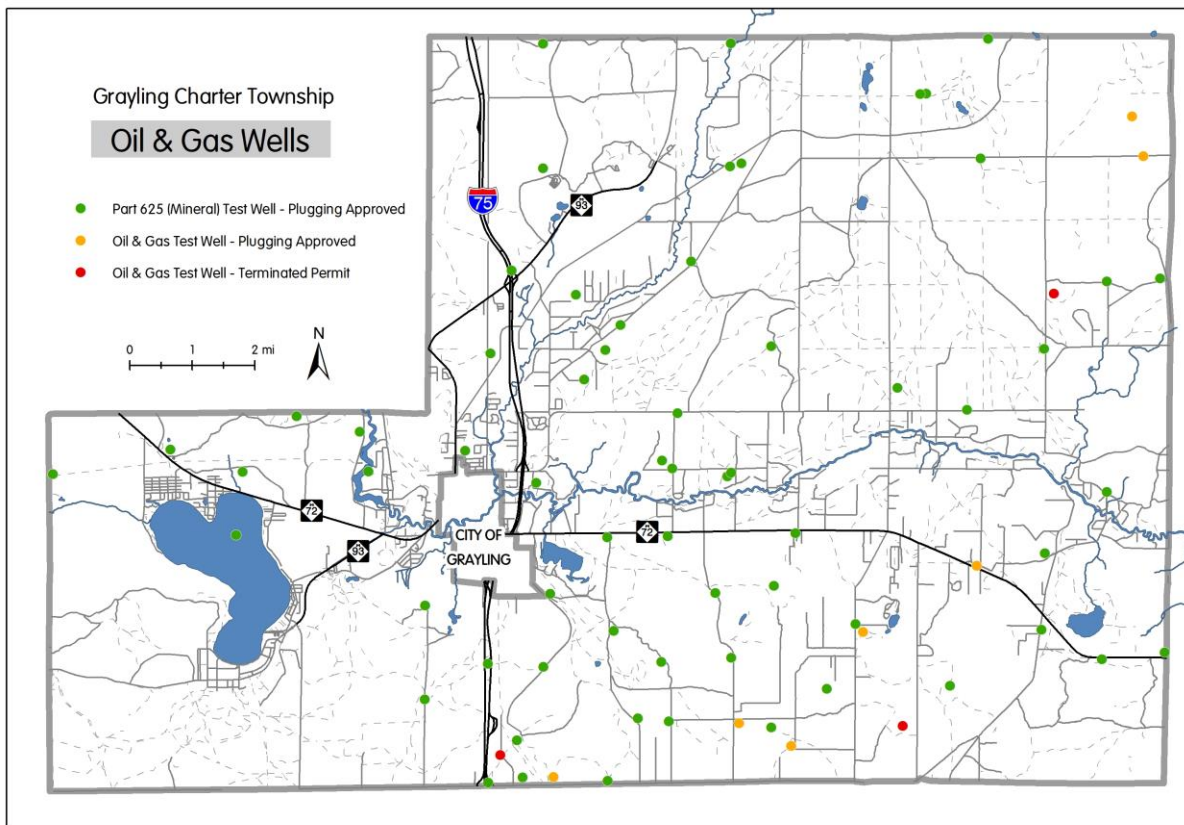
Shallow groundwater flows to the north toward Shellenbarger Lake, while the deeper groundwater aquifer is estimated to flow in a more northeasterly direction. EGLE is working with the city of Grayling Department of Public Works to identify potential sources in the sanitary sewer system and to identify receptors downgradient of the discharge fields.

EGLE representatives and the city of Grayling are in the process of developing a sanitary sewer sampling plan to identify source(s) of PFAS contamination. Sampling is expected to begin in the fall of 2020. EGLE will continue to work with Michigan Department of Health and Human Services and the local health department as data is received to determine if additional residential wells need to be sampled.

Oil & Gas Wells

Figure 6-13 shows the current wells in Grayling Charter Township (source: Michigan Department of Environment, Great Lakes and Energy). The majority of wells records show a status of "plugging approved."

Figure 6-13



Chapter 7

Plan Adoption & Implementation

Master Plan Adoption

Draft Plan Circulated for Comments

Following the Board's approval for distribution the proposed plan was distributed on September 23, 2021, for review and comment. The plan was distributed to the following:

1. *Crawford County Planning Commission*
2. *Grayling Township Planning Commission*
3. *Maple Forest Township Planning Commission*
4. *City of Grayling Planning Commission*
5. *Frederic Township Planning Commission*
6. *Beaver Creek Township Planning Commission*
7. *Lovells Township Planning Commission*
8. *South Branch Township Planning Commission*
9. *Kalkaska County Planning Commission*
10. *Bear Lake Township*
11. *Garfield Township*
12. *Otsego County Planning Commission*
13. *Hayes Township*
14. *Otsego Lake Township Planning Commission*
15. *Chester Township Planning Commission*
16. *Michigan Department of Transportation – North Region Office*
17. *Crawford County Road Commission*
18. *Crawford County Transportation Authority*
19. *Lake State Railway*

Public Hearing

A public hearing on the proposed Master Plan, for Grayling Charter Township as required by Public Act 33, of 2008, the Michigan Planning Enabling Act, as amended, was held on December 29, 2021. The legally required public hearing notice was published in the Crawford County Avalanche on December 8, 2021. During the review period, the draft plan was available for review on the Township's website, at the Township office, or by contacting the Grayling Charter Township Clerk. The purpose of the public hearing was to present the proposed Master Plan to accept comments from the public.

Plan Adoption

At a Planning Commission meeting following the public hearing on December 29, 2021, the Planning Commission discussed the comments received. The Planning Commission took action to formally adopt the Grayling Charter Township Master Plan, including all the associated maps by resolution on December 29, 2021. The Township Board formally adopted the plan on January 19, 2022.

Legal Transmittals

Michigan planning law requires that the adopted Master Plan be transmitted to the Township Board, as well as to the communities and agencies that received the review draft. Copies of these transmittal letters appear at the end of this chapter.

Implementation

A Master Plan is developed to provide a vision of the community's future. It is designed to serve as a tool for decision making on future development proposals. A Master Plan will also act as a guide for future public investment and service decisions, such as the local budget, grant applications, road standards development, community group activities, tax incentive decisions, and administration of utilities and services.

Zoning

According to the Michigan Zoning Enabling Act, comprehensive planning is the legal basis for the development of a zoning ordinance. Section 203 of the Act states: "The zoning ordinance shall be based on a plan designed to promote the public health, safety and general welfare, to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, to conserve natural resources and energy, to meet the needs of the state's residents for food, fiber, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land, to insure that uses of the land shall be situated in appropriate locations and relationships, to avoid the overcrowding of population; to provide adequate light and air; to lessen congestion of the public roads and streets, to reduce hazards to life and property; to facilitate adequate provision for a system of transportation, sewage disposal, safe and adequate water supply, education, recreation, and other public requirements, and to conserve the expenditure of funds for public improvements and services to conform with the most advantageous use of land resources, and properties."

The Zoning Ordinance is the most important tool for implementing the Master Plan. Zoning is the authority to regulate use of land by creating land use zones and applying development standards in various zoning districts. Grayling Charter Township is covered by the Grayling Charter Township Zoning Ordinance regulating land use activities.

The first Zoning Ordinance was adopted in 1982 and a subsequent ordinance was adopted on 2011. In 2018-2019, the township completed a comprehensive rewrite of the Zoning Ordinance with the assistance of the Northeast Michigan Council of Governments. The township adopted the new ordinance on January 10, 2019. The most recent Zoning Ordinance should be reviewed periodically to ensure the ordinance is consistent with the goals and the Future Land Use as presented in this Master Plan.

In accordance with the Michigan Planning Enabling Act, **Table 7-1**, shows the relationship between the Future Land Use Categories as described in Chapter 3 and the zoning districts as described and regulated in the Grayling Charter Township Zoning Ordinance.

**Table 7-1
Grayling Charter Township
Future Land Use Categories As Related To Zoning Districts**

Future Land Use	Zoning District	
Recreational Forest	R-F	Recreational Forest District
Low Density Residential	R-1	Single-Family Residential District
Medium & High Density Residential	R-2	General Residential District
	R-3	General Residential Association District
General Commercial	C-1	General Commercial District
Heavy Commercial	C-2	Heavy Commercial District
Airport-Related Uses	C-1	General Commercial District
	C-2	Heavy Commercial District
	I	Industrial District
Industrial	I	Industrial District
Mixed Use	MU-RC	Recreational-Forest and Commercial Overlay District
	MU-CC	Mixed Commercial District
	MU-CI	Mixed Heavy Commercial and Industrial District
	MU-CCI	Mixed General/Heavy Commercial and Industrial District
	A new mixed use zoning district is needed to accommodate a Mixed General Residential-Commercial Overlay	
River Protection	NRD	Natural River District

Grants and Capital Improvement Plan

The Master Plan and Recreation Plan can also be used as a guide for future public investment and service decisions, such as the local budget, grant applications, and administration of utilities and services. Many communities find it beneficial to prioritize and budget for capital improvement projects, such as infrastructure improvements, park improvements, etc. A Capital Improvements Program (CIP) is one tool which is often used to establish a prioritized schedule for all anticipated capital improvement projects in the community. A CIP includes cost estimates and sources for financing for each project, therefore can serve as both a budgetary and policy document to aid in the implementation of a community's goals defined in the Master Plan.

Documentation

Notice of Intent to Update the Master Plan



Northeast Michigan Council of Governments

80 Livingston Blvd Suite U-108 | PO Box 457 | Gaylord, MI 49734 | Voice: 989.705.3730 | Fax: 989.705.3729 | nemcog.org

Notice of Intent to Update Master Plan: Grayling Township and Maple Forest Township (Crawford County)

August 19, 2020

Grayling Township and Maple Forest Township has begun working with the Northeast Michigan Council of Governments (NEMCOG) to update their Master Plans. While the project will result in a separate Master Plan for each of the townships, they are collaborating on elements such as the public input survey.

As required by Public Act 33 of 2008, as amended, the Michigan Planning Enabling Act, notification is being sent to all geographically adjacent governmental entities, utilities, and transportation agencies to request cooperation and comment.

ADJACENT GOVERNMENTAL UNITS: Prior to and after adoption of the Master Plan, draft and final copies of the plan will be sent to all adjacent governmental units, as defined in the Michigan Planning Enabling Act, for review and comment. The plan will be transmitted via email unless the governmental unit requests a printed copy (please fill out and return the enclosed sheet to notify us of the preferred email address or to request a printed copy).

UTILITIES, RAILROADS & PUBLIC TRANSPORTATION AGENCIES: Utilities and public transportation agencies must request copies and may be charged for copies, and postage (please fill out and return the enclosed sheet to request a copy of the Master Plan update). Note: there will be no charge to utilities and public transportation agencies that choose to receive the plan via email.

Thank you for your cooperation and we look forward to your participation in this important project.

Sincerely,

Regional
Cooperation
Since
1968

Denise Cline, Deputy Director/Chief Planner
Northeast Michigan Council of Governments (NEMCOG)

Alcona * Alpena * Cheboygan * Crawford * Emmet * Montmorency * Oscoda * Otsego * Presque Isle

An
Equal Opportunity
Employer

Please complete and return to NEMCOG:

FOR GOVERNMENTAL UNITS ONLY:

_____ Please send a copy of the **(circle one or both)** Grayling Township Master Plan or Maple Forest Township Master Plan and correspondence pertaining to the preparation of the plan **electronically via email**:

Please provide preferred e-mail address: _____.

_____ We do not have the ability to review digital documents, so please send a **printed copy** of the **(circle one or both)** Grayling Township Master Plan or Maple Forest Township Master Plan and all correspondence pertaining to the preparation of the plan by first class mail.

FOR PUBLIC UTILITIES, RAILROADS AND TRANSPORTATION AGENCIES:

_____ Please send a copy of the **(circle one or both)** Grayling Township Maser Plan or Maple Forest Forest Township Master Plan and correspondence pertaining to the preparation of the plan **electronically via email**:

Please provide preferred e-mail address: _____.

_____ Please send a **printed copy** of the **(circle one or both)** Grayling Township Master Plan or Maple Forest Township Master Plan; therefore, **according to the law, we agree to pay for postage and copies of the Master Plan.**

Please provide the following contact information:

Contact Name _____

Agency/Organization _____ Phone _____

Address _____

E-mail _____

Return to:
Denise Cline
PO Box 457
Gaylord, MI 49735

or

dmcline@nemcog.org

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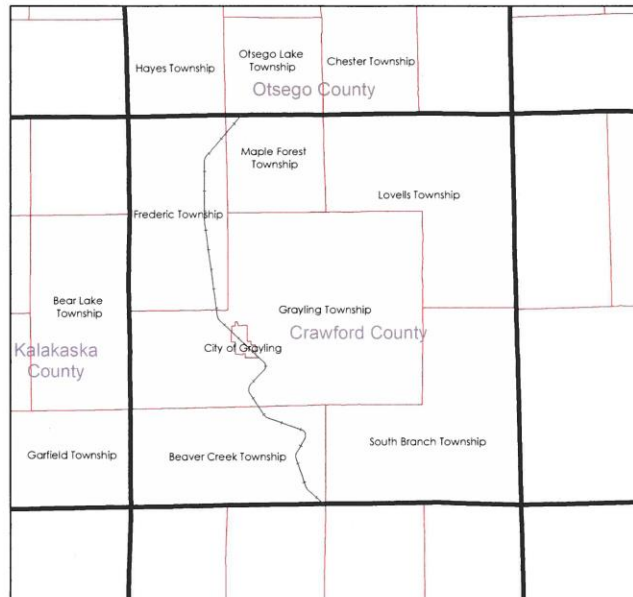
Affidavit of Mailing - Notice of Intent

AFFIDAVIT OF MAILING NOTICE OF INTENT TO UPDATE MASTER PLAN – GRAYLING TOWNSHIP AND MAPLE FOREST TOWNSHIP

I, J. Huff, certify that the communities and agencies on the attached list were notified of Grayling Township's and Maple Forest Township's intent to update the Master Plan. The notification was sent on 8/20/20, 2020 by first class mail and in accordance with Public Act 33 of 2008, as amended.

1. **Crawford County Planning Commission** ✓
200 West Michigan Avenue, Grayling, Michigan 49738 ✓
2. **Grayling Township Planning Commission** ✓
PO Box 521 Grayling, Michigan 49738
3. **Maple Forest Township Planning Commission** ✓
2520 W. Marker Rd Grayling, MI. 49738
4. **City of Grayling Planning Commission** ✓
P.O. Box 549 Grayling, MI 49738
5. **Frederic Township Planning Commission** ✓
P.O. Box 78, Frederic, MI 49733
6. **Beaver Creek Township Planning Commission** ✓
8888 S. Grayling Rd. Grayling, MI. 49738
7. **Lovells Township Planning Commission** ✓
8405 Twin Bridge Road Grayling, MI 49738
8. **South Branch Township Planning Commission** ✓
PO Box 606 Roscommon, MI 48653
9. **Kalkaska County Planning Commission** ✓
605 N. Birch Street Kalkaska, Michigan 49646
10. **Bear Lake Township** ✓
198 E. Bear Lake Rd. Kalkaska, MI 49646 ✓
11. **Garfield Township** ✓
0466 W. Sharon Rd, Fife Lake, Michigan 49633 ✓
12. **Otsego County Planning Commission** ✓
1322 Hayes Road Gaylord, Michigan 49735 ✓
13. **Hayes Township** ✓
7200 Hayes Tower Road, Gaylord, MI 49735 ✓
14. **Otsego Lake Township Planning Commission** ✓
P.O. Box 99 Waters, MI 49797 ✓

- 15. **Chester Township Planning Commission** ✓
1737 Big Lake Road, Gaylord, Michigan 49735
- 16. **Michigan Department of Transportation – North Region Office** ✓
1088 M-32 East, Gaylord, MI 49735
- 17. **Crawford County Road Commission** ✓
500 Huron Street Grayling, MI 49738
- 18. **Crawford County Transportation Authority** ✓
P.O. Box 307 Grayling, Michigan 49738
- 19. **Lake State Railway** ✓
750 N. Washington Ave
Saginaw, MI 48607
- 20. **DTE** ✓
One Energy Plaza Detroit, MI 48226
- 21. **Great Lakes Energy** ✓
P.O. Box 70 Boyne City, MI 49712-0070
- 22. **Consumers Energy** ✓
One Energy Plaza Jackson, MI 49201-2276



Transmittal Letter Draft Plan



Northeast Michigan Council of Governments

80 Livingston Blvd Suite U-108 | PO Box 457 | Gaylord, MI 49734 | Voice: 989.705.3730 | Fax: 989.705.3729 | nemcog.org

9/23/21

Re: Grayling Charter Township Master Plan and Maple Forest Township Master Plan Drafts

Grayling Charter Township and Maple Forest Township are submitting copies of their draft master plans for your review and comment. The townships participated in a coordinated survey process to complete their plans. The drafts are being submitted to you pursuant to Section 41 of Public Act 33 of 2008, as amended. Your municipality/agency has a maximum of 63 days from the receipt of these draft plans to submit comments. Please forward this to your Planning Commission (for municipalities) or to the person responsible for reviewing, if applicable. The plans can be downloaded at the following addresses:

http://www.discovernortheastmichigan.org/downloads/maple_forest_twp_master_plan_final_draft.pdf

http://www.discovernortheastmichigan.org/downloads/grayling_charter_township_master_plan_final_draft_92021.pdf

Please submit comments to:

**Denise Cline, Northeast Michigan Council of Governments
PO Box 457 Gaylord, MI 49734**

Or via email: dmcline@nemcog.org

The draft master plans were submitted to the following:

- | | |
|--|--|
| 1. Crawford County Planning Commission | 11. Garfield Township |
| 2. Grayling Township Planning Commission | 12. Otsego County Planning Commission |
| 3. Maple Forest Township Planning Commission | 13. Hayes Township |
| 4. City of Grayling Planning Commission | 14. Otsego Lake Township Planning Commission |
| 5. Frederic Township Planning Commission | 15. Chester Township Planning Commission |
| 6. Beaver Creek Township Planning Commission | 16. Michigan Department of Transportation |
| 7. Lovells Township Planning Commission | 17. Crawford County Road Commission |
| 8. South Branch Township Planning Commission | 18. Crawford County Transportation Authority |
| 9. Kalkaska County Planning Commission | 19. Lake State Railway |
| 10. Bear Lake Township | |

Thank you for your cooperation, and we look forward to your comments. If you have any questions, please don't hesitate to contact me at the email above.

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Since
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Sincerely,

Denise Cline, Deputy Director/Chief Planner
Northeast Michigan Council of Governments

Alcona * Alpena * Cheboygan * Crawford * Emmet * Montmorency * Oscoda * Otsego * Presque Isle

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Affidavit of Mailing – Draft Plan

AFFIDAVIT OF MAILING DRAFT MASTER PLAN FOR PUBLIC REVIEW– GRAYLING TOWNSHIP AND MAPLE FOREST TOWNSHIP

I, Denise Cline, certify that the communities and agencies on the attached list were sent Grayling Township's and Maple Forest Township's draft Master Plans. The plans were sent on September 23, 2021 by email and, if email addresses were not known, by first class mail and in accordance with Public Act 33 of 2008, as amended.

1. **Crawford County Planning Commission**
xcrisjones@gmail.com
2. **Grayling Township Planning Commission**
lstephan@twp.grayling.mi.us
3. **Maple Forest Township Planning Commission**
tcoors@mapleforest.org
4. **City of Grayling Planning Commission**
zoning@cityofgrayling.org
5. **Frederic Township Planning Commission**
shelly@frederictownship.org
6. **Beaver Creek Township Planning Commission**
dbonamie@beavercreektownship.com
7. **Lovells Township Planning Commission**
dennis.inman2014@gmail.com
8. **South Branch Township Planning Commission**
Jennifer Smith jen.d.smith@comcast.net
9. **Kalkaska County Planning Commission**
lhendricks@kalkaskacounty.org
10. **Bear Lake Township**
btclerkddavid@yahoo.com
11. **Garfield Township**
planningchair@garfieldtwsp.com
clerk@garfieldtwsp.com
12. **Otsego County Planning Commission**
cchurches@otsegoountymt.gov
13. **Hayes Township**
msanders@freeway.net
14. **Otsego Lake Township Planning Commission**
davematelski@yahoo.com

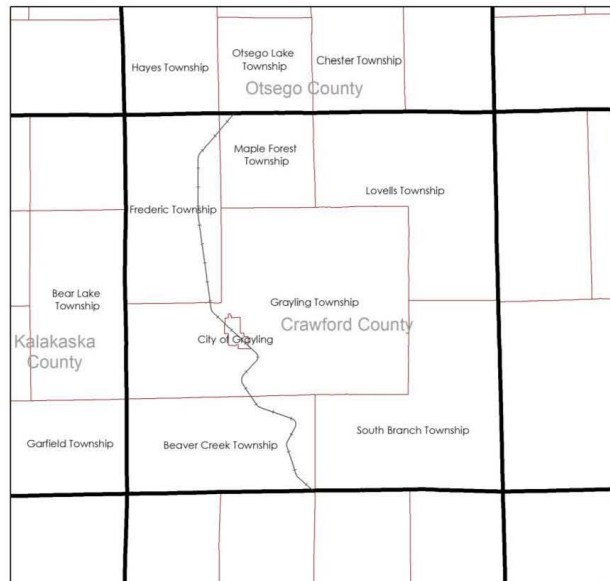
15. **Chester Township Planning Commission**
millerconstruction@live.com

16. **Michigan Department of Transportation – North Region Office**
Gallitisl@michigan.gov

17. **Crawford County Road Commission**
Info@crawford-crc.com

18. **Crawford County Transportation Authority**
info@crawfordbus.org

19. **Lake State Railway**
Sean Pengelly pengellys@lsrc.com
Helen Huneycutt huneycuh@lsrc.com



Affidavit of Mailing – Public Hearing Notice

AFFIDAVIT OF MAILING PUBLIC HEARING NOTICE– GRAYLING TOWNSHIP AND MAPLE FOREST TOWNSHIP

I, Denise Cline, certify that the communities and agencies on the attached list were sent Grayling Township's and Maple Forest Township's public hearing notice. The notice was sent on December 3, 2021 by email and, if email addresses were not known, by first class mail and in accordance with Public Act 33 of 2008, as amended.

1. **Crawford County Planning Commission**
xcrisjones@gmail.com
2. **Grayling Township Planning Commission**
lstephan@twp.grayling.mi.us
3. **Maple Forest Township Planning Commission**
tcoors@mapleforest.org
4. **City of Grayling Planning Commission**
zoning@cityofgrayling.org
5. **Frederic Township Planning Commission**
shelly@frederictownship.org
6. **Beaver Creek Township Planning Commission**
dbonamie@beavercreektownship.com
7. **Lovells Township Planning Commission**
dennis.inman2014@gmail.com
8. **South Branch Township Planning Commission**
Jennifer Smith jen.d.smith@comcast.net
9. **Kalkaska County Planning Commission**
lhendricks@kalkaskacounty.org
10. **Bear Lake Township**
bltclerkddavid@yahoo.com
11. **Garfield Township**
planningchair@garfieldtwsp.com
clerk@garfieldtwsp.com
12. **Otsego County Planning Commission**
cchurches@otsegocountymi.gov
13. **Hayes Township**
msanders@freeway.net
14. **Otsego Lake Township Planning Commission**
davematelski@yahoo.com

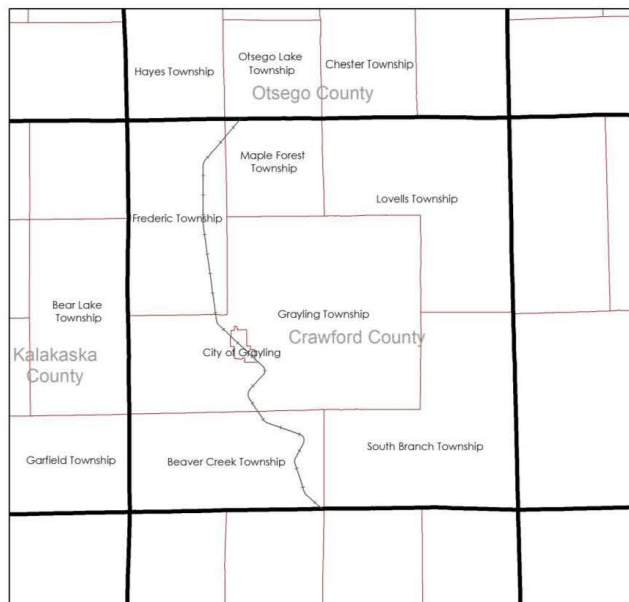
15. Chester Township Planning Commission
millerconstruction@live.com

16. Michigan Department of Transportation – North Region Office
Gailitis1@michigan.gov

17. Crawford County Road Commission
Info@crawford-crc.com

18. Crawford County Transportation Authority
info@crawfordbus.org

19. Lake State Railway
Sean Pengelly pengellys@lsrc.com
Helen Huneycutt huneycutt@lsrc.com



Resolution of Adoption – Planning Commission

Attachment "D"

**RESOLUTION OF ADOPTION
BY THE GRAYLING CHARTER TOWNSHIP PLANNING COMMISSION
Grayling Charter Township Master Plan**

WHEREAS: Grayling Charter Township, Crawford County, Michigan established a Planning Commission under State of Michigan Public Act 33 of 2008, as amended, and;

WHEREAS: The Grayling Charter Township Planning Commission is required by Section 31 of P.A. 33 of 2008, as amended, to make and approve a master plan as a guide for the development within the Township, and;

WHEREAS: The Grayling Charter Township Planning Commission worked with the Northeast Michigan Council of Governments to complete the Master Plan, and;

WHEREAS: The Grayling Charter Township Planning Commission, in accordance with Section 39(2) of the Act, notified all required entities of the intent to develop a plan and, in accordance with Section 41(2) of the Act, distributed the final draft to adjacent communities, the Crawford County Planning Commission, and transit agencies for review and comment, and;

WHEREAS: The plan was presented to the public at a hearing held on December 29, 2021 before the Planning Commission, with notice of the hearing being published in the Crawford County Avalanche on December 9, 2021, in accordance with Section 43(1) of the Act;

NOW THEREFORE BE IT RESOLVED THAT,

The content of this document, together with all maps attached to and contained herein with changes noted are hereby adopted by the Grayling Charter Township Planning Commission as the Grayling Charter Township Master Plan on this 29th day of December, 2021.

Motion: Marc Dedenbach Second: Cindy Reetz

Ayes: 5

Nays: 0

Absent: 0

Certification

I hereby certify that the above is a true and correct copy of the resolution adopted at the December 29, 2021, meeting of the Grayling Charter Township Planning Commission.

 Chair
Grayling Charter Township Planning Commission

 Secretary
Grayling Charter Township Planning Commission

Resolution of Adoption – Township Board

Attachment "A"

**RESOLUTION OF ADOPTION
BY THE GRAYLING CHARTER TOWNSHIP BOARD OF TRUSTEES
Grayling Charter Township Master Plan**

WHEREAS: Grayling Charter Township, Crawford County, Michigan established a Planning Commission under State of Michigan Public Act 33 of 2008, as amended, and;

WHEREAS: The Grayling Charter Township Planning Commission is required by Section 31 of P.A. 33 of 2008, as amended, to make and approve a master plan as a guide for the development within the Township, and;

WHEREAS: The Grayling Charter Township Planning Commission worked with the Northeast Michigan Council of Governments to complete the Master Plan, and;

WHEREAS: The Grayling Charter Township Planning Commission, in accordance with Section 39(2) of the Act, notified all required entities of the intent to develop a plan and, in accordance with Section 41(2) of the Act, distributed the final draft to adjacent communities, the Crawford County Planning Commission, and transit agencies for review and comment, and;

WHEREAS: The plan was presented to the public at a hearing held on December 29, 2021 before the Planning Commission, with notice of the hearing being published in the Crawford County Avalanche on December 9, 2021, in accordance with Section 43(1) of the Act; and

WHEREAS: The Grayling Charter Township Planning Commission has reviewed the proposed plan, considered public comment, and adopted the proposed plan by resolution on December 29, 2021, and;

WHEREAS: The Grayling Charter Township Board of Trustees has asserted the right to approve or reject the plan;

NOW THEREFORE BE IT RESOLVED THAT,

The content of this document, together with all maps attached to and contained herein are hereby adopted by the Grayling Charter Township Board of Trustees as the Grayling Charter Township Master Plan on this 19 day of January , 2022.

Motion: Smock Second: Selthoffer
Ayes: 5
Nays: 0
Absent: 2

Certification

I hereby certify that the above is a true and correct copy of the resolution adopted at the January 19, 2022, meeting of the Grayling Charter Township Board of Trustees.



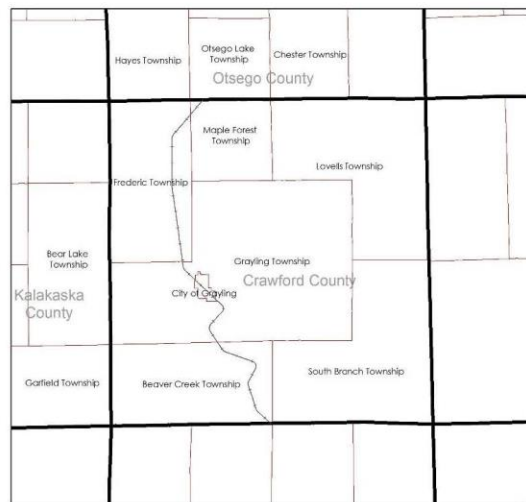
Grayling Charter Township Clerk

Affidavit of Mailing – Final Plan

AFFIDAVIT OF MAILING FINAL ADOPTED PLAN – GRAYLING TOWNSHIP

I, Denise Cline, certify that the communities and agencies on the attached list were sent Grayling Charter Township's final adopted Master Plan. The notice was sent on January 28, 2022 by email and, if email addresses were not known, by first class mail and in accordance with Public Act 33 of 2008, as amended.

1. **Crawford County Planning Commission**
xcrisjones@gmail.com
2. **Maple Forest Township Planning Commission**
tcoors@mapleforest.org
3. **City of Grayling Planning Commission**
zoning@cityofgrayling.org
4. **Frederic Township Planning Commission**
shelly@frederictownship.org
5. **Beaver Creek Township Planning Commission**
dbonamie@beavercreektownship.com
6. **Lovells Township Planning Commission**
dennis.inman2014@gmail.com
7. **South Branch Township Planning Commission**
Jennifer Smith jen.d.smith@comcast.net
8. **Kalkaska County Planning Commission**
lhendricks@kalkaskacounty.org
9. **Bear Lake Township**
bltclerkddavid@yahoo.com
10. **Garfield Township**
planningchair@garfieldtwsp.com
clerk@garfieldtwsp.com
11. **Michigan Department of Transportation – North Region Office**
GallitisJ@michigan.gov
12. **Crawford County Road Commission**
info@crawford-crc.com
13. **Crawford County Transportation Authority**
info@crawfordbus.org
14. **Lake State Railway**
Sean Pengelly pengellys@lsrc.com
Helen Huneycutt huneycutt@lsrc.com

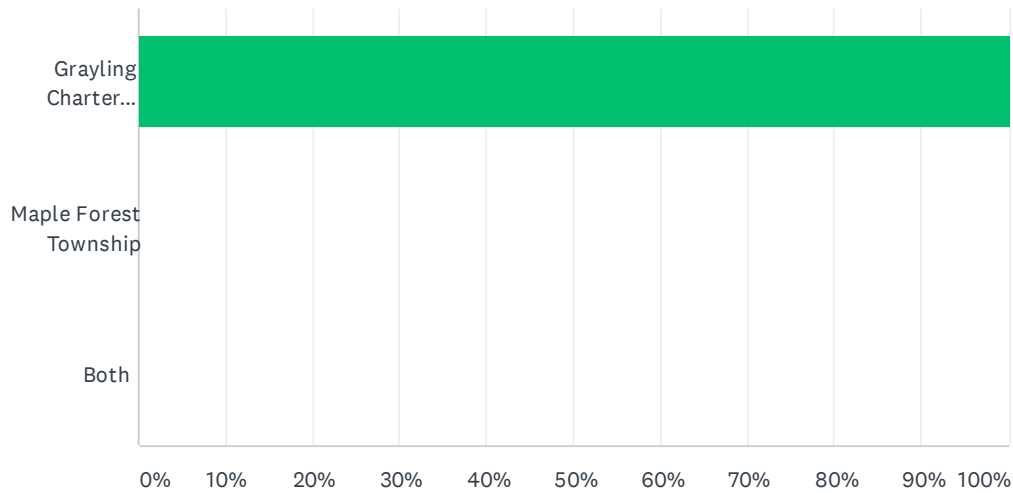


Appendix

Survey Responses

Q1 Please indicate which Township you are answering the survey in regards to:

Answered: 26 Skipped: 0

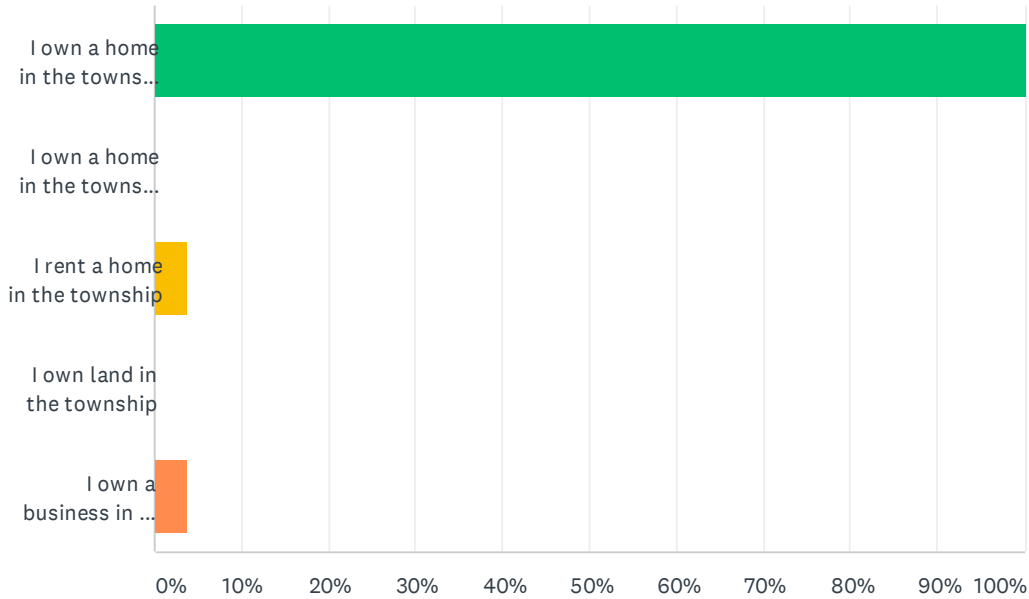


ANSWER CHOICES	RESPONSES	
Grayling Charter Township	100.00%	26
Maple Forest Township	0.00%	0
Both	0.00%	0
TOTAL		26

#	IF NON-RESIDENT, INDICATE PLACE OF RESIDENCE	DATE
There are no responses.		

Q2 Please indicate your property interest in either Grayling Charter Township or Maple Forest Township (mark all that apply):

Answered: 26 Skipped: 0

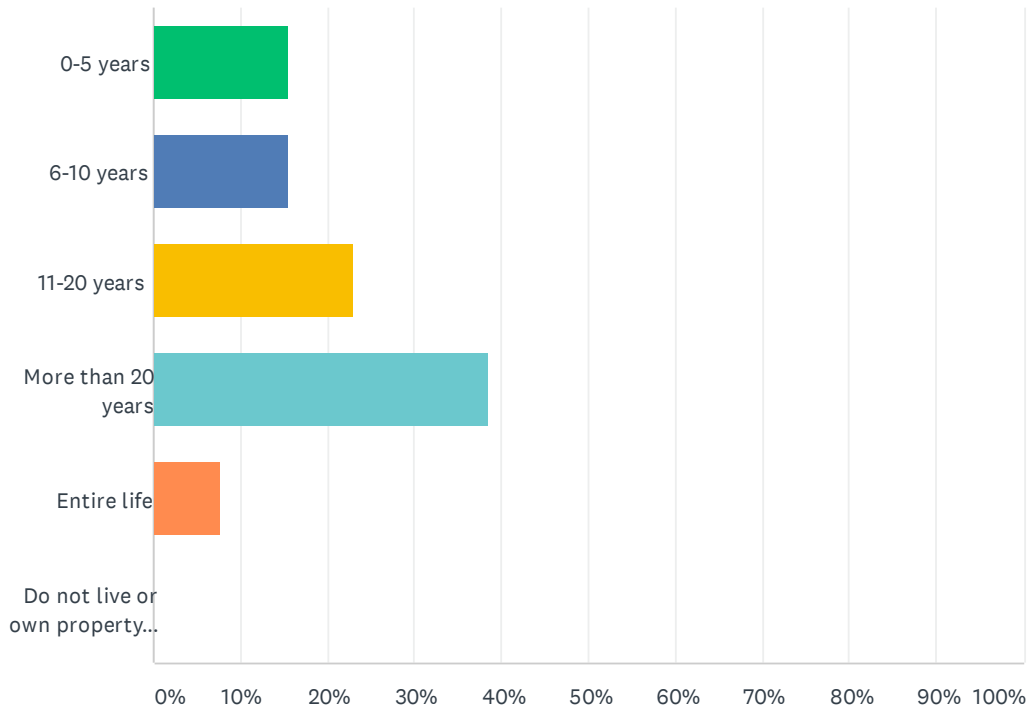


ANSWER CHOICES	RESPONSES	
I own a home in the township and reside there	100.00%	26
I own a home in the township but do not reside there	0.00%	0
I rent a home in the township	3.85%	1
I own land in the township	0.00%	0
I own a business in the township	3.85%	1
Total Respondents: 26		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q3 How long have you lived or owned property here?

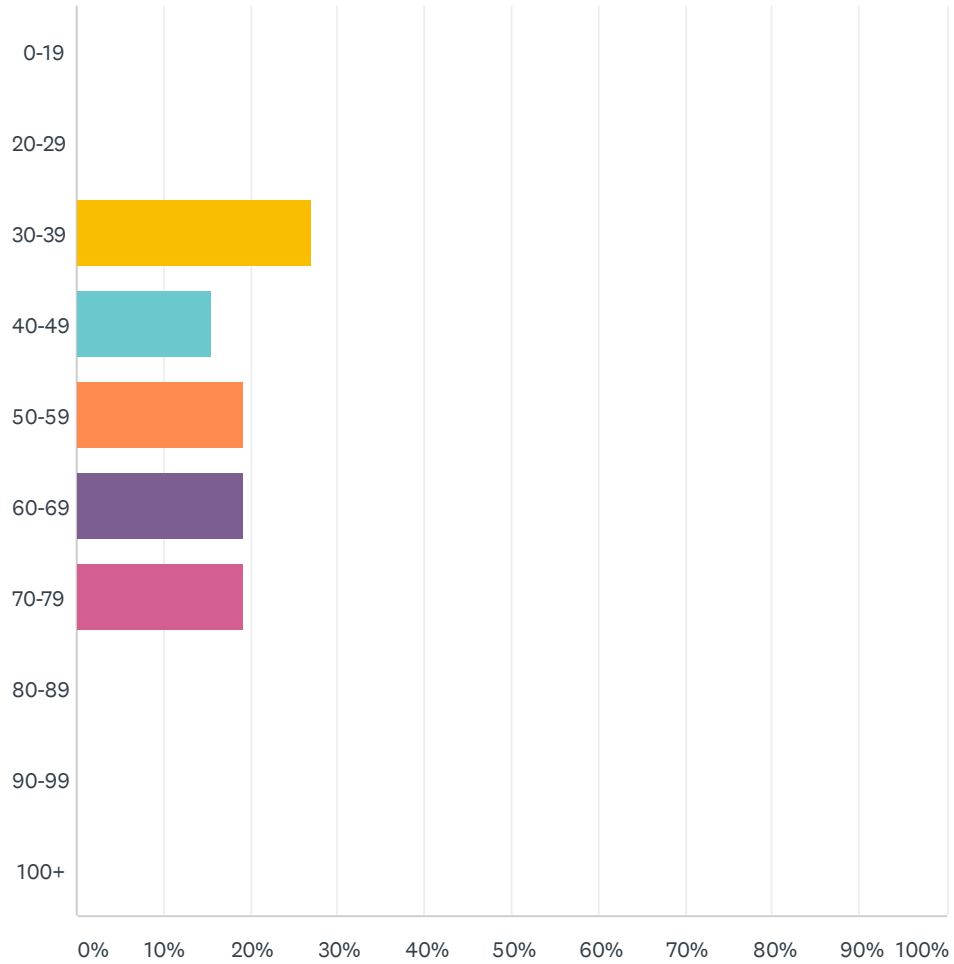
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
0-5 years	15.38%	4
6-10 years	15.38%	4
11-20 years	23.08%	6
More than 20 years	38.46%	10
Entire life	7.69%	2
Do not live or own property here	0.00%	0
Total Respondents: 26		

Q4 What is your age group?

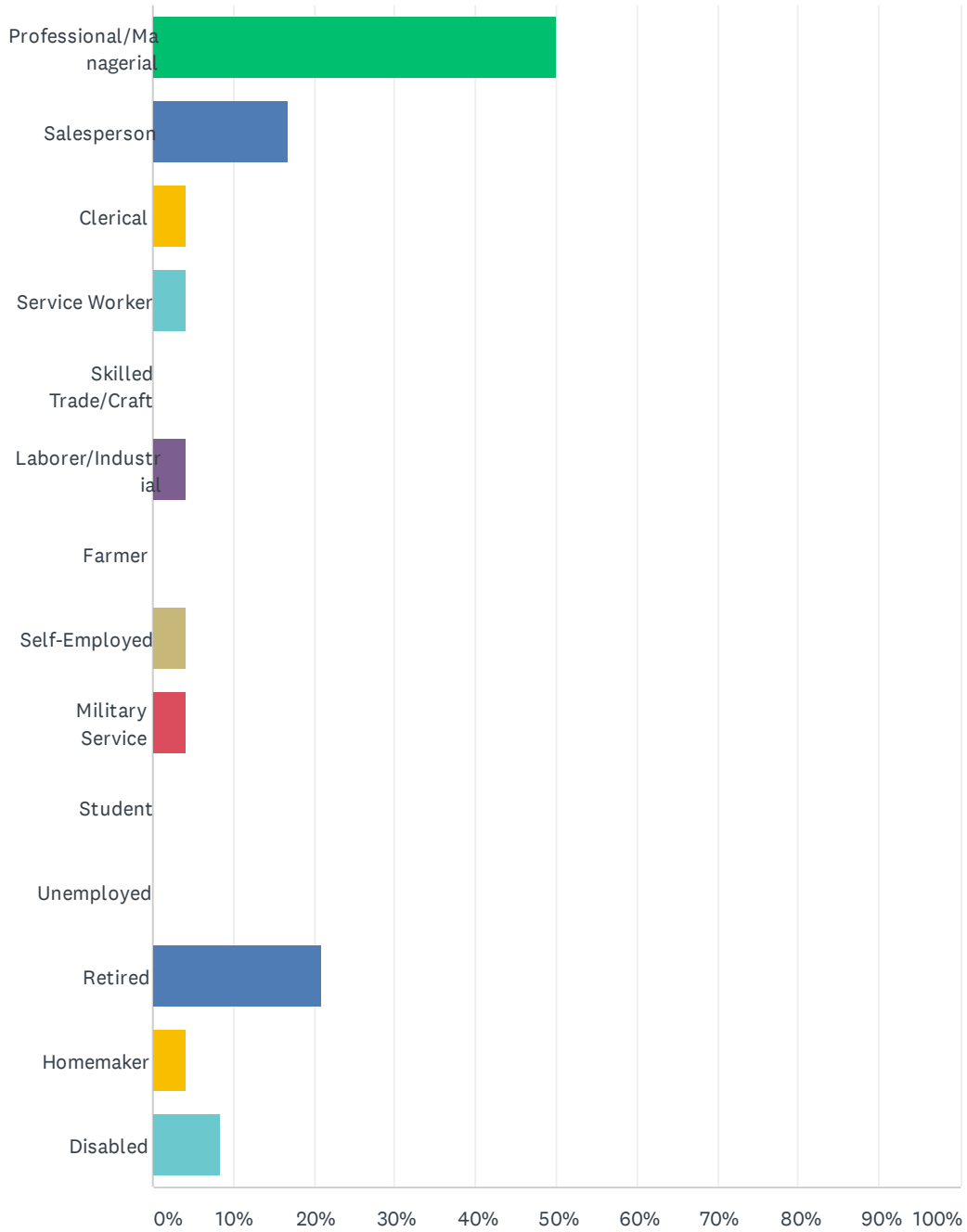
Answered: 26 Skipped: 0



ANSWER CHOICES	RESPONSES	
0-19	0.00%	0
20-29	0.00%	0
30-39	26.92%	7
40-49	15.38%	4
50-59	19.23%	5
60-69	19.23%	5
70-79	19.23%	5
80-89	0.00%	0
90-99	0.00%	0
100+	0.00%	0
Total Respondents: 26		

Q5 What is your primary occupation?

Answered: 24 Skipped: 2



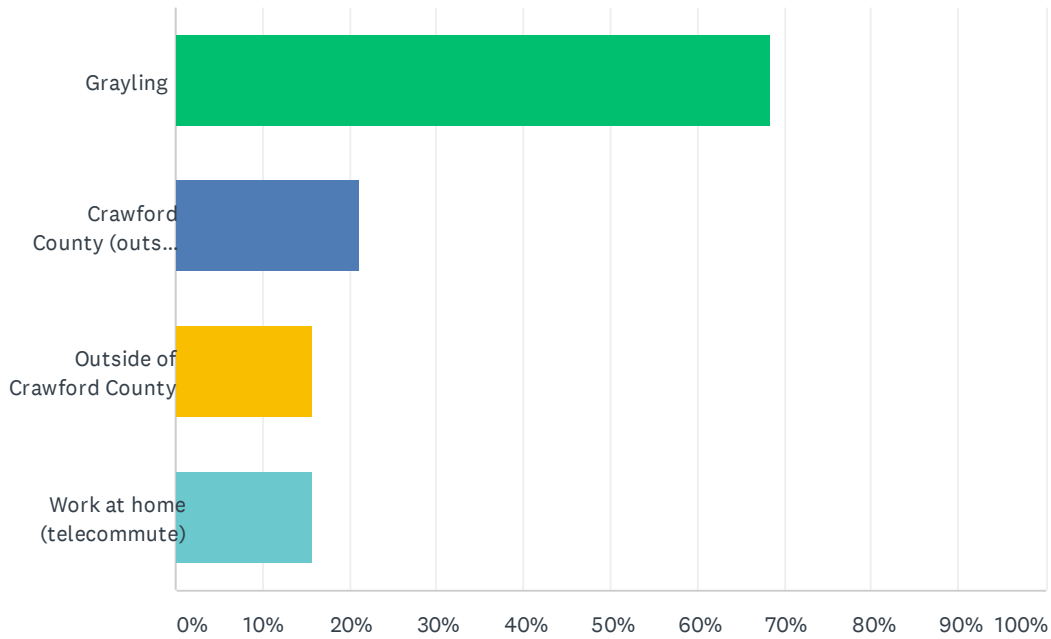
Grayling Charter Township & Maple Forest Township Public Input Survey

ANSWER CHOICES	RESPONSES	
Professional/Managerial	50.00%	12
Salesperson	16.67%	4
Clerical	4.17%	1
Service Worker	4.17%	1
Skilled Trade/Craft	0.00%	0
Laborer/Industrial	4.17%	1
Farmer	0.00%	0
Self-Employed	4.17%	1
Military Service	4.17%	1
Student	0.00%	0
Unemployed	0.00%	0
Retired	20.83%	5
Homemaker	4.17%	1
Disabled	8.33%	2
Total Respondents: 24		

#	OTHER (PLEASE SPECIFY)	DATE
1	Laid Off	12/12/2020 9:30 AM
2	Education	12/11/2020 9:07 AM
3	Township Treasurer	12/3/2020 2:41 PM

Q6 If working, where do you work?

Answered: 19 Skipped: 7

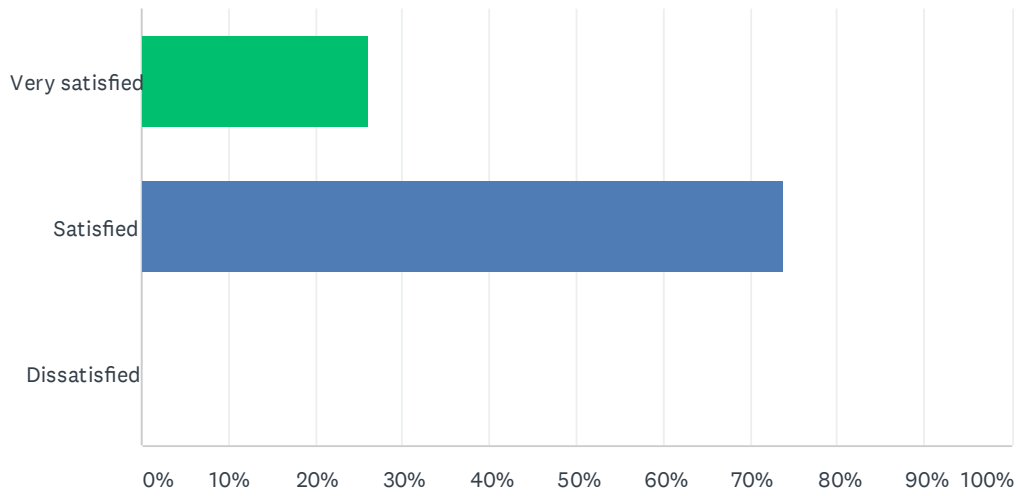


ANSWER CHOICES	RESPONSES
Grayling	68.42% 13
Crawford County (outside of Grayling)	21.05% 4
Outside of Crawford County	15.79% 3
Work at home (telecommute)	15.79% 3
Total Respondents: 19	

#	OTHER (PLEASE SPECIFY)	DATE
1	disabled	1/30/2021 10:32 AM
2	in the county and in surrounding counties	1/7/2021 5:57 AM

Q7 Generally speaking, how satisfied are you with the township as a place to live or own property?

Answered: 23 Skipped: 3



ANSWER CHOICES	RESPONSES	
Very satisfied	26.09%	6
Satisfied	73.91%	17
Dissatisfied	0.00%	0
TOTAL		23

Q8 What makes the township a great place to live or own property?

Answered: 21 Skipped: 5

ANSWER CHOICES	RESPONSES	
1.	100.00%	21
2.	71.43%	15
3.	42.86%	9

#	1.	DATE
1	living in God's Country	1/30/2021 10:35 AM
2	quiet area	1/7/2021 6:02 AM
3	Wide open spaces	12/31/2020 9:09 PM
4	Beautiful setting	12/22/2020 12:04 PM
5	People	12/20/2020 7:18 PM
6	beautiful country	12/20/2020 5:17 PM
7	Space for homes with acreage	12/18/2020 10:47 PM
8	Great outdoors	12/17/2020 5:51 PM
9	Ausable river	12/15/2020 8:28 PM
10	Lower taxes than City of Grayling	12/12/2020 9:35 AM
11	large yards, plenty of room	12/11/2020 9:45 PM
12	Friendly people	12/11/2020 3:55 PM
13	Rural	12/11/2020 3:04 PM
14	Outdoor recreation	12/11/2020 9:55 AM
15	The outdoor opportunities for recreation	12/11/2020 9:13 AM
16	Quiet	12/11/2020 9:07 AM
17	Community	12/11/2020 9:07 AM
18	Access to nature	12/11/2020 8:51 AM
19	The Great Outdoors	12/11/2020 8:45 AM
20	Outdoor recreation	12/11/2020 8:32 AM
21	Outdoor recreation	12/3/2020 2:44 PM

Grayling Charter Township & Maple Forest Township Public Input Survey

#	2.	DATE
1	quite	1/30/2021 10:35 AM
2	the street has been paved!	1/7/2021 6:02 AM
3	Safe area	12/22/2020 12:04 PM
4	Activities	12/20/2020 7:18 PM
5	Outdoor Recreation opportunities	12/18/2020 10:47 PM
6	State land	12/15/2020 8:28 PM
7	The state property fir recreation	12/11/2020 3:55 PM
8	Rivers and Lakes	12/11/2020 3:04 PM
9	Rural	12/11/2020 9:55 AM
10	Property space	12/11/2020 9:13 AM
11	Low Crime	12/11/2020 9:07 AM
12	Nature	12/11/2020 9:07 AM
13	Safety	12/11/2020 8:45 AM
14	Low taxes	12/11/2020 8:32 AM
15	river and lake	12/3/2020 2:44 PM
#	3.	DATE
1	outdoor sports	1/30/2021 10:35 AM
2	Close to all of northern Michigan at a lower home price	12/22/2020 12:04 PM
3	Natural beauty	12/20/2020 7:18 PM
4	Safe and clean	12/18/2020 10:47 PM
5	Orv trails	12/15/2020 8:28 PM
6	Access to internet and natural gas	12/11/2020 9:13 AM
7	Near family	12/11/2020 9:07 AM
8	The People	12/11/2020 8:45 AM
9	Hanson Hills	12/3/2020 2:44 PM

Q9 What are some problems you feel need to be addressed in the township?

Answered: 19 Skipped: 7

ANSWER CHOICES	RESPONSES	
1.	100.00%	19
2.	73.68%	14
3.	31.58%	6

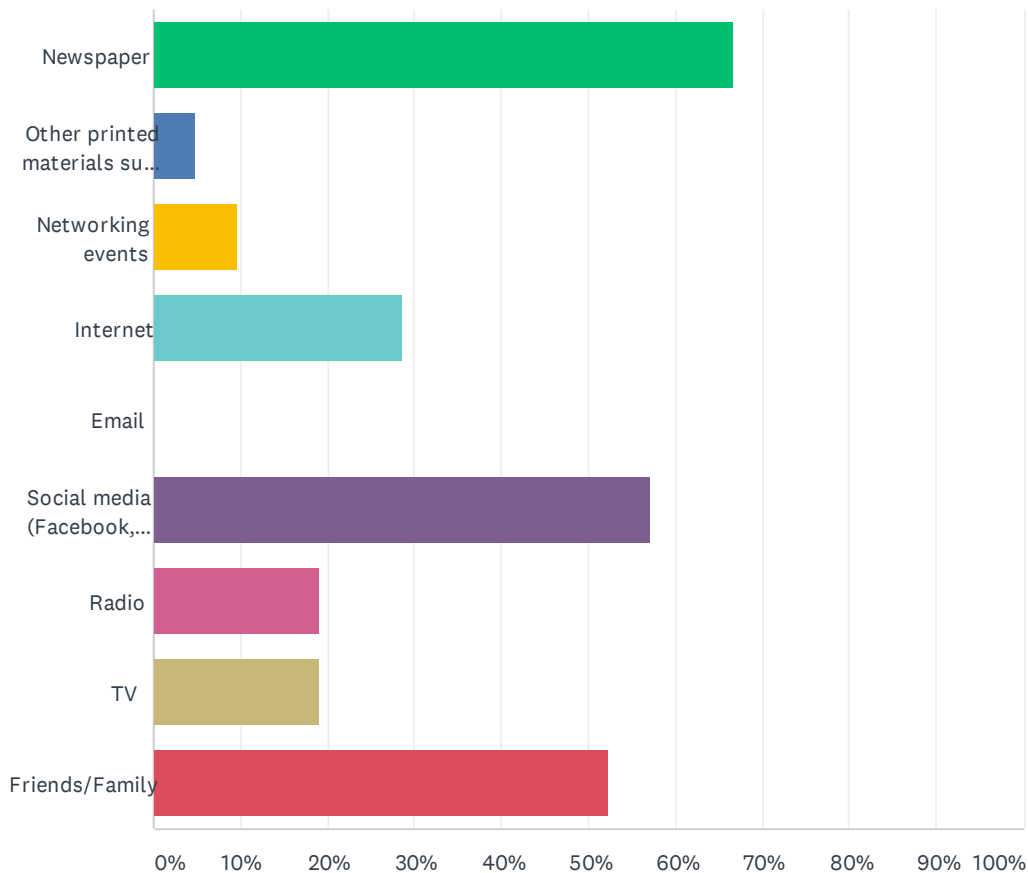
#	1.	DATE
1	Better grading and plowing of roads	1/30/2021 10:35 AM
2	blight enforcement	1/7/2021 6:02 AM
3	Roads	12/31/2020 9:09 PM
4	Many worn out roads	12/22/2020 12:04 PM
5	blight - some homes are very unsightly	12/20/2020 5:17 PM
6	Recycling needs to accept more variety and be open to whole County.	12/18/2020 10:47 PM
7	junk houses	12/17/2020 6:09 PM
8	Trash around homes nothing is done to stop the problem	12/17/2020 5:51 PM
9	Roads	12/15/2020 8:28 PM
10	PFAS	12/12/2020 9:35 AM
11	roads need to be repaved	12/11/2020 9:45 PM
12	Recycling	12/11/2020 3:04 PM
13	Community Health Fitness center	12/11/2020 9:55 AM
14	Blight and code violations	12/11/2020 9:13 AM
15	Roads (I don't know who that would be directed to)	12/11/2020 9:07 AM
16	Shopping opportunities	12/11/2020 9:07 AM
17	Curbside trash pickup	12/11/2020 8:51 AM
18	Internet access	12/11/2020 8:45 AM
19	Entertainment	12/11/2020 8:32 AM

Grayling Charter Township & Maple Forest Township Public Input Survey

#	2.	DATE
1	improved shopping, too many dollar stores	1/7/2021 6:02 AM
2	Trash pickup	12/31/2020 9:09 PM
3	No sport facility like Gaylord or Kalkaska	12/22/2020 12:04 PM
4	Be careful of commercial development at 4mile which will prevent people from getting off in Grayling and shopping.	12/18/2020 10:47 PM
5	yards full of junk cars etc	12/17/2020 6:09 PM
6	Orv rules	12/15/2020 8:28 PM
7	Roads	12/12/2020 9:35 AM
8	need to extend city water	12/11/2020 9:45 PM
9	Activities for children	12/11/2020 3:04 PM
10	Childcare	12/11/2020 9:55 AM
11	Expanded internet options	12/11/2020 9:13 AM
12	Recycling program expansion	12/11/2020 9:07 AM
13	Recycling for everyone	12/11/2020 8:51 AM
14	Fitness center	12/11/2020 8:32 AM
#	3.	DATE
1	Blighted properties	12/31/2020 9:09 PM
2	Need to travel for most shopping alternatives	12/22/2020 12:04 PM
3	Access to cell service and internet	12/12/2020 9:35 AM
4	Affordable housing	12/11/2020 9:13 AM
5	PFAS	12/11/2020 9:07 AM
6	More parks/keeping open longer seasonally/times	12/11/2020 8:51 AM

Q10 How do you find out about what's going on in the township?

Answered: 21 Skipped: 5



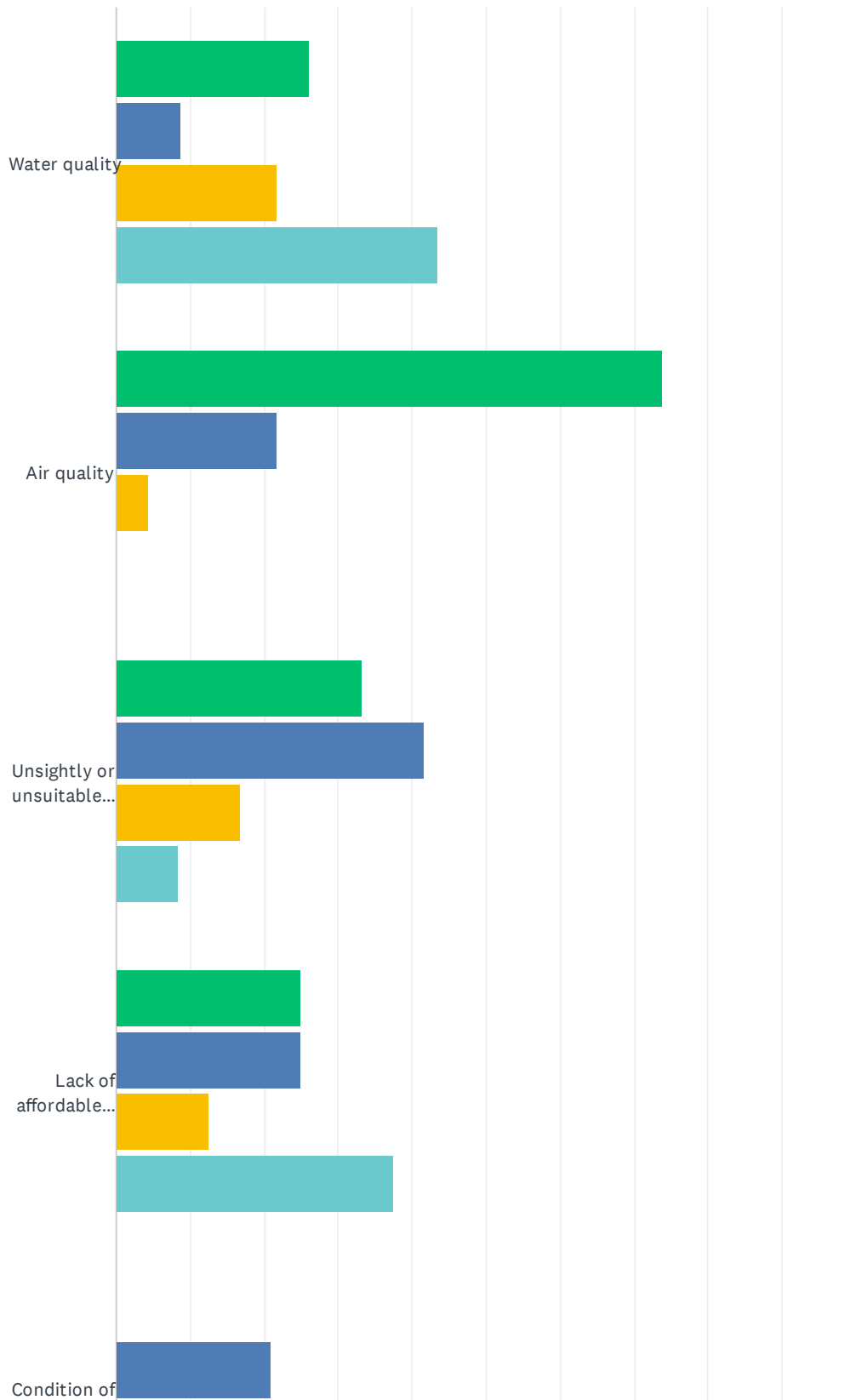
ANSWER CHOICES	RESPONSES	
Newspaper	66.67%	14
Other printed materials such as flyers and brochures	4.76%	1
Networking events	9.52%	2
Internet	28.57%	6
Email	0.00%	0
Social media (Facebook, Twitter)	57.14%	12
Radio	19.05%	4
TV	19.05%	4
Friends/Family	52.38%	11
Total Respondents: 21		

Grayling Charter Township & Maple Forest Township Public Input Survey

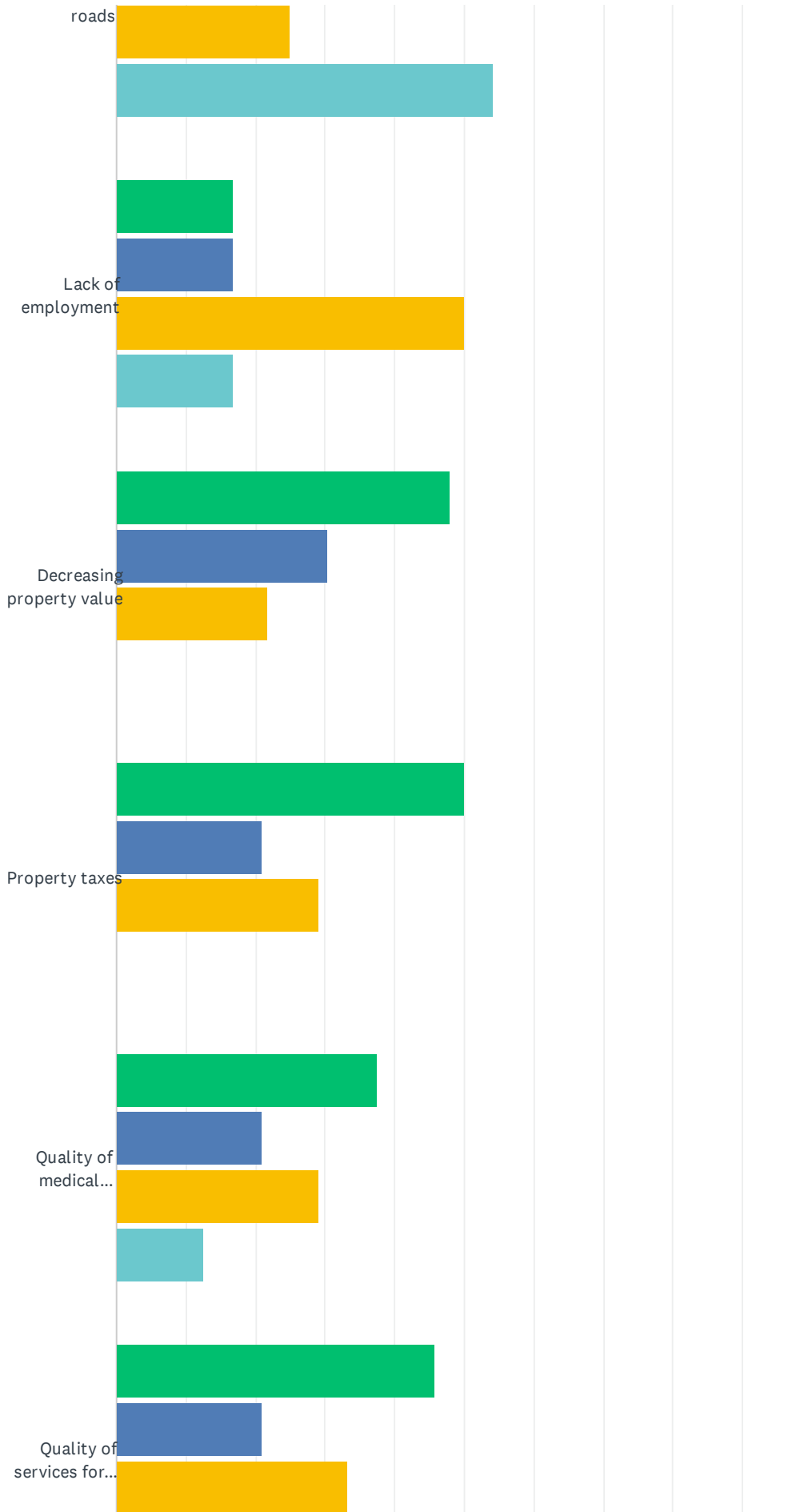
#	OTHER (PLEASE SPECIFY)	DATE
1	there is no real good way to find out what is going on in the township, website is not updated and newspaper is always a week behind	1/7/2021 6:02 AM
2	Don't hear much ever. Where do you advertise what's happening?	12/18/2020 10:47 PM

Q11 How much of a problem are these issues in the township? Check one choice for each item.

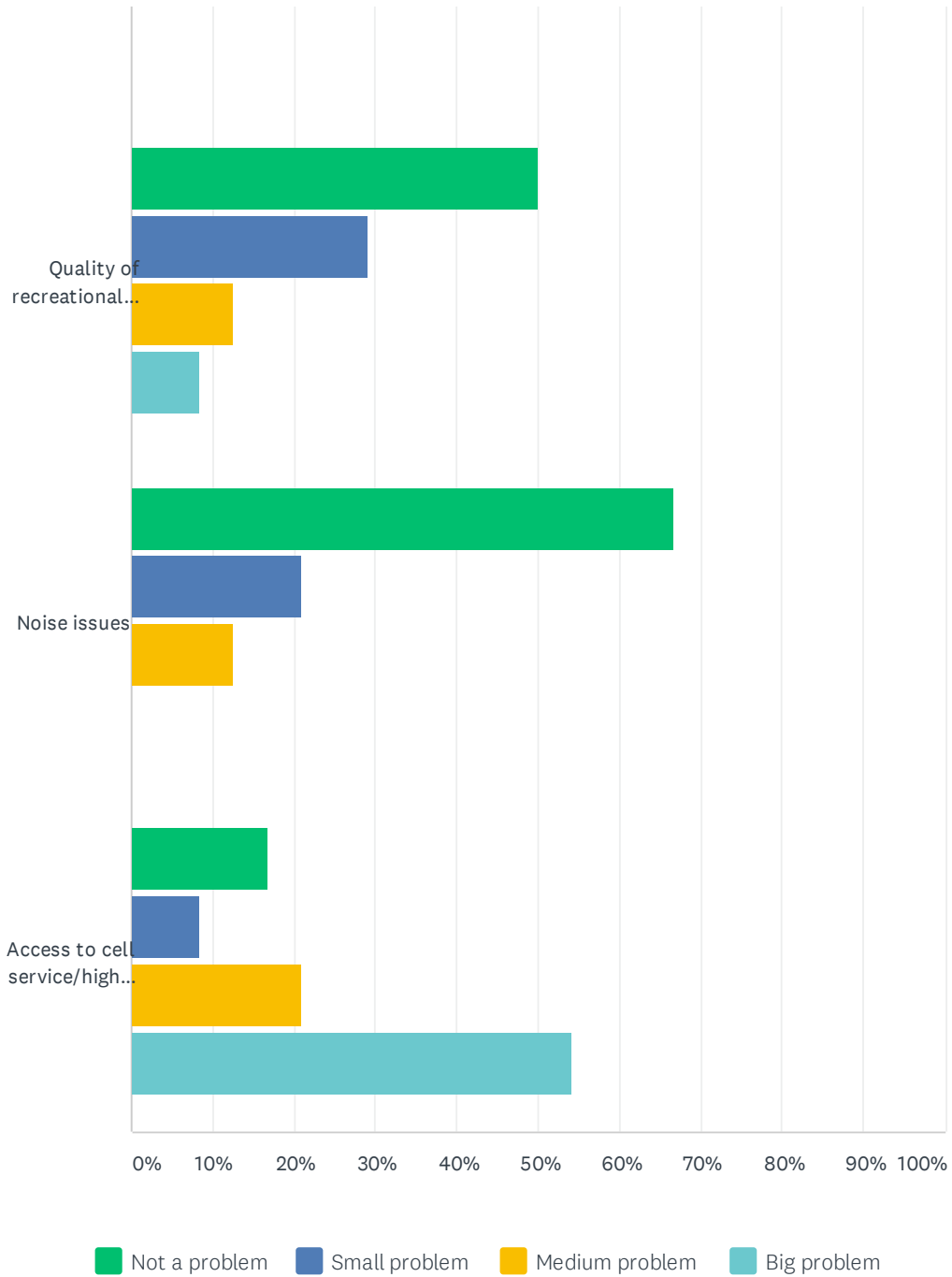
Answered: 24 Skipped: 2



Grayling Charter Township & Maple Forest Township Public Input Survey



Grayling Charter Township & Maple Forest Township Public Input Survey



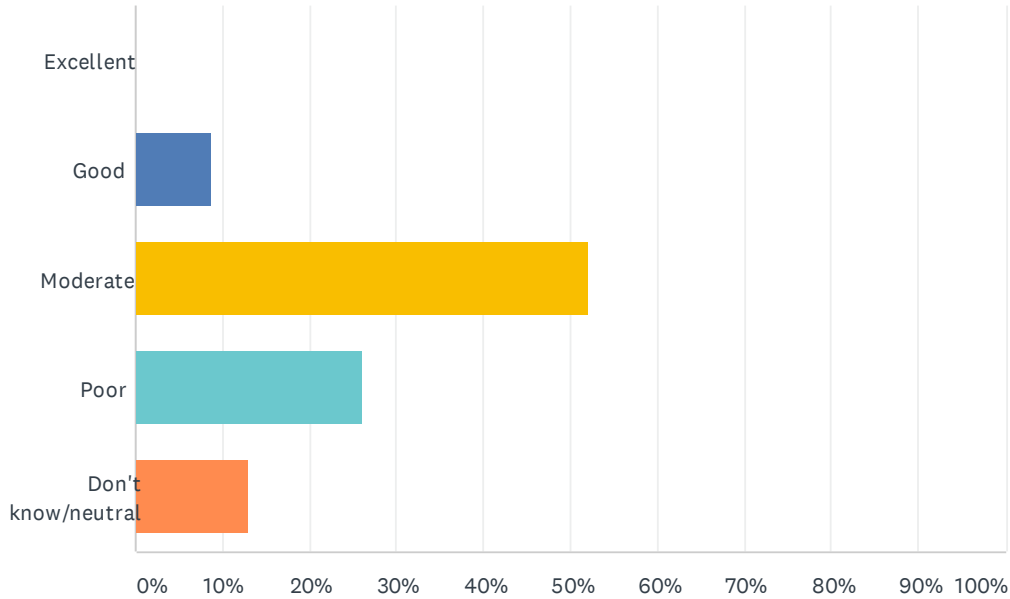
Grayling Charter Township & Maple Forest Township Public Input Survey

	NOT A PROBLEM	SMALL PROBLEM	MEDIUM PROBLEM	BIG PROBLEM	TOTAL
Water quality	26.09% 6	8.70% 2	21.74% 5	43.48% 10	23
Air quality	73.91% 17	21.74% 5	4.35% 1	0.00% 0	23
Unsightly or unsuitable business operations	33.33% 8	41.67% 10	16.67% 4	8.33% 2	24
Lack of affordable housing	25.00% 6	25.00% 6	12.50% 3	37.50% 9	24
Condition of roads	0.00% 0	20.83% 5	25.00% 6	54.17% 13	24
Lack of employment	16.67% 4	16.67% 4	50.00% 12	16.67% 4	24
Decreasing property value	47.83% 11	30.43% 7	21.74% 5	0.00% 0	23
Property taxes	50.00% 12	20.83% 5	29.17% 7	0.00% 0	24
Quality of medical services	37.50% 9	20.83% 5	29.17% 7	12.50% 3	24
Quality of services for seniors	45.83% 11	20.83% 5	33.33% 8	0.00% 0	24
Quality of recreational opportunities	50.00% 12	29.17% 7	12.50% 3	8.33% 2	24
Noise issues	66.67% 16	20.83% 5	12.50% 3	0.00% 0	24
Access to cell service/high speed internet	16.67% 4	8.33% 2	20.83% 5	54.17% 13	24

#	OTHER (PLEASE SPECIFY)	DATE
1	unsightly residences	12/20/2020 5:17 PM

Q12 What is your opinion of the quality and range of options for housing in the township?

Answered: 23 Skipped: 3

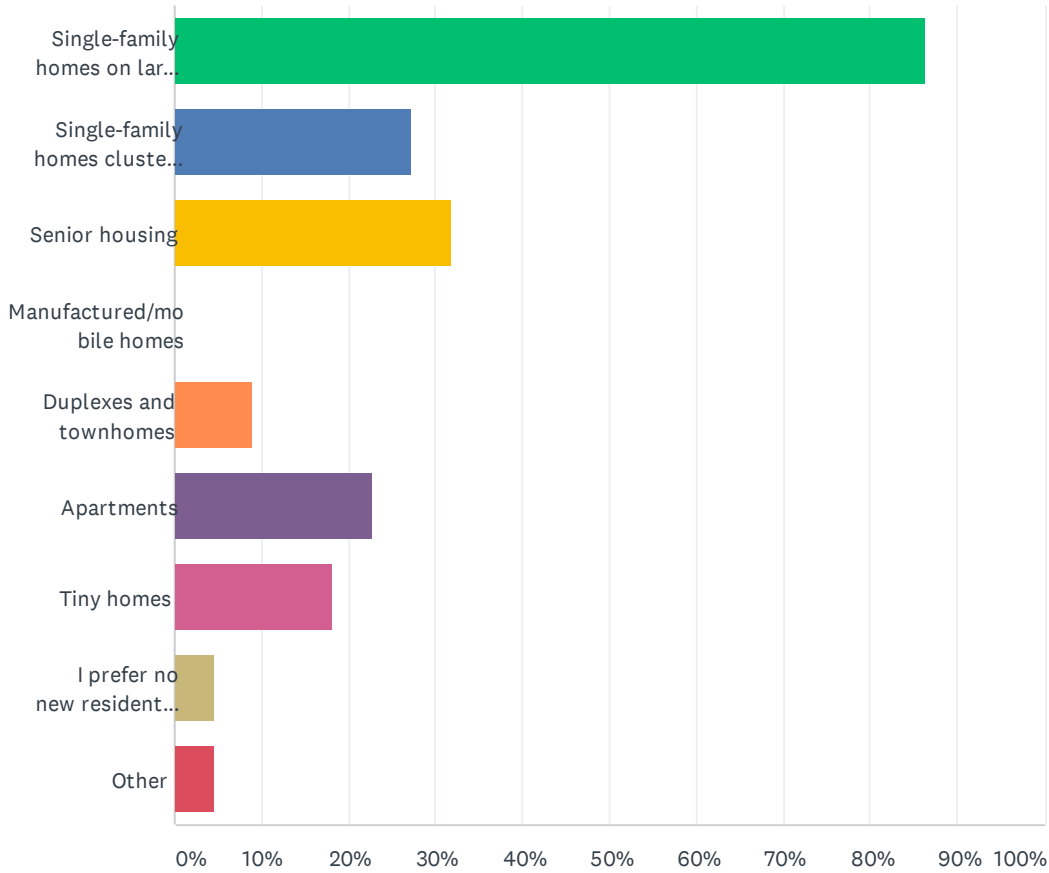


ANSWER CHOICES	RESPONSES
Excellent	0.00% 0
Good	8.70% 2
Moderate	52.17% 12
Poor	26.09% 6
Don't know/neutral	13.04% 3
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
1	I would love to purchase a slightly better house in the township, but none are available for a reasonable price. I'm essentially stuck where I am.	12/11/2020 9:20 AM
2	Missing middle, new construction, no subdivisions for families	12/11/2020 8:55 AM

Q13 What kind of residential growth would you like to see (check all that apply)?

Answered: 22 Skipped: 4



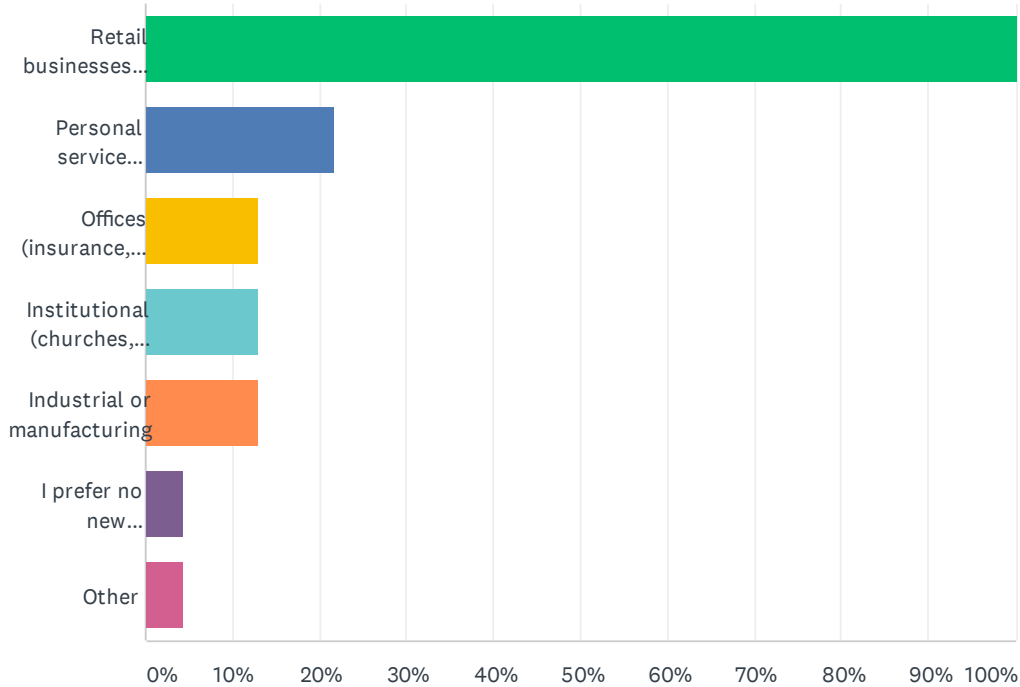
ANSWER CHOICES	RESPONSES	
Single-family homes on large residential lots	86.36%	19
Single-family homes clustered together, leaving open space undeveloped	27.27%	6
Senior housing	31.82%	7
Manufactured/mobile homes	0.00%	0
Duplexes and townhomes	9.09%	2
Apartments	22.73%	5
Tiny homes	18.18%	4
I prefer no new residential growth	4.55%	1
Other	4.55%	1
Total Respondents: 22		

Grayling Charter Township & Maple Forest Township Public Input Survey

#	OTHER	DATE
1	Growth in general. Low inventory yet cost to build exceeds value of off water. Hard balance	12/11/2020 8:33 AM

Q14 What type of non-residential development would you like to see (check all that apply)?

Answered: 23 Skipped: 3

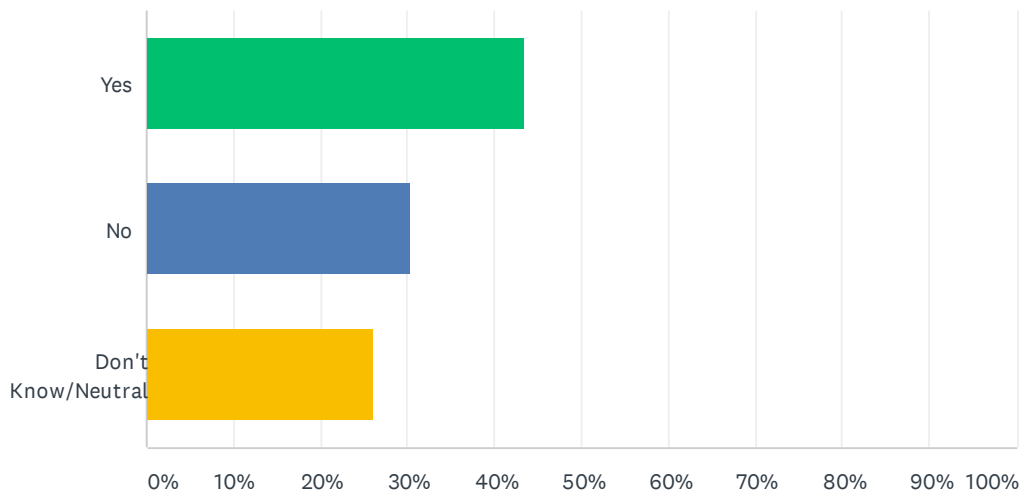


ANSWER CHOICES	RESPONSES	
Retail businesses (food, grocery, gas, etc)	100.00%	23
Personal service establishments (repair shops, barber/beauty shops, laundromat, etc)	21.74%	5
Offices (insurance, medical, etc)	13.04%	3
Institutional (churches, adult foster care, child care, etc)	13.04%	3
Industrial or manufacturing	13.04%	3
I prefer no new non-residential development	4.35%	1
Other	4.35%	1
Total Respondents: 23		

#	OTHER	DATE
1	Target, Meijer, more developed downtown	12/11/2020 8:55 AM

Q15 Do you support the idea of neighborhood businesses locating within residential areas?

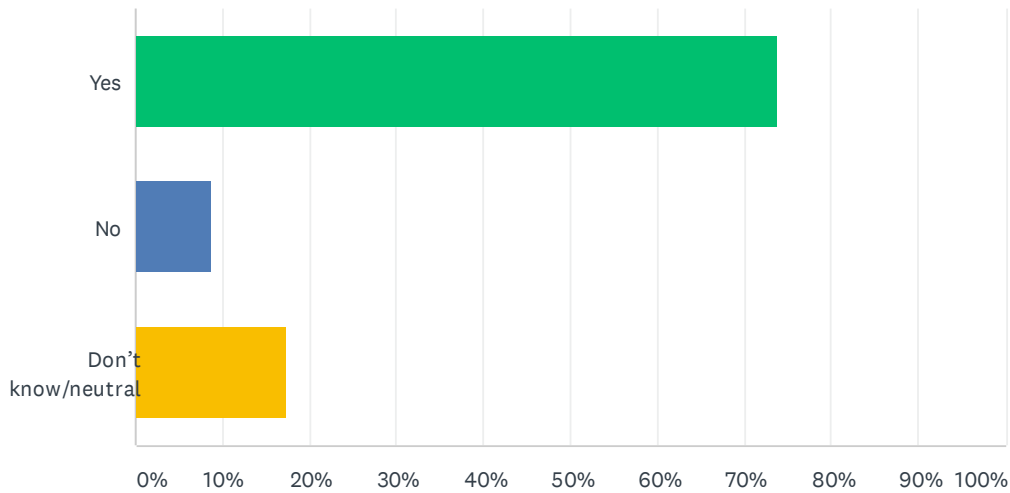
Answered: 23 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	43.48%	10
No	30.43%	7
Don't Know/Neutral	26.09%	6
TOTAL		23

Q16 Do you think blight is a problem in the township? (Blight refers to unsightly or inadequately maintained properties)

Answered: 23 Skipped: 3

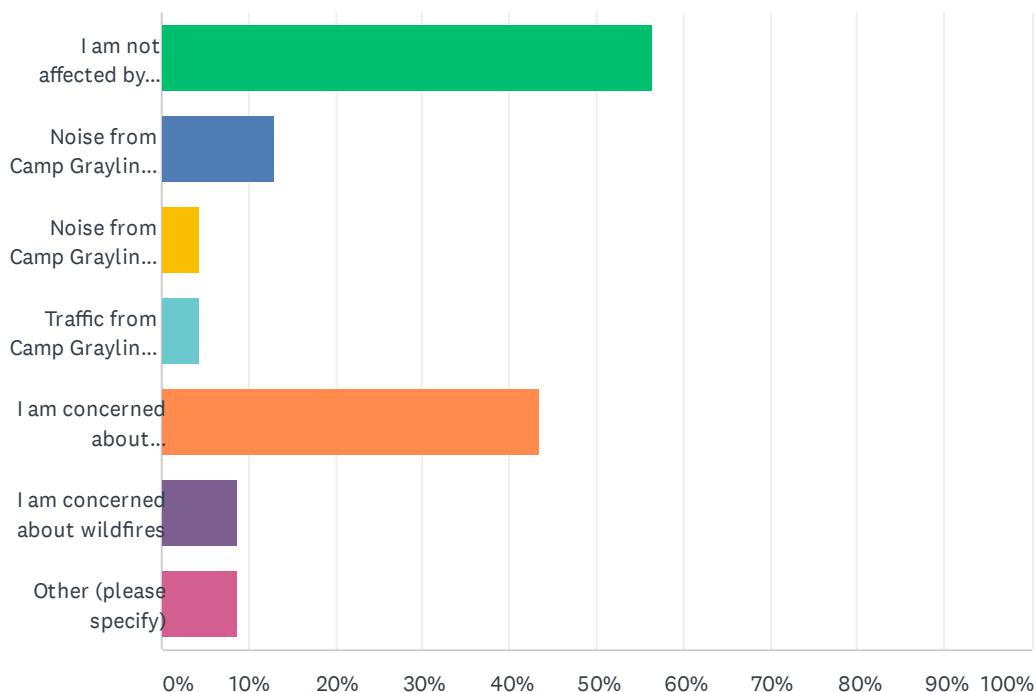


ANSWER CHOICES	RESPONSES
Yes	73.91% 17
No	8.70% 2
Don't know/neutral	17.39% 4
TOTAL	23

#	INDICATE AREA OF BLIGHT:	DATE
1	Timberly Village	1/7/2021 6:04 AM
2	72 & eagle point	12/20/2020 7:20 PM
3	wakely bridge road - a couple of houses between M72 & the river	12/20/2020 5:19 PM
4	Old bear archery property; old hospitality house on 27 north....these may be in city. Not sure where line is.	12/18/2020 10:54 PM
5	Just drive on I72 and look at the blight	12/17/2020 5:54 PM
6	Jones Lake Road	12/15/2020 8:33 PM
7	I struggle with this because I was cited during a home renovation project (had a permit). It was ridiculous that I was trying to clean-up and improve my property and had to pay a fine for blight. All while my neighbor builds multiple outbuildings out of cobbled materials and looks like a junkyard without an issue. The disparities are expanding. The cost of disposal of household goods is an obstacle for some residents, leading to blight and dumping. Regular clean-up days would be helpful.	12/11/2020 9:20 AM
8	This has been an area of unaddressed concern for years. While the township has an ordinance, it doesn't appear to be enforced. I have known individuals to make complaints and nothing happens. Would like to see a robust ordinance backed by legal enforcement.	12/11/2020 8:55 AM

Q17 Activities at Camp Grayling (choose all that apply): (click here for a map of Camp Grayling military operations)

Answered: 23 Skipped: 3

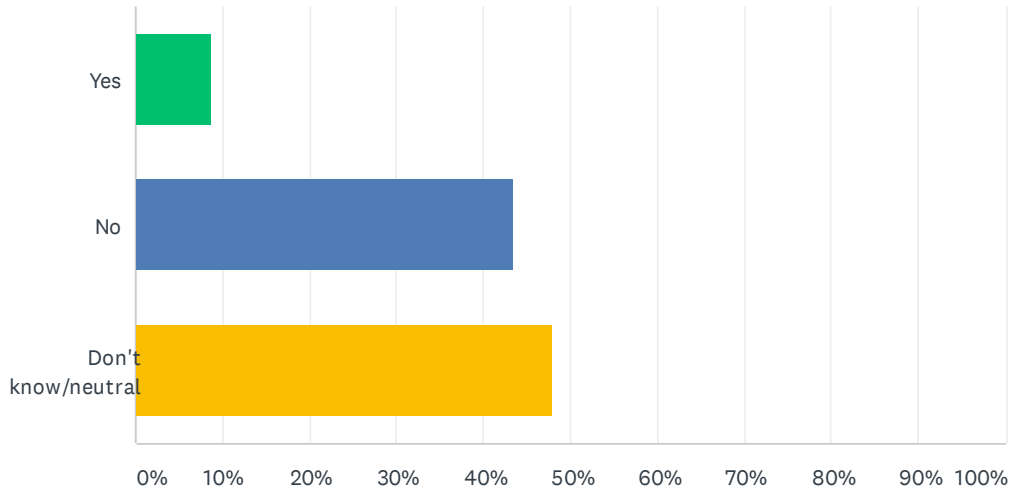


ANSWER CHOICES	RESPONSES	
I am not affected by activities at Camp Grayling	56.52%	13
Noise from Camp Grayling activities affects me negatively	13.04%	3
Noise from Camp Grayling bombing ranges specifically affects me	4.35%	1
Traffic from Camp Grayling affects me negatively	4.35%	1
I am concerned about groundwater contamination	43.48%	10
I am concerned about wildfires	8.70%	2
Other (please specify)	8.70%	2
Total Respondents: 23		

#	OTHER (PLEASE SPECIFY)	DATE
1	I support Camp Grayling.	12/11/2020 9:20 AM
2	Helecopters fly too low!!!	12/3/2020 2:48 PM

Q18 Do you think the township should adopt an overlay zone on private property outside of Camp Grayling (near the boundaries) which limits development to non-residential only? This proposed overlay zone would not include property that has already been developed as residential. (Click here to view map of noise contours around Camp Grayling to better see where noise has been an issue).

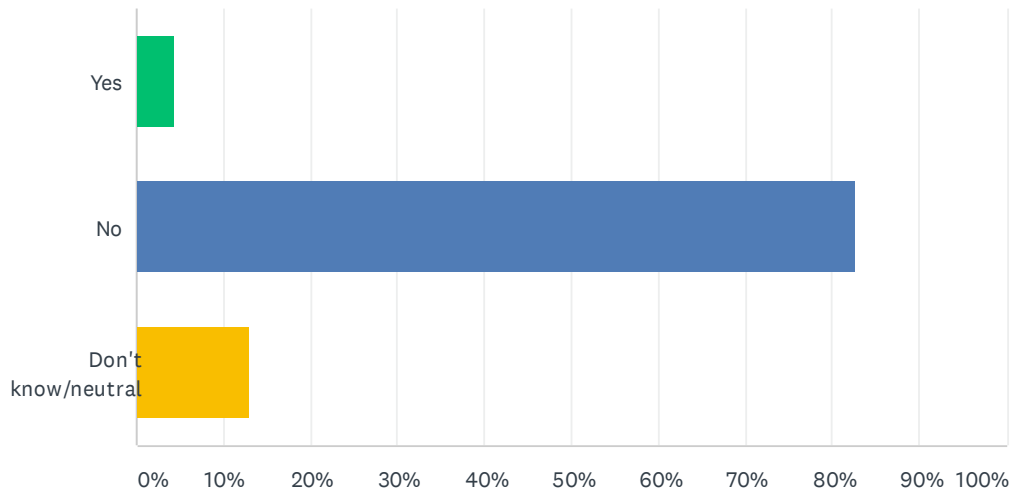
Answered: 23 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	8.70%	2
No	43.48%	10
Don't know/neutral	47.83%	11
TOTAL		23

Q19 Do you think the proximity to Camp Grayling land negatively affects your property value or ability to sell your home?

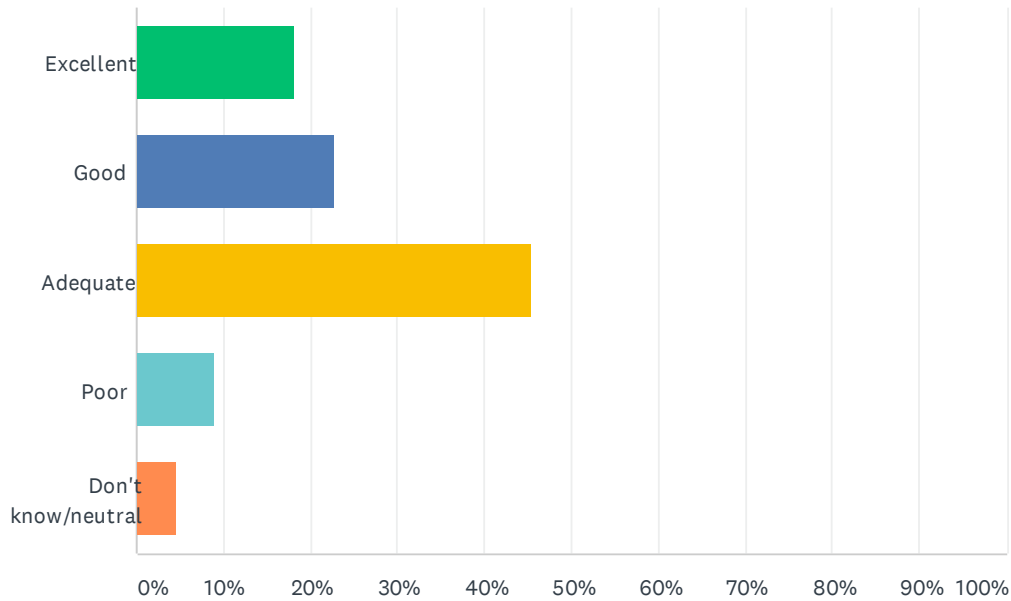
Answered: 23 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	4.35%	1
No	82.61%	19
Don't know/neutral	13.04%	3
TOTAL		23

Q20 What is the quality of services provided by the township government?

Answered: 22 Skipped: 4



ANSWER CHOICES	RESPONSES	
Excellent	18.18%	4
Good	22.73%	5
Adequate	45.45%	10
Poor	9.09%	2
Don't know/neutral	4.55%	1
TOTAL		22

#	EXPLANATION OR COMMENT:	DATE
1	not really many services provided	12/20/2020 5:20 PM

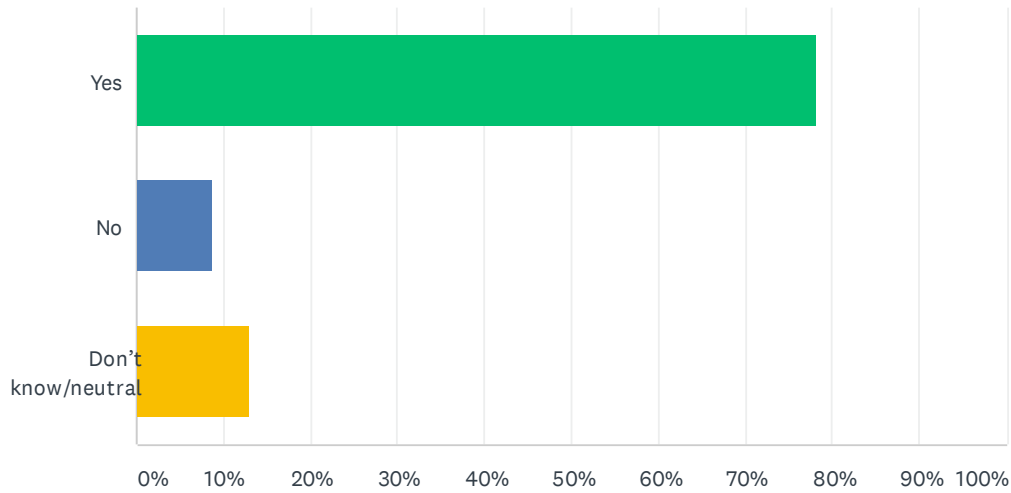
Q21 Are there additional services you would like to see the township offer?

Answered: 6 Skipped: 20

#	RESPONSES	DATE
1	Sports facility including a pool	12/22/2020 12:11 PM
2	County wide recycling	12/18/2020 10:55 PM
3	Restrict junk on residential property.	12/11/2020 9:49 PM
4	I would like to see the recycling program expanded...	12/11/2020 9:11 AM
5	Trash pickup, recycling, parks and rec department.	12/11/2020 8:57 AM
6	Bike path off north down over 75 to Rayburn property	12/11/2020 8:35 AM

Q22 Are you satisfied with law enforcement in the township?

Answered: 23 Skipped: 3

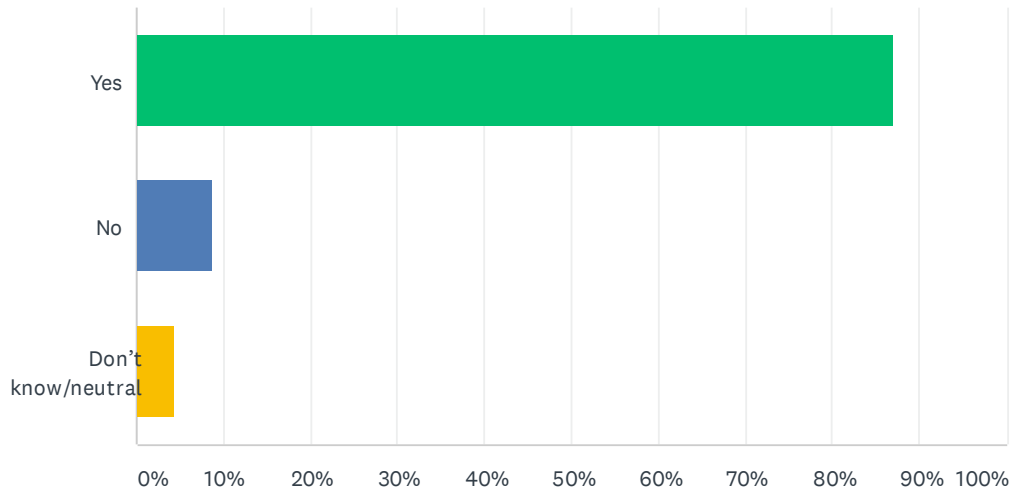


ANSWER CHOICES	RESPONSES
Yes	78.26% 18
No	8.70% 2
Don't know/neutral	13.04% 3
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
1	I've only had negative experiences.	12/11/2020 9:22 AM

Q23 Are you satisfied with fire protection in the township?

Answered: 23 Skipped: 3

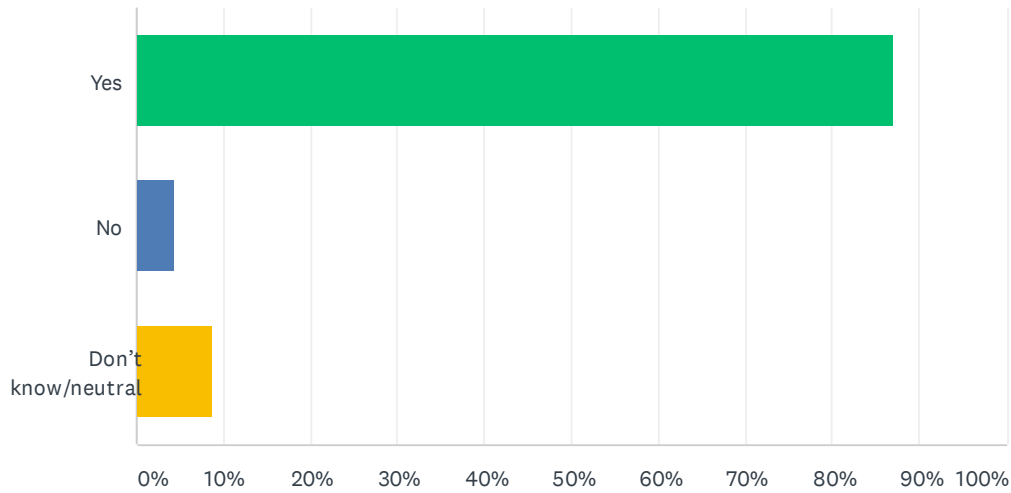


ANSWER CHOICES	RESPONSES
Yes	86.96% 20
No	8.70% 2
Don't know/neutral	4.35% 1
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
1	I don't see much that can be done for rural areas	12/20/2020 5:20 PM
2	The lack of a full time department increases my insurance.	12/11/2020 9:22 AM

Q24 Are you satisfied with emergency medical services in the township?

Answered: 23 Skipped: 3

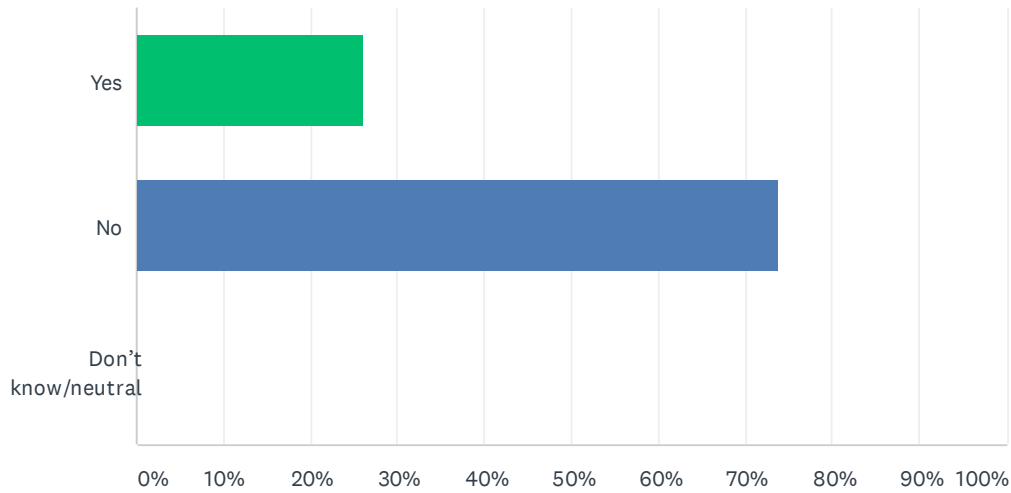


ANSWER CHOICES	RESPONSES
Yes	86.96% 20
No	4.35% 1
Don't know/neutral	8.70% 2
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
	There are no responses.	

Q25 Do you feel that the cellular network in the township is adequate?

Answered: 23 Skipped: 3

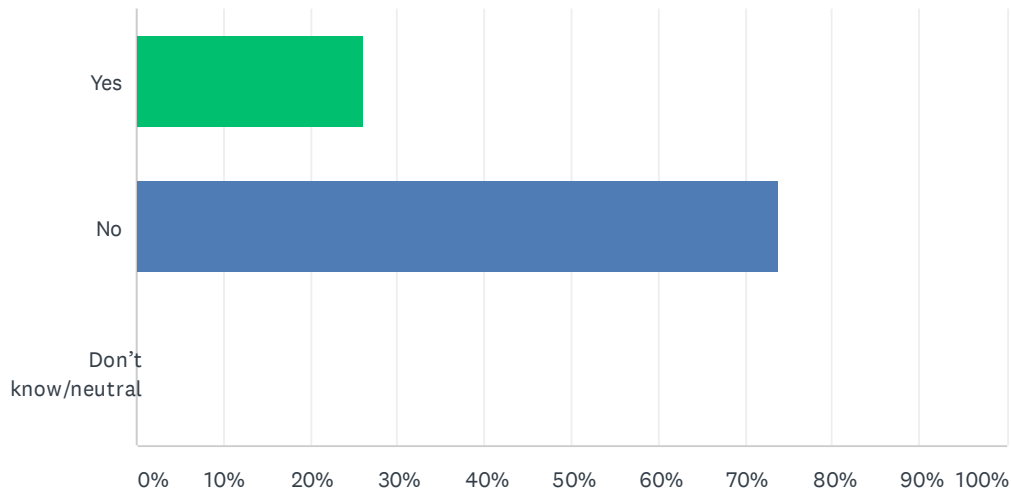


ANSWER CHOICES	RESPONSES
Yes	26.09% 6
No	73.91% 17
Don't know/neutral	0.00% 0
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
1	Verizon only has one bar of service one mile from the township hall	12/22/2020 12:11 PM
2	It is where I work and live but not widespread	12/11/2020 9:59 AM
3	Awful service and I'm not far out.	12/11/2020 9:22 AM

Q26 Do you feel that high speed internet access in the township is adequate?

Answered: 23 Skipped: 3

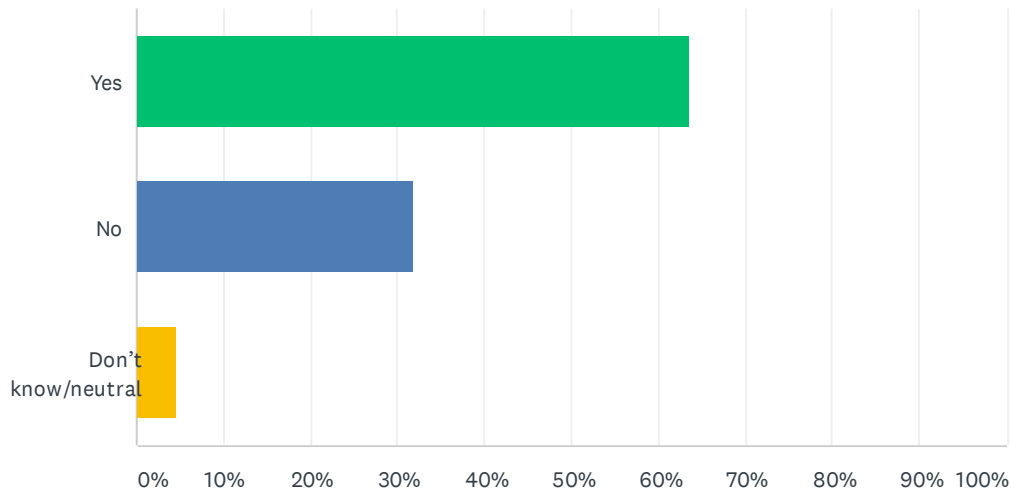


ANSWER CHOICES	RESPONSES
Yes	26.09% 6
No	73.91% 17
Don't know/neutral	0.00% 0
TOTAL	23

#	EXPLANATION OR COMMENT:	DATE
1	Charter frequently is very slow with daily momentary loss of signal	12/22/2020 12:11 PM
2	One provider with slow speeds is frustrating.	12/11/2020 9:22 AM
3	Doesn't go far enough	12/11/2020 8:35 AM

Q27 Are you satisfied with the solid waste disposal methods available to you in the township?

Answered: 22 Skipped: 4

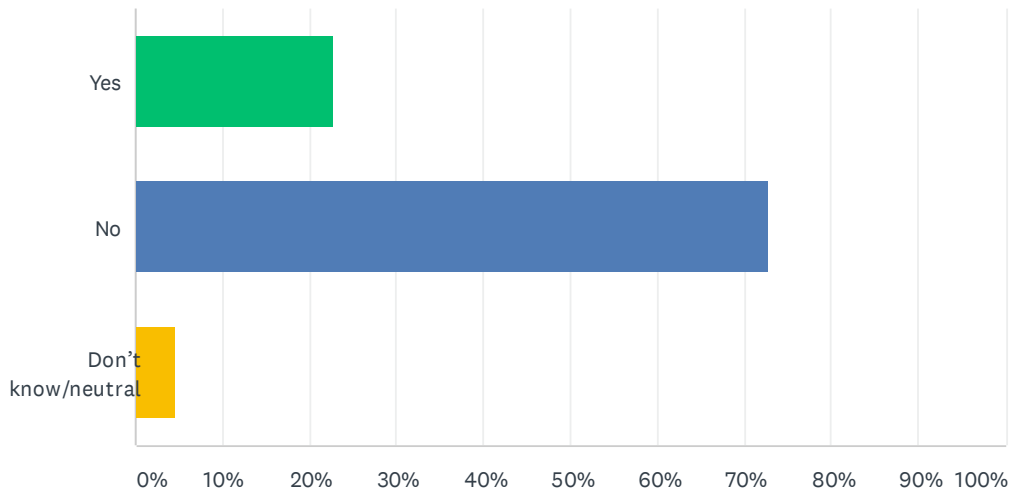


ANSWER CHOICES	RESPONSES	
Yes	63.64%	14
No	31.82%	7
Don't know/neutral	4.55%	1
TOTAL		22

#	EXPLANATION OR COMMENT:	DATE
1	Need to be able to recycle everything	12/18/2020 10:55 PM
2	I'm thankful we have it, but there are challenges.	12/11/2020 9:22 AM
3	I would just like to see recycling expanded.	12/11/2020 9:11 AM
4	Its inconvenient to take trash to dump, make it available to everyone regardless of sticker. We have a very poor population - make it easy and accessible to see change. It seems very archaic to have this method of trash disposal.	12/11/2020 8:57 AM

Q28 Are you satisfied with road maintenance, road construction, and road conditions in the township?

Answered: 22 Skipped: 4



ANSWER CHOICES	RESPONSES
Yes	22.73% 5
No	72.73% 16
Don't know/neutral	4.55% 1
TOTAL	22

#	EXPLANATION OR COMMENT:	DATE
1	Staley Lake Road seems to be graded too quickly in the summer months leading to ruts and potholes. In the winter as well.	1/30/2021 10:41 AM
2	many roads in need of repair - but this could be a county issue	12/20/2020 5:21 PM
3	Our road is damaging my vehicle... It is more patches than asphalt.	12/12/2020 12:13 AM
4	I had a paved road, it was torn up and never replaced with no reduction in taxes.	12/11/2020 9:23 AM
5	There arent enough funds to get adequate roads. Special assessments are done, which isnt fair to those who dont have money.	12/11/2020 8:58 AM
6	State/federal level funding to help repair roads damaged by military.	12/11/2020 8:35 AM

Q29 Are there roads or road segments you would like to see improved? Please list:

Answered: 13 Skipped: 13

ANSWER CHOICES	RESPONSES	
1.	100.00%	13
2.	61.54%	8
3.	23.08%	3
4.	15.38%	2
5.	7.69%	1

#	1.	DATE
1	4 mile Road	1/30/2021 10:41 AM
2	stephan bridge road	12/20/2020 5:21 PM
3	Stephan bridge	12/17/2020 5:56 PM
4	Jones Lake Road	12/15/2020 8:35 PM
5	Jones Lake Road	12/12/2020 9:42 AM
6	Pembroke Drive (it is ruining my car)	12/12/2020 12:13 AM
7	entire clough subdivision	12/11/2020 9:49 PM
8	Jones lake rd.	12/11/2020 3:58 PM
9	Jones Lake Rd	12/11/2020 10:00 AM
10	Airport Rd	12/11/2020 9:23 AM
11	Jones Lake Road	12/11/2020 8:58 AM
12	Jones Lake Rd	12/11/2020 8:35 AM
13	Jones Lake Road	12/3/2020 2:49 PM

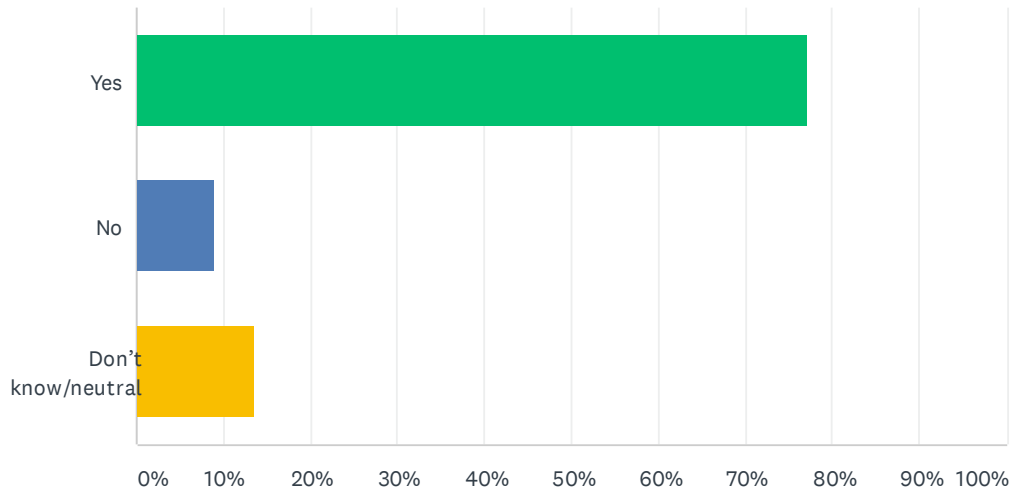
#	2.	DATE
1	Staley Lake Road	1/30/2021 10:41 AM
2	chase bridge	12/17/2020 5:56 PM
3	County Road 612	12/12/2020 9:42 AM
4	Banbury Drive	12/12/2020 12:13 AM
5	Evergreen drive	12/11/2020 3:58 PM
6	Jones Lake Road	12/11/2020 8:58 AM
7	Dale St	12/11/2020 8:35 AM
8	Karen Woods Roads	12/3/2020 2:49 PM

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#	3.	DATE
1	Wellington Way	12/12/2020 12:13 AM
2	Jones Lake Road	12/11/2020 8:58 AM
3	Old 27	12/11/2020 8:35 AM
#	4.	DATE
1	Crescent Drive	12/12/2020 12:13 AM
2	Jones Lake Road	12/11/2020 8:58 AM
#	5.	DATE
1	Beaver Island Road	12/11/2020 8:58 AM

Q30 Are you satisfied with snow removal within the township?

Answered: 22 Skipped: 4

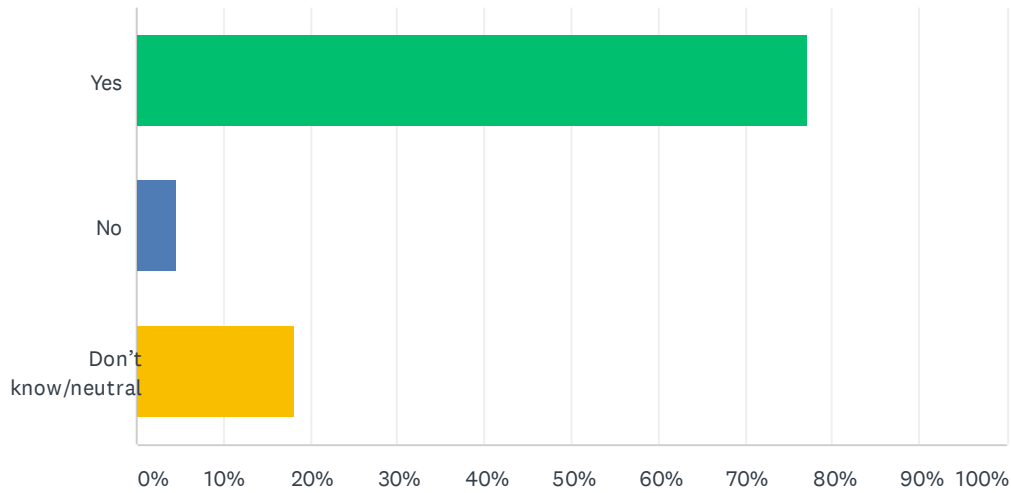


ANSWER CHOICES	RESPONSES	
Yes	77.27%	17
No	9.09%	2
Don't know/neutral	13.64%	3
TOTAL		22

#	EXPLANATION OR COMMENT:	DATE
1	Weekends No, Weekdays Yes	12/12/2020 9:42 AM
2	I wish it was sooner after a snow event, but I understand why it isn't	12/12/2020 12:13 AM

Q31 Do you feel that public transportation is adequate in the township?

Answered: 22 Skipped: 4

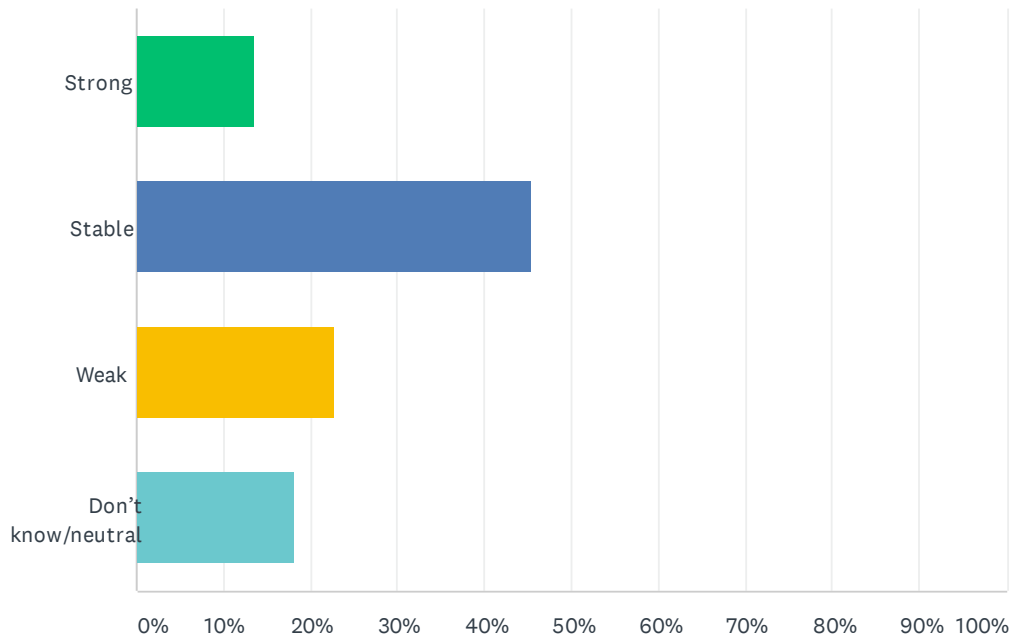


ANSWER CHOICES	RESPONSES
Yes	77.27% 17
No	4.55% 1
Don't know/neutral	18.18% 4
TOTAL	22

#	EXPLANATION OR COMMENT:	DATE
	There are no responses.	

Q32 What is your perception of the current real estate market in the township?

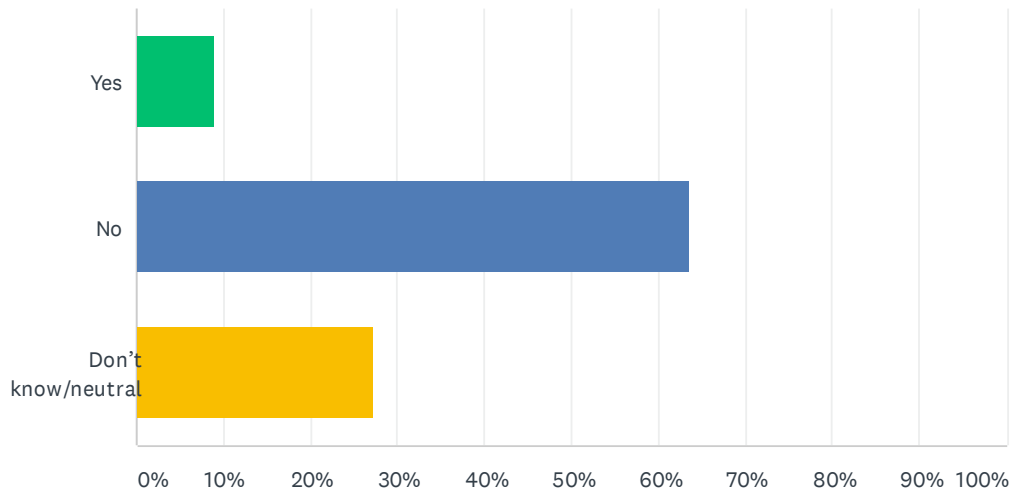
Answered: 22 Skipped: 4



ANSWER CHOICES	RESPONSES	
Strong	13.64%	3
Stable	45.45%	10
Weak	22.73%	5
Don't know/neutral	18.18%	4
TOTAL		22

Q33 Do you feel there are adequate job opportunities in the township or surrounding area?

Answered: 22 Skipped: 4

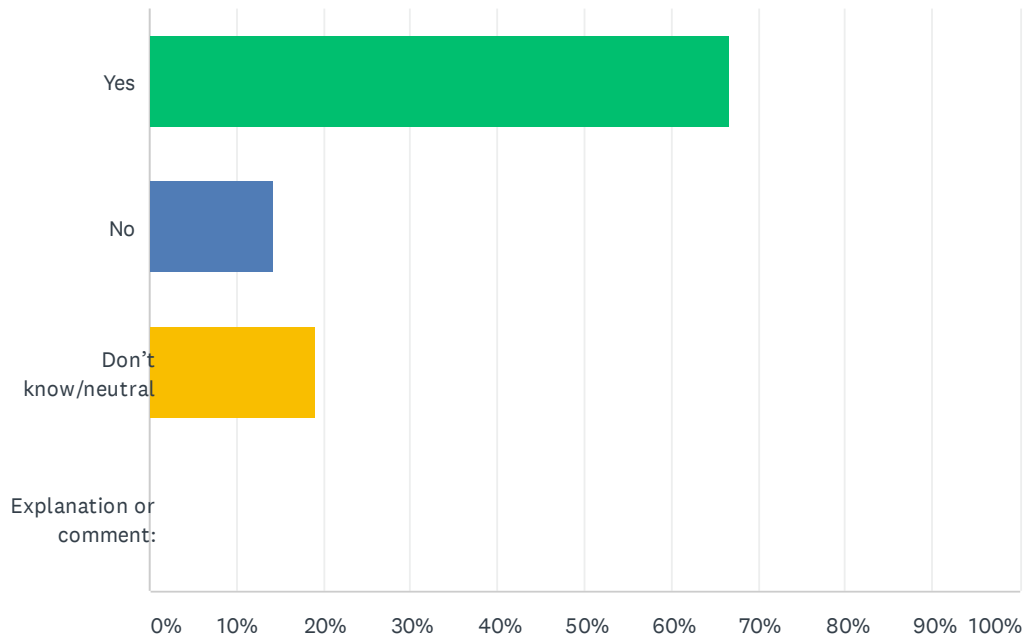


ANSWER CHOICES	RESPONSES
Yes	9.09% 2
No	63.64% 14
Don't know/neutral	27.27% 6
TOTAL	22

#	EXPLANATION OR COMMENT:	DATE
	There are no responses.	

Q34 Do you favor partial tax abatements to attract and retain new jobs and businesses?

Answered: 21 Skipped: 5



ANSWER CHOICES	RESPONSES
Yes	66.67% 14
No	14.29% 3
Don't know/neutral	19.05% 4
Explanation or comment:	0.00% 0
TOTAL	21

#	EXPLANATION OR COMMENT:	DATE
	There are no responses.	

Q35 Please use this space to make any additional comments which might help township officials plan for the community's future:

Answered: 4 Skipped: 22

#	RESPONSES	DATE
1	We have a need for a indoor sports facility that includes a swimming pool.	12/22/2020 12:14 PM
2	Take care of the blight Enforce the laws we have	12/17/2020 5:57 PM
3	extend out city water and sewer serices	12/11/2020 9:51 PM
4	Thank you for finding ways to make Grayling Twp even better. Lets position ourselves for future growth and focus on bigger ideas and broader thinking. Be open to new ideas!	12/11/2020 8:59 AM