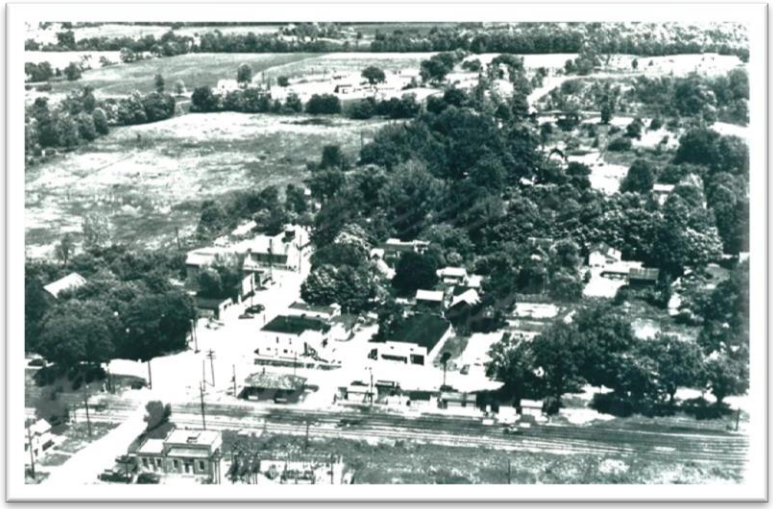

RIVES TOWNSHIP

MASTER PLAN

2018 Edition

The 2018 edition of the Rives Township Master Plan was adopted by the Rives Township Planning Commission on xxxxxxxx x, 2018

_____
Rives Township Planning Commission Chair

The 2018 edition of the Rives Township Master Plan was approved by the Rives Township Board on xxxxxxxx x, 2018

_____
Rives Township Clerk

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CHAPTER 1

INTRODUCTION

RIVES TOWNSHIP

Why Plan?

Municipalities have a vested interest in developing master plans. The master planning process provides an opportunity for municipalities to develop an overall vision for the next 20 years and to conduct a comprehensive review of their facilities and services. A successful Plan also contributes to the public understanding of the planning process and describes how its goals are to be achieved.

Section 31 of the Michigan Planning Enabling Act (PA 33 of 2008, MCL 125.3831) requires each planning commission to prepare and adopt a "master plan as a guide for development within the planning jurisdiction." The MPEA authorizes a planning commission to "do all of the following, as applicable:

- Make careful and comprehensive surveys and studies of present conditions and future growth within the planning jurisdiction with due regard to its relation to neighboring jurisdictions;
- Consult with representatives of adjacent local governments in respect to their planning so that conflicts in master plans and zoning may be avoided;
- Cooperate with all departments of the state and federal governments and other public agencies concerned with programs for economic, social, and physical development within the planning jurisdiction and seek maximum coordination of the local unit of government's programs within these agencies."

What is a Master Plan?

A master plan provides a framework within which Rives Township can evaluate its present condition and develop a vision for the future. The master plan also serves as the guiding document for land use, development, and zoning decisions. A well-designed and implemented plan which is kept up-to-date will help Rives Township to continue to be a highly desirable community in which to live, work, and visit.

Master Plan Principles

Before using the master plan to guide future development, it is important to understand some of the basic principles upon which it is based:

- **The Plan is flexible** — The document is not meant as a monument cast in stone, never to be adjusted or changed given that it plans for the next 20 years. The plan is a general guide to be used by the government to give direction for the future of Rives Township. It should be reviewed periodically and altered as general conditions in the community change.

- **The Plan allows for orderly development** — The land use allocations reflected in the plan are based upon the best available projections of future population levels for the Rives Township area. The plan must realistically provide sufficient land area to meet the anticipated needs and demands of our residents and businesses, while at the same time protecting the overall quality of life and the physical environment. While the document does not require a use which might provide the greatest amount of return on investment in land, it does require that property owners receive a reasonable return on their investments.
- **The Plan must encourage public understanding and participation** — The plan should be written in a way that aids public understanding of the planning process and describes how goals for Rives Township are to be achieved.
- **The Plan must be the result of a general consensus of the community** — Plan elements must be clearly understood by all and followed consistently to minimize the possibility of arbitrary decision making. A clear consensus is needed during the planning process to ensure that the Plan will be followed.
- **The Plan must balance property rights** —The law requires that all property owners be granted a reasonable use of their property. This includes the rights of adjoining property owners to enjoy their property.
- **The Plan is not a zoning map** — The document reflects the planned use of land, taking into consideration existing development, but does not depict a "new" zoning district map. Since the plan and zoning map are intended to be in reasonable harmony, it is likely that future zoning districts will take the shape of the plan as rezoning requests are received and reviewed by the community.
- **Zoning is not a substitute for a Master Plan** — The plan is a long range guide for community development. Zoning approvals are specific to a piece of property and are always attached to the land. They may not be restricted to an individual. Zoning approvals are always permanent, unless the use itself is temporary in nature.
- **Deviation from the Plan puts zoning decisions at risk of invalidation** — Zoning decisions that are not based upon the plan risk invalidation if faced with a legal challenge. Decisions made on the basis of the document may be afforded additional validity, since the decision was not made in an arbitrary fashion, but follows a rational plan for the Rives Township area.

Future Land Use and Zoning

The heart of the master plan is its depiction and descriptions for future land use. Determining the future use of land should be based on several factors, including:

- Community character
- Adaptability of land
- Community needs
- Available services
- Existing development
- Existing zoning

The connection between the master plan and the zoning ordinance of Rives Township is often misunderstood. Accordingly, the relationship between the plan's future land use map and the zoning map is a critical one. That link is established through the zoning plan element of the master plan.

Use of the Master Plan

Completion of the Master Plan is not the end of the planning process. Continuous and effective use of a Plan is necessary to ensure its validity. Failure to follow a Plan may discredit any attempt to use it as a defense for actions which may be challenged by property owners or developers.

Likewise, consistent and vigorous use of a Plan will lend credibility to the community's implementation of controversial decisions on zoning actions. While state courts do not normally recognize the absolute authority of a master plan, they do lend more credibility to actions supported by careful planning than those which appear to be made arbitrarily. The more common uses of the master plan include:

- **Zoning Decisions** — Since the master plan determines the future use of land, rezoning decisions should be consistent with its provisions. This is not to say that all rezonings that are consistent with the future land use map should automatically be approved. However, if all of the preconditions of the Master Plan are met, approval of the request may logically be forthcoming.

  On the other hand, a rezoning request different from that shown in the plan should not automatically be rejected, particularly if the Plan has not been reviewed in some time. Instead, each request should be evaluated to see if the conditions originally considered when the plan was adopted have changed. If so, the plan may deserve reconsideration (but need not necessarily be changed).

- **Utility Extensions/Capital Improvements** — A useful function of the master plan is its designation of land use intensity when evaluating the need for improved utilities, new roadways and public buildings, and other improvements. This information may be included in a Capital Improvement Plan (CIP). The CIP is a six-year plan, updated annually, for capital expenditures necessary for plan implementation.

Development of the CIP is the responsibility of the Planning Commission with considerable input from the municipal staff and consultants (e.g., engineers, planners, administrators, etc.) and other officials. Its principal elements include project names, descriptions, costs, priorities, years to be completed or begun, and potential or planned funding sources. This information provides property owners with some assurance that improvements necessary to implement the Plan are forthcoming, and shows a general schedule of those improvements.

- **Environmental Impact** — The master plan (as a reflection of the intensity of land use) should reflect the degree to which Rives Township desires to protect its environment and natural features. The plan should establish that value to the community and propose steps to implement the appropriate regulations.

- **Recreation Planning** — The master plan (through the provision of future residential lands) will create a need for recreation/open space land. The master plan can assist in the setting of priorities for park development. For example, parks and recreation plans pay special attention to the goals and objectives of the master plan. If additional recreation services are called for in the plan, these services may be noted in the parks and recreation plan.

  A review of Future Land Use is also important. If a Master Plan indicates that substantial new residential development will be forthcoming in a particular area, some indication should be made for the need to acquire and develop additional park land. However, the Future Land Use Map cannot indicate specific properties as park land, unless the land is in public ownership, or steps are already well underway to acquire that property.

  In order to qualify for grant programs at the state level, or federal grants administered at the state level, the Michigan Department of Natural Resources (MDNR) requires that Rives Township have a current (no more than 5 years old) parks and recreation plan on file with the agency. The Township does not have a current recreation plan on file with the MDNR.

- **Approval of a public way, space, building or structure** — An often overlooked provision in state law is a requirement that the Township planning commission review any new street, park acquisition, public building, or other similar easement, street, or use, shown in the master plan, prior to any positive actions taken to implement such improvement. This ensures that the proposed improvement is in compliance with the provisions of the master plan. Although a denial may be overruled by the controlling authority, the review is still required.

- **Transportation Improvements** — There is a clear relationship between transportation and land use. As development proceeds, the need for new or improved roadways becomes obvious. By measuring the intensity of future development shown in the Master Plan, trans-

portation planners can estimate needed rights-of-way widths, number of lanes, and the level of necessary access management.

Keeping the Plan Current

An outdated Plan that is not frequently reviewed can weaken decisions based upon the document. The planning commission should conduct an annual review of the Plan to ensure that it is kept current. Elected/appointed township officials and employees can assist by bringing issues not addressed in the document to the attention of the planning commission. Any amendments to the Plan can be done at that time to keep it up to date and consistent with community philosophies. For example, some goals may have been achieved and new ones need to be established. Where uses have been approved contrary to the plan, the document should be amended to reflect these changes. By routinely following this procedure, the Master Plan will continue to be an up-to-date and reliable planning tool. Even though the plan has a 20 year horizon, a comprehensive update should occur at least every 5 years according to the Michigan Planning Enabling Act (MPEA).

How Did the Plan Develop?

This document is the first update to the *Rives Township Master Plan*. The Township adopted its first master plan in 1977.

Citizen participation is extremely important to the success of almost any planning effort. Citizen participation helps guarantee that the vision outlined for the future of the Rives Township area accurately reflects the true goals of its residents. Direct and indirect public input opportunities included:

- Meetings of the planning commission where the Plan was included on the agenda (open to the public);
- A community planning survey; and
- A public hearing on the Master Plan.

Who Will Implement the Plan?

Three distinct bodies in the Township are charged with planning and zoning: the planning commission, the zoning board of appeals, and the township board. All of their decisions and recommendations should be based upon the Master Plan. Decisions not based upon the Plan should trigger the review and possible amendment of the document.

Planning Commission

Development and approval of the Master Plan is an important responsibility of the planning commission. The commission is charged with the development of zoning and other ordinances (over which the township board has final authority). The planning commission also recommends approval or rejection of requests to the township board for rezonings and various other zoning proposals.

Zoning Board of Appeals

The zoning board of appeals (ZBA) decides dimensional variance requests (e.g., setback requirements). The ZBA also makes official interpretations of the zoning ordinance when the meaning or intent of the legislation is not clear. ZBA decisions are final. Appeals are made to the circuit court.

Township Board

As the legislative body for the Township, the township board is responsible for the passage of all ordinances, including the zoning ordinance and other planning-related legislation. It also appoints members to the planning commission and the ZBA.

Other Planning Efforts

Township staff and other township committees may also undertake planning efforts on their own or in conjunction with the planning commission. These planning efforts may include housing, key transportation corridors, historical districts, and the other plans. Future updates to those plans should complement the goals of the Master Plan. In turn, those documents should be consulted whenever the Plan is amended or a new plan is adopted. This consultation should also extend to regional planning efforts.

CHAPTER 2

COMMUNITY DESCRIPTION AND ISSUE IDENTIFICATION

RIVES TOWNSHIP

Location

Rives Township is located in the far north-central portion of Jackson County. It is surrounded by the Townships of Tompkins to the west, Henrietta to the east, and Blackman to the south, along with Leslie Township (in Ingham County) to the north. Accessibility to urban centers is important to the Township because it is basically rural in character. There are no urban centers within the Township. Therefore, residents must travel to other places to obtain these amenities. Interaction with urban areas provides Township residents with cultural, educational, shopping, and employment opportunities. Urban centers in proximity to the Township include Jackson and Lansing as well as the smaller communities of Mason and Leslie.

Population/Demographics

See Appendix A for detailed information on Rives Township's population trends. However, the data contained in that appendix is summarized below:

- **General Population.** The population of Rives Township was 4,683 in 2010, according to the U.S. Census. It is projected that the population will grow to 4,821 by 2035 and then decrease to 4,803 by 2045.
- **Generations. Age & Gender** — The median age of Rives Township residents was estimated to be 37.0 years during the 2010-2014 time period, according to the American Community Survey. People between 45 and 54 years of age were estimated to be the largest age group, comprising an estimated 15.7% of residents. People between 35 and 44 years of age were estimated to be the second largest age group with 12.8% of the population. Females comprised an estimated 50.5% of the Township's population during the 2010-2014 time period.
- **Race & Ethnicity.** Rives Township has a very homogeneous population. An estimated 97.4% of Township residents are white. Only an estimated 2.6% of residents consider themselves to be Hispanic (Latino/Latina).
- **Disabilities.** An estimated 13.3% of Township residents are disabled. An estimated 37.5% of residents at least 65 have some type of disability and an estimated 11.9% have an ambulatory disability. Only an estimated 6.3% of residents 18 to 64 years old are disabled and only an estimated 2.2% have an ambulatory disability.
- **Households & Families.** Most residents live in the estimated 1,653 households in the Township. Families comprised an estimated 73.7% of households. However, an estimated 19.2% of households consist of a single person. The estimated size of the average household is 2.81 people and the average family has 3.27 people.

- **Household Income.** The Township's median household income is estimated to be $62,196 and the median family income is $70,978. The per capita income is $24,319.
- **Dwellings & Vacancy Rates.** It is estimated that the Township contains 1,732 dwellings. An estimated 95.4% are occupied.
- **Housing Types.** It is estimated that 82.9% of the Township's 1,732 dwellings are single-family homes. Only 1.6% of units are estimated to be located in multi-unit buildings. Finally, an estimated 15.5% of dwellings are mobile homes.

Community Facilities and Services

A variety of facilities and services are provided to Township residents, employers and employees, and visitors:

Police and Fire

The Township is served by the Rives-Tompkins Fire Department which maintains two of its three fire stations in Rives Township. The stations are located on Main Street in the unincorporated village of Rives Junction and on Lansing Avenue, just north of Berry Road. Police service is provided by the Jackson County Sherriff's Department and the Michigan State Police.

Healthcare Facilities

There are no healthcare facilities in the Township. However, medical facilities are available in the City of Jackson. Henry Ford Allegiance Health is capable of providing long-term care. Additional specialized care is available in Lansing and Ann Arbor.

Utilities

Consumers Energy provides electricity and natural gas throughout the Township. Telephone service is provided by Frontier Communications and AT&T. Those utilities are also the primary cable television and internet providers in the Township.

Public Sanitary Sewer and Water

All Rives Township households and businesses rely on individual wells and most rely on individual septic systems. However, the unincorporated village of Rives Junction and some houses on Rives Junction Road, are served by sanitary sewer.

Solid Waste Disposal

Rives Township provides a Type B Transfer Facility which residents can utilize to properly dispose of solid waste (i.e., trash) and recyclable materials. It is located off of Berry Road, east of US-127. Some households and businesses contract directly with the trash hauler of their choice.

Schools and Libraries

Most of the Township is served by the Northwest School District, a part of the Jackson County Intermediate School District. A small portion of the Township to the north is served by the Leslie School District. Several colleges are potentially within commuting range, including Baker College, Spring Arbor University, and Jackson College. The Jackson District Library (JDL) serves Township residents. However, none of the Library's thirteen branches are located in Rives Township.

Parks and Recreation

The Township maintains a small park behind the fire station in the unincorporated village of Rives Junction. The park contains a ballfield used by local teams, a playground, and picnic pavilion. A memorial to Rives Township veterans is also located in the park.

Roadways

US-127 is the sole state highway traversing Rives Township (see the Transportation Map). The Berry Rd. interchange provides direct access to the divided highway (i.e., expressway) within the Township. A rest area is also provided for southbound traffic, south of the Berry Rd. interchange.

All of the other public roads traversing the Township are maintained by the Jackson County Department of Transportation (JCDOT). Lansing Ave. and Berry, Rives Eaton, Rives Junction, Territorial, and Wood roads are county primary roads. Portions of Churchill (to Rives Eaton Rd.), Cooper (to Berry Rd.), Maple Grove (Lansing Ave. to Cooper Rd.), and Perrine (Rives Junction Rd. to Churchill Rd.) roads are also county primary roads. The entirety of Lansing Avenue is built to Class A (i.e., all season) standards, as are portions of Rives Eaton (Perrine Rd. to Berry Rd.) and Berry (Rives Easton Rd. to Lansing Ave.) roads. All of the other public roads traversing the Township are county local roads. There are no unpaved public roads traversing the Township. Baseline Road is maintained by Ingham County and is not included in the above analysis of the Township's roadway network.

Railroads

An active railroad also traverses Rives Township (see the Transportation Map). The Jackson & Lansing Railroad is one of five short-line railroads operated by the Adrian & Blissfield Rail Road Company. The corporate offices are located in Westland, Michigan.

Pipelines

There are several underground pipeline corridors traversing Rives Township (see the Pipelines & Airport Zones map) according to the National Pipeline Mapping System (https://www.npms.phmsa.dot.gov/). A gas transmission pipeline corridor follows Lansing Avenue. A hazardous liquid

pipeline corridor follows the Jackson & Lansing Railroad. Finally, a gas transmission pipeline and hazardous liquid pipeline corridor traverses the northwest corner of the Township.

Jackson County Airport – Reynolds Field

Most of Rives Township falls within the airport zoning area developed for the Jackson County Airport (see the Pipelines & Airport Zones map). Accordingly, buildings and other structures 100 feet tall or more within Zone C must be reviewed for compliance with Jackson County Airport zoning regulations. Buildings and other structures 200 feet tall or more within Zone D must be reviewed for compliance with Jackson County Airport zoning regulations and may require permits from the Michigan Department of Aeronautics and the Federal Aviation Administration (FAA).

Other Institutions

Rives Township is also home to a couple of unique private institutions.

- **Dormition of the Mother of God Orthodox Monastery.** The monastery is an "Orthodox monastic community under the omophorion of His Eminence Archbishop NATHANIEL of the Romanian Orthodox Episcopate of the Orthodox Church in America. [The] Monastery is located . . . on 200 acres of largely wooded land with an array of wildlife. It serves as a spiritual haven, not only for the monastics but also for pilgrims, a place away from the cares and temptations of the secular world, a place for spiritual guidance and growth" (http://www.dormitionmonastery.org/).
- **Youth Haven.** Youth Haven's "primary outreach tool is camping, with week-long summer camps and weekend camp sessions throughout the school year. Each year, over 3,000 less fortunate children come to Youth Haven's campuses in Michigan and Arizona, where they can enjoy the beauty of nature and participate in a variety of fun activities with other kids their age. [Youth Haven's] adult staff listen to them, spend time with them, and model positive behavior for them. . . . [Youth Haven does its] best to stay in touch with the children through follow-up letters, kids' newsletters, and birthday cards. [Children are invited] to return regularly, so Youth Haven can be a stable part of their lives. . . .[Youth Haven works] with a specific demographic of children who would not have opportunities to go to camp if they were required to pay for their stay" (https://www.youthhaven.org/how-we-help).

Natural Resources

Rives Township hosts a variety of natural resources.

Topography

The topography is gently rolling with elevation extremes of 1,034 feet above sea level in the vicinity of the Berry Road interchange with US-127 to 896 feet above sea level near the Grand River on the western edge of the Township (see the Topography map). There is a large low-lying area along the Grand River as it traverses Rives Township. There are also various scattered low-lying areas in other parts of the Township. These depressed areas could be a limiting factor for certain types of development.

Soils

More so in the past than the present, soils have been a key location factor for crops, pasture, dwellings, open land, forests, wetlands, and other land features.

- **Agricultural Productivity.** Agricultural productivity is based upon a number of factors and certain soils are deemed to be the most productive in a particular region. While management practices will allow practically any soil to be productive, some soils allow greater productivity with less input. These competitive soils are the ones that are best for crop production.

  What is the basis for selection of a particular soil for classification as a productive soil within a region? The most obvious criteria are the production of general field crops–information which is available from a soil survey. Certain crops may need special soils such as mint or blueberries but these are specialty situations, not generally produced crops. To maintain the agricultural economy of the county the most productive soils need to be preserved in the agricultural districts.

  Agricultural productivity is based on a ranking system which was developed from the Jackson County Soil Survey using production figures for all the crops generally grown in Jackson County. Yields of corn, corn silage, winter wheat, oats, soybeans, and alfalfa hay were used. There is not a clear pattern of agriculturally productive lands in the Township (see the Most Productive Soils map).

- **Hydric Soils.** Hydric soils are poorly drained and subject to occasional flooding. Along with other sources such as the National Wetlands Inventory and aerial photographs, they can be used to identify wetlands and other sensitive lands. Hydric soils are also associated with lakes and streams. Hydric soils are located along the Grand River, the Jackson & Lansing Railroad, and various other low-lying areas in the Township (see the Hydric Soils map).

Water Resources (Hydrology)

All of Rives Township lies within the Upper Grand River Watershed. The Grand River is the predominant water feature in the Township although there are a variety of small lakes/ponds and creeks/streams, and county drains. The extensive drainage pattern along with rolling topography can result in wetlands and flooding at certain times of the year.

Rives Township participates in the Federal Emergency Management Agency's (FEMA's) Federal Flood Insurance Program. A 100-year floodplain is associated primarily with the Grand River as it traverses the Township (see the Flood Zones map). Wetlands are also located along the Grand River, the Jackson & Lansing Railroad, and various other low-lying areas in the Township (see the Hydrology map), similar to hydric soils. The locations of flood plain areas and wetlands should be carefully studied because they present potential difficulties to development. It may be technologically feasible to develop in these areas but the long term threat of flood damages may make these undesirable locations for development.

Woodlands

A significant portion of the Township is forested. These woodlands are scattered in small patches and they also follow a belt which parallels the Grand River (see the Aerial Photo map). Because they add to the aesthetics of the Township, it may be desirable to regulate the intensity of development in some of these areas.

Existing Land Use

An inventory of existing land use is an important factor in the development of a future land use map for Rives Township. Assessing data compiled by the Township was utilized to determine existing land use in 2016. The township assessor assigns a numeric code to each property as part of the assessment process which was then translated into a broad land use category. Using this process Rives Township can be divided into the following land uses (please see the Property Assessment Map):

2016 Existing Land Use

Land Use	Acres	Sq. Mi.	%
Agricultural	11,536.0	18.0	52.2%
Residential	9,299.7	14.5	42.1%
Commercial	170.0	0.3	0.8%
Industrial	277.5	0.4	1.3%
Railroad	79.7	0.1	0.4%
Public/Quasi-Public	736.4	1.2	3.3%
Unknown	1.7	0.0	0.0%
Total	29,036.5	45.4	100.0%

Agricultural

Agriculture is still an important land use in the Township with 52.2% of the Township dedicated to this land use in 2016. Although 18.0 square miles were dedicated to agriculture, it appears that those properties are often commingled with primarily residential land uses distributed unevenly throughout the Township. However, it should also be pointed out that it is likely that the percentage of land dedicated to agriculture would be higher if an actual physical inventory of land use were conducted.

Residential

Residential properties covered 42.1% of the Township in 2016. Residential neighborhoods are distributed throughout the Township and are often located adjacent to agricultural land. The close proximity of some residences and farmland increases the potential for conflict. Many of those residences are built on large lots, creating a lot of unformed and non-contiguous open space. It should also be noted that 21.6% of the 14.5 square miles of residential land was classified as being vacant.

Commercial

Commercial properties occupied 0.8% of the Township in 2016. Most of the 0.8 square miles of commercial properties are concentrated in the unincorporated village of Rives Junction as well as in the vicinity of US 127 on the southern border of the Township.

Industrial

Industrial properties occupied 1.3% of the Township in 2016, including a Consumers Energy power line near the northern border of the Township. Railroad properties occupied another 0.4% of the Township.

Public/Quasi-Public

Public/Quasi-Public properties occupied 3.3% of the Township in 2016. Youth Haven is the largest of the Public-Quasi-Public properties, located north of the unincorporated village of Rives Junction.

2017 Rives Township Survey

Rives Township residents and property owners were asked to answer a short questionnaire in the winter of 2017 in order to provide an opportunity for input into the development of the 2017 edition of the *Rives Township Master Plan*. A total of 208 surveys were returned. The results of the survey are summarized below. Please see Appendix B for a complete analysis of the survey.

Quality of Life and Community Services

Respondents were asked to rank the following:

- **How do you rate the Township as a place to live?** Approximately 80% of responses were 'good' or 'excellent'.
- **How do you rate the administration of the Township?** Approximately 64% of responses were 'good' or 'excellent'.
- **How do you rate the Rives-Tompkins Fire/Rescue Department?** Approximately 80% of responses were 'good' or 'excellent'.
- **How do you rate the Township's park and ballfield?** Approximately 40% of responses were 'good' or 'excellent'.
- **How do you rate the Township's cemeteries?** Approximately 31% of responses were 'good' or 'excellent'.
- **How do you rate highways, roads, and streets in the Township?** Approximately 117% of responses were 'good' or 'excellent'.
- **How do you rate the railroad crossings in the Township?** Approximately, 13% of responses were 'good' or 'excellent'.

Future land use and related planning issues

Respondents were asked their opinion on the following:

- **Should the Township strive to preserve farmland?** Approximately 92% of responses were 'yes'.
- **Should the Grand River be made navigable for small boats, canoes, and kayaks?** Approximately 87% of responses were 'yes'.
- **Should the Township encourage additional commercial/light industrial development?** Approximately 68% of responses were 'yes'.
- **Should the Township opt-in to the new regulations regarding medical marijuana?** Approximately 59% of responses were 'no'.

General Comments

Respondents were also given an opportunity to provide general comments about the Township and/or the survey. A summary of those responses include: medical marijuana (mostly negative, including confusion over the question), the poor condition of roads and railroad crossings, impressions of the Township Board, concern about property blight/junkyards, clean-up of the Grand River, commercial/industrial areas, infrastructure needs (i.e., cable/internet, sewers), the Township's rural characteristics, the recycling center/trash site (i.e., transfer station), and other miscellany.

CHAPTER 3

COMMUNITY POLICIES AND PLANS

RIVES TOWNSHIP

Goals and Objectives

The goals and objectives of land use establish the basis for the Master Plan. They establish the intent of the Township in the preparation of its Master Plan and provide the basis for measures which the Township utilizes to implement the Master Plan. As a result of the analysis of the Township population, land use, natural features, transportation, and other factors included in previous sections of the Master Plan, the following goals and objectives are established for Rives Township:

Open Space and Natural Areas

Goal: Open spaces and natural areas should be protected and preserved for their natural assets which are valuable to the community's present and future well-being.

Objectives:

1. Encourage the preservation of areas identified as open spaces and natural areas from incompatible and unnecessary urban development.
2. Encourage low residential densities in open spaces and natural areas.

Agricultural Land Uses

Goal: Valuable agricultural areas should be preserved and protected from encroachment by other land uses.

Objectives:

1. Encourage the protection of lands identified as having value for generalized or specialized agricultural activities from incompatible and unnecessary development.
2. Encourage higher residential densities in limited areas in order to preserve agriculture.
3. Follow the requirements of the Michigan Right to Farm Act and the Generally Accepted Agricultural Management Practices (GAAMPs) developed under its authority.

Residential Land Uses

Goal: Residential land uses should be encouraged to be developed to assure the maintenance of an attractive living environment. This includes provision for mixtures of housing opportunities, preservation of the existing housing supply, the location of new residences in areas where necessary services can be feasibly provided, and in locations compatible with adjacent land uses.

Objectives:

1. Encourage low density residential developments on sites having good physical characteristics including those conducive to on-site sewage disposal, appropriate soils, slopes, and water table.
2. Encourage the development of residential areas to avoid potential conflicts with incompatible land uses.
3. Encourage clusters of new residential development located near appropriate shopping facilities, community services, and utilities or where these supportive services may be feasibly provided to promote efficient utilization of land and discourage dispersed strip development.
4. Encourage the location of high density residential land uses such as mobile home parks and multiple family developments in areas having or expected to have necessary services and facilities including major roads and central sewer and water facilities.

Commercial Land Uses

Goal: Commercial development should relate to the overall character of the community and to its specific land use patterns, and should provide services and products in locations which are readily accessible to residents and which promote efficient and safe traffic patterns.

Objectives:

1. Encourage clustered concentrations of related commercial uses to avoid strip commercial development.
2. Encourage commercial development of a convenience nature near existing and planned residential areas.
3. Encourage the location of major commercial areas at the intersection of major roads at locations with accessibility from several directions.
4. Provide for the future expansion of existing or planned commercial areas.

Industrial Land Uses

Goal: Industrial land uses should relate to the overall character of the community and to its specific land use patterns, and should provide employment in locations readily accessible to regional transportation facilities, in areas having compatible land uses, and in areas having or expected to have appropriate utilities.

Objectives:

1. Encourage industrial development in areas having immediate access to major roads and highways extending to other areas of the region and state.
2. Encourage industrial development in areas having or expected to have facilities and services.
3. Wherever possible, encourage industrial development in areas where industrial parks are feasible and where there is likely to be sufficient room for growth and expansion.
4. Encourage industrial development in areas where industrial activities will not result in incompatibilities with adjacent land uses.

Recreational Land Uses

Goal: Preserve existing recreational lands and provide for new recreational lands, appropriately located, to meet the changing needs of the community.

Objectives:

1. Encourage development of recreational lands in open spaces and natural areas.
2. Encourage development of recreational lands in areas accessible to the neighborhood and community population.
3. Maintain and improve existing recreation facilities as well as plan for new facilities.

Infrastructure

Goal: Develop an infrastructure system which will meet the needs of the Township, now and in the future.

Objectives:

1. Encourage the maintenance and improvement of the existing infrastructure system.
2. Encourage the extension of infrastructure to those areas of the Township planned for more intensive development.
3. Promote the creation of complete streets (as defined by the Michigan Planning Enabling Act) where appropriate.

Future Land Use Plan

The Master Plan represents a vision of how Rives Township might look in the future. The horizon is 2040. The Plan does not suggest that the Township will develop to the limits identified on the future land use map. Rather, the Plan is intended to guide the community through its daily decision making processes so that future development will be consistent with the goals adopted in this Plan.

The Master Plan consists of policies that address future land use and development of Rives Township over the life of the Plan. However, the Plan itself has no regulatory authority and must rely upon other tools for implementation, most notably the Zoning Ordinance. The Plan simply suggests where various land uses should be located. The Zoning Ordinance carries out the policies of the Plan by regulating the type of use that a parcel may have, the location of uses, and the bulk and density of development throughout the Township.

The Future Land Use Plan presented here is not static (please see the Future Land Use map). It is designed to be a flexible document that can and should change as the community changes. Even though the Plan is long range in nature (i.e., 20+ years), it should be periodically reviewed and updated as Rives Township grows and changes. There will be times when it will be necessary to deviate from the Plan. Changing land use patterns may cause certain areas on the Future Land Use map to become obsolete for a suggested use. When this happens, the Planning Commission may be required to interpret the most appropriate type of use for an area. Interpretation of a specific site should be made with regard to the impact on the surrounding area.

The Future Land Use map was not designed, nor was it intended, to mirror the Zoning Map. Zoning is the tool used to carry out (i.e., implement) the Plan. Therefore, the Zoning Map will not look exactly like the Future Land Use Map. As the community grows and rezoning requests become necessary to accommodate development, future rezonings should be consistent with the Plan in most cases or the Plan should be amended to reflect changing trends. This is not to suggest that every rezoning needs to be consistent with the Plan. However, in areas where several requests are made for rezoning, it may be necessary to consider amending the Plan if

changing land use patterns warrant a change in the Plan. The Future Land Use Plan is comprised of six land use categories within Rives Township (see the Future Land Use Map). A description of each land use category is presented below.

Agricultural

Agriculture continues to be the predominant land use within the Township. The Agricultural Preservation Area map contained in the *Jackson Community Comprehensive Plan* places the majority of Rives Township in an Agricultural Preservation Area (please see the countywide future land use map). Accordingly, most of the properties located outside of the unincorporated village of Rives and significant portions of the Lansing Avenue corridor south of Berry Road. Please note that strips of single-family residential developments are retained within this land use category.

Residential

- **Low Density Residential.** This land use category is intended primarily for low density (i.e., single-family) residential development. This category covers the largest area of the Township outside of the properties recommended for agricultural uses. Accordingly, many of the properties located within the unincorporated village of Rives and significant portions of the Lansing Avenue corridor south of Berry Road are recommended for low density residential uses. Clusters of single-family homes developed along subdivision streets are also included within this land use category.

- **Medium Density Residential.** This land use category is intended primarily to accommodate the existing manufactured housing (i.e., mobile home) park which is developed at a greater density than single-family homes. The category covers a large property located on the southern border of the Township along Lansing Avenue.

Commercial

This land use category is intended for local retail commercial and service businesses intended to primarily serve Township residents. There are 2 existing areas within the unincorporated Village of Rives Junction—the intersection of Main Street and Rives-Eaton Road and much of Railroad Street—dedicated to commercial uses. Another existing commercial area runs along the east side of Lansing Avenue, south of Maple Grove Road. An emerging commercial area is also proposed further north along Lansing Avenue, south of Berry Road.

Industrial

Industry continues to be a small use within the Township and generally accommodates existing businesses. Existing industrial areas are located on the north side of the unincorporated village of Rives Junction and further to the west along Broughwell Road, south of Rives Eaton Road. Future industrial growth is planned for along Rives Eaton Road to State Road, adjacent to US-127. Future industrial growth is also planned on the west side of Churchill Road, south of Baseline Road. The close proximity of a county primary road, natural gas pipelines, and a nearby electrical substation provides the possibility for future alternative energy uses.

Institutional

The Future Land Use map also identifies where various institutions are located within the Township. Primary among them are Youth Haven and the Dormition of the Mother of God Orthodox Monastery. A variety of other public and private institutions (i.e., the township hall, cemeteries, churches, non-profit radio stations, and county and state owned properties) are small but important components of the Township which contribute to its quality of life. The overlay category also identifies the proposed underlying land use category if that institution ever ceases to exist.

Zoning Plan

The Master Plan provides the legal basis for zoning in Rives Township. Accordingly, the Plan is required to contain a special plan element, known commonly as the Zoning Plan, by Michigan's planning and zoning enabling acts. As noted in the Michigan Planning Guidebook (May 2008), "special plan elements are often prepared to establish a legal basis for a local regulation, such as a zoning plan to serve as the basis for zoning regulations."

The MPEA — the Michigan Planning Enabling Act (PA 33 of 2008), as amended — requires "a zoning plan for the various zoning districts controlling area, bulk, location, and use of buildings and premises" because Rives Township has an adopted zoning ordinance. The MZEA —the Michigan Zoning Enabling Act (PA 110 of 2006), as amended— requires the planning commission to adopt and file with the township board "a zoning plan for the areas subject to zoning" in Rives Township. Finally, the MPEA also requires the Zoning Plan to "include an explanation of how the land use categories on the future land use map relate to the districts on the zoning map".

Zoning Districts

Article 4 of the Rives Township Zoning Ordinance established the following zoning districts (please see the Zoning Map):

- **Agricultural District (AG).** *This district is composed of certain large open land areas. The regulations of this district are designed to retain the open character of this land, and to that end, the uses are limited primarily to agricultural activities.*
- **Residential District (R).** *This District is designed principally for Residential use and is limited to dwellings and uses normally associated with residential neighborhoods in order to encourage a suitable and healthy environment for family life and to preserve a predominantly rural character.*
- **Mobile Home Residential District (MHR).** *This district is designed to provide suitable space for mobile home dwellings. The regulations of this district are designed to permit a density of population and an intensity of land use in those areas which are served by a municipal water supply and municipal sewage disposal, and which abut or are adjacent to such other uses, buildings, or amenities which support, complement, or serve such a density and intensity.*

  A public sanitary waste disposal and public fresh water system must already be available before a parcel may be considered for rezoning to Mobile Home Residential District.
- **Commercial District (C).** *The Commercial District is designated to encourage efficient traffic movement, parking, and utility service; advance public safety; and protect surrounding property. The commercial district is designed to regulate the location of these business uses according to a [well-considered] plan which determines the types of such uses and the intensity of land, street and highway use in such district; potential nuisances and hazards which may cause unsafe conditions; and the relationship of commercial use to streets and highways.*
- **Industrial District (I).** *This district is designed to provide suitable space for industrial uses which operate in a safe, non-objectionable and efficient manner, and which are compatible in appearance with and require a minimum of buffering measures from adjoining non-industrial zoning district. These uses generate a minimum of noise, glare, odor, dust, vibration, air and water pollutants, fire, explosive and radioactive hazards, and other harmful or obnoxious matter.*

Dimensional Standards

The following bulk, height, and setback restrictions for each district are included in Article IV of the Rives Township Zoning Ordinance:

ZONING DISTRICT	ZONING SYMBOL	LOT REQUIREMENTS			MINIMUM YARD REQUIREMENTS		
		Minimum Lot Area	Minimum Lot Width	Maximum Lot Coverage	Front	Side	Rear
Agricultural	AG	2 Acres	200 ft. depth 250 ft.	25%	50 ft.	25 ft.	50 ft.
Residential *(Without Sewer)*	R	2 Acres	200 ft. depth 250 ft.	25%	50 ft.	25 ft.	50 ft.
Residential *(With Sewer)*	R	1.5 Acres	200 ft. depth 250 ft.	25%	50 ft.	25 ft.	50 ft.
Mobile Home Residential	MHR	As required by Mobile Homes Commission Act or as otherwise specified elsewhere within this Ordinance.					
Commercial	C	2 Acres	200 ft. depth 160 ft.	30%	35 ft.	20 ft. (35ft. for corner lots)	50 ft.
Industrial	I	2 Acres	200 ft. depth 160 ft.	30%	35 ft.	20 ft.	50 ft.

Corner Lots - see section 17.25

MHR Zoning requires Public Sanitary Waste Disposal and Public Water Supply.

Rezoning Criteria

The most common zoning application of the Master Plan is during the rezoning process. Accordingly, a rezoning should be required to meet set criteria in order to be considered consistent with the Master Plan:

- Is the proposed rezoning consistent with the policies and uses proposed for that area in the Township's master plan?
- Will all of the uses allowed under the proposed rezoning be compatible with other zones and uses in the surrounding area?
- Will any public services and facilities be significantly adversely impacted by a development or use allowed under the requested rezoning?
- Will the uses allowed under the proposed rezoning be equally or better suited to the area than uses allowed under the current zoning of the land?

Relationship to the Future Land Use Map

The remainder of this element equates the various Zoning Districts included on the Zoning Map with the various land use categories included on the Future Land Use Map.

- **Agricultural.** Agricultural areas are addressed generally on the Future Land Use Map. The following zoning district equates to those areas:
  - Agricultural District (AG).
- **Residential.** The following residential areas are included on the Future Land Use Map:
  - **Low Density Residential** — Low-density residential areas are addressed generally on the Future Land Use Map. The following zoning district currently equates to those areas:
    - Residential District (R)
  - **Medium Density Residential** — Medium density residential areas are addressed generally on the Future Land Use Map. The following zoning districts currently equate to those areas:
    - Mobile Home Residential (MHR)
- **Commercial.** Commercial areas are addressed generally on the Future Land Use Map. The following zoning district equates to those areas:
  - Commercial District (C)
- **Industrial.** Light industrial areas are addressed generally on the Future Land Use Map. The following zoning district equates to those areas:
  - Industrial District (I)
- **Institutional.** Institutions are also included on the Future Land Use map as an overlay land use category:
  - No zoning district equates to institutions

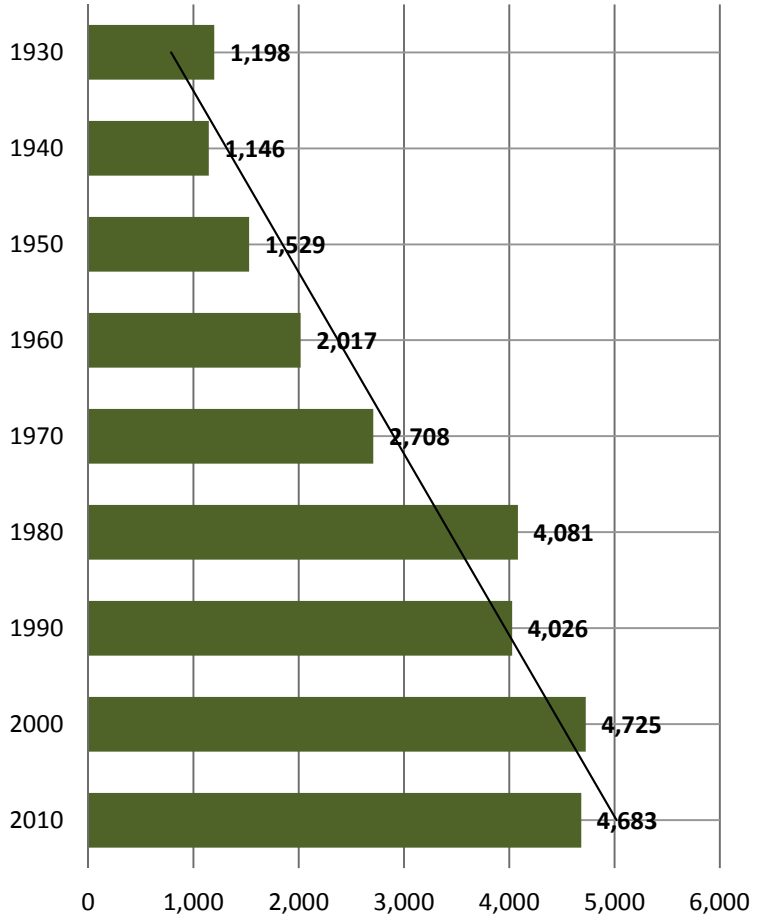
APPENDIX A

DEMOGRAPHICS

RIVES TOWNSHIP

Population History

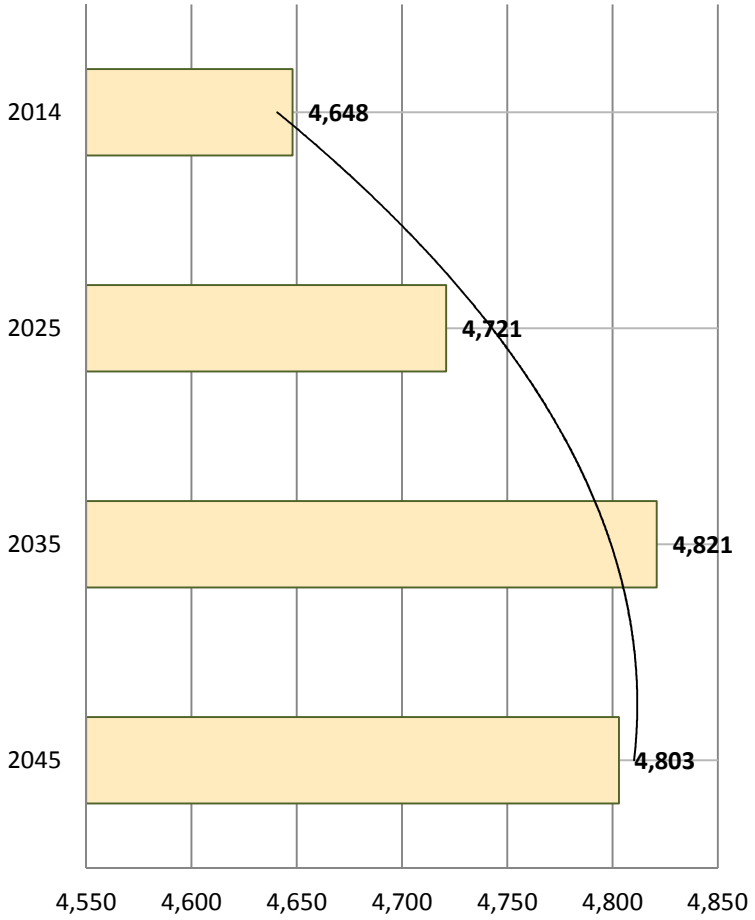
- The Township was home to 4,683 people in 2010, according to the U.S. Census
- The adjacent figure shows that the population:
  - Decreased 4.3% between 1930 and 1940
  - Increased 33.4% between 1940 and 1950
  - Increased 31.9% between 1950 and 1960
  - Increased 34.3% between 1960 and 1970
  - Increased 50.7% between 1970 and 1980
  - Decreased 1.3% between 1980 and 1990
  - Increased 17.4% between 1990 and 2000
  - Decreased 0.9% between 2000 and 2010



Population Projections

- The population projections utilized in this plan were developed for the Jackson Area Comprehensive Transportation Study (JACTS)
  - The 2045 projections are grounded on historic census trends and Regional Economic Models Inc. (REMI) forecasts
  - REMI data is based upon Cohort Survival methodology and local factors and input
- Utilizing that information, it is reasonable to expect that:
  - The population will grow between 2014 and 2040 and then begin to decline through 2045
  - The 2014 population for the Township is projected to be 4,648 residents

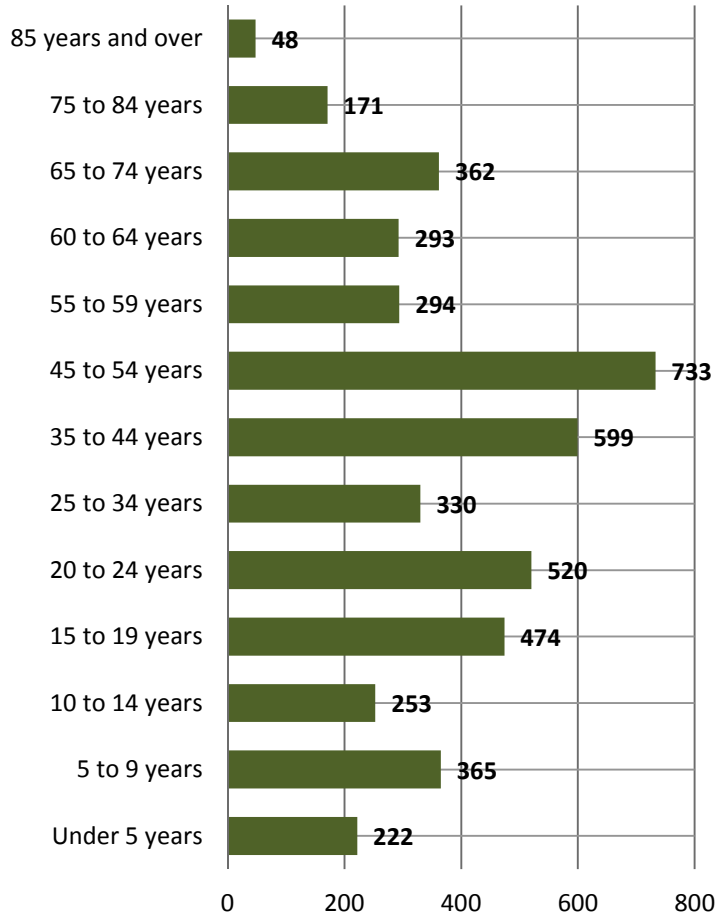
    The American Community Survey (ACS) estimates that the population was 4,644 people between 2010 and 2014
  - The 2035 population is projected to grow to 4,721 residents
  - The 2035 population is projected to grow to 4,821 residents
  - The 2045 population is projected to decrease to 4,803 residents



American Community Survey (ACS)

- The use of estimates provided by the U.S. Census Bureau's American Community Survey (ACS) provides more up-to-date demographics than the decennial census
- Reporting jurisdictions the size of Rives Township are provided five-year average estimates on a regular basis
- The reporting period available and utilized for this plan is 2010-2014
- The ACS states that "median income divides the income distribution into two equal groups, one having incomes above the median, and [the] other having incomes below the median"
- The ACS states that "mean household income is obtained by dividing total household income by the total number of households"
- The ACS states that per capita income is the average "obtained by dividing aggregate income by [the] total population of an area"

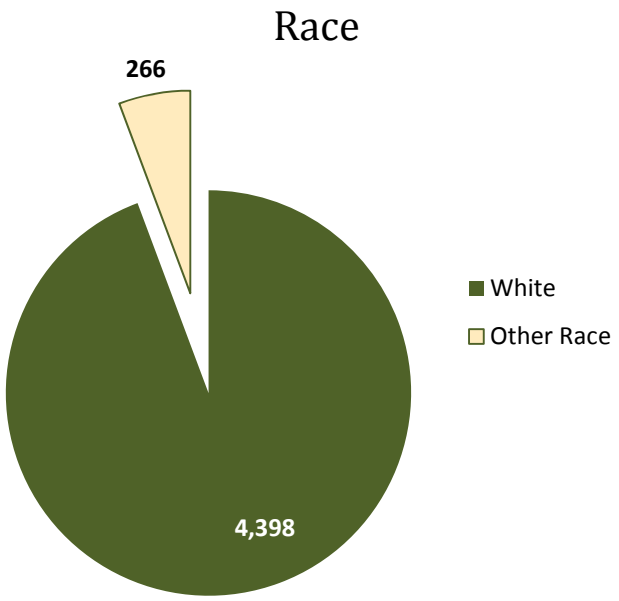
Age & Gender: 2010-2014

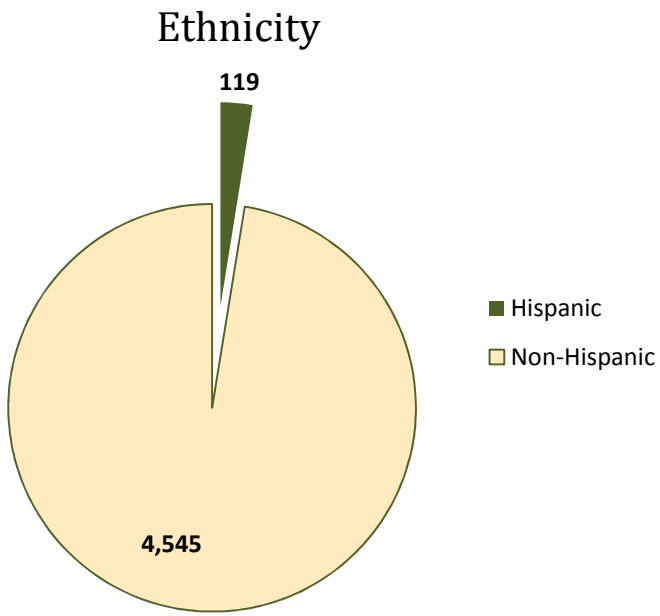


Rives Township Master Plan, 2018 edition

- The estimated median age of Rives Township residents was 37.0 years
- The adjacent figure illustrates Rives Township's age cohorts:
  - 1.0% —85 years and over
  - 3.7% — 75 to 84 years
  - 7.8% — 65 to 74 years
  - 6.3% — 60 to 64 years
  - 6.3% — 55 to 59 years
  - 15.7% — 45 to 54 years
  - 12.8% — 35 to 44 years
  - 7.1% — 25 to 34 years
  - 11.1% — 20 to 24 years
  - 10.2% — 15 to 19 years
  - 5.4% — 10 to 14 years
  - 7.8% — 5 to 9 years
  - 4.8% — Under 5 years
- Finally, it is estimated that females comprised 50.5% of the Township's population

Race & Ethnicity: 2010-2014





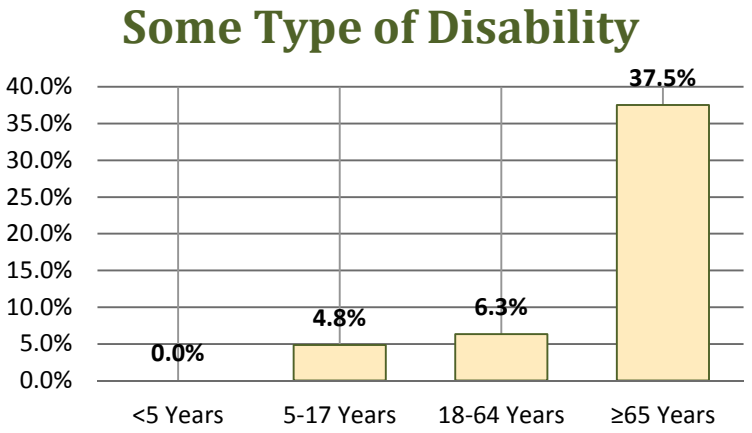
The population of Rives Township is homogenous with few racial and ethnic minorities

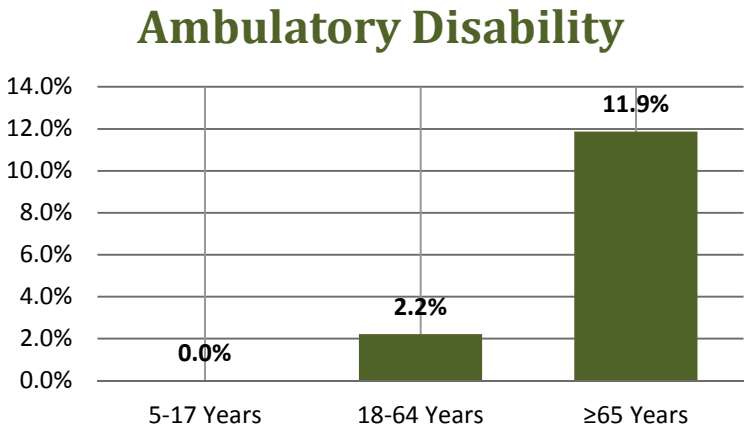
- An estimated 97.4% of the Township's population was white
- An estimated 2.6% of the Township's residents considered themselves Hispanic

Disabilities: 2010-2014

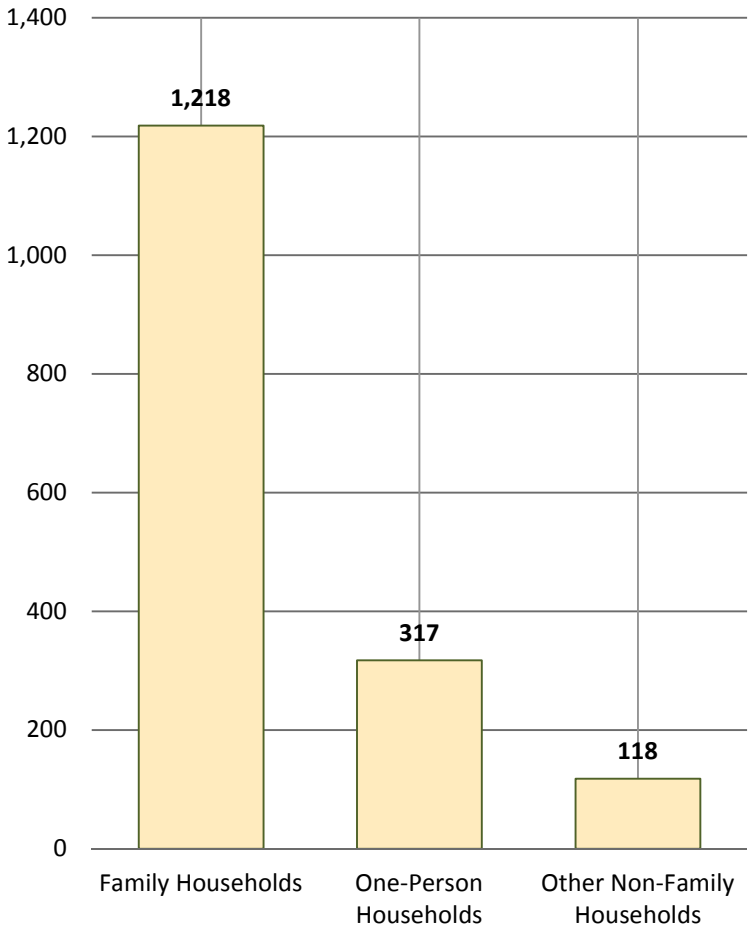
Disabled residents are a significant component of Rives Township's population

- An estimated 13.3% of Township residents were disabled
- <5 years old
  - An estimated 0.0% were disabled
- 5-17 years old
  - An estimated 4.8% were disabled
  - An estimated 0.0% had an ambulatory disability
- 18-64 years old
  - An estimated 6.3% were disabled
  - An estimated 2.2% had an ambulatory disability
- ≥65 years old
  - An estimated 37.5% were disabled
  - An estimated 11.9% had an ambulatory disability



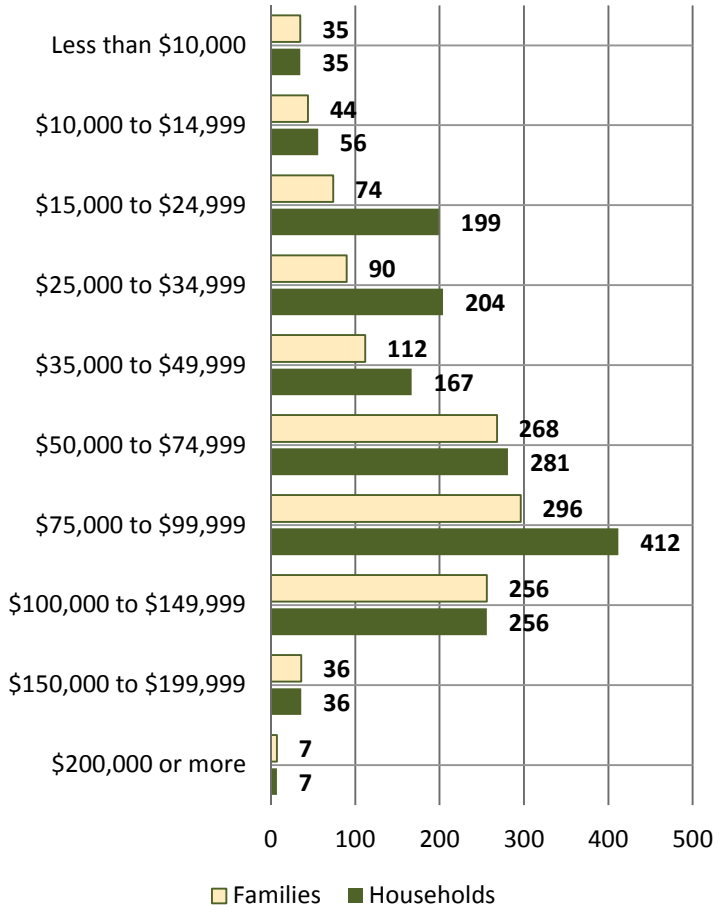


Households & Families: 2010-2014



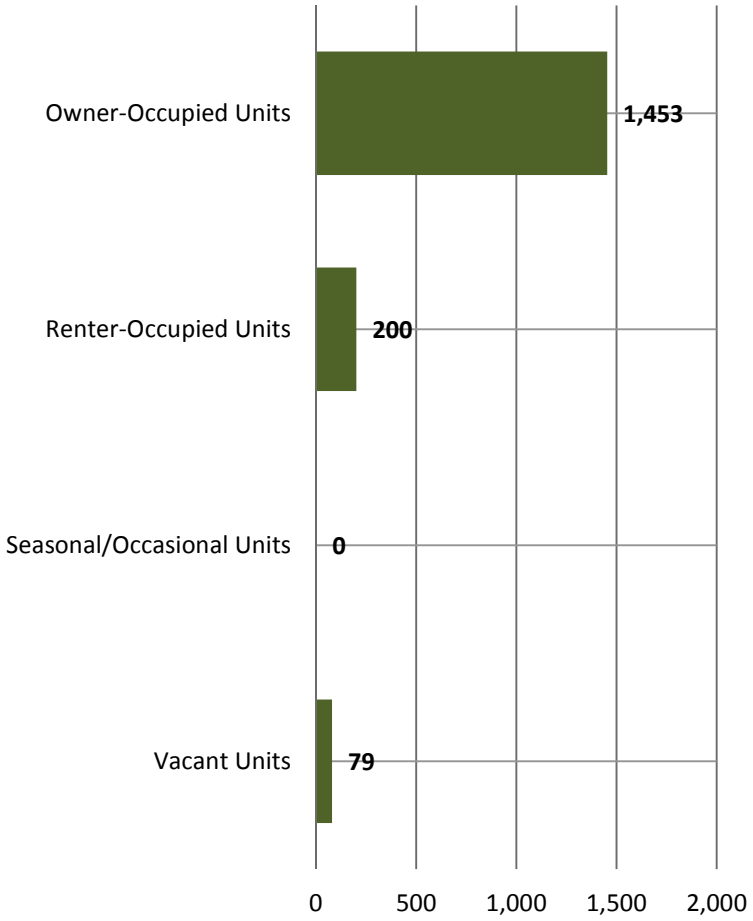
- Most people live in the estimated 1,653 Rives Township households
- Families comprised an estimated 73.7% of households
- An estimated 19.2% of households were comprised of a single person
- Other non-family households comprised the remaining estimated 7.1% of households
- Estimated average household and family size was 2.81 people and 3.27 people, respectively (please see the ACS note)
- *There were an estimated 0 seasonal or occasional homes (i.e., households)*
- *Group quarters (e.g., nursing homes, etc.) were home to an estimated 22 people*

Household Income: 2010-2014



- Estimated median and mean household income, respectively:
  - Median — $62,196 (please see the ACS note)
  - Mean — $67,296
- Estimated median and mean family income:
  - Median — $70,978 (please see the ACS note)
  - Mean — $74,934
- Estimated per capita income:
  - Township — $24,319 (please see the ACS note)

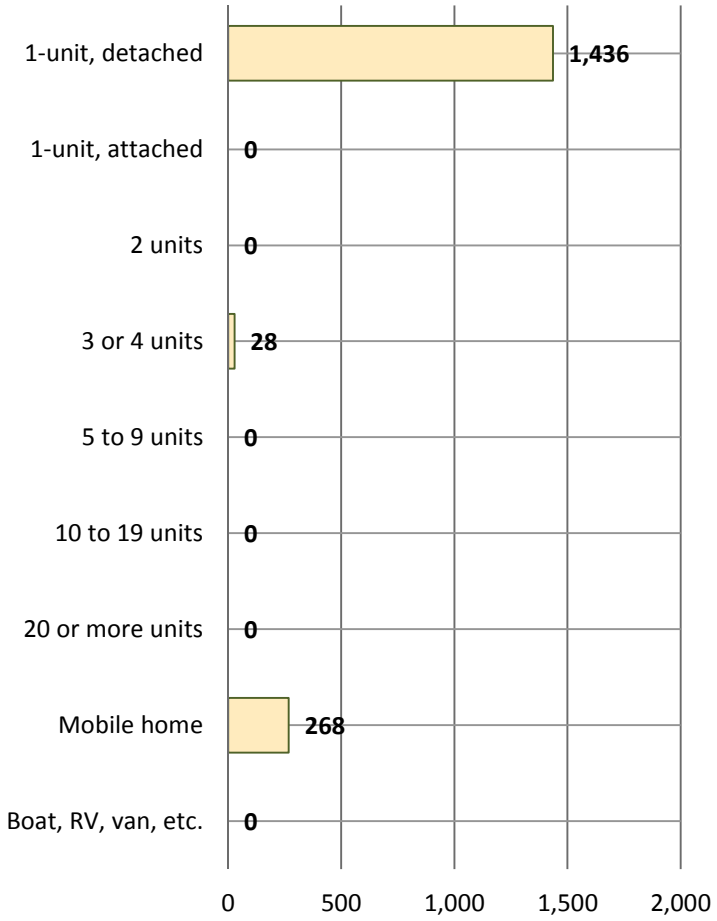
Dwellings & Vacancy Rates: 2010-2014



Rives Township had an estimated 1,732 dwelling units

- An estimated 95.4% of those dwellings were occupied
  - An estimated 83.9% of those dwellings were owner-occupied
  - An estimated 11.5% were renter-occupied
- An estimated 4.6% of those dwellings were vacant
  - An estimated 0.0% of those dwellings were only used seasonally or occasionally
  - An estimated 4.6% of dwellings were vacant

Housing Types: 2010-2014



Rives Township had an estimated 1,732 dwelling units

- An estimated 82.9% of dwellings were single units
  - An estimated 82.9% of dwellings were detached single units
  - There were no attached single units
- An estimated 1.6% of dwellings were in multi-unit buildings
  - There were no duplexes
  - An estimated 1.6% of dwellings were in 3-4 unit buildings
  - There were no 5-9, 10-19, or 20+ unit buildings
- An estimated 15.5% of dwellings were mobile homes

APPENDIX B

2017 RIVES TOWNSHIP SURVEY

RIVES TOWNSHIP

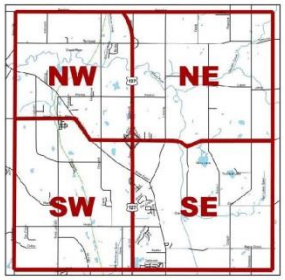
Rives Township Master Plan
Community Planning Survey
Winter 2017

The planning commission of Rives Township is in the initial stages of creating the second edition of a master plan and seeks your input into the process. Please take a few minutes to complete this survey and return it to the Township Office (348 E. Main St., Rives Junction, MI 49277) or Township Collection Site by March 30, 2017. Once compiled, the information will help the planning commission to develop a set of goals and policies which will influence the character of future development in Rives Township.

Relationship and Location

1. Please indicate your relationship to the Township (*circle all that apply*).
   a. resident
   b. property owner
   c. business owner
   d. student

2. Using the adjacent map, please indicate the area of the Township where your residence is located (*circle only one*).
   a. Northwest ¼ of the Township (NW)
   b. Northeast ¼ of the Township (NE)
   c. Southwest ¼ of the Township (SW)
   d. Southeast ¼ of the Township (SE)



Quality of Life and Community Services

3. How do you rate the following (*place an [×] or a [✓] under the most appropriate response*):	Excellent	Good	Average	Fair	Poor	No opinion
a. The Township as a place to live?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
b. The administration of the Township?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
c. Rives-Tompkins Fire/Rescue Dept.?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
d. Township Park and Ballfield?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
e. Township Cemeteries	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
h. Highways, roads, and streets?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
i. Railroad crossings?	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

(*continued on opposite side*)

Future land use and related planning issues

	Yes	No
4. Should the Township strive to preserve farmland?	[ ]	[ ]
5. Shall the Grand River be made navigable for small boats, canoes and kayaks?	[ ]	[ ]
6. Should the Township encourage additional commercial/light industrial development?	[ ]	[ ]

7. What is your age group?

18-24 24-34 35-44 45-54 55-64 65-74 75-84 ≥85

	Own	Rent
8. What is the status of your residential dwelling?	[ ]	[ ]

	Yes	No
9. Medical Marijuana. Several years ago Michigan voters approved medical marijuana. In September, 2016, new regulatory framework was passed into law. It is an opt-in law for Townships to allow five (5) different regulations of this product. Should Rives Township opt-in?	[ ]	[ ]

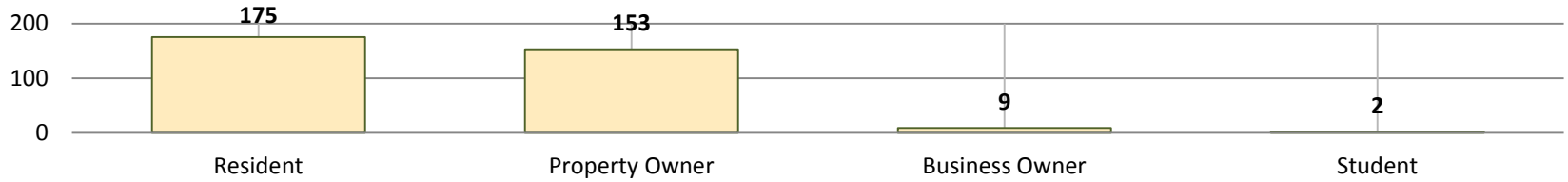
10. Provide general comments here:

Thank You!

Rives Township residents and property owners were asked to answer a short questionnaire in the winter of 2017 in order to provide an opportunity for input into the development of the 2017 edition of the *Rives Township Master Plan*. A total of 208 surveys were returned.

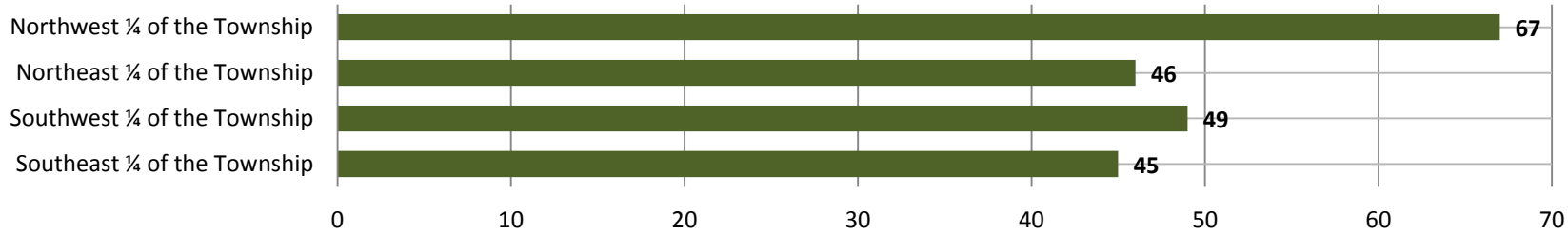
Relationship and Location

1. **Relationship to the Township**



Respondents were asked to indicate their relationship to the Township and were encouraged to circle all options that applied to them. Of the respondents, 84.1% identified as 'resident', 73.6% 'as 'property owner', 4.3% as a 'business owner' and 1.0% identified as a 'student' (n=208). Since respondents were asked to indicate multiple options if applicable, overlap between responses occurred.

2. **Location of the respondent's property**

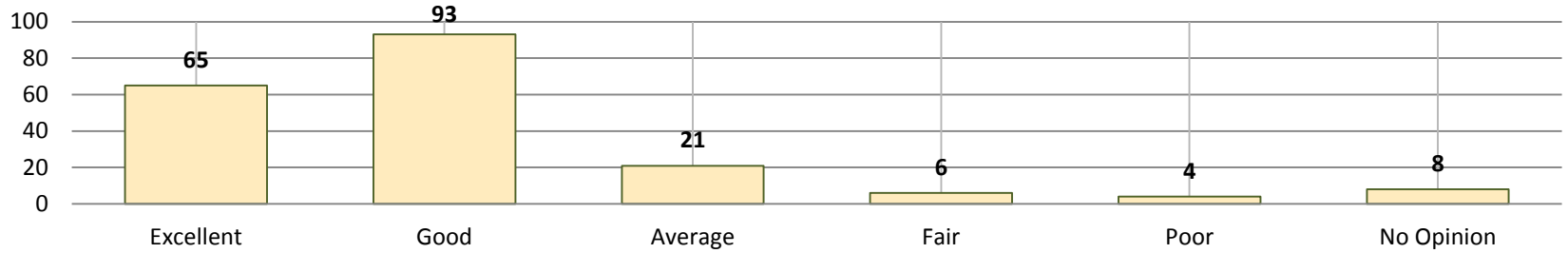


Respondents were asked to indicate the location of their properties in the Township and were encouraged to circle all applicable options: 32.4% of responses were 'NW quarter', 23.7% were 'SW quarter,' 22.2% were 'NE quarter,' and 21.7% were 'SE quarter' (n=207). Since respondents were asked to indicate multiple options, if applicable, some overlap between responses occurred.

Quality of Life and Community Services

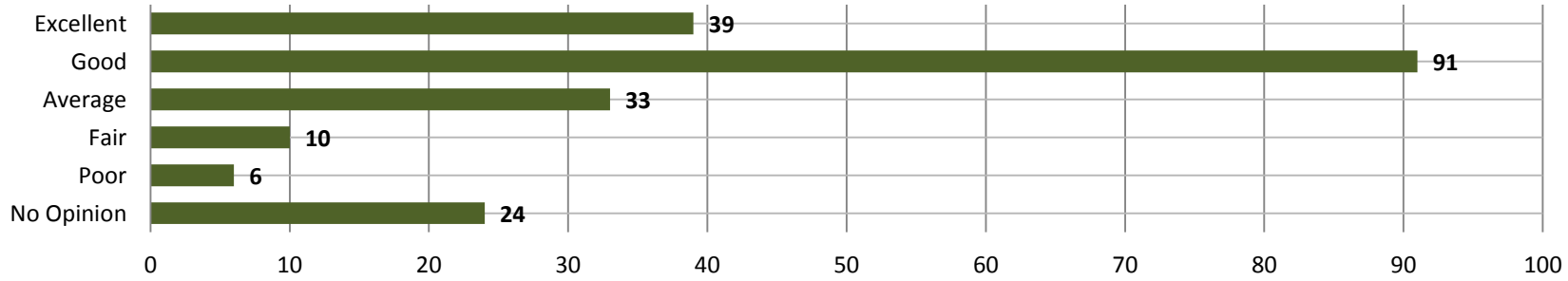
3. **Rank the following:**

   a. **How do you rate the Township as a place to live?**



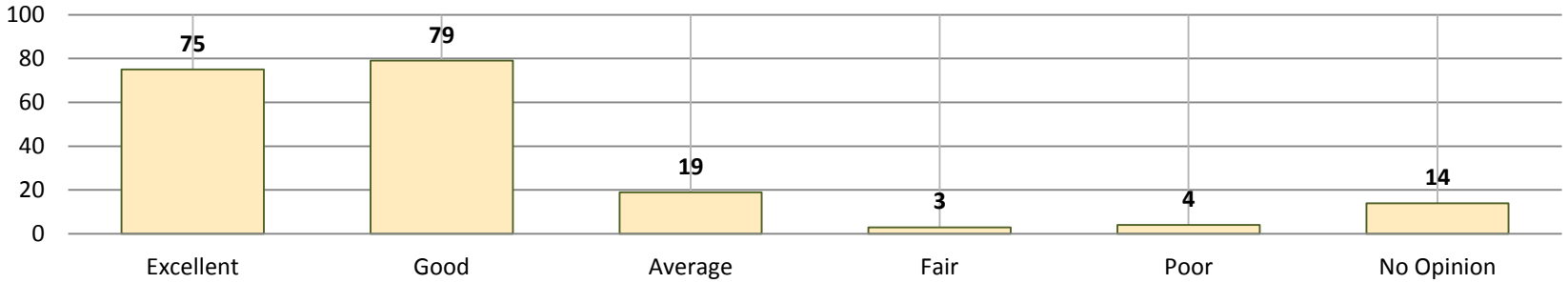
When asked to rate the Township as a place to live, 47.2% of responses were 'good,' 33.0% were 'excellent," 10.7% were 'average,' 3.0% were 'fair, and ' 2.0% were 'poor'(n=197). 'No opinion' accounted for 4.1% of responses (n=197).

   b. **How do you rate the administration of the Township?**



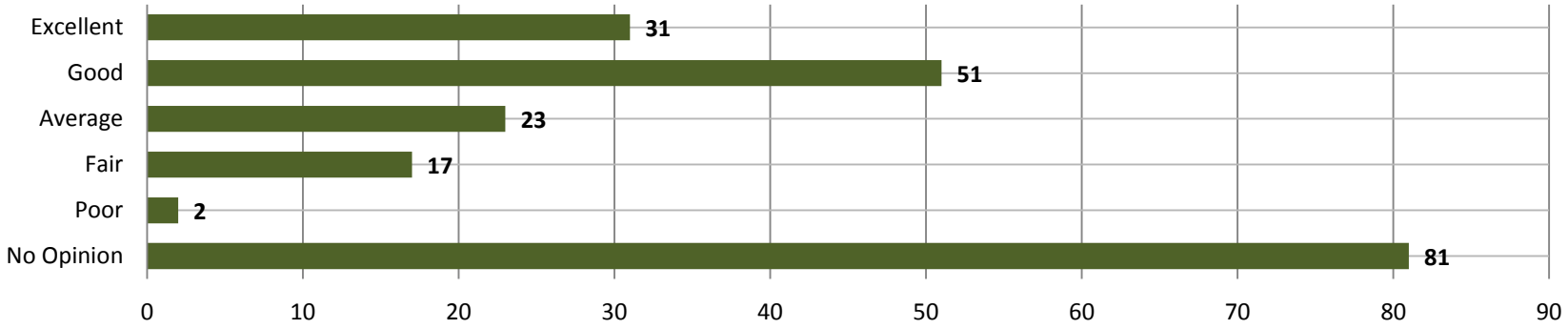
When asked to rate the administration of the Township, 44.8% of responses were 'good,' 19.2% were 'excellent', 16.3% were 'average," 4.9% were 'fair,' and 3.0% were 'poor'. No opinion' accounted for 11.8% of responses (n=203).

c. **How do you rate the Rives-Tompkins Fire/Rescue Department?**



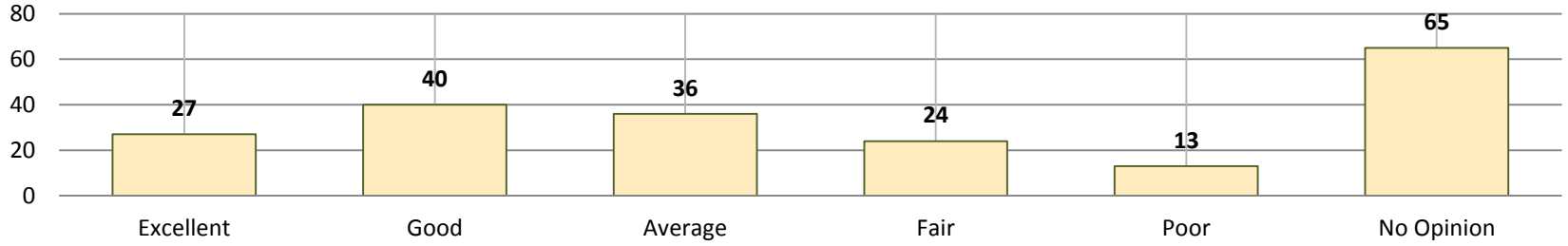
When asked to rate the Rives-Tompkins Fire/Rescue Department, 40.7% of responses were 'good,' 38.7% were 'excellent," 9.8% were 'average,' 2.1% were 'fair', and 1.5% were 'poor'. 'No opinion' accounted for 7.2% of responses (n=194).

d. **How do you rate the Township's park and ballfield?**



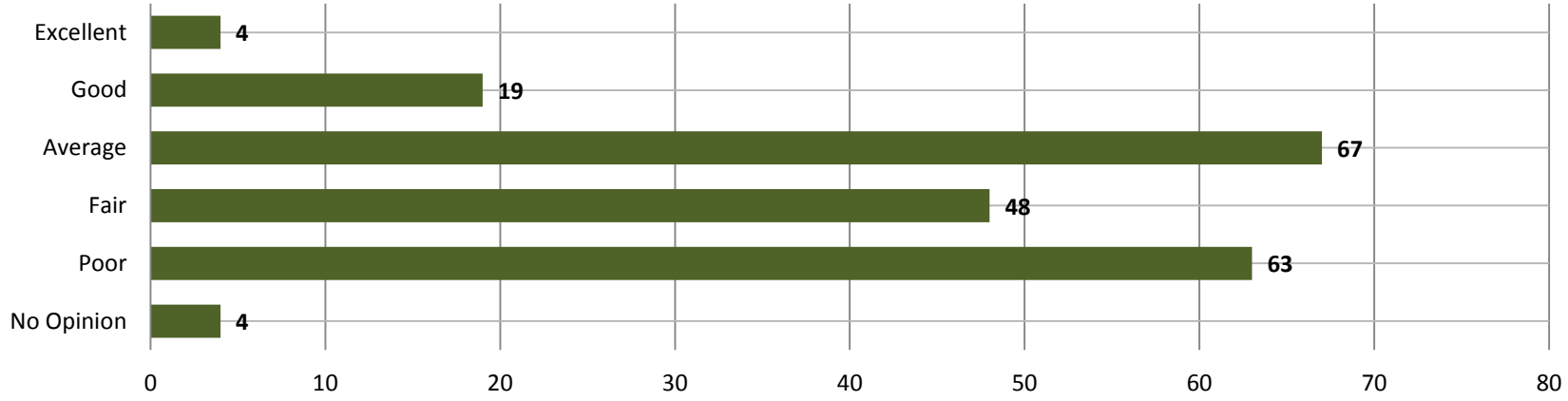
When asked to rate the Township's park and ballfield, 24.9% of responses were 'good,' 15.1% were 'excellent', 11.2% were 'average,' 8.3% were 'fair,' and 1.0% were 'poor'. 'No opinion' accounted for 39.5% of responses (n=205).

e. **How do you rate the Township's cemeteries?**



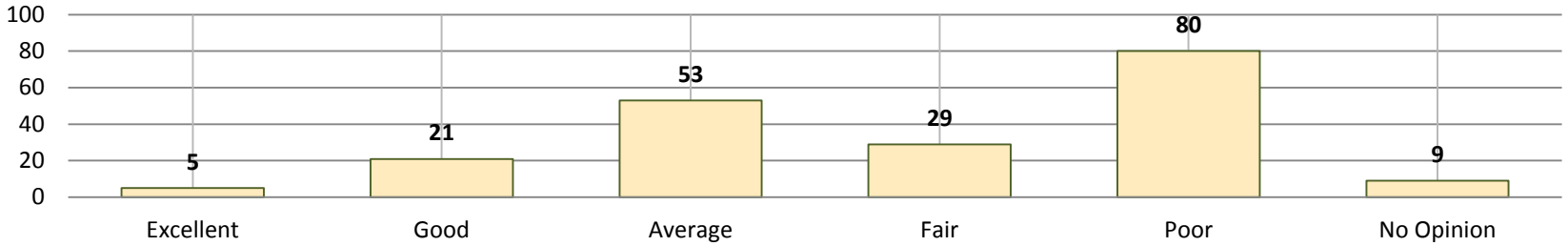
When asked to rate the Township's cemeteries, 19.5% of responses were 'good,' 17.6% were 'average,' 13.2% were 'excellent,' 11.7% were 'fair,' and 6.3% were poor (n=205). 'No opinion' accounted for 31.7% of responses.

f. **How do you rate highways, roads, and streets in the Township?**



When asked to rate the highways, roads, and streets in the Township, 32.7% of responses were 'average', 30.7% were 'poor,' 23.4% were 'average,' 9.3% were 'good', and 2.0% were 'excellent'. 'No opinion accounted for 2.0% of responses (n=205).

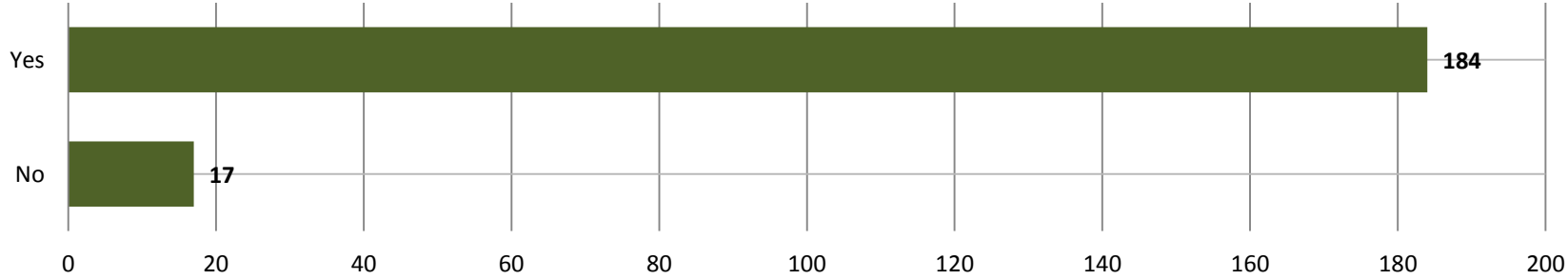
g. **How do you rate the railroad crossings in the Township?**



When asked to rate the railroad crossings in the Township, 40.6% of responses were 'poor', 26.9% were 'average,' 14.7% were 'fair,' 10.7% were 'good', and 2.5% were 'excellent'. 'No opinion' accounted for 4.6% of responses (n=197).

Future land use and related planning issues

4. **Should the Township strive to preserve farmland?**

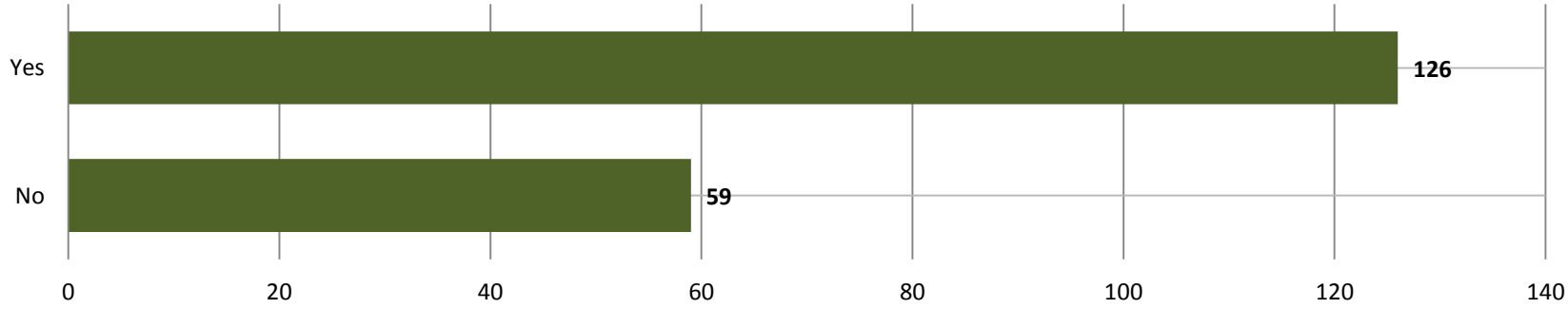


When asked if the Township should strive to preserve farmland, 91.5% of responses were 'yes' and 8.5% were 'no' (n=201).

5. **Should the Grand River be made navigable for small boats, canoes, and kayaks?**

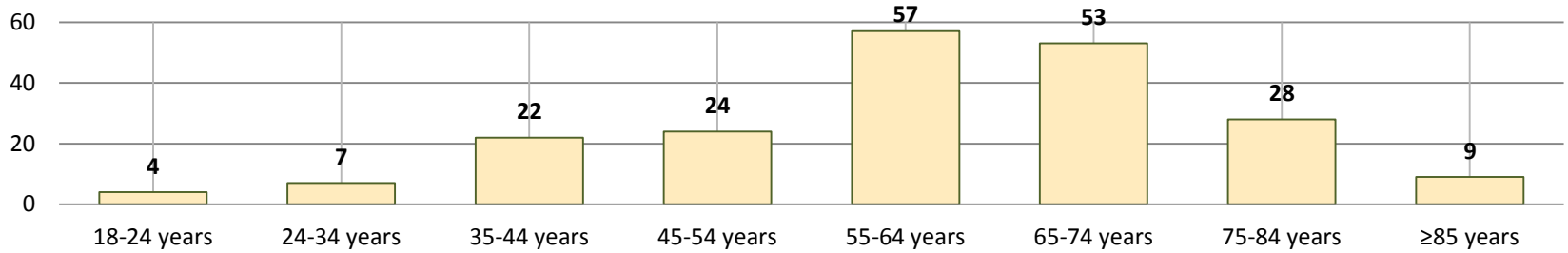
When asked if the Grand River should be made navigable for boats, canoes, and kayaks, 87.2% of responses were 'yes' and 12.8% were 'no' (n=203).

6. **Should the Township encourage additional commercial/light industrial development?**



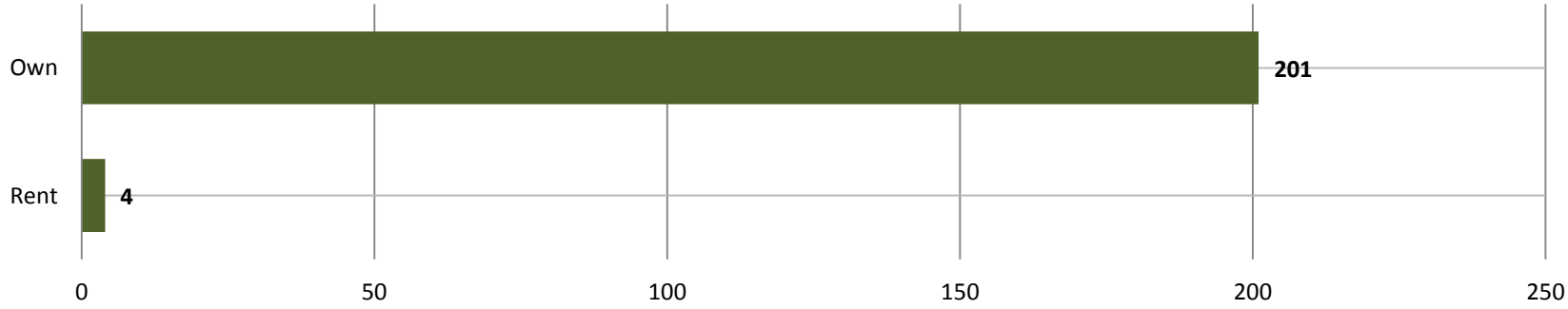
When asked if the Township should encourage additional commercial/light industrial development, 68.3% of responses were 'yes' and 31.7% were 'no' (n=186).

7. **What is your age group?**



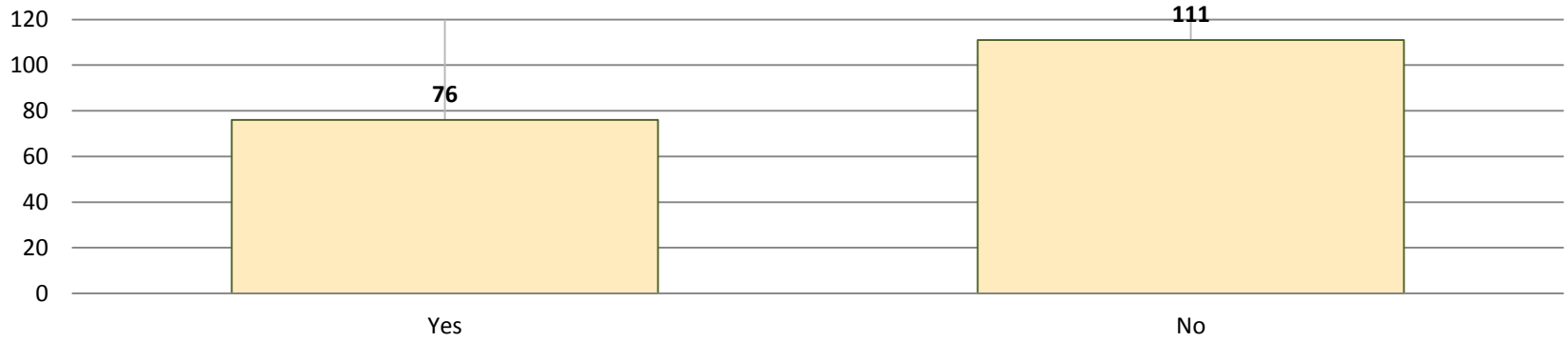
When asked what is your age group, 27.9% of responses were '55-64 years', 26.0% were '65-74 years', 13.7% were '75-84 years', 11.8% were '45-54 years', 10.8% were '35-44 years', 4.4% were '≥85 years', 3.4% were '24-34 years', and 2.0% were '18-24 years' (n=204).

8. **What is the status of your residential dwelling?**



When asked what is the status of their residential dwelling, 98.0% of responses were 'own' and 2.0% were 'rent' (n=205).

9. **Should the Township opt-in to the new regulations regarding medical marijuana?**



When asked if the Township should opt-in regarding the local regulation of 5 new standards regarding medical marijuana, 59.4% of responses were 'no' and 40.6% were 'yes' (n=187). It should be noted that 7 respondents were confused by the question and 12 had no opinion regarding the issue.

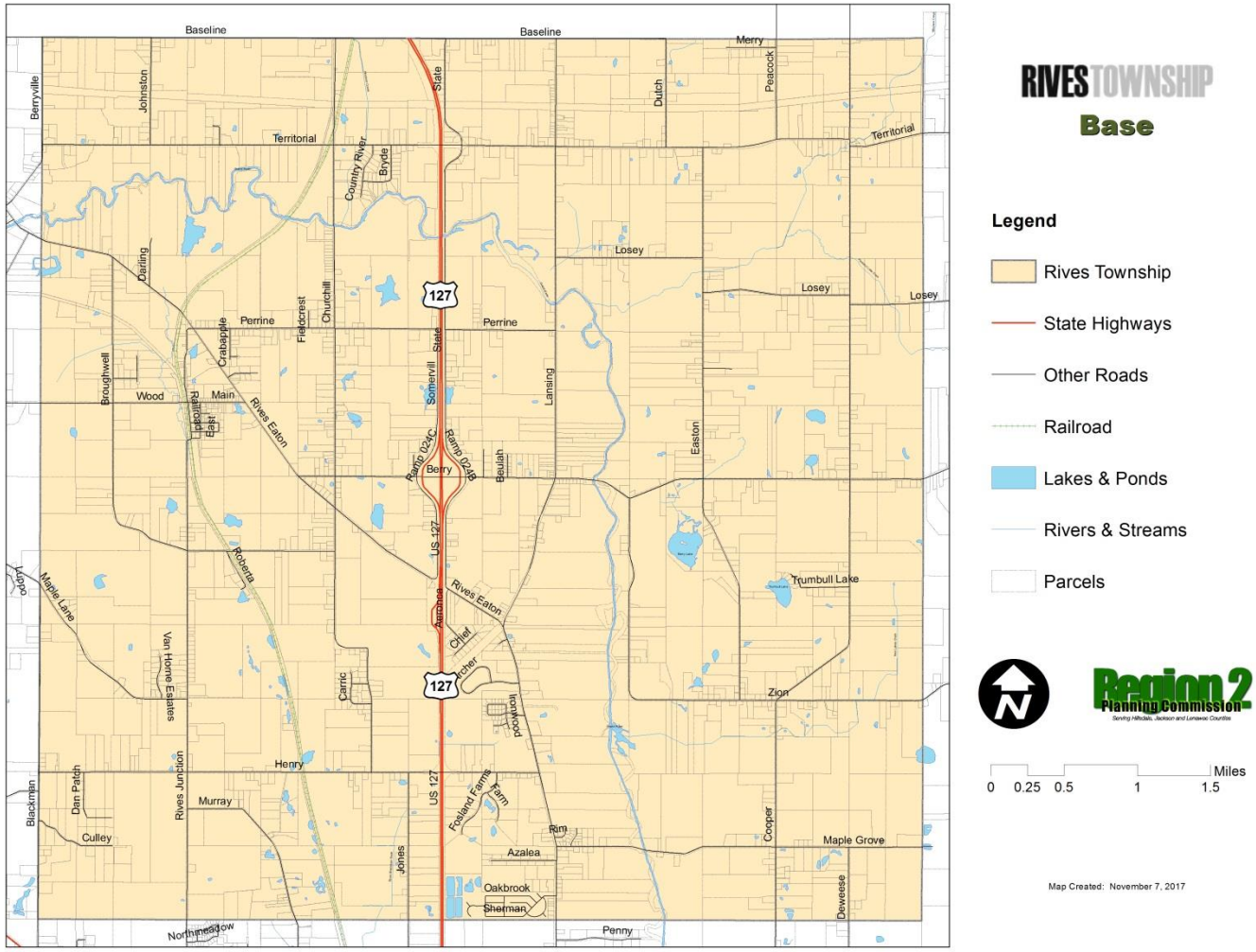
General Comments

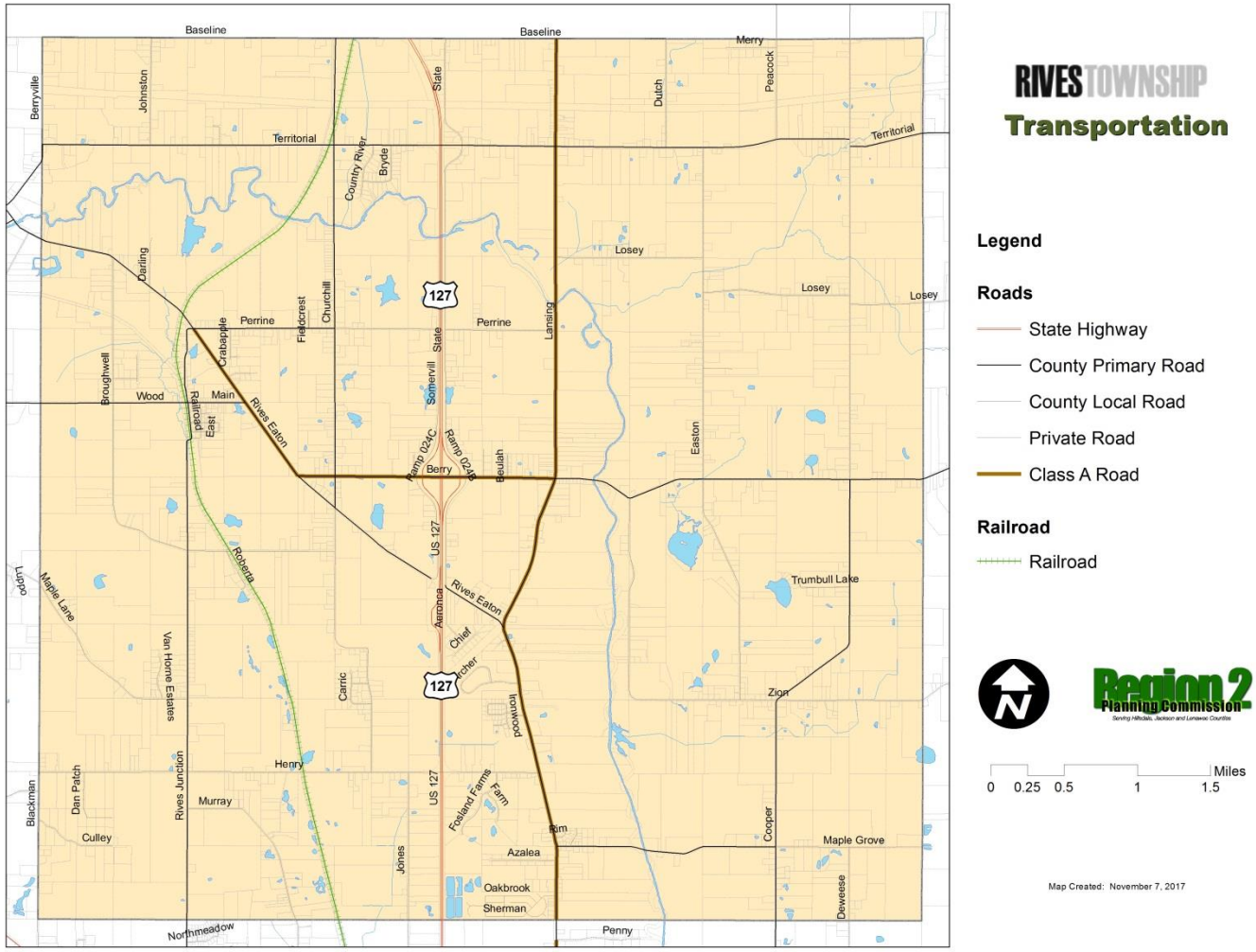
The 10th question provided an opportunity for respondents to provide general comments about the Township and/or the survey. A summary of the responses include: medical marijuana (mostly negative, including confusion over the question), the poor condition of roads and railroad crossings, impressions of the Township Board, concern about property blight/junkyards, clean-up of the Grand River, commercial/industrial areas, infrastructure needs (i.e., cable/internet, sewers), the Township's rural characteristics, the recycling center/trash site (i.e., transfer station), and other miscellany.

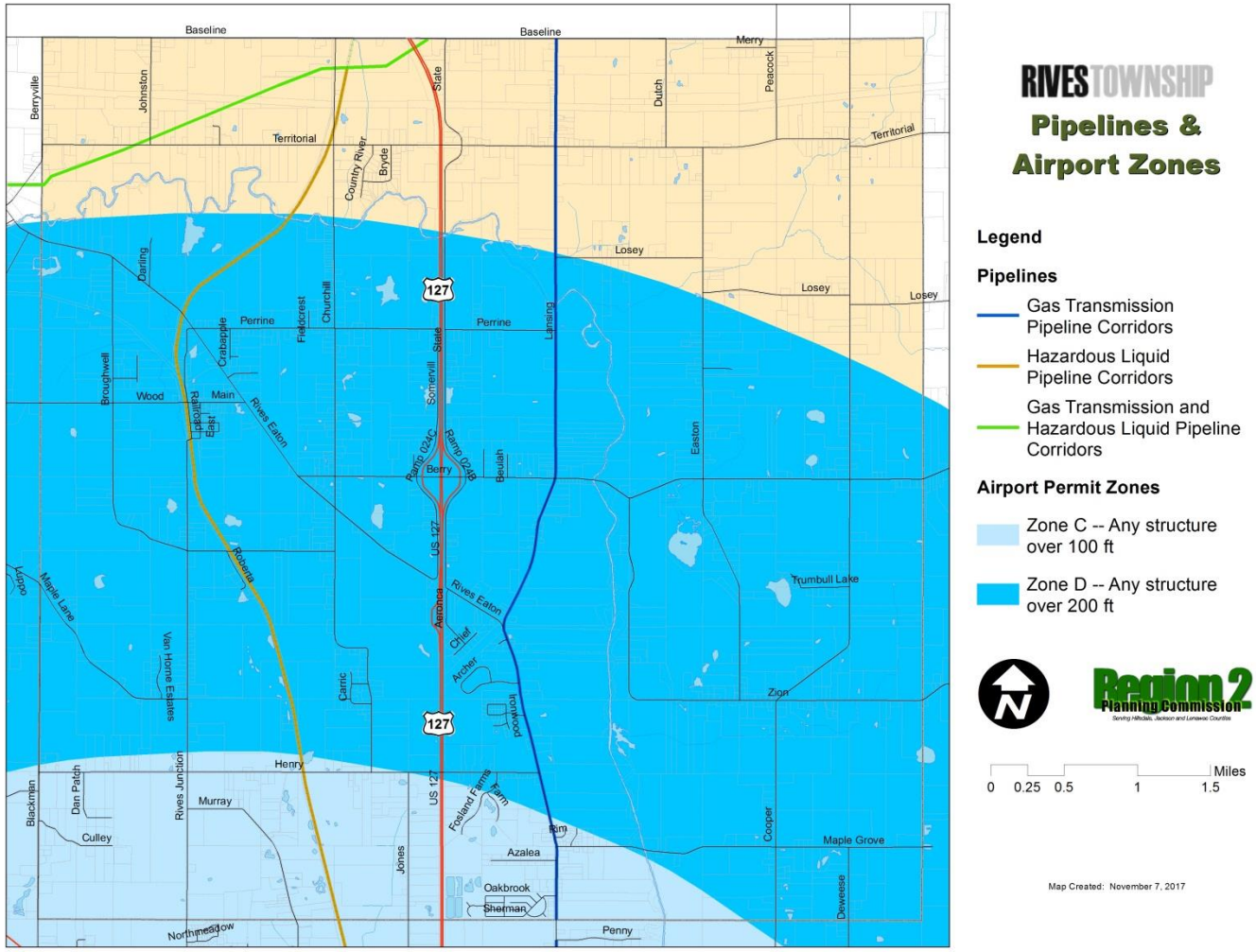
APPENDIX C

MAPS

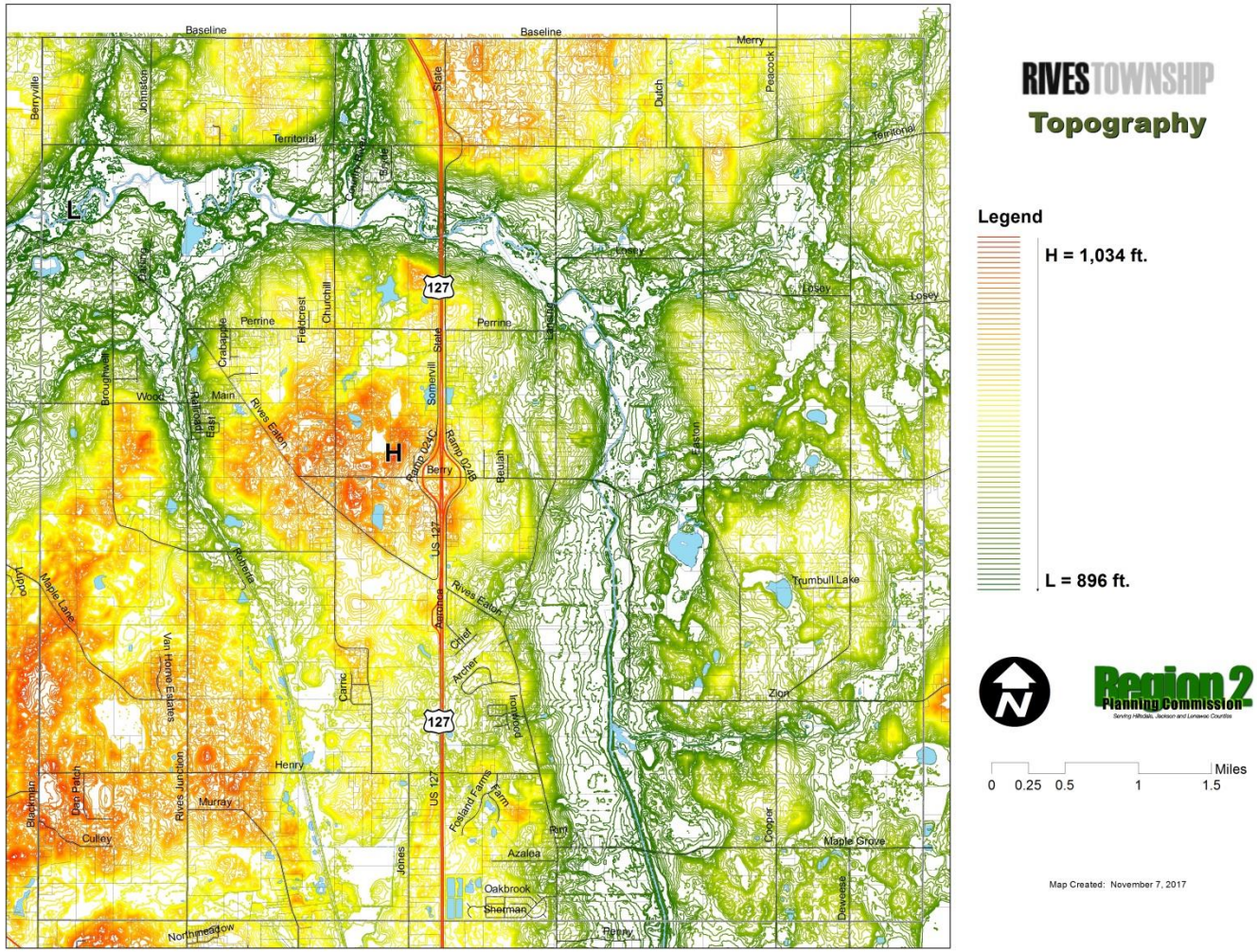
RIVES TOWNSHIP

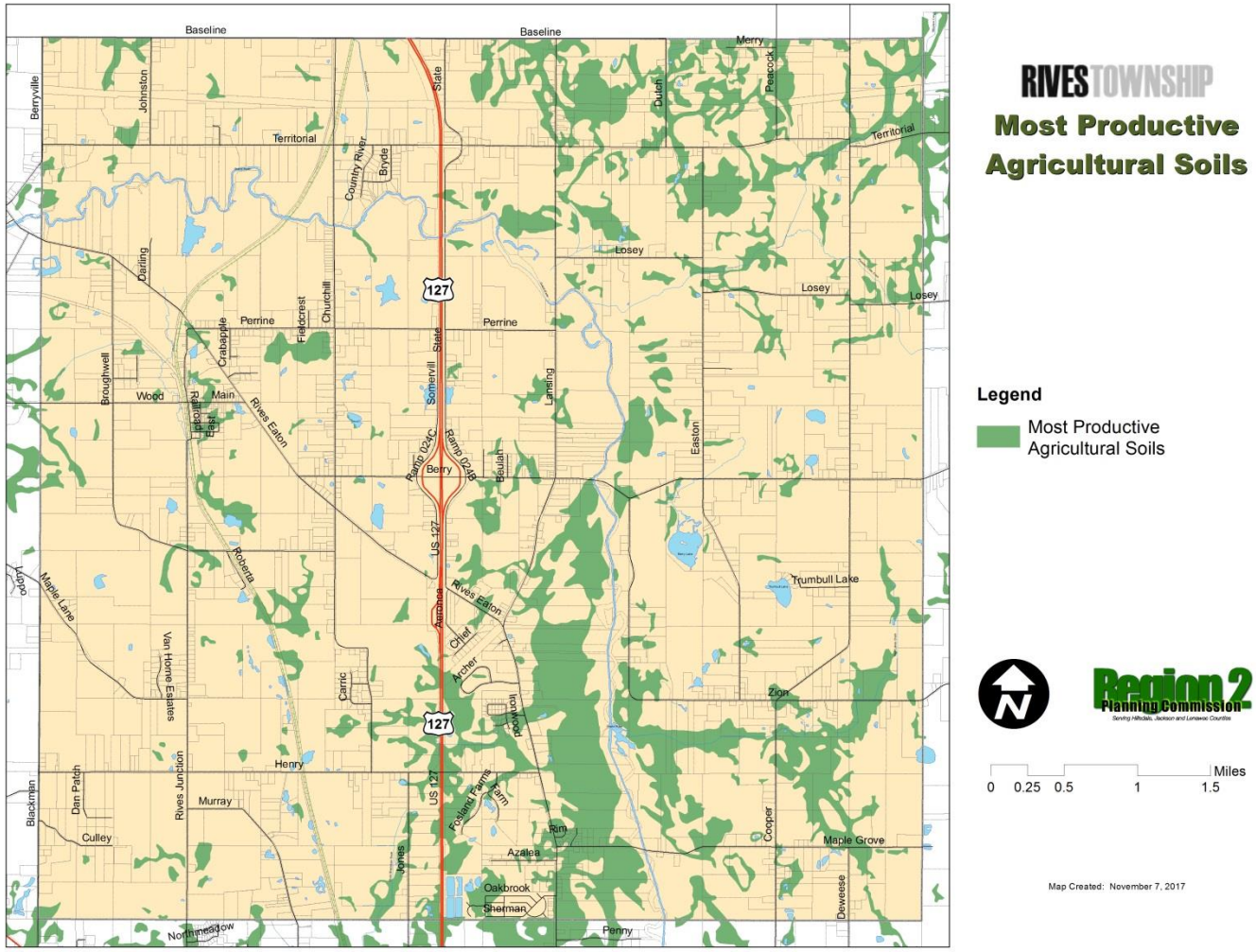

RIVES TOWNSHIP
Base
Legend
Rives Township
State Highways
Other Roads
Railroad
Lakes & Ponds
Rivers & Streams
Parcels
Region 2
Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Berryville
Johnston
Dutch
Peacock
Country River
Bryde
Losey
Darling
Perrine
Fieldcrest
Churchill
Crabapple
Broughwell
Wood
Main
Railroad
East
Rives Eaton
Somervill
State
Lansing
Easton
Ramp 024C
Ramp 024B
Berry
Beulah
127
US 127
Roberta
Maple Lane
Van Horne Estates
Trumbull Lake
Chief
Archer
Carric
Ironwood
Zion
Henry
Murray
Rives Junction
Dan Patch
Blackman
Culley
Fosland Farms
Farm
Rim
Azalea
Jones
Cooper
Maple Grove
Oakbrook
Sherman
Deweese
Penny
Northmeadow


RIVES TOWNSHIP
Transportation
Legend
Roads
State Highway
County Primary Road
County Local Road
Private Road
Class A Road
Railroad
Railroad
Region 2
Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Berryville
Johnston
State
Dutch
Peacock
Country River
Bryde
Losey
Darling
Perrine
Fieldcrest
Churchill
127
Lansing
Crabapple
Broughwell
Wood
Main
Railroad
East
Rives Eaton
Somervill
Ramp 024C
Ramp 024B
Berry
Beulah
Easton
US 127
Roberta
Lupo
Maple Lane
Van Horne Estates
Aaronea
Chief
Archer
Trumbull Lake
Carric
Ironwood
Zion
Henry
Blackman
Dan Patch
Rives Junction
Murray
Culley
Fosland Farms
Farm
Rim
Azalea
Jones
Cooper
Maple Grove
Oakbrook
Sherman
Deweese
Northmeadow
Penny



RIVES TOWNSHIP
Pipelines & Airport Zones


RIVES TOWNSHIP
Topography
Legend
H = 1,034 ft.
L = 896 ft.
Region 2
Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Perrine
Losey
Berry
Henry
Murray
Culley
Azalea
Oakbrook
Sherman
Maple Grove
Trumbull Lake
Zion
Rives Eaton
Rives Junction
Van Horne Estates
Maple Lane
Northmeadow
Berryville
Johnston
Dutch
Peacock
Fieldcrest
Churchill
Crabapple
Broughwell
Wood
Main
Somervill
Beulah
Easton
Cooper
Jones
Carric
Archer
Chief
Ironwood
Farm
Rim
Dewoese
Blackman
Dan Patch
Luppo
Roberta
127
H
L



RIVES TOWNSHIP
Most Productive Agricultural Soils

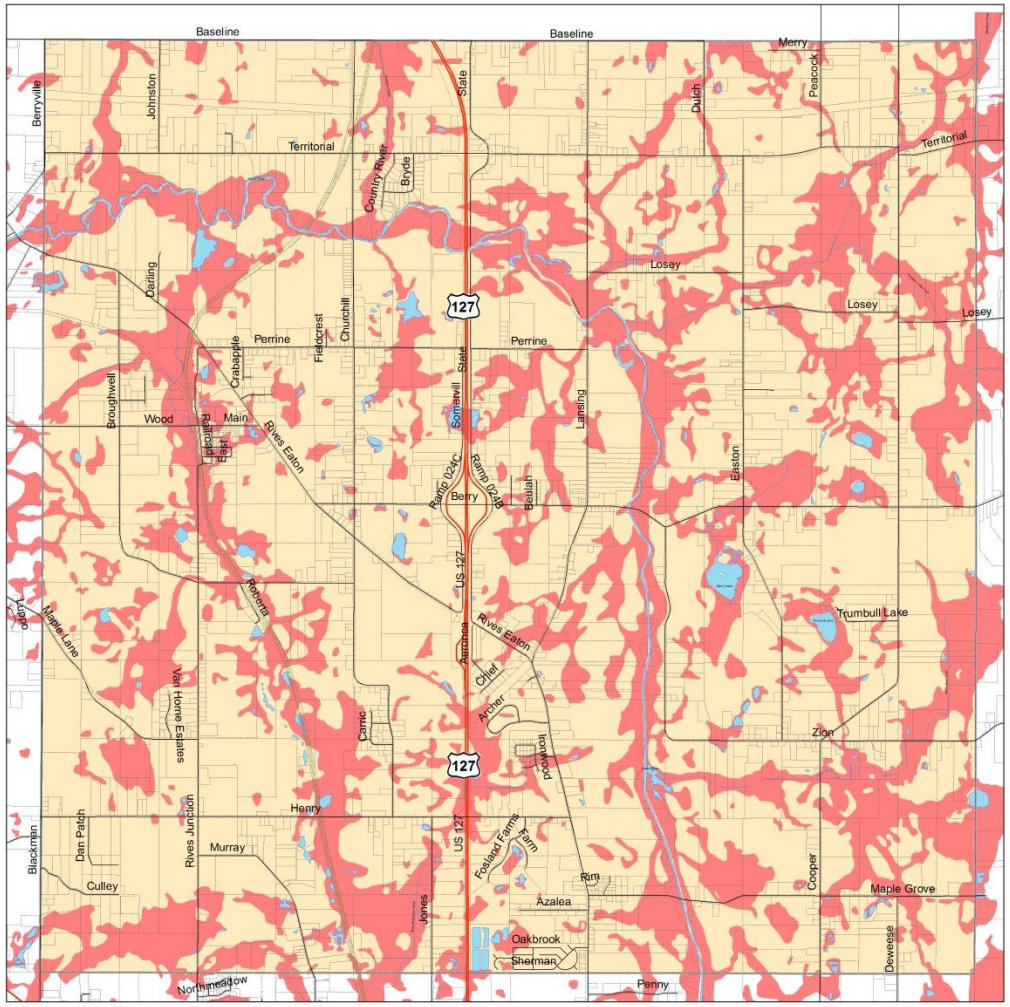
Legend

Most Productive Agricultural Soils

Region 2 Planning Commission
Serving Hillsdale, Jackson and Lenawee Counties

0 0.25 0.5 1 1.5 Miles

Map Created: November 7, 2017



RIVES TOWNSHIP
Hydric Soils

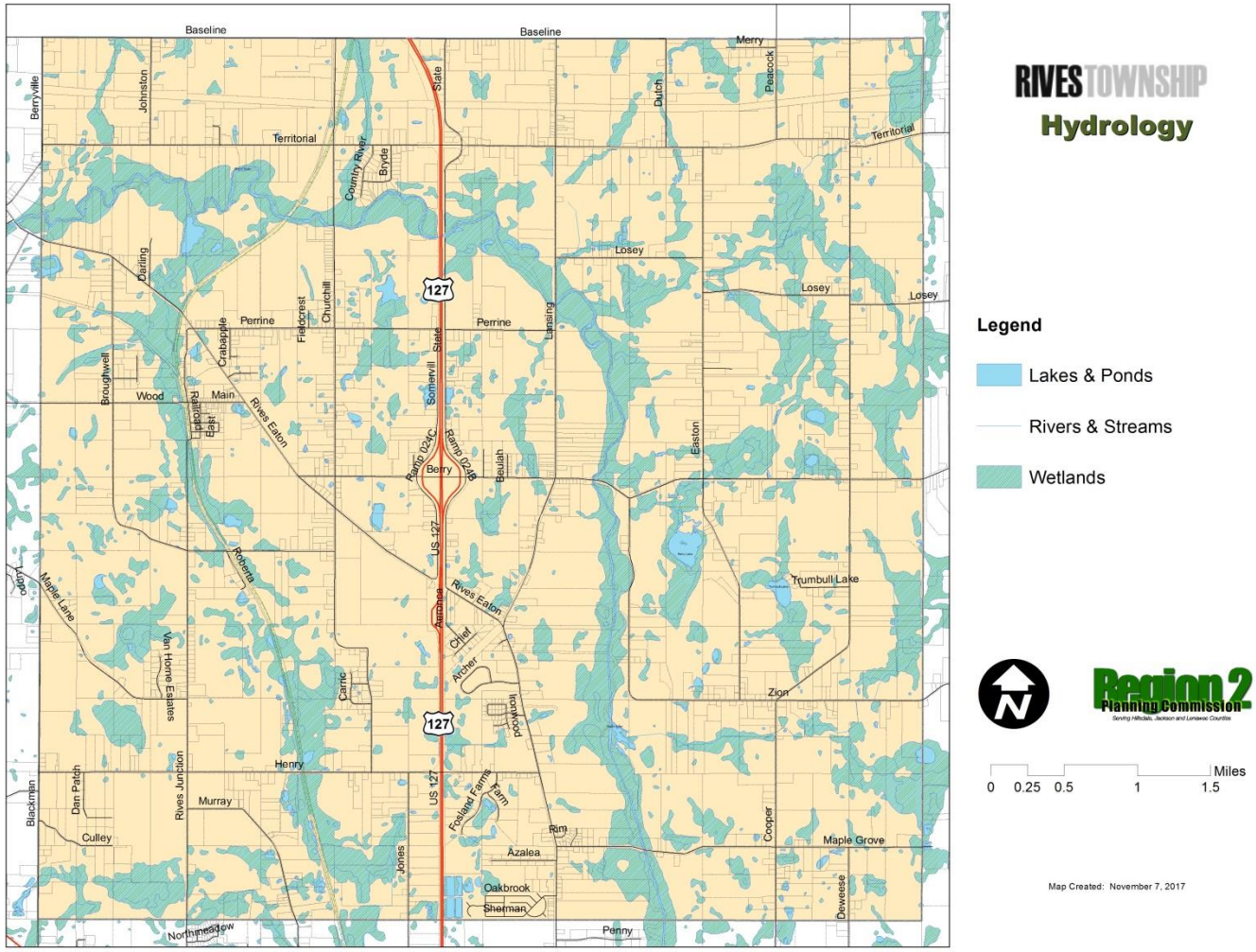
Legend

Hydric Soils

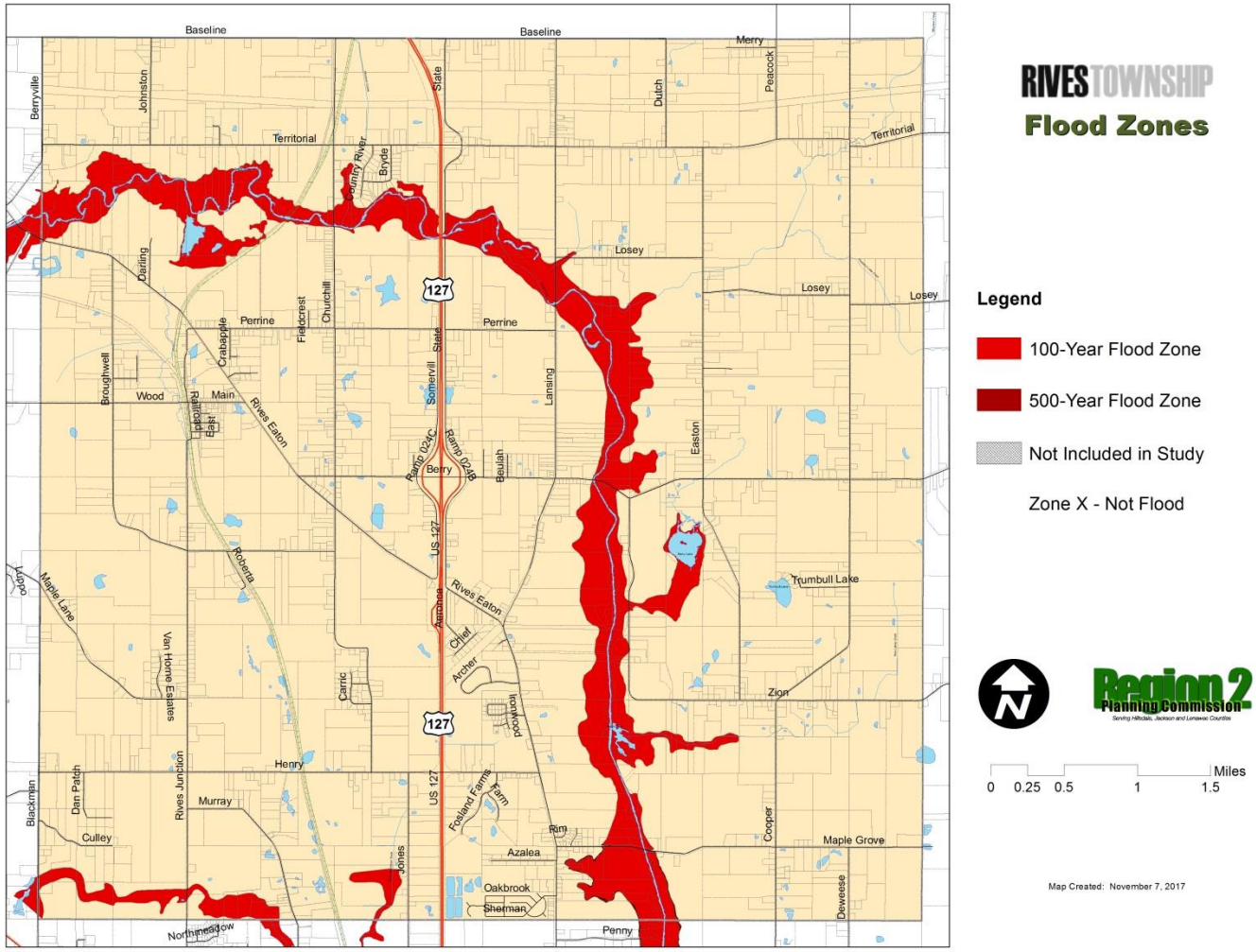
Region 2 Planning Commission
Serving Hillsdale, Jackson and Lenawee Counties

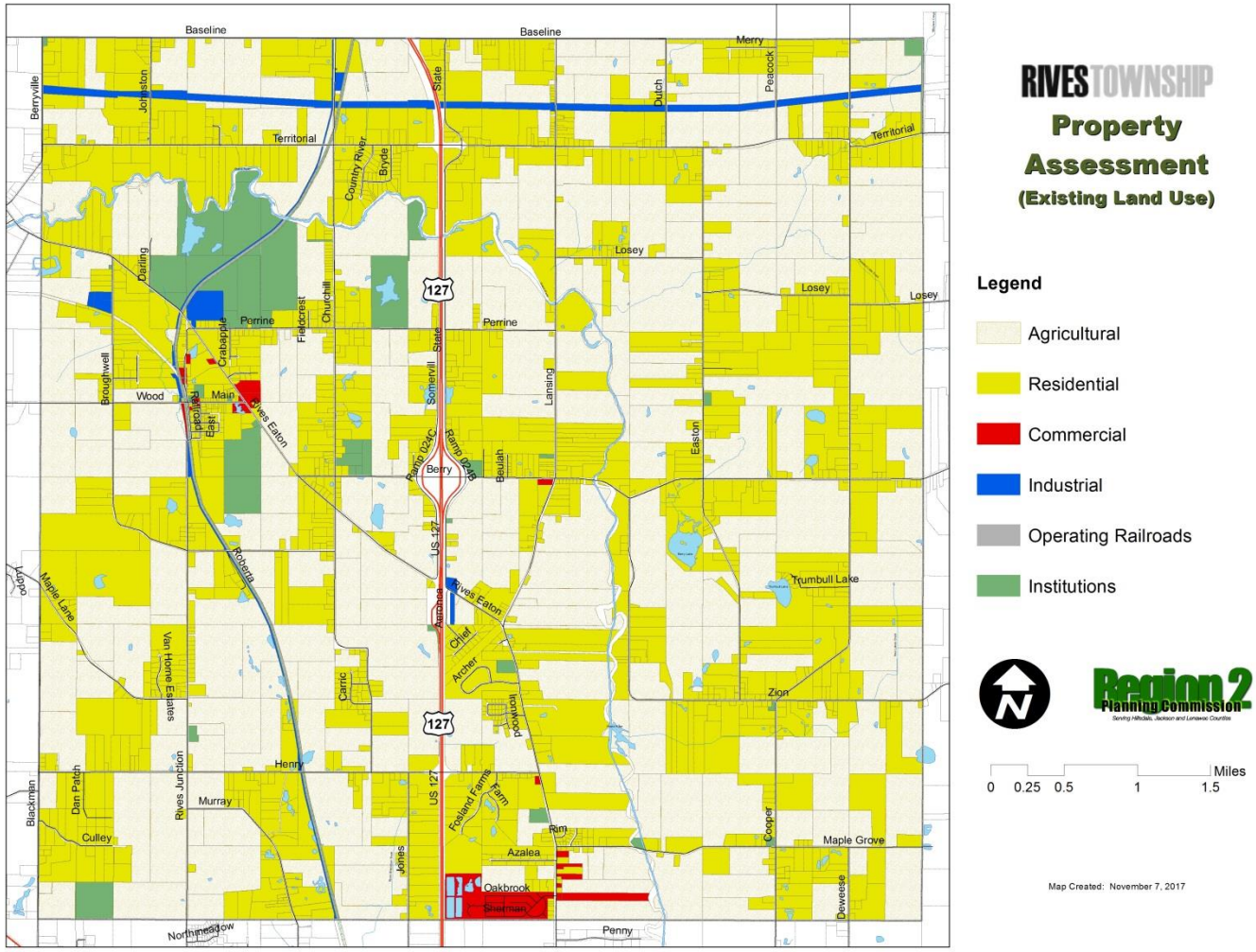
0 0.25 0.5 1 1.5 Miles

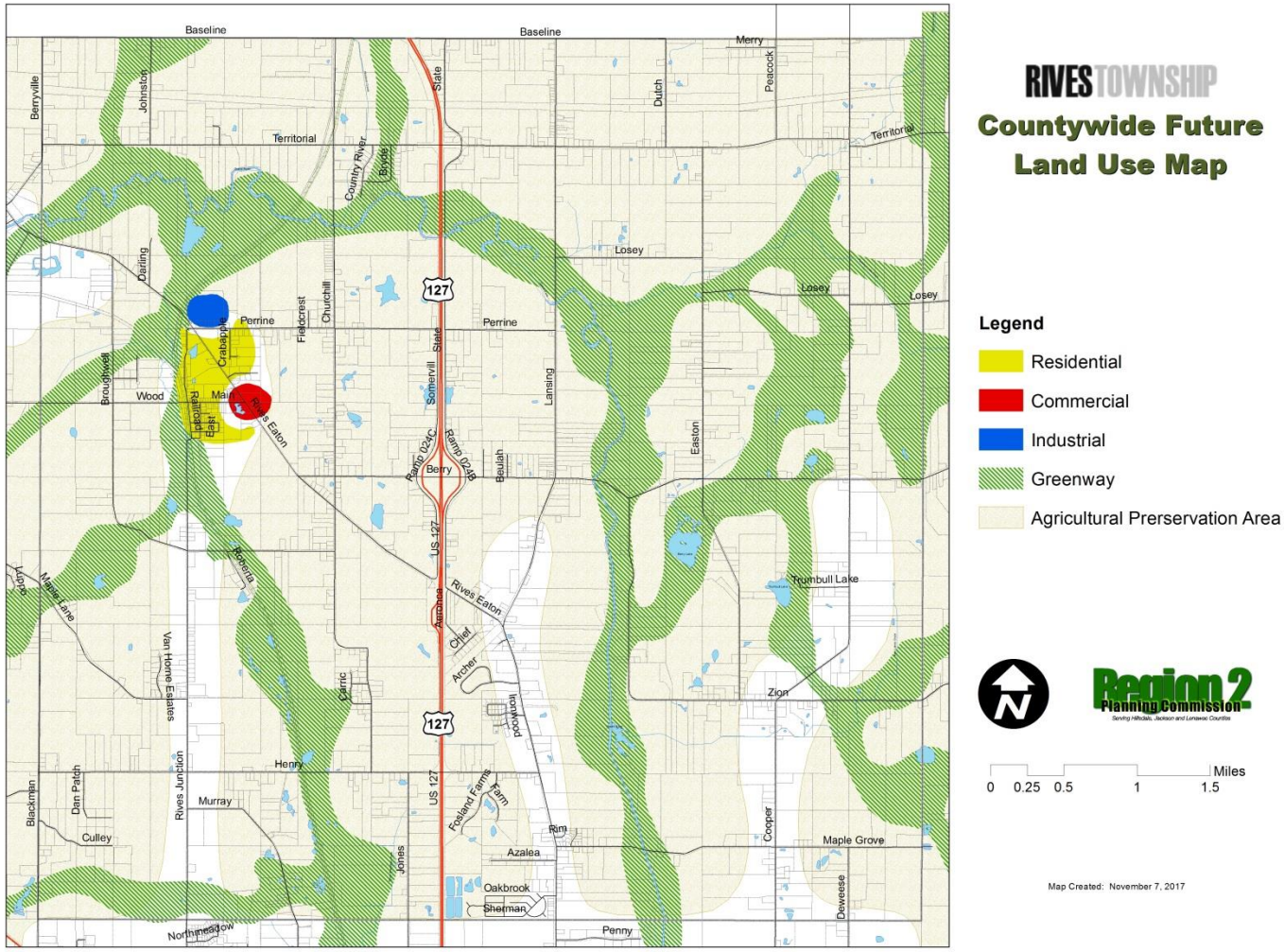
Map Created: November 7, 2017

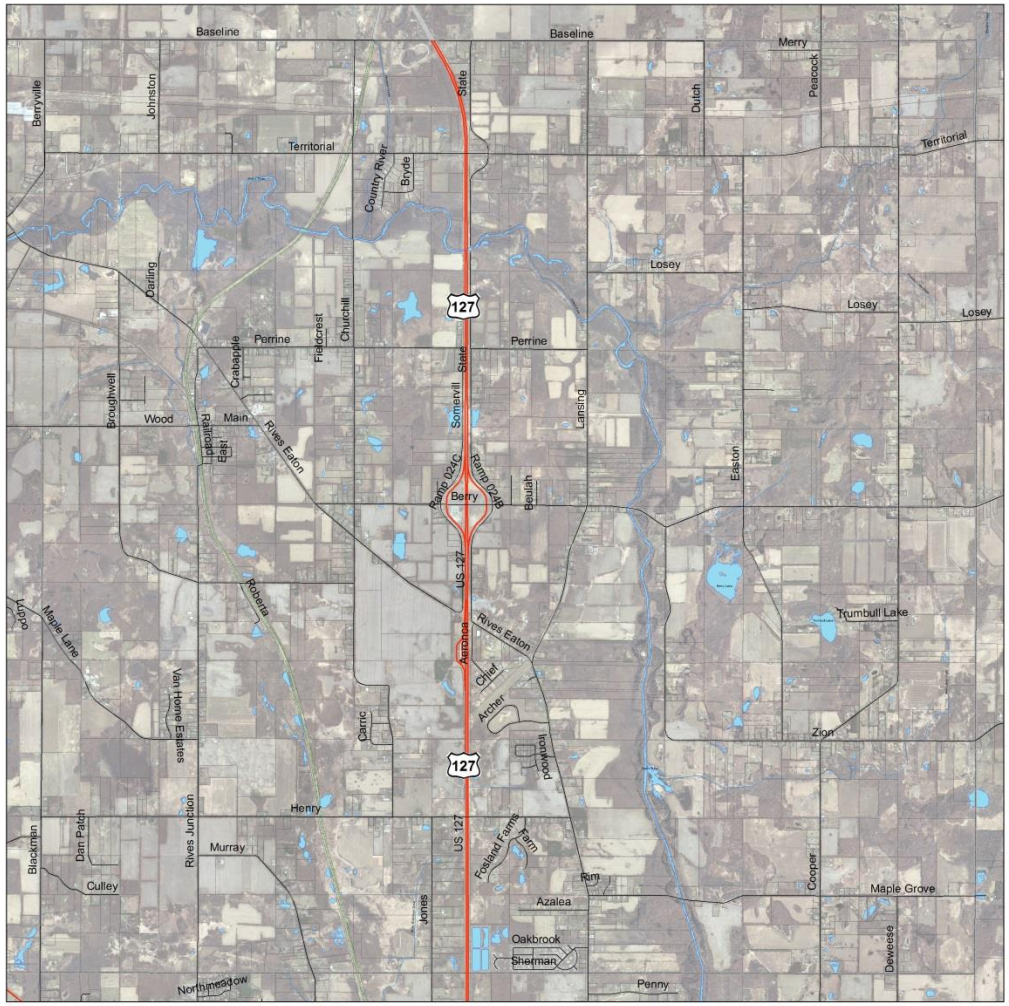


RIVES TOWNSHIP
Hydrology


RIVES TOWNSHIP
Flood Zones
Legend
100-Year Flood Zone
500-Year Flood Zone
Not Included in Study
Zone X - Not Flood
Region 2
Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Losey
Perrine
Wood
Main
Rives Eaton
Berry
Henry
Murray
Culley
Azalea
Oakbrook
Sherman
Penny
Maple Grove
Trumbull Lake
Zion
Berryville
Johnston
Dutch
Peacock
Darling
Broughwell
Crabapple
Fieldcrest
Churchill
Somervill
Lansing
Easton
Beulah
Roberta
Maple Lane
Van Horne Estates
Carric
Chief
Archer
Ironwood
Dan Patch
Rives Junction
Blackman
Jones
Cooper
Deweese
Rim
Farm
Fosland Farms
Ramp 024C
Ramp 024B
US 127
127
State
Country River
Bryde
Railroad
East
Lupo
Northmeadow


RIVES TOWNSHIP
Property Assessment
(Existing Land Use)
Legend
Agricultural
Residential
Commercial
Industrial
Operating Railroads
Institutions
Region 2 Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Losey
Perrine
Main
Wood
Berry
Henry
Murray
Culley
Azalea
Oakbrook
Sherman
Penny
Maple Grove
Zion
Trumbull Lake
Rives Eaton
Rives Junction
Van Horne Estates
Maple Lane
Roberta
Country River
Bryde
Churchill
Fieldcrest
Crabapple
Darling
Broughwell
Somervill
Lansing
Easton
Beulah
Ramp 024C
Ramp 024B
Chief
Archer
Ironwood
Carric
Fosland Farms
Farm
Rim
Jones
Cooper
Deweese
Dan Patch
Blackman
Berryville
Johnston
Dutch
Peacock
Lupo
Northmeadow
127
US 127


RIVES TOWNSHIP
Countywide Future Land Use Map
Legend
Residential
Commercial
Industrial
Greenway
Agricultural Prerservation Area
Region 2 Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Losey
Perrine
Wood
Berry
Henry
Murray
Culley
Azalea
Oakbrook
Sherman
Penny
Maple Grove
Trumbull Lake
Zion
Rives Eaton
Rives Junction
Van Horne Estates
Maple Lane
Blackman
Dan Patch
Northmeadow
Jones
Cooper
Deweese
Easton
Lansing
Beulah
Somervill
Churchill
Fieldcrest
Country River
Bryde
Dutch
Peacock
Berryville
Johnston
Darling
Broughwell
Railroad
East
Roberta
Carric
Chief
Archer
Ironwood
Fosland Farms
Farm
Rim
Auronee
Ramp 024C
Ramp 024B
US 127
127

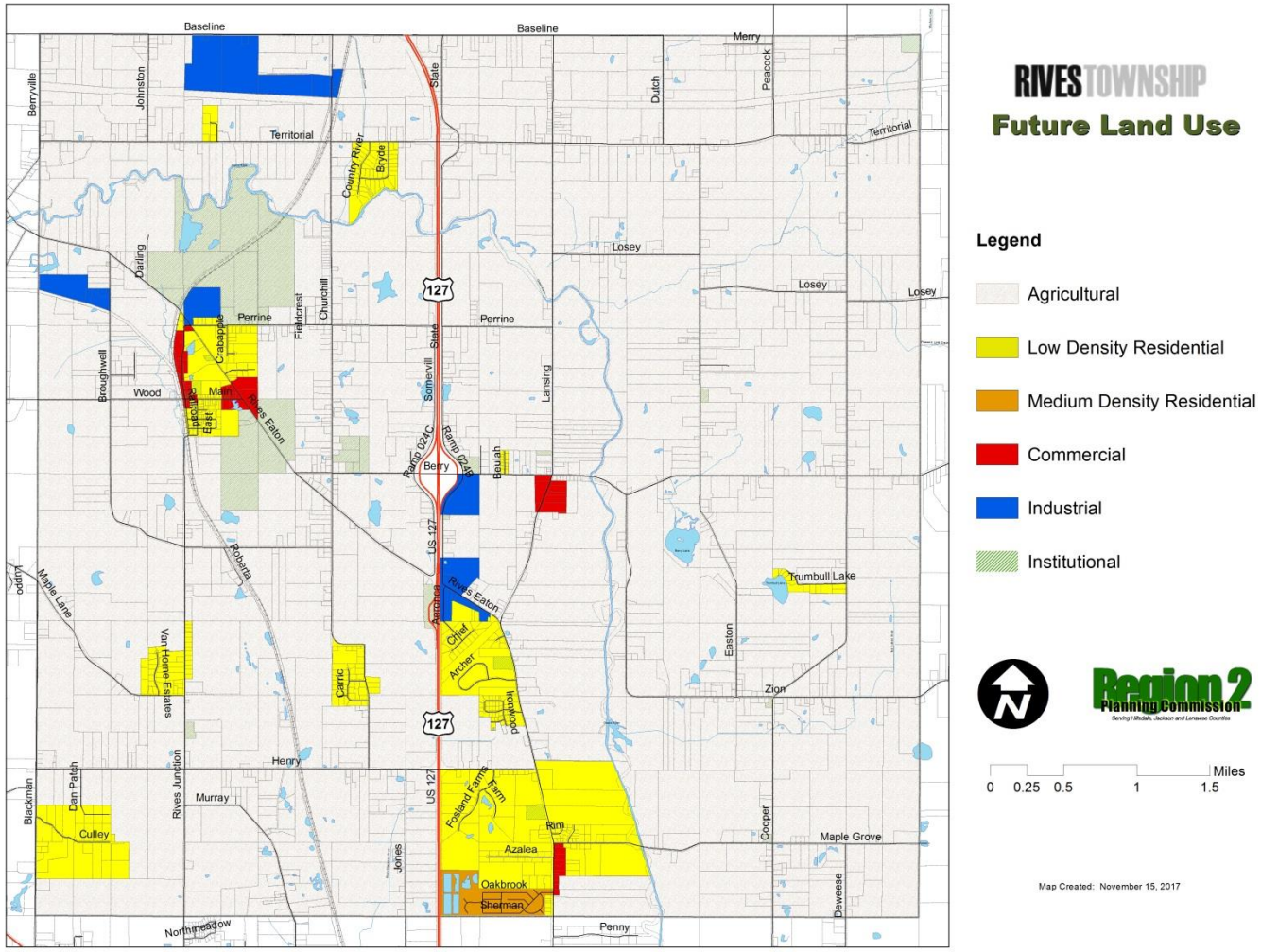


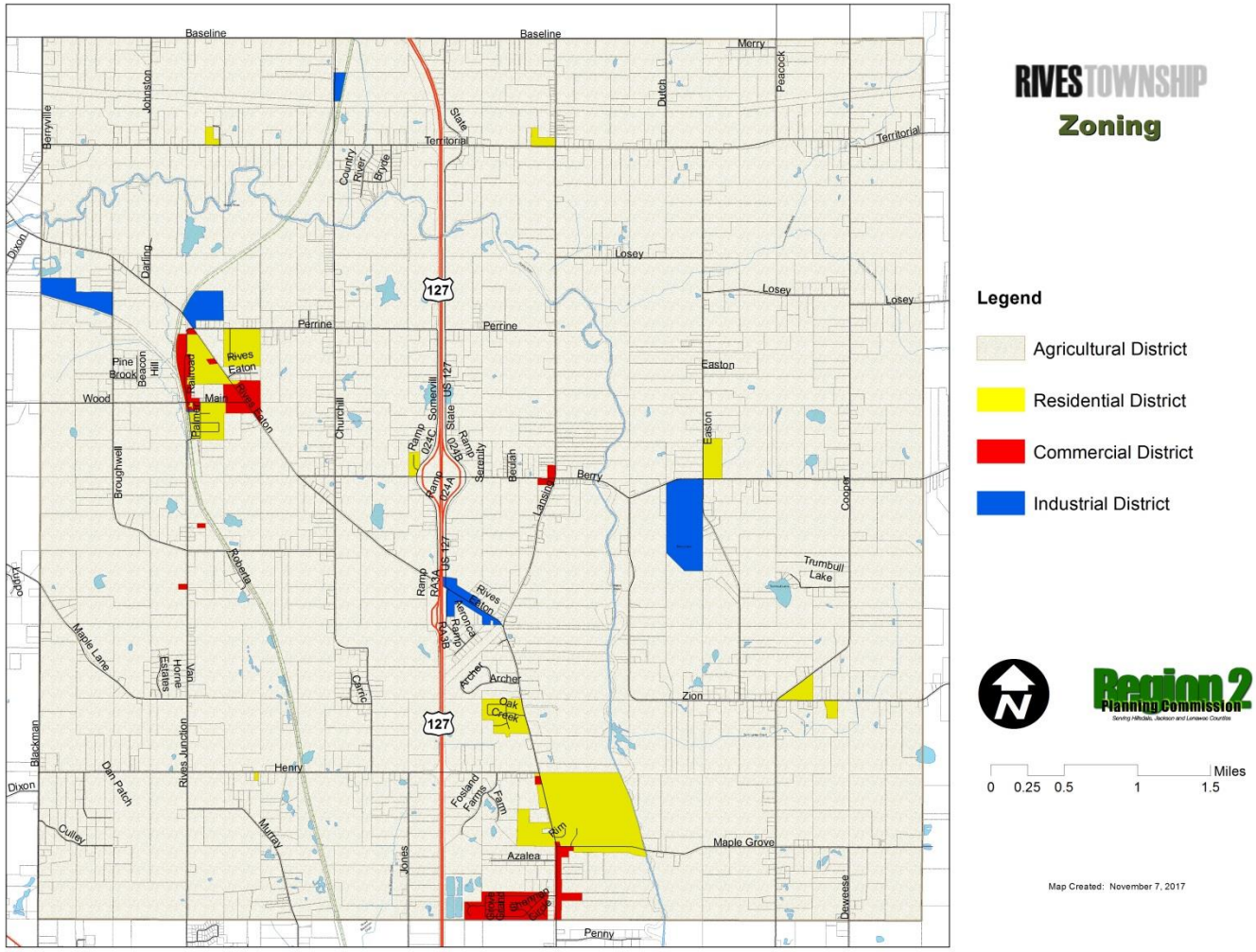
RIVES TOWNSHIP
Aerial Photo

Region 2 Planning Commission
Serving Hillsdale, Jackson and Lenawee Counties

0 0.25 0.5 1 1.5 Miles

Map Created: November 7, 2017


RIVES TOWNSHIP
Future Land Use
Legend
Agricultural
Low Density Residential
Medium Density Residential
Commercial
Industrial
Institutional
Region 2
Planning Commission
0 0.25 0.5 1 1.5 Miles
Map Created: November 15, 2017
Baseline
Merry
Territorial
Losey
Perrine
Wood
Main
Rives Eaton
Berry
Beulah
Trumbull Lake
Zion
Henry
Murray
Culley
Azalea
Oakbrook
Sherman
Rim
Maple Grove
Penny
Northmeadow
Country River
Bryde
Crabapple
Fieldcrest
Churchill
Somervill
Lansing
Dutch
Peacock
Berryville
Johnston
Darling
Broughwell
Roberta
Maple Lane
Van Horne Estates
Carric
Chief
Archer
Ironwood
Fosland Farms
Farm
Jones
Easton
Cooper
Deweese
Blackman
Dan Patch
Rives Junction
127
US 127
State


RIVES TOWNSHIP
Zoning
Legend
Agricultural District
Residential District
Commercial District
Industrial District
Region 2
Planning Commission
Miles
0 0.25 0.5 1 1.5
Map Created: November 7, 2017
Baseline
Merry
Territorial
Losey
Perrine
Easton
Berry
Zion
Henry
Maple Grove
Azalea
Penny
Wood
Main
Rives Eaton
Oak Creek
Trumbull Lake
127

APPENDIX D

CAPITAL IMPROVMENTS PROGRAMING

RIVES TOWNSHIP

What is a Capital Improvements Program?

"Capital improvements are those physical facilities which involve a substantial investment and last a long time . . . as opposed to the operating expenses that occur during the same year they are budgeted." Examples of capital improvements include: municipal buildings (e.g., Township Halls, fire stations, etc.), parks and recreation facilities, streets and alleys, and utilities (e.g., water and sewer lines). A capital improvements program (CIP) is a six-year prioritized listing of those projects along with the following information: location, date of construction, cost, means of financing, sponsor, and relationship to other facilities (if pertinent). The CIP "is updated annually with the first year being the current year capital budget" according to the Michigan Planning Guidebook (May 2008).

Why Prepare a Capital Improvements Program?

Section 65 of the MPEA —the Michigan Planning Enabling Act (PA 33 of 2008, MCL 125.3865), as amended— requires that Rives Township "annually prepare a capital improvements program of public structures and improvements," upon the adoption of this Master Plan. The Planning Commission must "prepare and adopt a capital improvements program [(CIP)], separate from or as a part of the annual budget." Alternately, the task can be delegated the Township Supervisor (or a designee), "subject to final approval by the" Township Board. The CIP shows "those public structures and improvements, in the general order of their priority, that in the commission's judgment will be needed or desirable and can be undertaken within the ensuing 6-year period . . . [and] shall be based upon the requirements of the [Township] for all types of public structures and improvements. Consequently, each agency or department of the [Township] with authority for public structures or improvements shall upon request furnish the Planning Commission with lists, plans, and estimates of time and cost of those public structures and improvements."

Of course, there are also benefits to developing and maintaining a CIP. Chief among those benefits is the coordination of seemingly disparate projects. For example, water and sewer projects can be coordinated with street paving projects eliminating the potential for streets to be repaved, only to be torn up to for a water or sewer project two or three years later. It is also important to note that "plans for new public works that are identified in the [Master Plan can] actually come to fruition through the CIP" and to ensure that "new public facilities are built in locations and consistent with the public policy for development in particular areas or neighborhoods as spelled out in the" document, according to the Michigan Planning Guidebook.

Developing a Capital Improvements Program

The following information should be used to develop the capital improvements program (CIP) upon the completion of the comprehensive plan:

Establishing Objective Criteria

"Without objective criteria, the [capital improvements process (CIP)] can quickly break down into a strictly political process where those agencies or neighborhoods with more political or fiscal resources (or both) will run roughshod over smaller agencies or weaker neighborhoods," according to the Michigan Planning Guidebook, and simply ranking proposed projects as 'urgent,' important,' or 'desirable' "leave room for disagreement in determining priority. More robust criteria are often used first to examine each project:"

- Does the proposed facility address a risk to public safety or health?
- Is the current facility deteriorated or unsafe?
- Is the proposed facility part of a systematic replacement program?
- Will the proposed facility result in improvement of operating efficiency?
- Is the proposed facility necessary to:
  - Ensure the success of another capital improvement?
  - Meet a state or federal statutory or administrative requirement?
  - A court order?
  - A major public goal of the township board?
- Will the proposed facility result in the equitable provision of services or facilities to a part of the population with special needs?
- Will the proposed facility protect or conserve sensitive natural features or natural resources or the air or water quality of the Township?
- Will the proposed facility protect the investment in existing infrastructure from becoming over capacity?
- Will the proposed facility result in a new or substantially expanded facility to provide a new service or new level of service in Township?

Those answers can then be used to place proposed facilities into groups based upon the following criteria:

- The proposed facility is urgent and fills a high priority need that should be met.
- The proposed facility is a high priority that should be done as funding becomes available.
- The proposed facility is worthwhile if funding is available (but may be deferred).
- The proposed facility is a low priority that is desirable but not essential.

The criteria listed above are recommended for larger governments with the potential for many projects. The criteria used for "small communities with few projects may not be much more than 'urgent,' 'important,' or 'desirable.'"

Establishing a Process

The Michigan Planning Guidebook recommends that a medium or large-sized community create a special committee to advise its planning commission on the capital improvements program (CIP). The committee should be comprised of the chief elected or appointed official and representatives from the planning commission, the legislative body, and pertinent departments (e.g., engineering; finance; fire; parks, recreation and grounds; public works; purchasing; and water). A total of eight steps are recommended for the development of a CIP:

- Prepare an inventory of all capital facilities.
- Rate the existing level of service for each infrastructure element.
- Identify the structure needs.
- Identify options to meet needs and cost estimates to all projects over the next six years.

Prepare a draft CIP that includes a review of each project against the master plan and CIP prioritization criteria:

- Establish financial capacity for financing public works proposals over the next six years.
- Develop a project schedule for the next six years based on the ranking of selected projects and the availability of funding.

- Select projects to be undertaken during the coming year which become the capital budget. The remaining projects become part of the capital improvements program for the subsequent five years.
- Develop a project schedule for the next six years based on the ranking of selected projects and the availability of funding.
- After public review and hearing, the CIP is adopted by the township board with any agreed upon amendments.
- Implement current year of the CIP.
- Monitor projects and update the CIP annually.

The Michigan Planning Guidebook notes that "in smaller communities with few capital improvements," such as Rives Township, the process can be simplified. "Each office, agency, or department responsible for public works is asked to submit proposed public works and the planning commission as a whole reviews and prioritizes them all —ensuring they are consistent with the master plan."