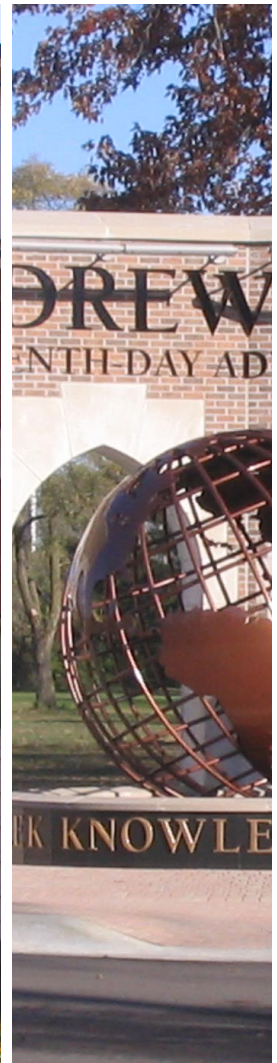


Oronoko Charter Township

Berrien County, Michigan



2010 Master Plan

Approved by the Planning Commission April 6, 2010

Adopted by the Township Board April 13, 2010

**ORONOKO CHARTER TOWNSHIP
BERRIEN COUNTY MICHIGAN
(Resolution No. _____)**

At a regular meeting of the Oronoko Charter Township Planning Commission held on April 6, 2010, at the Oronoko Charter Township Hall, the following Resolution was offered for adoption by Planning Commission Member Mike Hildebrand and was seconded by Planning Commission Member August Zuelke

**A RESOLUTION RECOMMENDING APPROVAL OF THE NEW
ORONOKO CHARTER TOWNSHIP MASTER PLAN TO THE
ORONOKO CHARTER TOWNSHIP BOARD AND CONSTITUTING
PLANNING COMMISSION APPROVAL OF SUCH MASTER PLAN**

WHEREAS, the Michigan Planning Enabling Act, MCL 125.3801 *et seq.* ("MPEA") authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the Township; and

WHEREAS, the Planning Commission prepared a new Master Plan and submitted such plan to the Township Board for review and comment; and

WHEREAS, on December 8, 2009, the Oronoko Charter Township Board received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan to the Notice Group entities identified in the MPEA; and

WHEREAS, notice was provided to the Notice Group entities as provided in the MPEA; and

WHEREAS, the Planning Commission held a public hearing on March 2, 2010 to consider public comment on the proposed new Master Plan, and to further review and comment on the proposed Master Plan; and

WHEREAS, after the public hearing was held, the Planning Commission voted to approve the new Master Plan on March 2, 2010, and recommended approval of the proposed Master Plan to the Township Board; and

WHEREAS, the Township Board reviewed the proposed Master Plan, rejected it, and stated their reasons for rejection pursuant to the requirements of the MPEA; and

WHEREAS, the Planning Commission revised the proposed Master Plan to address the Township Board's reasons for rejection; and

WHEREAS, the Planning Commission held a second public hearing on the proposed Master Plan to consider public comment on the proposed new Master Plan; and

WHEREAS, the Planning Commission finds that the proposed Master Plan is desirable, proper, and reasonable and furthers the use, preservation, and development goals and strategies of the Township;

NOW, THEREFORE, BE IT HEREBY RESOLVED AS FOLLOWS:

1. ***Adoption of 2010 Master Plan.*** The Oronoko Charter Township Planning Commission hereby approves and adopts the proposed Master Plan, including all of the chapters, figures, descriptive matters, maps and tables contained therein.

2. ***Distribution to the Township Board.*** Pursuant to MCL 125.3843, the Township Board has asserted by resolution its right to approve or reject the proposed Master Plan and therefore, the approval granted herein is not the final step for adoption of the plan as provided in MCL 125.3843. In addition, the Planning Commission hereby approves distribution of the proposed new Master Plan to the Township Board. The Planning Commission respectfully

recommends to the Township Board that the Township Board give final approval to the proposed new Master Plan.

3. *Findings of Fact.* The Planning Commission has made the foregoing determination based on a review of existing land uses in the Township, a review of the existing Master Plan provisions and maps, and input received from the Township Board and at the public hearing, as well as the assistance of a professional planning group. The Planning Commission also finds that the new Master Plan will accurately reflect and implement the Township's goals and strategies for the use, preservation, and development of lands within Oronoko Charter Township.

4. *Effective Date; Repeal.* The new Master Plan shall become effective on the date it is approved by the Township Board.

YEAS: August Zielke, yes Mike Lalibonnet yes
Don Damon yes Jeff Lamony yes Tim Dargatzis yes David Nelson yes

NAYS: _____

ABSENT ABSTAIN: Lawrence Schalk.

RESOLUTION DECLARED ADOPTED.

CERTIFICATION

I hereby certify that the above is a true copy of a resolution adopted by the Oronoko Charter Township Board at the time, date, and place specified above pursuant to the required statutory procedures.

Dated: April 6, 2010

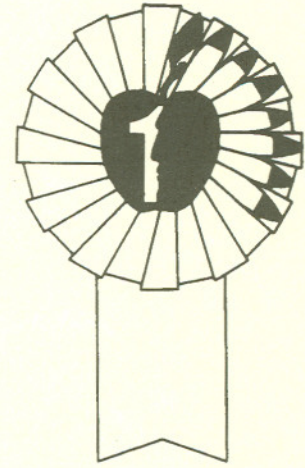
Respectfully submitted,

By David Nelson
David Nelson, Secretary of the Oronoko
Charter Township Planning Commission

Oronoko Charter Township

4583 E. Snow Road
P. O. Box 214
Berrien Springs, Michigan 49103
269-471-2824

ORONOKO CHARTER TOWNSHIP BERRIEN COUNTY MICHIGAN (Resolution No. 4-2010-1)



At a regular meeting of the Oronoko Charter Township Board held on April 13, 2010, at the Oronoko Charter Township Hall, the following Resolution was offered for adoption by Trustee August Zielke and was seconded by Trustee Philipp Riess:

A RESOLUTION ADOPTING THE PROPOSED ORONOKO CHARTER TOWNSHIP MASTER PLAN

WHEREAS, the Michigan Planning Enabling Act, MCL 125.3801 *et seq.* ("MPEA") authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the Township; and

WHEREAS, the Planning Commission prepared a new Master Plan and submitted such plan to the Township Board for review and comment; and

WHEREAS, on December 8, 2009, the Oronoko Charter Township Board received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan to the Notice Group entities identified in the MPEA; and

WHEREAS, notice was provided to the Notice Group entities as provided in the MPEA; and

WHEREAS, the Planning Commission held a public hearing on March 2, 2010 to consider public comment on the proposed new Master Plan, and to further review and comment on the proposed Master Plan; and

WHEREAS, after the public hearing was held, the Planning Commission voted to approve the new Master Plan on March 2, 2010, and recommended approval of the proposed Master Plan to the Township Board; and

WHEREAS, the Township Board reviewed the proposed Master Plan, rejected it, and stated their reasons for rejection pursuant to the requirements of the MPEA; and

WHEREAS, the Planning Commission revised the proposed Master Plan to address the Township Board's reasons for rejection; and

WHEREAS, the Planning Commission held a second public hearing on the proposed Master Plan on April 6, 2010 to consider public comment on the proposed Master Plan; and

WHEREAS, after the second public hearing was held, the Planning Commission voted to approve the new Master Plan on April 6, 2010, and recommended approval of the proposed Master Plan to the Township Board; and

WHEREAS, the Township Board finds that the proposed Master Plan is desirable, proper, and reasonable and furthers the use, preservation, and development goals and strategies of the Township;

NOW, THEREFORE, BE IT HEREBY RESOLVED AS FOLLOWS:

1. ***Adoption of 2010 Master Plan.*** The Oronoko Charter Township Board hereby approves and adopts the proposed Master Plan, including all of the chapters, figures, descriptive matters, maps and tables contained therein.
2. ***Distribution to Notice Group.*** Pursuant to MCL 125.3843, the Township Board approves distribution of the new Master Plan to the Notice Group.
3. ***Findings of Fact.*** The Township Board has made the foregoing determination based on a review of existing land uses in the Township, a review of the existing Master Plan provisions and maps, and input received from the Township Board and at the public hearing, as well as the assistance of a professional planning group. The Township Board also finds that the new Master Plan will accurately reflect and implement the Township's goals and strategies for the use, preservation, and development of lands within Oronoko Charter Township.
4. ***Effective Date; Repeal.*** The new Master Plan shall become effective on the adoption date of this resolution. The prior Master Plan is hereby repealed upon the new Master Plan becoming effective.

YEAS: Trustee Philipp Riess, Trustee Dorothy Hildebrand, Clerk Suzanne Renton, Trustee Marc Kerlikowske, Trustee August Zielke, Supervisor Ernest Hildebrand.

NAYS: None.

ABSENT Treasurer Kendall Hill

ABSTAIN: None.

RESOLUTION DECLARED ADOPTED.

CERTIFICATION

CERTIFICATE: I hereby certify that the foregoing constitutes a true and complete copy of a Resolution adopted at a meeting of The Oronoko Charter Township Board held at the Township Hall on April 13, 2010; that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being 1976 PA 267; that a quorum of the Board was present and voted in favor of said Resolution; and that minutes of said meeting were kept and will be or have been made available as required by said Open Meetings Act.

Respectfully submitted,

Dated: April 13, 2010

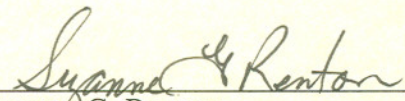
By 
Suzanne G. Renton,
Oronoko Charter Township Clerk

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ORONOKO CHARTER TOWNSHIP PLANNING COMMISSION

Jeff Lemon, Chair

David Nelson, Secretary

Don Damron

Timothy Dargus

Michael Hildebrand

John Jasper

August Zielke, Jr

ORONOKO CHARTER TOWNSHIP BOARD

Ernest Hildebrand, Township Supervisor

Suzanne Renton, Township Clerk

Kendall Hill, Treasurer

Dorothy Hildebrand, Trustee

Marc Kerlikowske, Trustee

Philipp Riess, Trustee

August Zielke, Jr, Trustee

BUILDING INSPECTOR/ZONING ADMINISTRATOR

Tom Russell

PLANNING CONSULTANT

Williams & Works

CHAPTER I. INTRODUCTION

The fundamental purpose of a Master Plan is to enable a community to establish a direction for physical development, capital investment and growth. Therefore, a Master Plan represents a foundation policy statement about what a community is, what its residents value and what those residents and businesses hope the community will become. The Michigan Planning Enabling Act (Act 33 of 2008) specifically gives the Oronoko Charter Township Planning Commission and the Township Board the authority to prepare and adopt a plan. Once prepared, adopted and maintained, this Plan will serve as an advisory guide for the physical conservation of certain areas and for the development of other areas.

This Plan represents the culmination of more than a year of work by numerous local residents and local officials. It reflects the community's deep concern for the natural beauty of its surroundings and a strong commitment to retain and strengthen local quality of life. The plan outlines the preferred future for the community and a comprehensive plan to realize it. The Plan is appropriately general, recognizing that planning for the future is a delicate blend of art and science and that sufficient flexibility will be needed to respond to the challenges of the future.

Oronoko Charter Township last Master Plan was completed in 1999. General planning practice, as well as State statute, suggests that Master Plans should be reviewed at about five-year intervals and the Township has been fairly vigilant in doing so. The former plan, adopted in January 2000, reflected many current conditions and trends, so the effort to update it in 2008-2009 enabled the community to focus on particular challenges rather than restrict the effort to a more general overview.

Nevertheless, planning for the long-term should be carried at a general level that recognizes the potential for change and provides flexibility. This results in a Master Plan that can be useful well into the future instead of becoming obsolete if or when demographic and economic trends stray from those identified in the Community Profile.

PLAN METHODOLOGY

The planning process involved four inter-related phases:

- Data Analysis – A Community Profile;
- Goals and Objectives – Creating a Policy Foundation;
- Plan Preparation – Analyzing the Issues and Defining the Preferred Future; and

- Implementation Strategies – Getting There from Here

DATA ANALYSIS

The Community Profile is the first part of this Master Plan, and contains the following key areas of focus:

- Natural and Cultural Features (Chapter 2)
- Population (Chapter 3)
- Housing and Economic Development (Chapter 4)
- Land Use and Development Patterns (Chapter 5)
- Community Facilities and Services (Chapter 6)
- Utilities and Transportation (Chapters 7 and 8)

During the first phase, demographic, economic and land use data was gathered from a variety of sources and analyzed. The purpose of this effort was to develop a comprehensive impression of the patterns of growth and the challenges that will impact the Township. This phase culminated in the preparation of the Community Profile Report, which was published in December 2008. This report served as a technical resource for the Planning Commission and the consultant. It also represents the Community Profile, which constitutes Chapters 2 through 7 of this Plan.

PUBLIC PARTICIPATION

The objective of the second phase was to establish a policy basis for the Township's planning and land use regulations. To do this it was important to "take the pulse" of the community and determine what direction residents were looking for the future of their community. To this end, the Township held an Open House and Visioning Workshop in March 2009. This was a public meeting intended to give community residents an opportunity to voice their opinion regarding important issues such as farmland preservation, land use, utilities and others.

Approximately 60 participants attended the meeting and provided valuable input regarding agriculture, transportation, utilities, and many other topics. A report that details the results of this meeting is included as Appendix 1.

GOALS & OBJECTIVES

Information gathered from the Open House and Visioning Workshop were formed into several broad goal statements which form the foundation of the Master Plan. Each goal is supported by several objectives that are to be seen as steps needed to accomplish each goal. The goals and objectives comprise Chapter 8 of the Plan.

PLAN PREPARATION

The third phase involved drawing together the input from the previous two phases and preparing a Future Land Use Plan, which is reflected in Chapter 9. The future land use designations and map were developed in a series of interactive meetings of the Planning Commission. To support the desired development patterns envisioned in the Future Land Use Map, the Map is supported with a collection of texts describing how specific areas of the Township should develop within the next twenty to thirty years.

IMPLEMENTATION STRATEGIES

The final phase of the process involved the development of specific implementation strategies to carry out the Plan. These are reflected in general terms in Chapter 10. At the conclusion of the fourth phase, the Planning Commission held an open house and a public hearing on the entire draft Plan.

PLAN ADOPTION

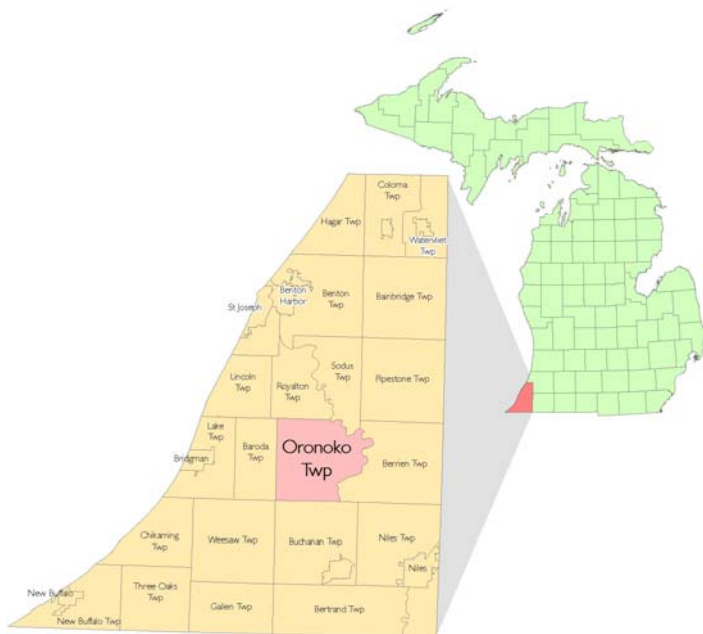
On April 6, 2010, the Planning Commission approved the Plan and on April 13, 2010, the Oronoko Charter Township Board officially adopted the Oronoko Charter Township Master Plan.

CHAPTER 2. NATURAL FEATURES & THE ENVIRONMENT

Oronoko Charter Township is situated in the southwestern lower peninsula of Michigan in the center of Berrien County, just a few miles north of the State's border with Indiana. The Township has an area of slightly more than 33 square miles and is characterized by abundant agricultural land, wooded habitats, rivers and creeks mixed with new and old human development. This chapter of the Community Profile Report presents the natural and environmental conditions that characterize the community.

The Township is bounded by Royalton Township to the north, Buchanan Township to the south, Baroda Township to the west and by the Saint Joseph River and Lake Chapin to the east. The Township was organized on March 11, 1837 and became a Charter Township in 1988.

There is some uncertainty surrounding the origins of the Township's name. Some believe the Township was named after Oronoko, an Indian Chief known by the Governor, George Mason, while others believe that the Township was named after the heroine in the novel *Oroonoko, OR, The Royal Slave: A True History*, written by Mrs. Aphra Behn in 1688.



Map I. Location Map of Oronoko Charter Township

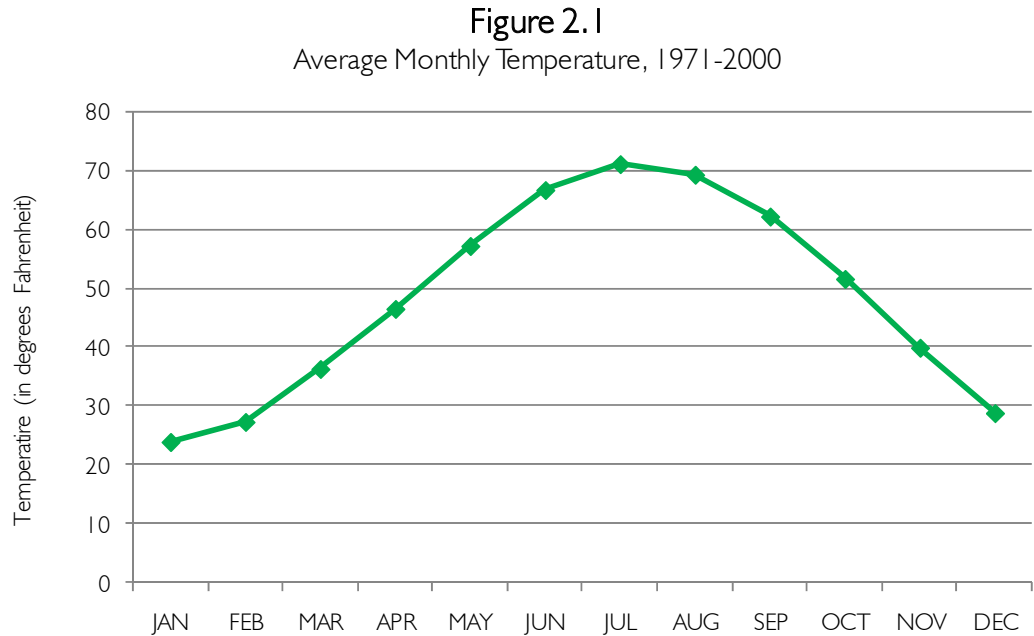
CLIMATE

Temperatures in the Township are conducive to many wintertime activities such as cross-country skiing, snowmobiling and ice fishing.

According to the Midwestern Regional Climate Center (MRCC)¹ that averaged annual climatic conditions between 1971 and 2001, in January, temperatures in the Township range from an average low of 17°F to an average high of 30°F. These temperatures, along with an average of 76 inches of snowfall annually, are conducive to many wintertime activities such as cross-country skiing, snowmobiling and ice fishing.

In July, the average low temperature of 56°F and average high of 77°F makes for a pleasant and comfortable environment for bicycling, fishing, golfing, hiking and many other outdoor summer activities. The average annual precipitation for the Township is 37 inches. The Township's proximity to Lake Michigan creates a significant amount of lake-effect precipitation. The Township's location and weather create a unique micro-climate which is conducive to agricultural activities, such as vineyards.

¹ Midwestern Regional Climate Center Website and National Climate Data Center, 2001.



LAKES & RIVERS

Lake Chapin

The most significant lake in the Township is Lake Chapin, which comprises a part of the Township's eastern border. Lake Chapin has an area of approximately 480 acres and is a popular destination for fishing and boating. Lake Chapin is a man-made reservoir, created with the construction of the Berrien Springs Dam in 1908. A fish ladder was added in 1975, and at the time it was the second major fish ladder to be constructed in the State of Michigan.



Lake Chapin plays an important role in defining the community's character

Lake Chapin plays an important role in defining the community's character, enhancing both the natural environment and the lifestyle for residents. Much of the western shoreline of the lake is developed with seasonal and year-round residences.

St. Joseph River

The St. Joseph River is approximately 210 miles long and begins in Hillsdale County, dips southwest into northern Indiana before turning northwest and emptying into Lake Michigan between St. Joseph and Benton Harbor. The St. Joseph River watershed is over 4,600 square miles in area, contains over 400 lakes, and falls approximately 600 feet from its source in Hillsdale County to Lake Michigan.

The St. Joseph River formed about 8,000 years ago when the last glaciers retreated, and small settlements first appeared near the river between 2,000 and 4,000 BC. Early European explorers found Miami and Potawatomi peoples living near present-day St. Joseph. The river was a significant early transportation route for both Native Americans and French fur traders.

The river provides residents with recreational opportunities such as fishing, canoeing and kayaking. Much of the St. Joseph River north of the Village of Berrien Springs is bordered by wetland areas. These wetlands and the 100-year floodplain areas have helped to limit intense development in close proximity to portions of the riverbank within the Township.

WATERSHEDS

A watershed is a region of land that is drained by a particular river or river system

A watershed is a region of land that is drained by a particular river or river system. Typically these systems include many smaller tributaries such as creeks and streams that feed into a larger river and are influenced by elevation or the lay of the land. All of Oronoko Township lies within the St. Joseph River regional watershed. In addition to lands that drain directly to the St. Joseph River, Oronoko Township also includes the following sub watersheds:

- Big Meadow Drain – Drains the northern portion of Oronoko Township, as well as portions of Lincoln and Royalton Township and enters the St. Joseph River in northwest Royalton Township.
- East Branch of the Galien River – Drains a very small portion of Oronoko Township, as well as portions of Baroda Township, Lake Township, Weesaw Township and Buchanan Township.
- Hickory Creek – Drains the western portion of Oronoko Township as well as portions of Buchanan Township, Weesaw Township, Baroda Township, Lake Township, Lincoln Township, Royalton Township and meets the St. Joseph River in St. Joseph Township.
- Lemon Creek – Drains the central portion of Oronoko Township and enters the St. Joseph River just north of Berrien Springs.

Water quality within a watershed is directly related to the land management practices with that watershed

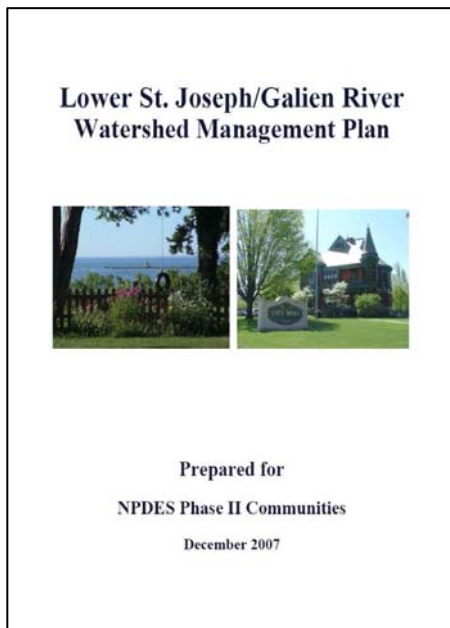
Water quality within a watershed is directly related to the land management practices within that watershed. For example, if a new development creates a large amount of impervious surfaces (i.e. asphalt) and stormwater is not properly managed, it is possible that the volume and velocity of the runoff into the creek, stream, or river could increase to a point that stream bank erosion occurs. Stream bank erosion has the potential of increasing silt material on the streambed, changing the chemistry of the water with phosphates, nitrogen, and other chemicals, and altering the turbidity and

temperature of the water. All of these changes may have an effect on the wildlife that is dependent on the stream or river for survival. Map 2 illustrates the watersheds, rivers, streams, and lakes in the Township.

According to the Great lakes Commission, Land Uses within the St. Joseph River watershed are roughly 60 percent agricultural, 20 percent forested, and less than 10 percent of the area is urbanized. However, management practices within the agricultural industry have contributed to bank erosion and sedimentation issues within the watershed. Water quality in the St. Joseph River watershed has been negatively affected by:

Roughly 60% of all land uses within the St. Joseph River watershed are agricultural

- nonpoint source pollution from agricultural uses
- highly erodible soils
- the location of twelve Superfund (hazardous waste) sites
- the presence of Atrazine, PCBs, nutrients, suspended solids, trans-nonachlor and mercury



The Lower St. Joseph/Galien River Watershed Management Plan was completed in 2007

The St. Joseph River Watershed Management Plan

In 2007, the Lower St. Joseph/Galien River Watershed Management Plan was completed. The purpose of the plan is to “identify and implement actions needed to improve water quality and reduce water quantity impacts by encouraging cooperation between the diverse public and private entities in the watershed.”² The plan identifies several overall goals for the St. Joseph River Watershed. Below is a list of goals from the plan that are related to land use practices, planning and development:

- Reduce soil erosion and sedimentation by site remediation, controlling pathways, and preventing or minimizing sources so that surface water functions and uses are not impaired and aesthetics are improved.
- Increase preservation, restoration, protection, and appreciation of open space and coastal zones, and implement actions that restore, enhance, and sustain the health, biodiversity, and productivity of the ecosystem (a system of natural areas, wildlife habitats, corridors, farmland, open land, and parklands).
- Reduce the levels of chemicals, pesticides, heavy metals, petroleum, and other toxins that are harmful to public health and that degrade aquatic habitat.
- Minimize hydrologic impacts of development, maintain water levels high enough for navigation, protect streambanks from erosion, and reduce flooding impacts.

² Lower St. Joseph River Watershed Management Plan, December 2007

Oronoko Charter Township

Berrien County, Michigan

Map 2 Watersheds

Legend

- Big Meadow Drain
- Hickory Creek
- Lemon Creek
- St. Joseph River
- E Br Galien River

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,500 feet

0 1,750 3,500 7,000
Feet

Williams & Works



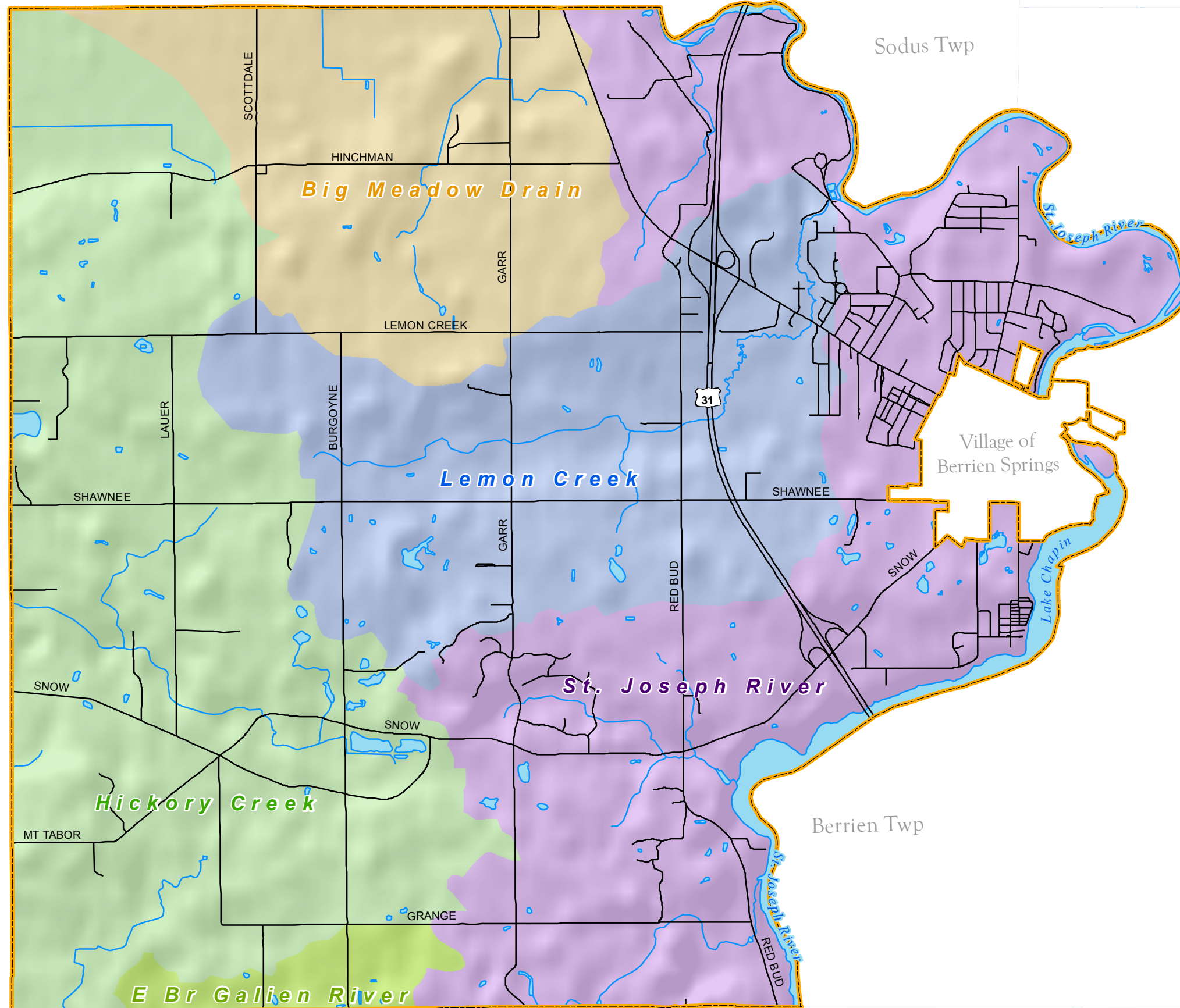
Baroda Twp

Royalton Twp

Sodus Twp

Berrien Twp

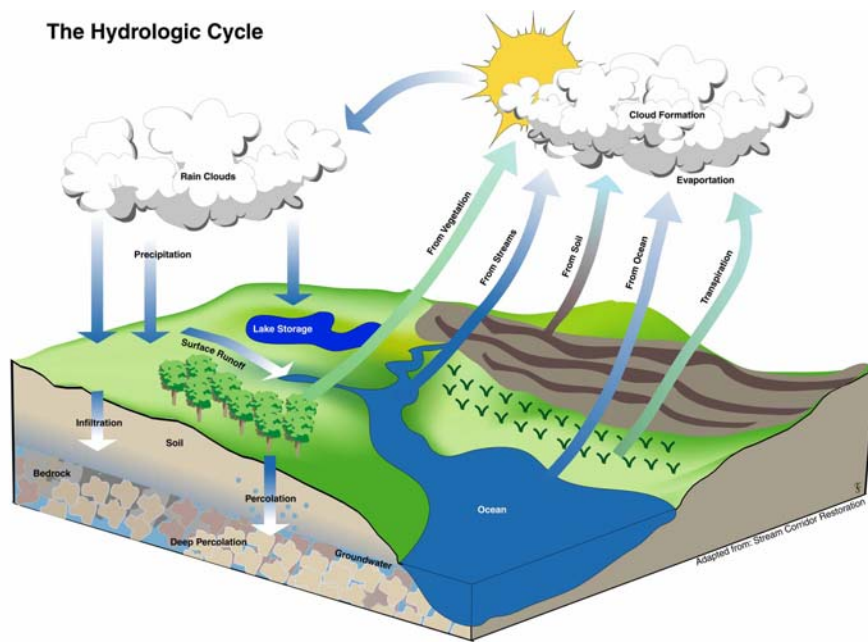
Buchanan Twp



As the Township's population continues to grow and development pressures increase, care must be taken to ensure that new developments are carefully planned to protect the quality of the water in the St. Joseph River and its tributaries. The health of the watershed should be carefully considered when assessing the impacts of new development within the Township.

GROUNDWATER

As the population in and around Oronoko Township continues to grow, natural resources will inevitably be impacted. The groundwater supplies in the Township, even though abundant, can be affected as more area becomes impervious and with greater demand placed on groundwater supplies.



According to Dr. Roberta Dow of the Michigan Groundwater Stewardship Program at the Michigan State University Extension in Traverse City, Michigan, there are many different ways ground water can be polluted. Two primary contributors are application of fertilizer on crops and residential lawns and septic tank drainfield effluent. Proper fertilizer application management and septic tank maintenance may help to significantly reduce nitrate levels. Abandoned wells may also be a threat to ground water quality if they have not been properly closed or “capped.” Open wells may expose groundwater supplies to surface contaminates.

Since all drinking water in Oronoko Charter Township is derived from groundwater sources – either from private wells or the municipal water supply - protecting this key resource is of vital interest to the Township.

SOILS

The composition of soils determines stability and suitability for structural development

Soil composition is an important aspect of planning for many reasons. Some soils are not well suited for individual septic systems and therefore may threaten ground water or surface water quality due to lack of proper filtration. The composition of soils also determines stability and suitability for structural development and agricultural productivity is dependent on

the fertility of the soils. With the soils of the Township classified, areas can be appropriately designated for a suitable use.

The United States Department of Agriculture Soil Conservation Service has classified the soils of the Township into many different general soil associations, and Map 3 illustrates the different soil textures found in Oronoko Township:

- **Sandy** – Sands are loose and single-grained. Soil materials classified as sands contain 85-100% sand-sized particles, 0-15% silt-sized particles, and 0-10% clay-sized particles.
- **Loamy** – Loam is soil material that is medium-textured and is composed of a mixture of clay, silt and sand. Soil materials classified as loams contain 7-27% clay, 28-50% silt and less than 52% sand.
- **Muck** – Muck is extremely dark in color and contains well-decomposed organic soil mixed with mineral soil material. Mucky soils contain at least 20% organic matter.
- **Complex** – Complex soils are characterized by the presence of two or more kinds of soil occurring in such a pattern that they cannot be shown separately on a soil map.
- **Pits** – Pits are open excavations from which the soil and underlying material has been removed, exposing material that supports little or no plant cover. Pits may have standing water at varying depths.

Map 4 illustrates the engineering limitations of the soil types found in the Township for dwellings with basements. Soils that are “not limited” have characteristics that are generally favorable to development. Soils that are “somewhat limited” have characteristics that are not favorable to development without special planning or design. Soils that are “very limited” have characteristics that are highly unfavorable to development, and development on these soils may result in increased construction maintenance and costs.

Oronoko Charter Township

Berrien County, Michigan

Map 3
Soils - Texture

Legend

Soil Texture

- Sandy
- Loamy
- Muck
- Complex
- Ponded/Water
- Pits

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,500 feet

0 1,750 3,500 7,000 Feet

Williams & Works



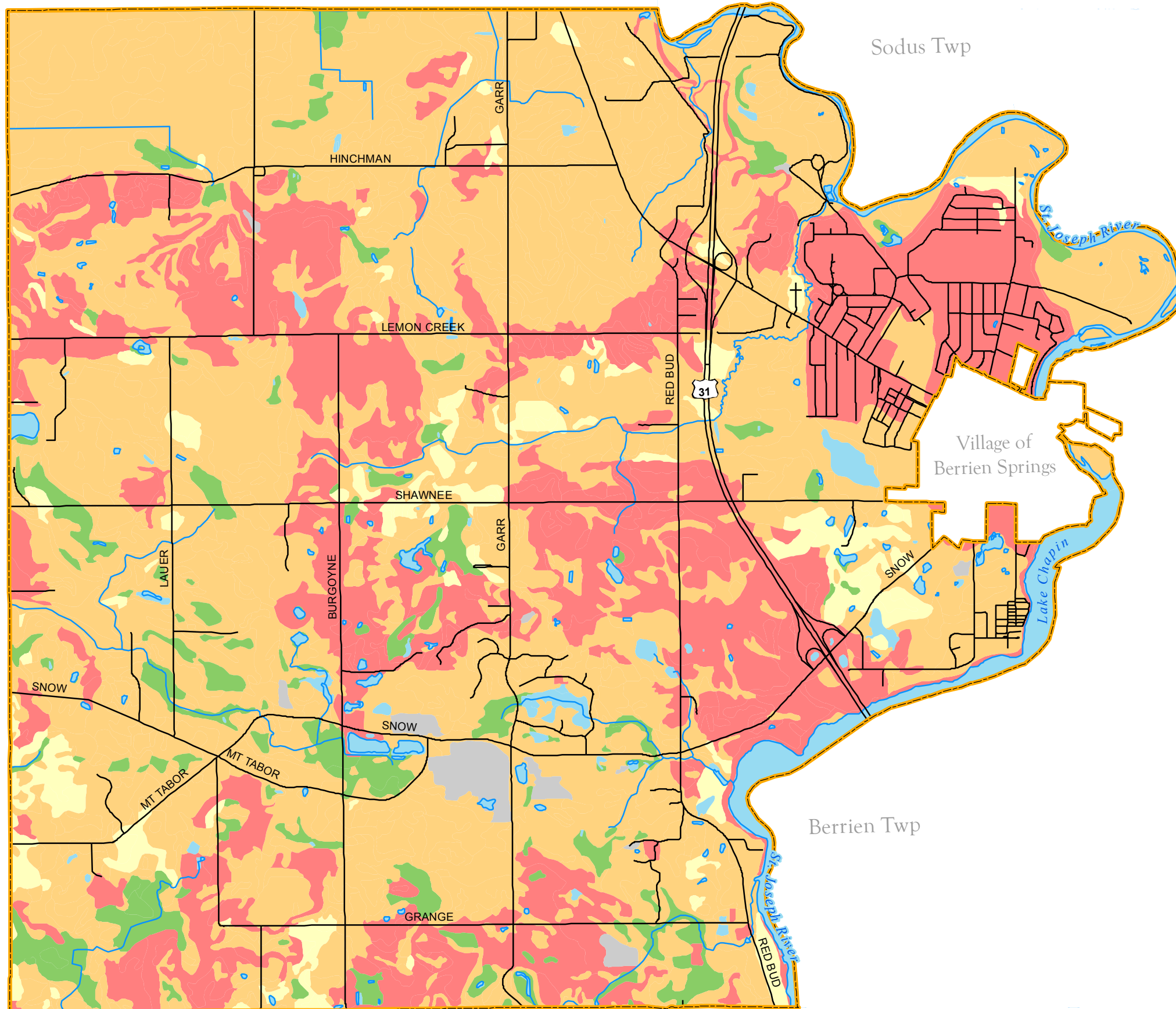
Baroda Twp

Royalton Twp

Sodus Twp

Berrien Twp

Buchanan Twp



Oronoko Charter Township

Berrien County, Michigan

Map 4 Soil Development Limitations

Legend

Development Suitability

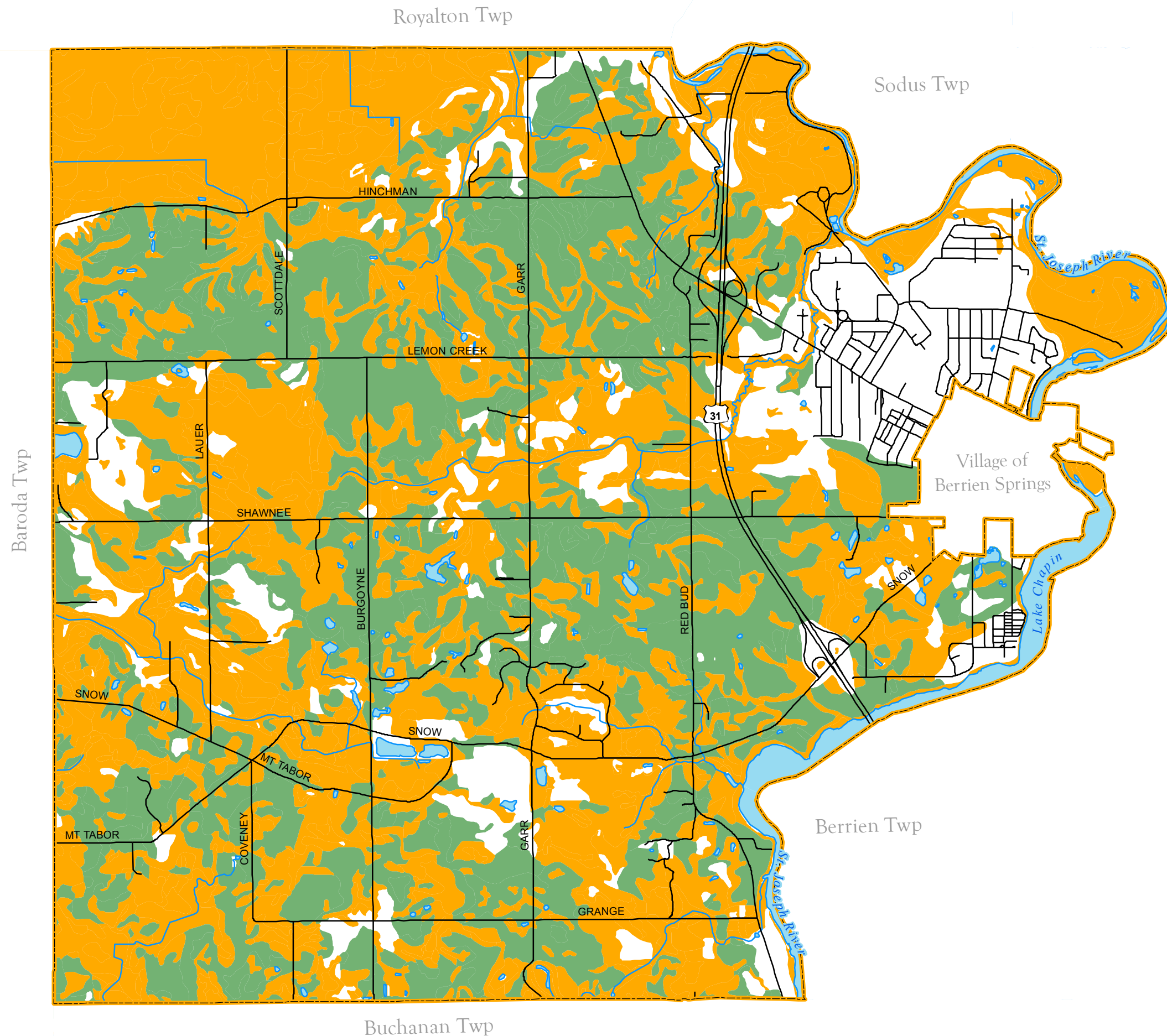
- Not limited
- Somewhat limited
- Very limited

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,500 feet

0 1,750 3,500 7,000 Feet

Williams & Works



WETLANDS

Wetlands play a critical role in regulating the movement of water within watersheds. Wetlands are characterized by water saturation in the root zone, or above the soil surface, for a certain amount of time during the year. The fluctuation of the water table above and below the soil surface is unique to each wetland type.



Wetlands play a critical role in regulating the movement of water within watersheds

Wetlands store precipitation and surface water and then slowly release the water in associated water resources, ground water, and the atmosphere. They help maintain the level of the water table and may serve as filters for sediments and organic matter. They may also serve as a sink to catch water, or transform nutrients, organic compounds, metals, and components of organic matter. Wetlands have the ability to impact levels of nitrogen, phosphorous, carbon, sulfur, and various metals. Without them, water quality decreases, areas are prone to flash flooding and habitat for specialized plants and animals is reduced.

The wetlands in Oronoko Township occupy approximately 5,100 acres and are scattered throughout the Township, but are found primarily along stream and drain corridors. Wetland areas and hydric soils are identified on Map 5, which is based on the state-wide Wetland Inventory conducted by the Department of Environmental Quality (DEQ), and hydric soils are identified by the Soil Survey Geographic.

According to the Michigan Department of Environmental Quality, a hydric soil “is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions. This lack of oxygen in the soil can lead to the formation of certain observable characteristics in wetland soils, such as a thick layer of organic matter (non-decomposed plant materials) in the upper part of the soil column.”³ While the presence of a hydric soil does not necessarily indicate the presence of a wetland, hydric soils are considered to be wetland soils, according to the United States Natural Resources Conservation Service.

This map is intended to illustrate only the general location of potential wetland areas in the Township. The exact location of any wetland or hydric soil should be determined through a field site inspection by a qualified scientist.

³ Michigan Department of Environmental Quality http://www.michigan.gov/deq/0,1607,7-135-3313_3687-10408-,00.html

PLANNING IMPLICATIONS

Oronoko Township's natural features and rural character will likely continue to draw attract new residents, resulting in continued residential development. While the pace and scale of growth is expected to be manageable, there is a risk that without effective planning, this growth will begin to degrade the very resources that draw it.


The Township's contains 5,100 acres of potential wetland areas, and many of the soils found in the Township are not conducive to residential development. Additionally, most land within the Township drains toward the St. Joseph River, and protecting this watershed is important to the environmental health of the entire region. Careful site planning will be needed for the Township to aid in maintaining these critical natural features.

Oronoko Charter Township

Berrien County, Michigan

Map 5 Potential Wetland Areas

Legend

-  Streams
-  Open Water
-  Potential Wetland Areas
-  Potential Hydric Soils

This Wetlands Inventory Map is intended to be used as one tool to assist in identifying wetlands and provide only potential and approximate locations of wetlands and wetland conditions.

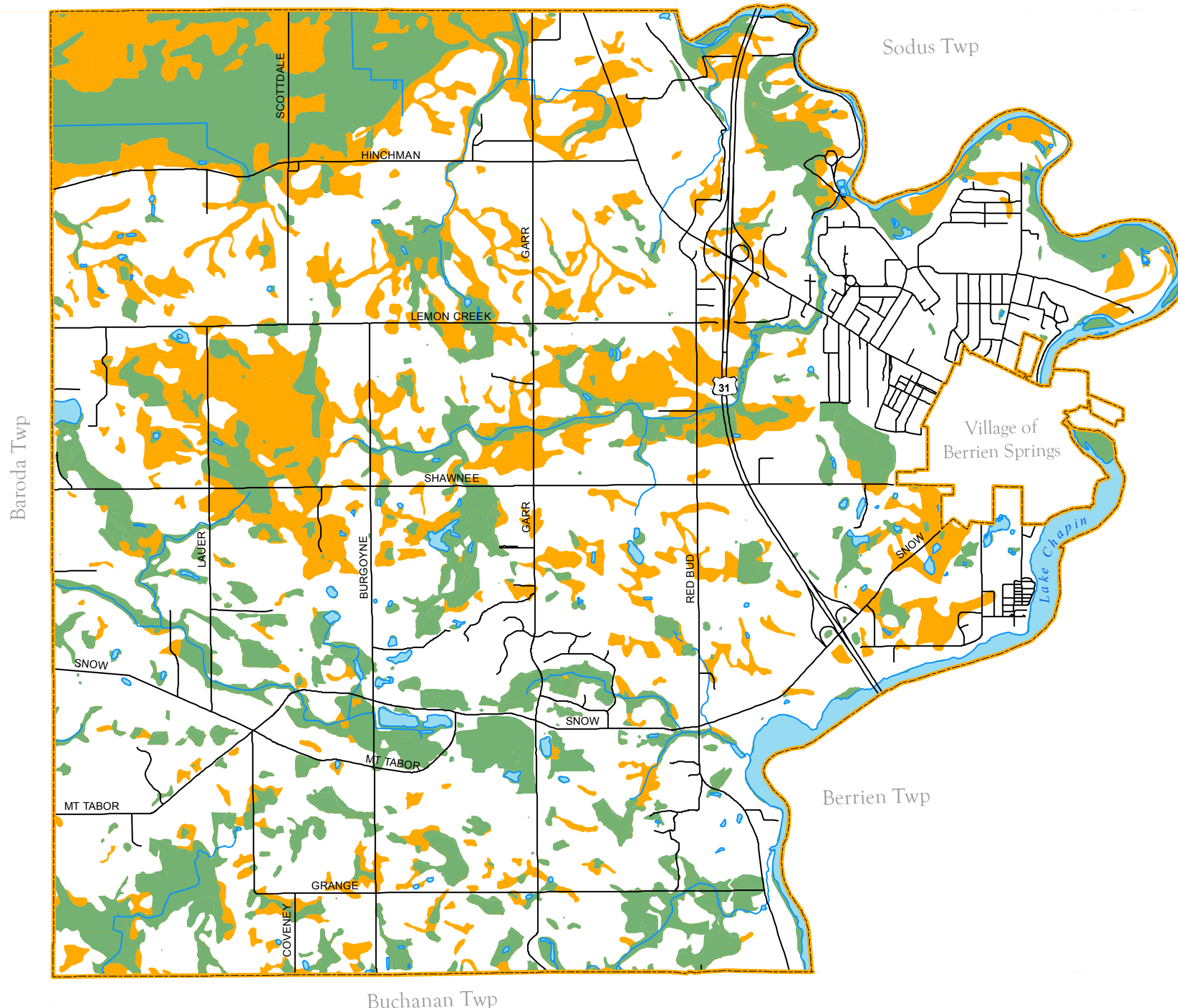
This map is not intended to be used to determine specific locations and jurisdictional boundaries of wetland areas subject to regulation under part 303 Wetlands Protection Act, 1994 PA 451, as amended. Only an on-site evaluation performed by MDEQ in accordance with Part 303 shall be used for jurisdictional determination. A permit is required from the MDEQ to conduct certain activities in jurisdictional wetlands.

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,500 feet



Williams & Works



CHAPTER 3. POPULATION

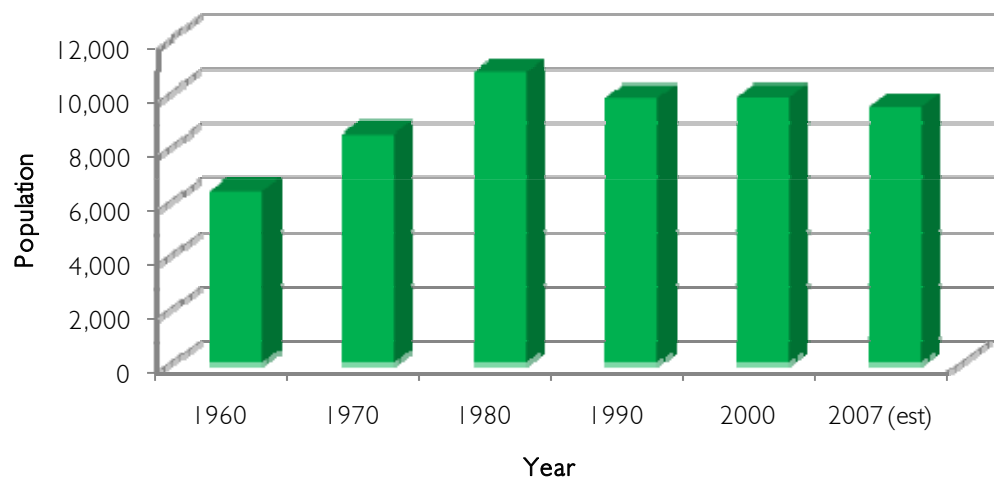
Population and demographic change are among the most important measures to express growth and its likely impact on land uses in a community. An accurate analysis of the Township's current and future population is critical to ensure that the Township will meet future needs for housing, recreation and other community services and preserve the high quality of life that characterizes Oronoko Charter Township.

Therefore, it is helpful to recognize the Township's population and growth trends in preparing a realistic and meaningful Master Plan. This chapter of the Community Profile Report describes Township population and demographic characteristics, and serves as part of the foundation for drawing conclusions about the Township's likely future.

HISTORIC POPULATION GROWTH

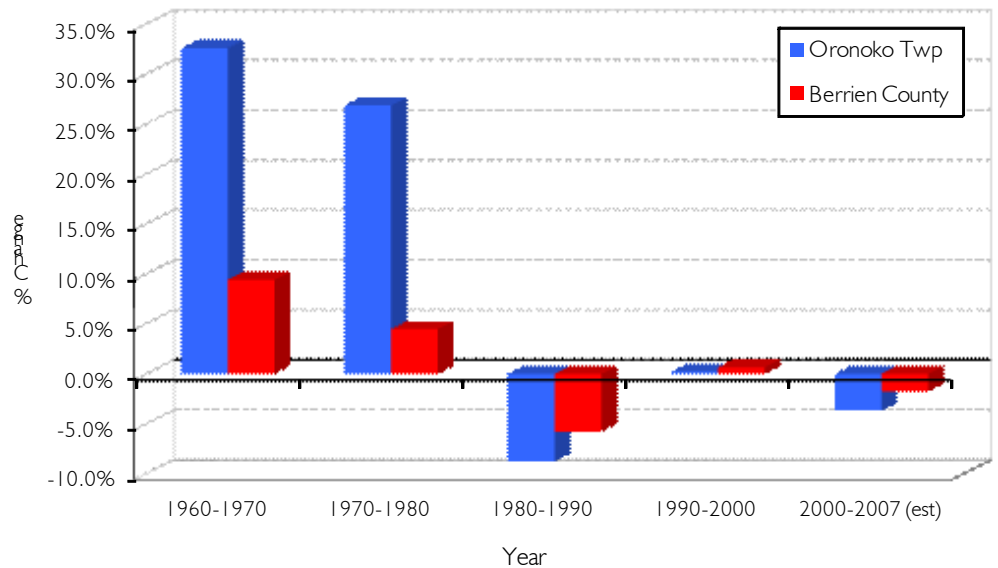
To begin with, it is appropriate to determine the overall growth the Township has experienced in the recent past (i.e., the last thirty years). Oronoko Township experienced relatively steady growth in the 1960s and 1970s, and that growth has plateau and declined in recent years. In 1980, the Township's population was 10,761, compared with 9,843 in 2000 and an estimate of 9480 in 2008. Figure 3.1 illustrates the change in population in Oronoko Township from 1960 to 2007.

Figure 3.1
Population Change, 1960-2007
Oronoko Charter Township



From 1990 to 2000, the Township experienced very little change in population, with the Township adding 24 residents during that time. Population changes in Berrien County have mirrored those experienced in the Township, although changes in the County's population have been more drastic. Figure 3.2 illustrates the percent change in population in Berrien County and Oronoko Township from 1960-2007.

Figure 3.2
Comparison in Population Change, 1960-2007
Oronoko Township and Berrien County, Michigan



POPULATION PROJECTIONS

Statistical averaging techniques were employed to project the Township's likely population growth to the year 2030

Statistical averaging techniques were employed to project the Township's likely population growth to the year 2030. These approaches are intended to provide a general sense of growth in the future. In communities such as Oronoko Township that have experienced varying rates of growth development, future growth trends may not parallel historical trends, especially since developable acreage has been consumed over time. The following generalizations are limited in scope and are based on past trends documented by the United States Census Bureau and Township data.

These projections have implications regarding future land use necessities, the demand for various public services and capital improvements, and they help to understand the future position of the Township in terms of growth and total population. The following describes the projection techniques.

Using the Constant Proportion Method, the population of Oronoko Township will decrease over the next ten to fifteen years.

The Constant Proportion (or ratio) Method of projecting population assumes that Oronoko Charter Township will continue to represent the same percentage of Berrien County's projected population in the years 2010, 2020, and 2030 that it represents today. In 2000, Oronoko Township comprised about 6.05% of Berrien County's total population. Using the population projections for Berrien County as estimated by the Woods and Poole Economics⁴, and extending those trends through 2030, the following illustrates the results of the constant proportion method for Oronoko Township.

Constant Proportion Method

	<u>2000 Population</u>	<u>2010 Population Projection</u>	<u>2020 Population Projection</u>	<u>2030 Population Projection</u>
Berrien County	162,453	159,696	155,538	153,598
Oronoko Twp	9,843	9,661	9,410	9,293

The Growth Rate Method predicts that the Township will grow to nearly 11,400 residents by 2030

The Growth Rate (or geometric) Method projects future population growth or decline based on the rate of change in the Township in the past. Using the growth rate method, the following assumes that growth in the future will occur at the same average rate as has occurred annually since 1970. As indicated previously, the Township's population grew between 1970 and 1990, but declined in the 1990s, resulting in an overall compounded annual rate of change of +0.489%.

Growth Rate Method

Compounded Annual Growth Rate

	<u>1970-2000</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Oronoko Twp	0.489%	9,843	10,335	10,851	11,394

⁴ *West Michigan Growth Statistics*. Woods and Poole Population Estimates Published by The Right Place, Inc. August 2008.

The Arithmetic Method suggests that the Township will grow to more than 11,100 by 2030

The Arithmetic Method is similar to the growth rate method in that population projections are based on growth that occurred in preceding decades. This method, however, bases population growth on the overall average increase in the number of persons per year, rather than on growth rates. The following projections are based on the average net increase of 45 persons per year between 1970 and 2000, in Oronoko Township, based on U.S. Census figures.

Arithmetic Method					
	Average Increase Each Decade (Number of Persons)	2000 Population	2010	2020	2030
Oronoko Twp	450	9,843	10,293	10,743	11,193

The Building Permit Method predicts that the Township will grow to more than 11,500 by 2030

The Building Permit Method may be the most reliable projection technique since it depicts present growth trends based on the actual number of residential building permits issued by the Township. Oronoko Township has issued 22 new residential building permits on average per year from 1995 to 2007.⁵ The Township's average household size is 2.62 persons⁶. Extrapolating these figures into the future may project likely population growth, if current trends remain the same. This population projection technique holds that Oronoko Township will grow by 58 persons per year.

Building Permit Method					
Average No Permits/Year	Persons per H/H	2000 Population	2010	2020	2030
22	2.62	9,843	10,423	11,003	11,583

The table on page 25 summarizes the preceding information. By averaging the results of these methods, it is reasonable to predict that the population of Oronoko Township will grow to approximately 10,200 persons by the year 2010; roughly 10,500 by the year 2020; and nearly 10,900 by the year 2030. The projections summarized here assume that past trends will continue into the future, and are limited in scope by such a supposition. Projections are based on population counts documented by the United States Census and building permit data from the Township.

⁵ Oronoko Township data

⁶ United States Census Bureau, 2000

Table 3.1. Population Projection Summary

	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Constant Proportion	9,843	9,661	9,410	9,293
Growth Rate	9,843	10,335	10,851	11,394
Arithmetic	9,843	10,293	10,743	11,193
Building Permits	9,843	10,423	11,003	11,583
Average	9,843	10,199	10,556	10,866

AGE, GENDER AND ETHNICITY

Another opportunity to measure change involves comparing the age distribution of a community over time. This assists in determining the type of housing demands and recreational facilities that may be needed. For example, if a large portion of the population were younger, the Township may benefit from additional park and playground facilities. Similarly, the rate of increase in a senior population may have implications for more senior living opportunities, such as condominiums, and public services.



More than 15% of the Township's population is under the age of 15, suggesting a need for parks and youth-related facilities

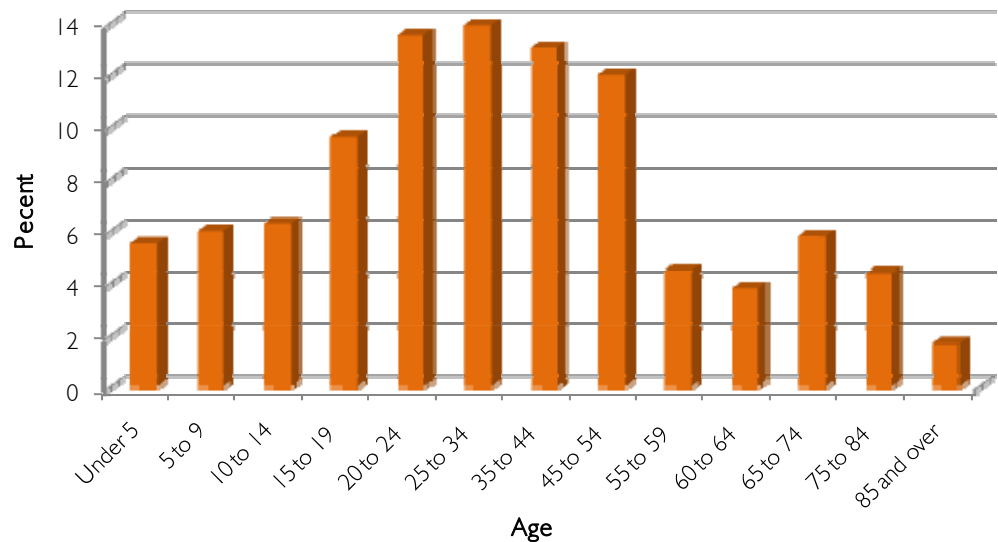
In 2000, the median age of Oronoko Township residents was 31.3 years, significantly younger than the County (37.4 years), and also younger than the State and the U.S. (35.5 and 35.3 years, respectively). This can likely be attributed to the large student population and Andrews University. The median age represents the mid-point in the range of all ages within the Township; one-half of the population is younger and one-half of the population older.

Despite the aging of the "baby boomer" population, more than 15% of the Township's population is under the age of 15, suggesting a potential need for schools, parks, and other youth-related facilities.

The 25 to 44 years age group is significant since this represents the main age division for family formations. About 27% of the Township's population falls in the 25 to 44 age group. The bulk of the wage-earning population is between the ages of 25 and 54, and nearly 40% of the Township's population falls within this age range. These age groups symbolize a demand for single-family housing developments, and school and

recreational facilities for children. These age groups are typically indicative of future increases in the 5 to 19 years age groups and school enrollment, and a demand for family-oriented commercial services.

Figure 3.3
Age Distribution
Oronoko Charter Township, Michigan



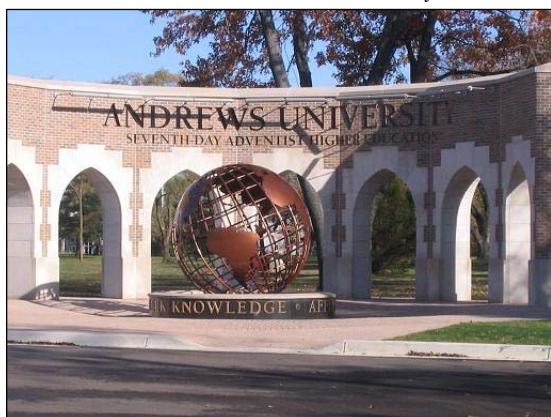
In 2000, the median age of Oronoko Township residents was 31.3 years

Nearly one-fifth of Township residents are over the age of 55. This age division is generally comprised of “empty nesters” and aging baby boomers and implies disposable incomes. About eight percent of the Township is aged 55 to 64 years, and will likely enter retirement within the next ten years. Indicative of retirees and senior citizens, 11.9% of the Township is over 65 years of age (compared with 14.4% of Berrien County). These figures, in addition to statistics on general aging, point toward a possible need for increased senior living opportunities, public transportation, and passive recreational facilities, such as parks and pedestrian facilities which connect land uses.

As far as ethnicity characteristics, the community is relatively diverse. The portion of the population of the Township classified as “white alone” at the 2000 Census represents 66.5% of the community. Black or African Americans represent 17.5% of the Township; American Indian and Alaska Natives represent 0.4%; Asians represent 7%; and other races comprise 8.6% of the Township. Note that 80.2% of Michigan’s population is “white alone”, compared with Oronoko Township at 66.5%.

EDUCATIONAL ATTAINMENT

In addition to age, gender, and ethnicity characteristics, it is appropriate to catalog educational attainment trends in the community. This information may be an indicator of local school district quality, which is typically a major concern for families moving into the area. Figures pertaining to education attainment in Oronoko Township are also influenced by the presence of Andrews University, which will be discussed in Chapter 6, Community Facilities and Services.



Education attainment statistics in the Township are likely influenced by Andrews University

The 2000 Census indicates that within Oronoko Township approximately 16.2% of the population over 25 years of age have the equivalent of a high school education, and 43.3% of the population have a bachelor's degree or higher. In Berrien County, roughly 31.9% of the population have the equivalent of a high school education with 19.6% reporting a bachelor's degree or higher. Thus, generally, residents in the Township are more educated than the county overall, much of which can be likely be attributed to Andrews University.

In 2000, 43.3% of Township residents had the equivalent of a bachelor's degree or higher

The 2000 Census reports that 31.3% of the population in Michigan has a high school education or similar equivalency as the highest level of education achieved, compared with 16.2% in the Township. In the State of Michigan, 21.8% has at least a bachelor's degree, compared with 43.3% reporting a bachelors degree or higher in the Township.

PLANNING IMPLICATIONS

It is reasonable to assume that Oronoko Charter Township will continue to experience growth and development. Natural beauty, high quality educational institutions, access to cultural and recreational facilities and close proximity to choice employers, expressways, churches, and regional destinations work as part of the magnetism that draws residents to the community.

By averaging the results of four different methods of population projection, it is reasonable to predict that the population of Oronoko Township will grow to more than 11,000 persons by the year 2030. While this rate of growth is not unmanageable, it does suggest that demands on public facilities, utilities and transportation networks will increase.

CHAPTER 4. HOUSING & ECONOMIC DEVELOPMENT

This chapter analyzes the housing and economic development trends within the community. It is useful to compare housing trends with the population projections so that housing shortages or surpluses can be estimated. In addition, comparisons of housing and land values against the incomes of current residents can help reveal the relative affordability of the local housing stock for the residents of the community.

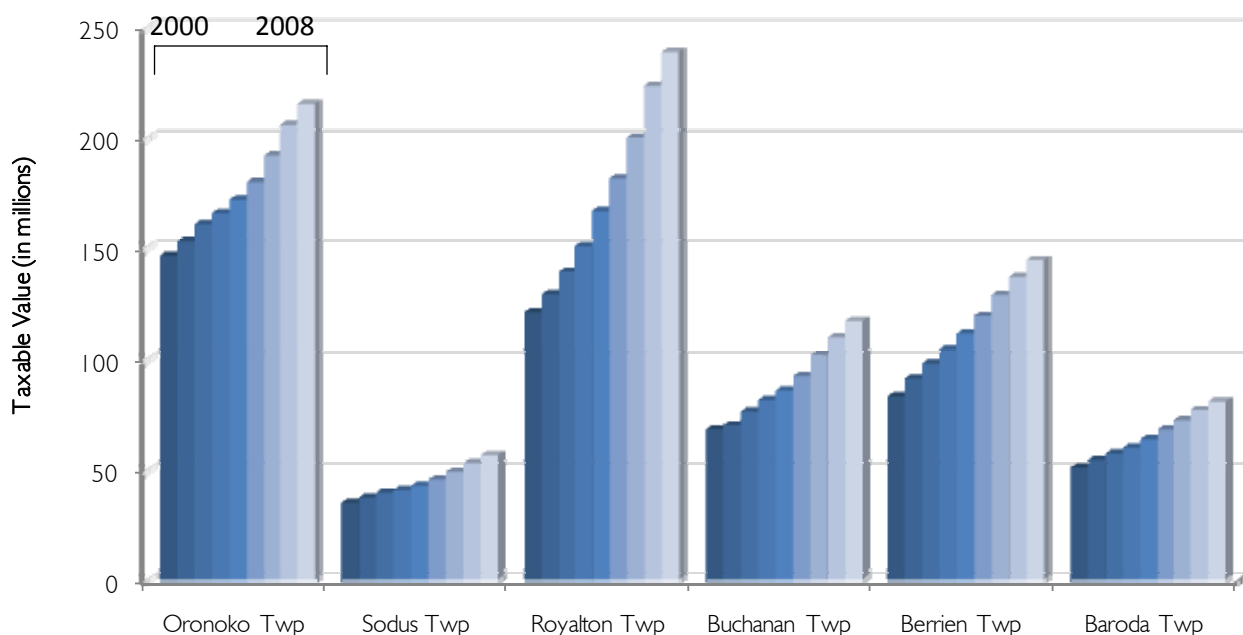
TAXABLE VALUE GROWTH

Property values are a key measure of economic growth and the financial strength of a community

Property values are a key measure of economic growth and the financial strength of a community. Property values reflect both investment in new development and the degree of growth in the value of those investments. Annually, the Assessors of each jurisdiction report total valuation within their respective jurisdictions, and these reports can provide an illuminating impression of the character of a community. The table below compares the annual taxable values of real property in Oronoko Charter Township to those of surrounding municipalities.

Figure 4.1

Change in Taxable Value of Real Property, 2000-2008
Oronoko Charter Township and Surrounding Municipalities



Source: Berrien County Equalization Department

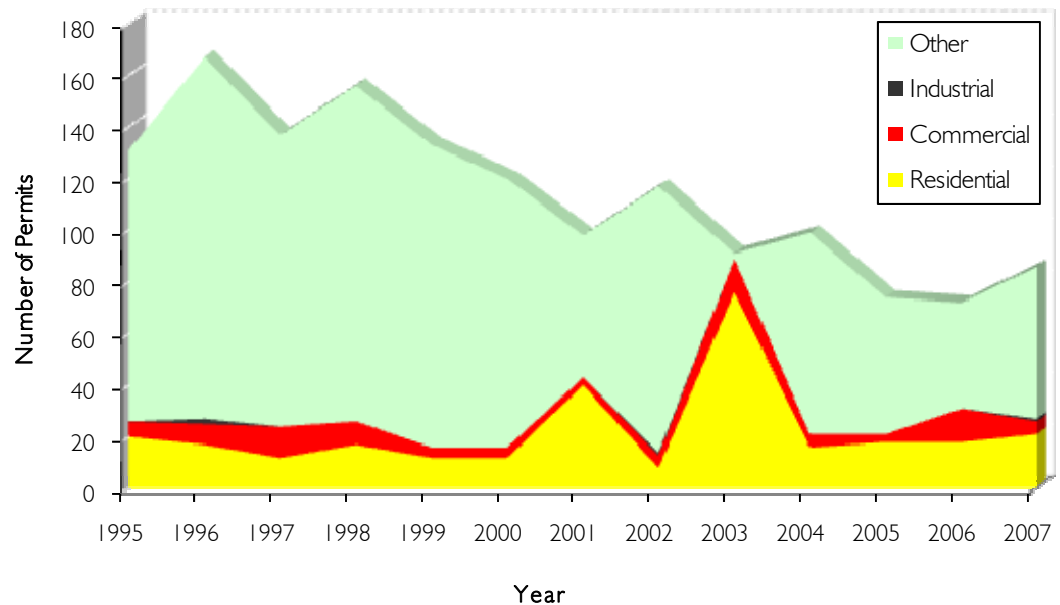
Municipality, 2000-2008

The total real property taxable value for Oronoko Charter Township in 2000 was \$146.2 million, and by 2008 it had increased by nearly 50% to \$215.2 million. This value ranks tenth among all 30 jurisdictions in Berrien County, in 2008. Oronoko Township accounts for about 6% of the County's population (based on the 2000 Census) and about 3.4% of its total real property value. It is important to note that while many estimates indicate that the Township's population has leveled off in recent years, the value of real property has continued to increase at a relatively steady rate.

BUILDING PERMITS

Building permits are a good indication of investment in the community. As Figure 4.1 indicates, the number of total building permits issued in Oronoko Township over the past ten years has fluctuated somewhat.⁷ The "Residential" category includes new single-family homes, duplexes and multi-dwelling buildings. The "other" category consists of remodels, additions, garages, and other modifications to existing residential structures. The "commercial" and "industrial" categories consist of new construction or modifications to existing commercial or industrial development, respectively.

Figure 4.2
Building Permit Activity
Oronoko Charter Township, 1995-2007



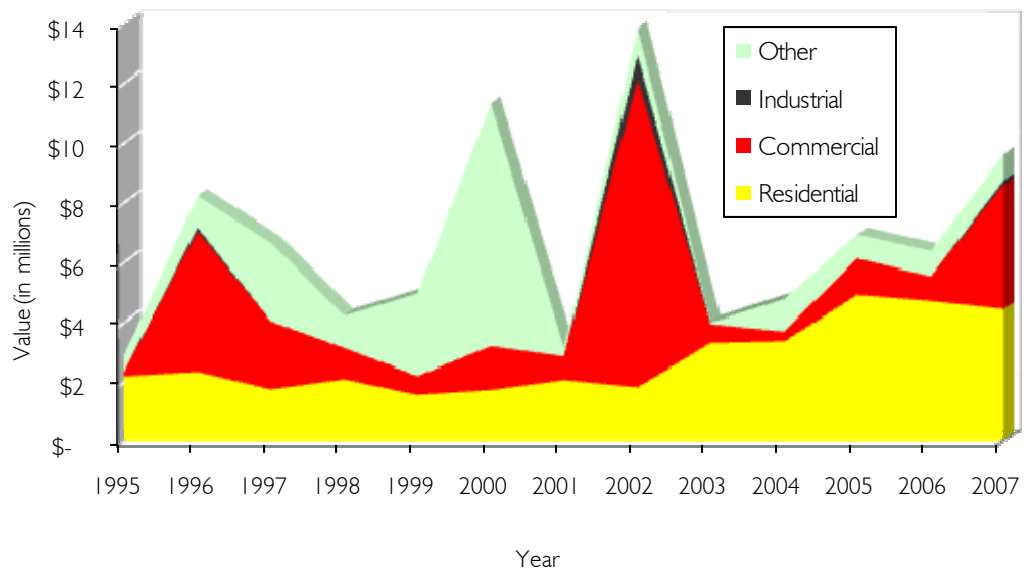
⁷ Oronoko Charter Township

Despite a decreasing trend in the number of permits issued, the value of all permits issued has trended upward since 2003

Figure 4.2 is somewhat deceptive in that it only reports on the number of building permits issued, and does not address the value of those permits. Thus an overall impression of decline is created by the fact that the number of permits has fallen significantly since the mid-to late-1990s.

If the value of all permits issued over the same time period is examined, it is revealed that despite a decreasing trend in the number of permits issued, the value of all permits issued has trended upward since 2003. Figure 4.3 illustrates the value of building permits issued from 1995-2007.

Figure 4.3
Value of Permits Issued
Oronoko Charter Township, 1995-2007

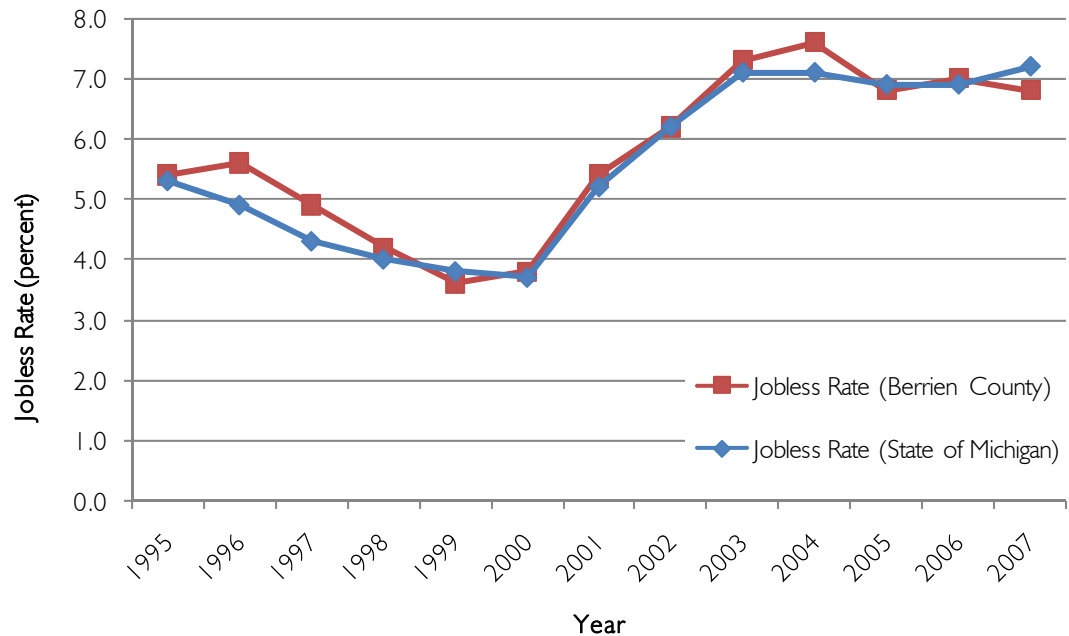


EMPLOYMENT

With the relatively small extent of commercial and industrial development in the Township, many of the Township's residents find their employment outside of the community. According to the 2000 Census, the mean (average) travel time to work for Township residents was 16.2 minutes. Of the Township's labor force, about 66% reported traveling to work alone, 12.2% carpooled and 15.8% indicated that they walked to work. These figures may be influenced by the presence of Andrews University, where it is likely that many students live in close proximity to the University and are able to walk or carpool.

At the beginning of 2000, the Township's workforce reflected a relatively low jobless rate of 3.8%. Of course, since the Census figures were collected, unemployment has increased significantly. Figure 4.4 illustrates the jobless rate in Berrien County from 1995-2007.

Figure 4.4
Jobless Rate in Berrien County
and the State of Michigan



The County's
jobless rate has
averaged around
7% for the past
three to four years

Over the last twelve years, the jobless rate in Berrien County has closely mirrored that of the State in general. In the late 1990s, the jobless rate steadily declined to a low in Berrien County of 3.6% in 1999. By 2004, however, the jobless rate had more than doubled to 7.6% in the County and 7.1% in the State of Michigan. Since that time, the jobless rate has moderated somewhat, but has still averaged around 7% for the past three to four years.

Of those who are employed in Oronoko Township, nearly half (40.8%) are employed in management, professional and related occupations, educational, health and social services, according to the 2000 Census. Additionally, 23.8% are employed in sales and office occupations, 17.6% are employed in service occupations, and 10.7% are employed in production, transportation and material moving occupations. Despite the predominant agricultural land use in the Township, agriculture, forestry, fishing and hunting and mining only account for 1.4% of total employment.

Although Oronoko Township is largely a rural and agricultural community, some employment is centered in the Township. It is home to several larger employers and institutions such as Andrews University provides significant employment for area residents. The following is a listing of several of the largest employers with locations in the Township:

▪ Andrews University	775 Employees
▪ Premier Tool & Die Cast Corp	160 Employees
▪ Twixwood Nursery	70 Employees
▪ Tabor Hill Winery	30 Employees
▪ Tafcor & Tyler Wood Products	30 Employees

PLANNING IMPLICATIONS

Despite the recent downturns in the state and local economy, development activity and property values within Oronoko Township remain strong. Investment in Oronoko Township continues to increase in value, and property values have steadily increased since 2000. The Township enjoys a diversified workforce consisting of jobs in education, manufacturing and agriculture.

However, the jobless rate in the Township mirrors that of the State, and a large portion of Township residents look to other communities for employment opportunities. As the Township grows in population, it may be necessary to examine the potential of increasing employment opportunities within the Township.

CHAPTER 5. LAND USE AND DEVELOPMENT PATTERNS

Oronoko Charter Township has an area of approximately 33 square miles. It is bounded on the north by Royalton Township, on the south by Buchanan Township, on the west by Baroda Township, and on the east by the St. Joseph River and Lake Chapin. Additionally, US-31 runs through the eastern portion of the Township from north to south, connecting the Township with the larger urban centers towards the north and south. These features have affected growth and development patterns in the Township over time, and will continue to make the Township an attractive location for new development.

LAND COVER

Land cover describes the vegetation of land use that occupies the land in a given community

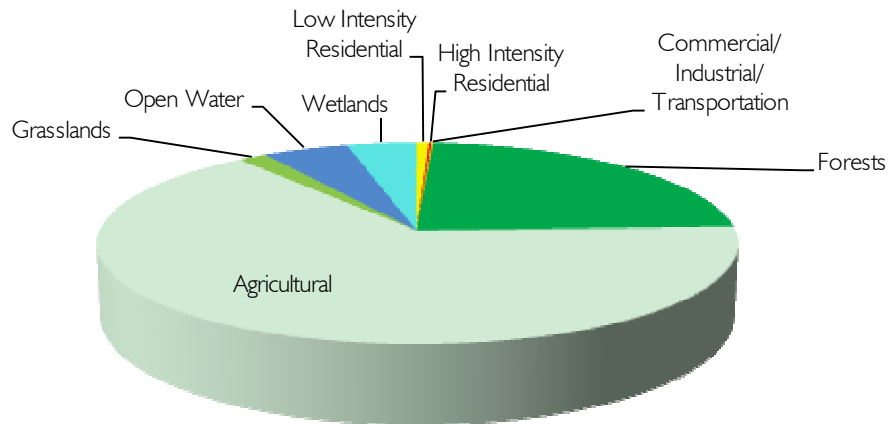
Land cover describes the vegetation or land use that occupies the land in a given community. The Land Cover data analyzed for this plan is part of the larger National Land Cover Dataset (NLCD) as prepared by the United States Geological Survey (USGS) in 1992. This information was derived from LandsatTM (Thematic Mapper) satellite imagery, and was interpreted using an automated computer-based process. This was followed by an accuracy assessment of the satellite data that involved the use of aerial photographs to judge the quality of the computer-based interpretation. This information is useful in determining the distribution of vegetation and development patterns throughout the Township. The National Land Cover dataset includes 21 classes of land cover type. The smallest “on the ground” unit of measure for the NLCD is 30 meters square.



Agricultural uses, such as vineyards, are found throughout the Township

Figure 5.1 illustrates the Land Cover make-up of Oronoko Township based on the 1992 NLCD. The predominant land cover type found in the Township is agricultural (65%), this class is a composite of three planted/cultivated related NLCD classes found in the Township: pasture/hay, row crops and small grains. The Forested class is also an aggregate grouping of the three forest cover types including deciduous forest, evergreen forest and mixed forest. Together, residential land cover types, both low and high intensity, constitute less than one percent of the Township’s land cover. However, since the data is based on research and analysis performed in 1992, many of the Township’s new developments are not reflected. Generally, however, the data reflects the current land cover found in Oronoko Charter Township.

Figure 5.1
Land Cover in Oronoko Charter Township



LAND USE CHANGE

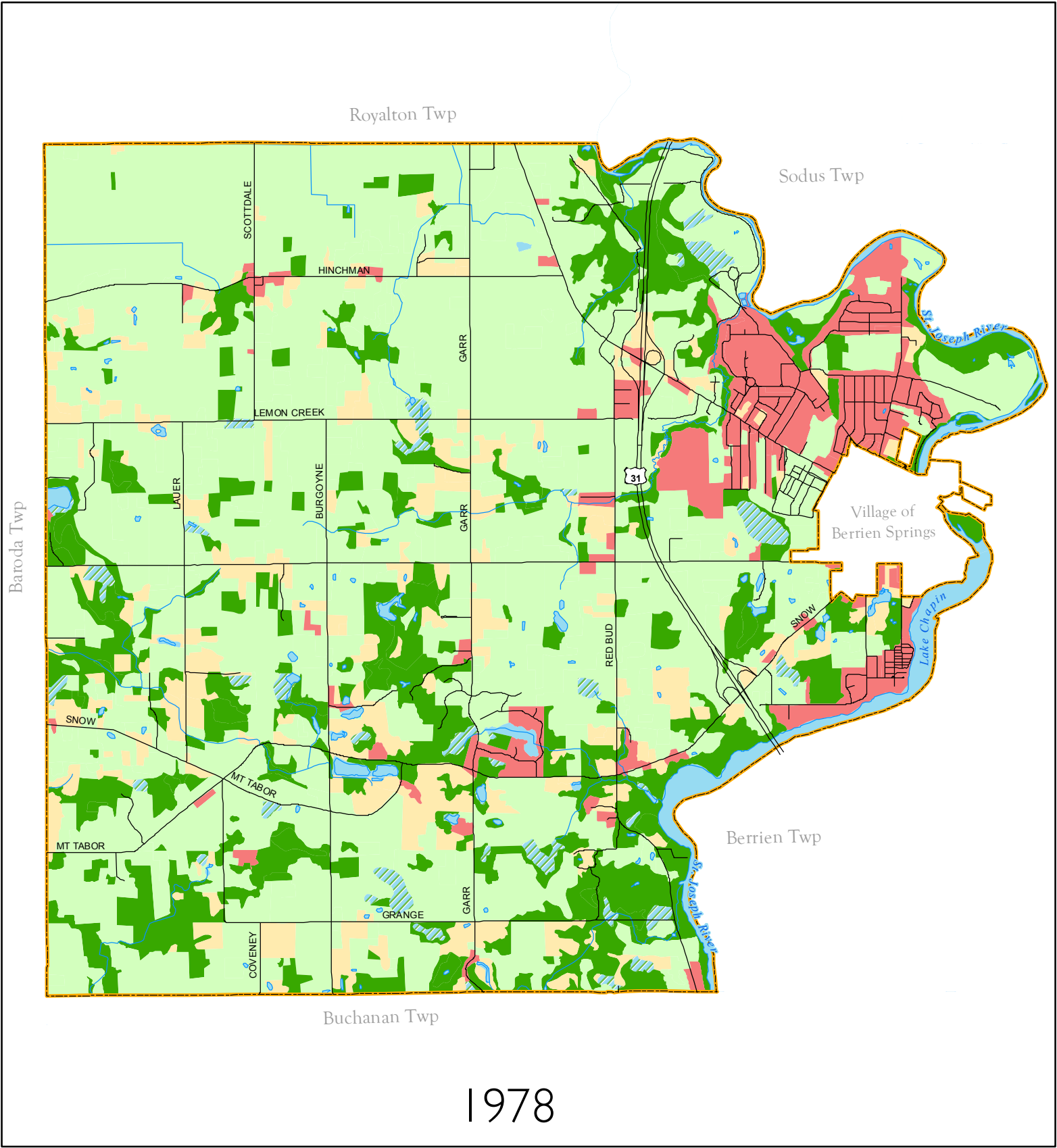


Large lot residential development has occurred in some of the Township's agricultural areas

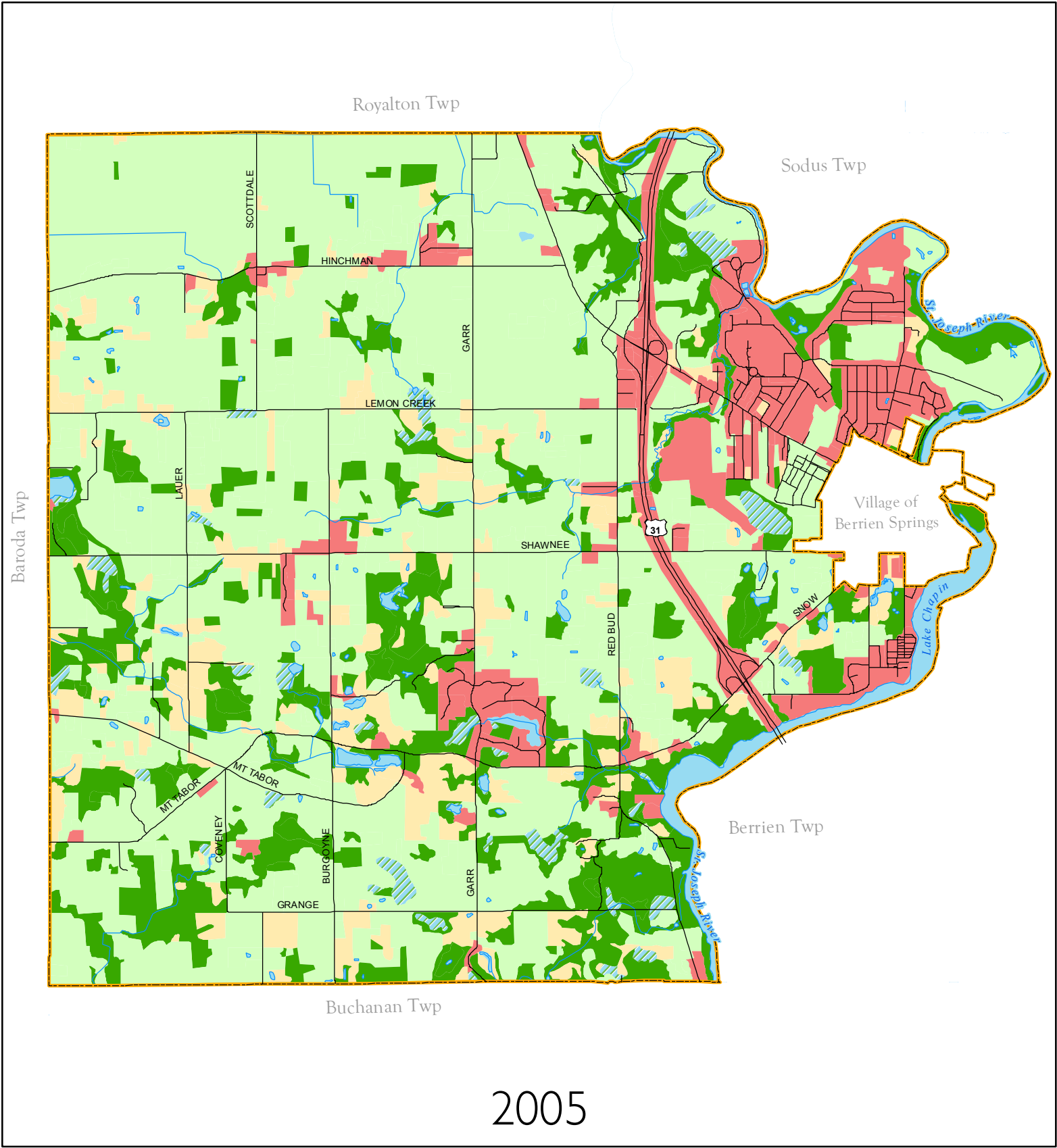
The Land Use information for the Township has been derived from computerized mapping efforts of the Michigan Resources Information System (MIRIS) in 1978. An objective of MIRIS was to create a "statewide computerized database of information pertinent to land utilization, management, and resource protection activities." It is important to note that the information in Map 6 was prepared from aerial photographs and reflects composite groupings of land use categories. MIRIS information is not bounded by parcel lines, but instead follows natural systems. Therefore the map is intended not to reflect zoning or exact land uses. Williams & Works updated this information in 2008, based on 2005 digital aerial photography and updated parcel data. Map 6 illustrates land use change in the Township between 1978 and 2005.

During this time period, the largest change in land uses the Township experienced was an additional 805 acres lands classified as "urban and built-up", which was largely due to an increase in low-density residential development in rural areas of the Township, and the construction of US-31 and its accompanying interchanges in the Township, which occurred in the 1990s.

The increase in urban and built-up lands resulted in a corresponding decrease in lands classified as agricultural (580 acres), forested land (121 acres) and rangeland (103 acres).



1978



2005

Oronoko Charter Township

Berrien County, Michigan

Map 6
Land Use Change
1978-2005

- Legend
- Agricultural Land
 - Forest Land
 - Rangeland
 - Urban and Built Up
 - Water
 - Wetlands

Table 5.1. Land Use Change, 1978-2005, Oronoko Charter Township

Land Use Category	1978 (acres)	1978 Percent	2005 (acres)	2005 Percent	Change (acres)	Change (percent)
Agricultural Land	12,675	58.12%	12,095	55.46%	(580)	-4.58%
Forest Land	3,885	17.81%	3,764	17.26%	(121)	-3.11%
Rangeland	2,007	9.20%	1,904	8.73%	(103)	-5.13%
Urban and Built Up	1,868	8.57%	2,673	12.26%	805	43.09%
Water	1,000	4.59%	1,000	4.59%	0	0.00%
Wetlands	373	1.71%	372	1.71%	(1)	-0.27%

A QUICK BUILD-OUT ANALYSIS

A Build-out analysis is a powerful tool for illustrating the potential impact of master plans and zoning policy if all buildable lands are developed at the maximum permitted density. This section evaluates the current zoning conditions in Oronoko Charter Township, and considers the impacts future growth will have on the community by performing a build-out analysis.

A Build-out analysis is essentially an evaluation of the current zoning situation in a community. It acts as a worst-case scenario tool for planning. The analysis can assist local governments by showing what growth the locality will allow in the future under current zoning designations. The resulting information can then be used to estimate the impacts of future growth on the community in question. The primary output from the analysis is the maximum number of dwelling units that can be built in each zoning district. Future population estimates for the community can then be derived from the number of potential dwelling units, and then compared with population projections for the area. This comparison will then allow one to judge the effectiveness of the area's current zoning.

A build-out analysis can assist local governments by showing what growth the locality will allow in the future under current zoning designations

Many build-out analyses have shown a disparity between existing population, projected 20-year growth, and potential build-out figures resulting in a serious rethinking of public policy. In ten Michigan communities examined by Kilpatrick and Wyckoff⁸, build-out analyses showed that the current zoning in these communities on average would support a population increase of 453%. This extreme "overzoning" as it has come to be known, can be seen as an invitation to inefficient land use and a perpetuation of suburban sprawl.

⁸ Mark Wyckoff and Erin Kilpatrick, Planning Zoning News, April 2002

Step 1: Analyze Current Zoning

The first step in conducting the analysis in Oronoko Charter Township requires the calculation of the total amount of developable land within each residential zoning district. For purposes of this analysis, it was assumed developable parcels were those with an area greater than five acres. Additionally, to account for the necessary infrastructure needed (roads, utilities, etc.) to support development, 15% was subtracted from the total developable land in each residential zoning district. Table 5.2 shows the amount of land occupied by each residential district in the Township.

Table 5.2. Developable Land Based on Residential Zoning District

Mapped Residential Districts	Developable Acres	Net developable Acres (Minus 15 % for Infrastructure)
A-R Agricultural Residential	12,764	10,849
E-1 Estate Residential	1,575	1,339
R-1 Single Family Residential	511	434
R-2 Single & Two-Family Residential	755	642
R-3 General Residential	133	113
Total	15,738	13,377

Step 2: Determine Potential Dwellings

The second step in the process is to determine the number of potential dwelling units allowed by zoning standards at build-out. To derive this number, the total developable net area in each district is divided by the minimum lot area allowed in the given district (Table 5.3).

Table 5.3. Residential Lots at Build-Out Based on Zoning District

Mapped Residential Districts	Net Developable Acres	Minimum Lot Size	Potential Number of Lots
A-R - Agricultural Residential	10,849	1 Acre	10,849
E-1 Estate Residential	1,339	1 Acre	1,339
R-1 Single Family Residential	434	15,000 sq ft	1,260
R-2 – Single & Two-Family Residential	642	12,000 sq ft	2,330
R-3 General Residential	113	12,000 sq ft	410
Total	13,377	--	16,188

Step 3: Determine Potential Population

The third and final step in the analysis is to determine the total population resulting from the number of potential lots, or the potential population at build-out. This is accomplished by multiplying the number of lots by 2.62, the average number of people per household in the Township according to the 2000 Census. Since most of the Township consists of single-family homes, we have assumed that each of the residential zoning districts will contain one home per lot.

Table 5.4. Population at Build-Out Based on Zoning District

Mapped Residential Districts	Potential Number of Lots	Number of additional residents at build-out
A-R - Agricultural Residential	10,849	28,424
E-1 Estate Residential	1,339	3,508
R-1 Single Family Residential	1,260	3,301
R-2 – Single & Two-Family Residential	2,330	6,104
R-3 General Residential	410	1,074
Total	16,188	42,411

The resulting calculations show that under current zoning, Oronoko Charter Township would have a population of 52,254 persons at build-out, which is an increase of 430%. Based on the rates of growth described in Chapter 3, and given current zoning, the Township is not likely to reach full build-out for more than 300 years. This means that the Township is severely “overzoned” to accommodate far more growth than it is likely to experience over the life of this plan. This also means that the Township’s current zoning standards need to provide more guidance in terms of where in the Township new development should be located.

Under current zoning,
Oronoko Charter
Township would have a
population of 52,254
persons at build-out

As the Township begins to look at alternative future land use patterns, it may be helpful to revisit the build-out analysis and consider existing patterns as well as planned new growth. However, care should be taken when interpreting these results. This analysis should be seen only as a theoretical model of Oronoko Township’s current zoning map. As with most models there are many variables and assumptions built into the analysis that are not necessarily reflective of the real-world situation.

PLANNING IMPLICATIONS

As illustrated in the Land Use and Land Cover maps, Oronoko Township is still predominately a rural and agricultural community and is likely to remain as such for the foreseeable future. However, as the build-out analysis demonstrated, the current zoning in the Township provides little guidance for the location of new development. This apparent lack of direction may result in new development becoming fragmented and undermine the rural character and natural beauty that attracts much of this development in the first place. Therefore, as the Township considers amendments to the Zoning Ordinance and map in the future, it is recommended that the Township consider revisions that would provide more guidance pertaining to location of new development.

CHAPTER 6. COMMUNITY FACILITIES AND SERVICES

Community facilities play a fundamental role in augmenting civic engagement, sponsoring cultural events, and promoting community pride. High quality recreational opportunities are quality of life indicators and such facilities characterize Oronoko Township. The health and leisure benefits of a trail facility and other recreation lands, such as several popular golf courses, extend beyond the Township. In addition to recreational facilities, public schools provide local spaces for interaction, learning, and community building, and safety services provide a compulsory service to the community.

This chapter of the Community Profile begins with a discussion of education opportunities within the region and portrays local school enrollment and trends. In addition, parks and recreation areas are catalogued. Finally, the chapter discusses public safety facilities which service the Township.

HIGHER LEARNING INSTITUTIONS

Residents of Oronoko Charter Township are within close proximity to many educational institutions, and one university, Andrews University, is located within the Township's boundaries. Several additional colleges and universities are within driving distance. These include Lake Michigan College in Benton Harbor, Western Michigan University – Southwest Campus in Benton Harbor, Southwestern Michigan College in Niles, Siena Heights College in Benton Harbor, and Notre Dame University in South Bend, Indiana.



Andrews University is an educational institution of the Seventh Day Adventist Church

Andrews University

Located in the northeast portion of the Township just east of US-31, Andrews University is an educational institution of the Seventh-Day Adventist Church. It was founded in 1874 in Battle Creek, and moved to its present location in the Township in 1901. Originally called Battle Creek College, the name was changed to Emmanuel Missionary College upon its relocation. The name was changed again in 1960 to Andrews University, after the church's first overseas missionary, John Nevins Andrews.

Andrews University's 2008 enrollment was 3,419 students engaged in undergraduate, seminary/professional and Master's/Doctoral studies. As of 2008, approximately 885 of the University's students were international, representing 98 different countries. The University employs more than 700

people, including 280 faculty members teaching 85 undergraduate majors and 50 graduate majors.

The University has a significant impact on land use and development in the Township, as it owns some 1,400 acres of property in the Township. The presence of the University also diversifies the Township in terms of ethnicity, housing, educational attainment, and in many other areas.

Year	2004	2005	2006	2007	2008
Total Enrollment	3,017	3,087	3,195	3,221	3,419

Andrews University also provides many cultural facilities in the Township, including the Siegfried Horn Archaeological Museum, the Howard Performing Arts Center, the Crayon Box (Children's Day Care) and the James White Library.

PUBLIC SCHOOL DISTRICTS

Oronoko Township is served by four school districts: Berrien Springs Public Schools, Buchanan Community Schools, River Valley School District and Lakeshore School District. However, the vast majority of the Township is served by Berrien Springs Public Schools.

Berrien Springs Public Schools

Berrien Springs Public Schools enrolls approximately 1,800 K-12 students and almost all of Oronoko Township is within this district. This school district extends beyond the Township's boundaries and contains four schools: Berrien Springs High School, Berrien Springs Middle School, Sylvester Elementary and Mars Elementary. All four of these facilities are located within the Village of Berrien Springs. Enrollment trends illustrate that the school district is growing steadily, which is somewhat surprising given that the population of the Township has declined in recent years. Since 2004, enrollment in the district has grown by 14%, or 227 students. As of 2008, the district's total enrollment was 1,855 students.



Approximately 1,800 K-12 students are enrolled at Berrien Springs Public Schools

Table 6.1. Enrollment Trends in Berrien Springs Public Schools

	2004	2005	2006	2007	2008
Mars Elementary	359	375	365	333	379
Sylvester Elementary	344	351	351	353	387
Berrien Springs Middle School	380	398	403	395	416
Berrien Springs High School	502	527	545	554	536
Alternative Ed	43	73	117	127	137
Total	1,628	1,724	1,781	1,762	1,855

Source: Berrien Springs Public Schools

Buchanan Community Schools

Buchanan Community Schools are located in Buchanan, south of the Township, however, a small (approximately 200-acre) area of this district reaches north into Oronoko Township along Red Bud Trail south of Grange Road.

There are five schools within Buchanan Community Schools: Buchanan High School, Buchanan Middle School, Moccasin Elementary School, Ottawa Elementary School and Stark Elementary School. Approximately 1,702 students are enrolled in Buchanan Community Schools, and are distributed as follows:

- Moccasin, Ottawa and Stark Elementary Schools: 779 students
- Buchanan Middle School: 382 students
- Buchanan High School: 541 students

River Valley School District

The River Valley School District is located in Three Oaks, which is southwest of the Township, however, approximately 450 acres in the southwest corner of the Township are within this school district's boundaries.

There are four schools within this district: Chikaming Elementary School, Three Oaks Elementary School, River Valley Middle School and River Valley High School. Below is the approximate enrollment of each school in this district:

- Chikaming Elementary: approximately 200 students
- Three Oaks Elementary: approximately 200 students
- River Valley Middle School: approximately 160 students
- River Valley High School: approximately 370 students

Lakeshore School District

The Lakeshore School District is located in Baroda and Stevensville to the west of the Township. Only about 80 acres of this school district is located in Oronoko Charter Township along Hartline Road, which is the Township's western border.

There are five schools within this district, none of which are in Oronoko Township: Lakeshore High School, Lakeshore Middle School, Stewart Elementary, Hollywood Elementary and Roosevelt Elementary.

- Stewart, Hollywood and Roosevelt Elementary Schools: 1,313 students
- Buchanan Middle School: 678 students
- Buchanan High School: 989 students

PRIVATE SCHOOLS

Oronoko Charter Township is home to four private schools that serve the community: Andrews Academy, Ruth Murdoch Elementary, the Village Adventist Elementary School and Trinity Lutheran School. These private institutions are active in the community and provide unique educational opportunities for students and families in the area.

Andrews Academy and Ruth Murdoch Elementary School

Andrews Academy is a Seventh-day Adventist secondary school located on the campus of Andrews University that offers grades 9-12. The Academy has a staff of about 25 professionals, and enrollment at the Academy has been steadily increasing over the past few years, with 270 students attending the Academy in the 2007/2008 school year. The academic program has been recognized by the United States Department of Education as a recipient of the School of Excellence Award for secondary schools.

Ruth Murdoch Elementary School is a Seventh-day Adventist elementary school for children grades K through 8, also located on the campus of Andrews University. Both Andrews Academy and Ruth Murdoch Elementary are part of the Seventh-day Adventist school network, which includes more than 7,000 elementary and high schools around the world.

Village Adventist School

Located in Berrien Springs, the Village Adventist Elementary School has been in operation for nearly ninety years. It is a coed school offering grades K through 8. The school is owned by the Michigan Association of Seventh-day Adventists and enrolls approximately 200 students.

Trinity Lutheran School

Located in the Village of Springs, Trinity Lutheran School is part of the Trinity Lutheran Church and offers preschool through 8th grade. The school is accredited by the Lutheran Church-Missouri Synod, MANS (Michigan Association of Non-public Schools), and the Michigan District of the Missouri Synod. Enrollment at the school is about 125 students.

RECREATION AND COMMUNITY FACILITIES

Community facilities play an elemental role in augmenting civic engagement, sponsoring cultural events, and promoting community pride. Recreational opportunities are quality of life indicators and such facilities characterize Oronoko Charter Township. The developed portions of the Township contain numerous recreational opportunities including trails and bikeways, golf courses, and parks. In addition to recreational facilities, public schools provide neighborhood spaces for interaction, learning, and community building, and safety services provide a compulsory service to the community.



Oronoko Charter Township maintains one park and five cemeteries

Township Facilities

Oronoko Charter Township maintains one park and five cemeteries in the Township. Robert G. Feather Park is located adjacent to the Township Hall and contains one baseball field, playground equipment, picnic facilities and two pavilions: one enclosed pavilion with restroom facilities and one open pavilion. The enclosed pavilion can be reserved by Township residents with payment of a deposit.

Greater Berrien Springs Recreation Department

The Greater Berrien Springs Recreation Department (GBSRD) is a non-profit organization that provides year round athletic programs for children ages 4-18. Programs offered by GBSRD include basketball, volleyball, soccer, football, cheerleading, tennis, golf and many others.

Programs are funded through contributions from Oronoko Township, Berrien Township the Village of Berrien Springs and numerous local businesses. Most of the activities are held at locations provided by Berrien Springs Public Schools.

Farm Markets and Wineries

Oronoko Township is home to several high-quality farms and wineries that serve an important role in the Township, as well as the region as a whole.



image source: www.lemoncreekwinery.com



image source: www.lemoncreekwinery.com



image source: www.taborhill.com

The Township's fruit farms and wineries serve a unique role in the Township and the region

These farms have been located in the Township for decades, and their continued operation plays an important role in defining the Township's agricultural heritage. These important agricultural operations also serve as a recreational opportunity for residents and visitors.

Local farms in Oronoko Township include Stovers, Hildebrand, and Lemon Creek. These farms operate farm markets as well as "u-pick", where visitors pick their own fruit, which is generally available from June through October. Stovers Farm also offers opportunities for education through school field trips and entertainment on the weekends, and Lemon Creek Winery and Fruit Farm hosts numerous events, including a radio show and an art fair.

Wineries in the Township include Tabor Hill, Lemon Creek Winery, Roundbarn Winery, Domaine Winery and Free Run Cellars. Many of the wines produced at these wineries have won numerous local and national awards, and some wineries also host events, banquets and offer winemaking classes.

The Township's farms and wineries are an important component of the local economy and a key aspect of the Township's identity. The viability of these important community members should be considered as one of the Master Plan's recommendations.

Educational and Cultural Facilities

Berrien Springs Community Library. Located at 215 Union Street in Berrien Springs, the Berrien Springs Community Library serves residents of the Township as well as the Village of Berrien Springs. According to the National Center for Education Statistics, the library contains over 45,000 books and serial volumes, as well as numerous subscriptions, videos and audio materials. The library's total circulation in 2005 was 135,827.

Andrews University James White Library. James White Library is a large, multi-level research library that primarily serves students and faculty at Andrews University. Originally located on the second floor of the University's Administration Building, it quickly grew and when the library opened in its current location in 1962, it housed over 120,000 volumes. As of this writing, the James White Library houses more than 750,000 volumes and nearly 3,000 periodical subscriptions, and annual circulation is approximately 80,000. The library also has a collection of non-print material, and its catalogue is available on the internet. Members of the community are permitted to use the library with the purchase of a community card, which costs \$36 annually.

Andrews University Howard Performing Arts Center. Andrews University Howard Performing Arts Center is located on the university's



Howard Performing Arts Center benefits both the University and the community

campus and is a cultural resource for the entire region. It serves as a performance venue for university orchestras and choirs, community-based musical groups, as well as visiting musicians. According to the University's website, the center's broadcast and recording studios will provide a new home for WAUS-FM, the campus public radio station. In addition, the facility will be available to schools, civic groups and other organizations for special events and educational programs.



The 1839 Courthouse in Berrien Springs is the oldest Courthouse in Michigan

1839 Courthouse Square. Located in Berrien Springs, this is the oldest Courthouse in the state of Michigan. It was used as a Courthouse until 1894, when the County seat was moved from

Berrien Springs to St. Joseph. Since that time, new owners re-used the buildings on the courthouse square for various uses including a dance hall, church, and low-income apartments. Today the square houses a County museum, archives and serves as headquarters for the Berrien County Historical Association. Its original buildings are listed on the National Register of Historic Places. Also included in this historical site is the Sheriff's residence, the old County Office building, a two-story log house and a blacksmith shop.

Public Safety Services and Facilities

Police. Oronoko Charter Township is served by the Berrien Springs Oronoko Township Police Department, which is funded entirely by Oronoko Township. This police department is comprised of ten full- and part-time policed officers, which are complimented by a reserve division that of citizens that provide support to officers and community events. The department's personnel consist of the Chief of Police, Patrol Lieutenant, Detective and Patrol Officers.

Officers also participate in several county task force operations including the Sheriff's Tactical Response Unit, the Homicide Task Force, the Fire Investigation Task Force and various county wide traffic enforcement initiatives.

Fire and Rescue. The Township is served by the Berrien Springs/Oronoko Township Fire Department, which is a volunteer fire department consisting of 28 firefighters. The department's personnel are also trained in search & rescue, vehicle extrication, hazardous material awareness, swift water rescue, ice rescue, carbon monoxide alarm responses and some members are also trained as First Responders.



PLANNING IMPLICATIONS

Recreational and cultural opportunities are plentiful for Oronoko Township Residents. However, if Oronoko Township experiences the growth that is outlined in Chapter 3, it will create a need for additional facilities and services, as well as additional demand on the revenue available to support those services.

Recent residential development in the Township implies a need to ultimately address the cost-revenue ratio for the Township and other municipal services. Typically, residential uses require between \$1.10 and \$1.30 in municipal services (i.e., schools, police, fire, roads, parks, etc.) for every \$1.00 contributed in tax base.⁹ This suggests that the Township should work towards diversifying its tax base and consider growth or redevelopment of industrial and commercial uses, or ultimately need to face the prospect of higher local tax rates to support the higher demands for services in the community.

Furthermore, the Township's agricultural businesses and wineries provide an important and unique service within the community, and care should be taken to support their active role in the community, and to resist low-density residential development patterns that might encroach on their viability.

⁹ Thomas, Holly L. *The Economic Benefits of Land Conservation*, Planning & Zoning News, January, 1993

CHAPTER 7. UTILITIES & TRANSPORTATION

TRANSPORTATION

Transportation plays a critical role in determining the nature and intensity of land uses that occur throughout a community

A safe and well-balanced transportation network is essential to the health of any jurisdiction, as it links activities and land uses within a community to those in the broader region. Transportation plays a critical role in determining the nature and intensity of land uses that occur throughout a community. Oronoko Township has a wide variety of land uses and in turn a rather diverse transportation network, providing its residents with a mixture of transportation experiences, from winding rural roads to busy limited-access highways.

The Township's land uses do not generate congestion on the level that many Berrien County communities experience. Further, most roads in Oronoko Township navigate straight through the Township, providing sufficient connections with neighboring communities.

This chapter of the Community Profile will chronicle the characteristics of the Township's transportation system as it pertains to quality of life and land use planning.

Road Classifications

One approach to gaining a better understanding of transportation networks has been to classify the roads that make up these networks into groups based on the role or function that they play. One such classification scheme was devised by the Berrien County Road Commission. This classification system is shown on Map 7 and contains the following categories:

- Interstate Highway
- State Highway
- County Road, Primary System (paved)
- County Road, Local System (paved)
- County Road, Local System (unpaved)
- Private Road

The following table contains a breakdown of the highways and County primary roads in the Township based on their classification system by the Berrien County Road Commission.

Oronoko Charter Township

Berrien County, Michigan

Map 7 Road Classification

Legend

- Interstate Highway
- State Highway
- County Road, Primary System (Paved)
- County Road, Local System (Paved)
- County Road, Local System (Unpaved)
- Private Road
- No Data

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,500 feet

0 1,750 3,500 7,000
Feet

Williams & Works

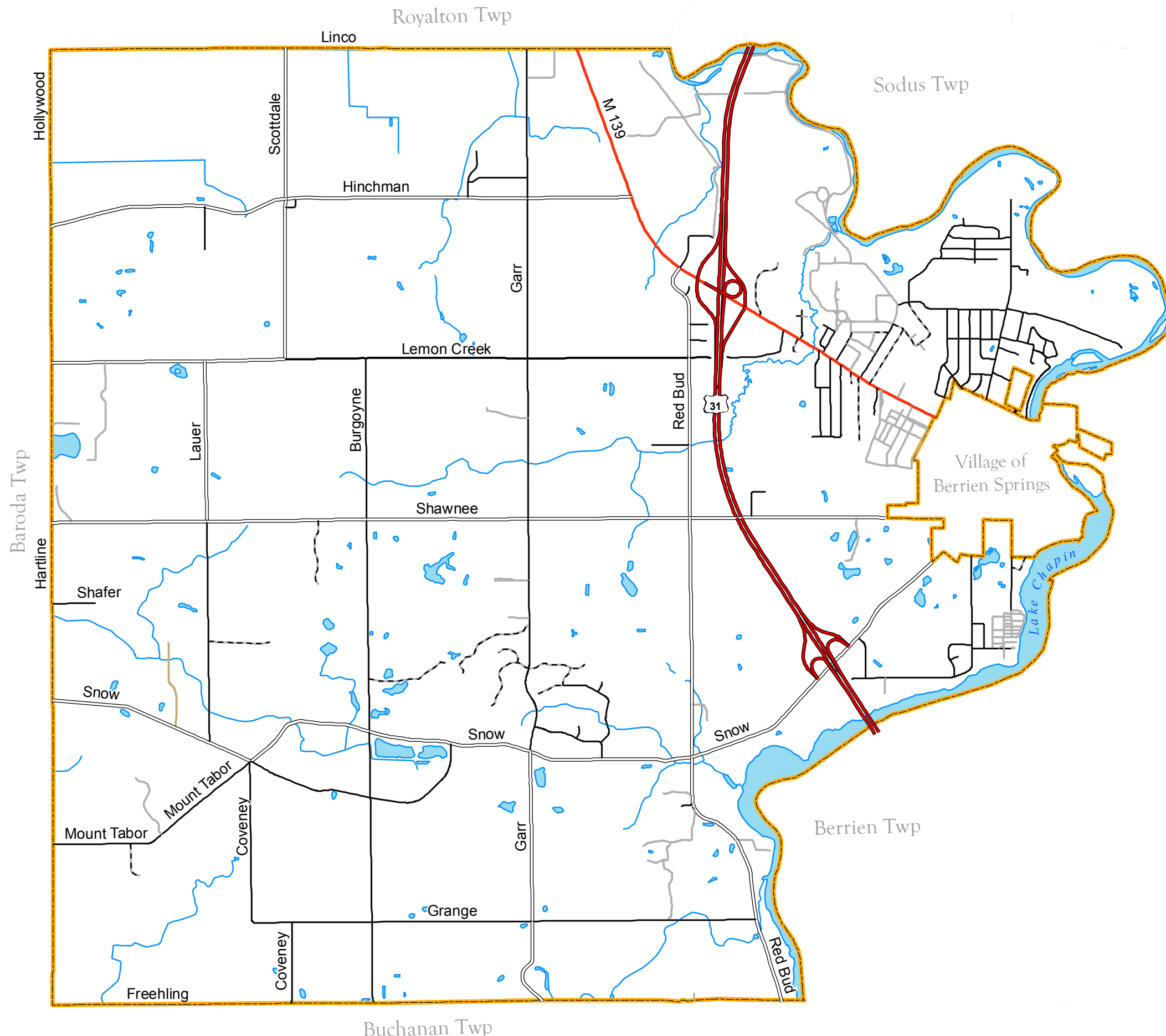


Table 7.1. Highway and Primary Road Classifications
Oronoko Charter Township

Interstate Highways
US-31
State Highways
M-139 (Old US-31)
County Road, Primary System
Hollywood Road
Hinchman Road
Scottdale Road
Linco Road (part)
Lemon Creek Road (part)
Lauer Road
Shawnee Road
Snow Road
Garr Road (part)
Red Bud Trail
Hills Road

Most of the roads in the rural parts of the Township run north-south or east-west, generally along section lines. In some instances, however, roads are routed around natural features such as rolling hills or open water. The Township contains three crossings over the St. Joseph River: twice along US-31 and M-139 in the Village of Berrien Springs.

Commuting Patterns

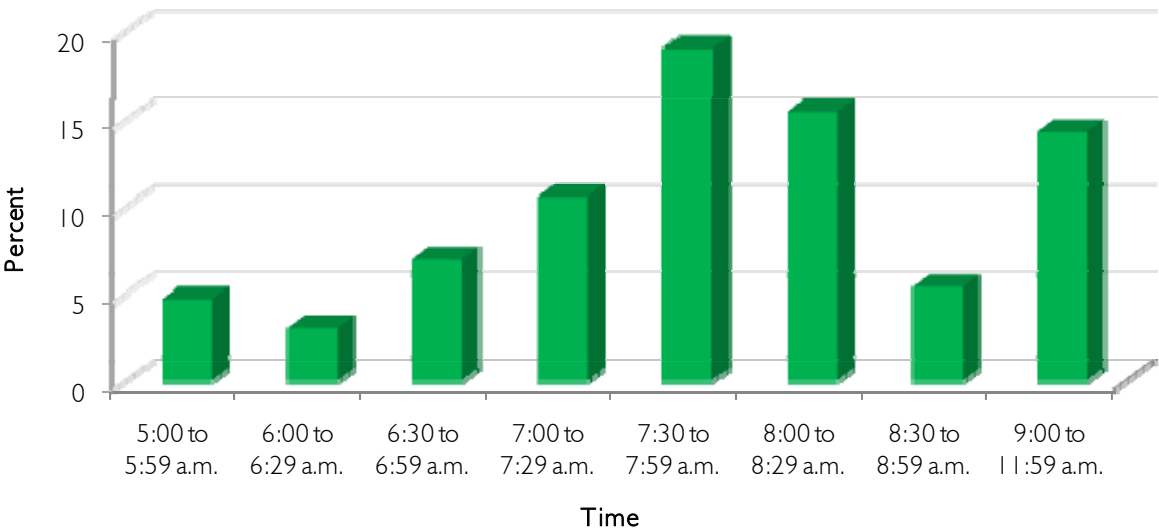
Nearly half of the Township's working population works outside of Oronoko Township

According to 2000 Census data, nearly half of the Township's working population travels outside the Township for work. Additionally, about 8% of the Township's residents work in a different County. Conversely, about 45% of the Township's workers live in a different community and about 8% live in a different County. This has significant implications with regard to the transportation network, as a large portion of the Township's residents and workers utilize the regional transportation network to access employment.

Of Township residents who work in another community, about 17% work in the City of St. Joseph, about 10% work in Benton Charter Township, and about 10% work in St. Joseph County, Indiana. However, the overwhelming majority (91%) of Township's working population works within Berrien County.

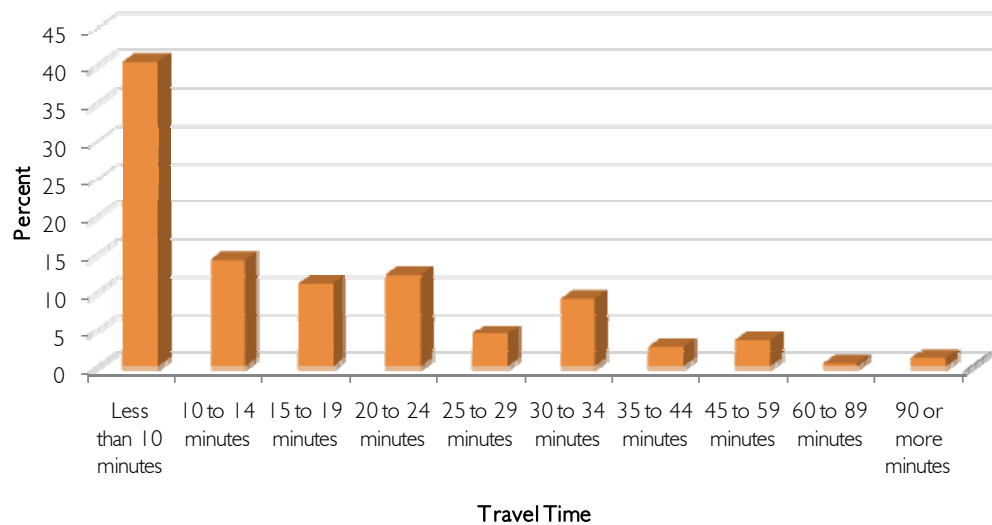
Most of the Township’s residents (66.2%) drove to work alone, but a significant portion (12.2%) shared a ride, and a slightly larger portion (15.8%) walked to their jobs, according to the 2000 Census.

Figure 7.1
Peak Travel Times, Morning Commute
Oronoko Charter Township



The peak travel times during the morning commute expectedly coincides with the standard workday, with the greatest percentage of residents leaving their homes for work around 8 am. Most residents who work outside of the Township work within a 15 to 30 minute drive of the Township. Figure 7.1 illustrates morning commute peak travel times, and Figure 7.2 illustrates the travel time to work for Township residents, based on 2000 Census data.

Figure 7.2
Travel Time to Work
Oronoko Charter Township



Travel Conditions and Traffic Volumes

Approximately 10,000 vehicles travel along US-31 each day in the Township

US-31 is an important route both locally and regionally. US-31 in Michigan begins at the Indiana state line, 3 miles south of US-12 near White Pigeon, and terminates at I-75 near the Mackinac Bridge, just south of Mackinac City, Michigan. US-31 has become an important route in Michigan, connecting the Township to many population centers in western Michigan including St. Joseph, Holland, Grand Haven and Muskegon. Locally, US-31 serves as the major north/south connection between the Township and employment and commerce centers such as Niles, the Benton Harbor/St. Joseph area and South Bend, Indiana. Approximately 4 ½ miles of US-31 are contained within Oronoko Township. This limited-

access highway as two interchanges in the Township: one at M-139 and one at Snow Road. According to data compiled by the Michigan Department of Transportation (MDOT), US-31 in Oronoko Township carries approximately 10,000 vehicles per day.



M-139 is the key commercial corridor in the Township, connecting the Township with employment centers in St. Joseph and Niles

M-139 (Old US-31) is another major road in the Township, connecting employment centers in St. Joseph and Niles. In addition, the segment of Old US-31 in the Township between US-31 and Berrien Springs has seen commercial development, providing services to local and regional traffic. M-139 carries between 6,000 and 8,000 vehicles per day in the Township, according to MDOT.

Below is a table showing a breakdown of traffic volume for selected roads in the Township. The traffic counts were collected by the Berrien County Road Commission, the Southwest Michigan Planning Commission and the Michigan Department of Transportation.

**Table 7.2. Selected Traffic Counts
Oronoko Charter Township, 2003-2008**

US-31			
Location	Count	Year	Source
South of Snow	7,883	2002	MDOT
South of Snow	9,866	2006	MDOT
South of Snow	10,102	2008	MDOT
M-139			
Location	Count	Year	Source
North of US-31	7,983	2005	MDOT
North of Hinchman	6,331	2006	MDOT
Garr Road			
Location	Count	Year	Source
North of Shawnee	392	2002	BCRC
South of Shawnee	483	2002	BCRC
South of Snow	309	2006	BCRC
South of Linco	385	2008	BCRC
North of Shawnee	322	2008	BCRC
Hinchman Road			
Location	Count	Year	Source
West of M-139	1,567	2004	SWMPC
East of Hollywood	1,458	2005	BCRC
West of M-139	1,885	2005	BCRC
West of M-139	1,507	2005	BCRC
Lemon Creek Road			
Location	Count	Year	Source
East of Hollywood	1,527	2002	BCRC
West of Scottdale	1,589	2004	SWMPC
West of Red Bud	1,343	2004	SWMPC
East of Scottdale	1,213	2004	SWMPC
West of Scottdale	1,279	2005	BCRC
West of Red Bud	969	2008	BCRC

Red Bud Trail			
Location	Count	Year	Source
South of Shawnee	2,313	2003	BCRC
South of Lemon Creek	2,380	2003	BCRC
North of Lemon Creek	3,784	2004	SWMPC
North of Shawnee	2,334	2004	SWMPC
South of Shawnee	2,225	2004	SWMPC
South of Shawnee	1,819	2008	BCRC

Shawnee Road			
Location	Count	Year	Source
East of Garr	2,882	2002	BCRC
West of Garr	2,764	2002	BCRC
East of US-31	2,753	2002	BCRC
East of Lauer	3,314	2004	SWMPC
East of Lauer	2,752	2005	BCRC
West of Village Limits	2,437	2008	BCRC

Snow Road			
Location	Count	Year	Source
East of Tudor	1,783	2002	BCRC
West of Tudor	3,258	2002	BCRC
East of Tudor	2,062	2004	SWMPC
East of Tudor	2,704	2005	BCRC
West of Red Bud	916	2006	BCRC
West of Garr	588	2006	BCRC
East of Red Bud	2,730	2008	BCRC
North of Mt. Tabor	290	2008	BCRC

BCRC: Berrien County Road Commission
SWMPC: Southwest Michigan Planning Commission
MDOT: Michigan Department of Transportation

Generally, traffic on the Township's roads flows smoothly and there are few congestion concerns. Vehicular traffic flow is heaviest towards the eastern portion of the Township, since these areas have absorbed most development in the Township. However, traffic in the Township is currently manageable.



Andrews University Airpark is located just east of US-31

Public and Air Transportation

Andrews University Airpark. While there are no commercial airports in the Township, Andrews University Airpark is located south of Old US-31 and east of US-31. The Airpark primarily serves students participating in the University's Program of Aviation Flight, although it is available for use by members of the Community as well. The University owns seven aircraft and 30 hangars.

The nearest commercial airports include the Michiana Regional Transportation Center in South Bend, Indiana, and the Kalamazoo International Airport in Kalamazoo.



Berrien Bus provides mass transit services to numerous destinations in Berrien County

Berrien Bus. Berrien Bus is a nonurban system that provides public transportation to Township residents. This service is headquartered in Berrien Springs and offers regularly-scheduled daily trips to destinations across the County including Benton Harbor, St. Joseph, Niles, Coloma, Watervliet and others. Additionally, Berrien Bus offers a demand-response service where riders can schedule a ride at least a day in advance.

Fares for Berrien Bus are \$2.00 for riders who live within five miles of the Village, and \$4.00 for riders who live more than five miles from the Village. Senior citizens over the age of 60 receive a 50% discount off the regular fares.

UTILITIES

Public utilities are an important element in a growth management plan. Through the delivery of reliable and plentiful water and the safe and efficient disposal of wastewater, communities can achieve an improved quality of life for local residents. Utility systems also have the potential to aid in growth management by enabling greater densities in selected locations. Finally, and most importantly, public utility systems give the community the ability to provide effective stewardship over such important natural features as groundwater and surface water features.

Most residents of the Township rely on private wells and septic systems to meet their water and wastewater needs

The source of Berrien Springs' water supply is groundwater, and the currently this water plant has sufficient capacity to provide water services to additional homes if it is needed. As for wastewater, a new treatment plant was recently constructed on the east side of the St. Joseph River, and this facility also has capacity to accommodate additional users, if expansion becomes necessary.

Water

Residents of Oronoko Township generally rely on private wells to meet their needs for clean drinking water. The Village of Berrien Springs and Andrews University both own and operate their own water and sanitary sewer systems. The Berrien Springs system serves a portion of Township residents.

Areas in Oronoko Township served by public water services consist of the Kephart Woods neighborhood to the north of the village, as well as some properties along Shawnee Road and Snow Road. Along Shawnee, a water line extends a short distance to the west of the Village limits. Along Snow Road, a water line extends from the Village to the Township's Public Safety building located about ¼ mile southwest of the Village.

Sewer

Currently, the Village of Berrien Springs provides sewer services to a limited number of areas in the Township. Along Shawnee Road, a sewer line extends a short distance to the west of the Village limits. Along Snow Road, a water line extends from the Village to the Township's Public Safety building located about ¼ mile southwest of the Village. Additionally, an apartment complex on Rose Hill Road, south of the Village limits, is also served.

PLANNING IMPLICATIONS

While the current transportation system in the Township functions smoothly, increasing population and development pressures may begin to increase congestion on the transportation network. A smooth and efficient transportation network is critical for a community experiencing population growth, and as Oronoko Township's population increases, the transportation network will have to be analyzed. Possible topics for study should include not only at traffic volume and conditions, but roadway surfaces, access management and vehicular and pedestrian safety.

Currently, preliminary agreements are being negotiated to extend water and wastewater utilities along M-139 in the Township. However, if the growth trends outlined in Chapter 3 are realized, the Township may need to consider adding water and wastewater utilities in other areas of the community as well.

CHAPTER 8. GOALS & OBJECTIVES

As a result of the Township's efforts to form a community consensus opinion about growth and development, a series of twelve broad goal statements has been developed. These goals and objectives are founded on the input received during the Open House and Visioning Workshop that was held in support of the plan and the knowledge of the Planning Commission and local officials.

Goals and Objectives are founded on the input received during the Open House and Visioning Workshop

Each goal is supported by more specific objectives, and the policies of this plan are based on these statements. The goals are intended to describe a desirable end state or the condition of the Township twenty to thirty years into the future. They are intentionally general but attainable through concerted effort. The objective statements tend to be more specific and may be regarded as milestones in the journey to achieve the larger goal.

An effective goal serves as a useful guide for policy decisions by the Planning Commission, Township staff and the Township Board. For a goal to be useful, it should meet the following criteria:

- **Define a desired end.** A goal statement should describe a desired end state, outcome or result. The statement may be worded in either the present or future tense, but if the future tense is used, it should be stated as a prediction, rather than a hope.
- **State in positive terms.** For a goal to be effective, it should state a positive outcome, as opposed to avoidance of an undesirable result. It is tempting to state goals as the reversal of an undesirable trend, such as "Oronoko Township will limit significant additional development in agricultural areas." This statement, however, does not address the underlying issue: Protection of the Township's productive farmlands for the benefit of future generations.
- **Bold, but realistic.** For a statement to be meaningful, it needs to require effort to achieve. If goals were achieved without effort, they would simply be re-statements of current trends. On the other hand, a goal also needs to be realistic. Goals that are impossible to achieve will languish, resulting in community frustration and acrimony.
- **Reflect a consensus.** Most importantly for goal setting, the goal must reflect a community consensus on a particular issue. Since implementation of these goals will require broad community support, the goals need to reflect community ideas and values. A statement that does not reflect the ideas and values of a broad section of the community is doomed to failure.

AGRICULTURE AND FARMLAND PRESERVATION

Goal 1

A predominant feature of Oronoko Charter Township will be its productive agricultural lands with a minimum of 10,000 acres in active agricultural use. Oronoko Township farms will be characterized by sustainable, environmentally healthy operations based on both traditional and progressive agricultural techniques. A thorough understanding of agriculture's role in the community will underlie policy decisions related to land use.

Objectives:

- a.) Review and adjust the zoning ordinance to enhance flexibility and adaptation to traditional and modern agriculture and related activities.
- b.) Participate in the Berrien County Farmland and Open Space Preservation Program (PDR) and actively assist landowners who wish to enroll in the program.
- c.) Explore the possibility for enacting a local transfer of development rights (TDR) program that would preserve farmland while encouraging higher development densities in specific, pre-determined areas.
- d.) Conduct a detailed analysis of local farmland to identify agricultural properties in active use.
- e.) Educate agricultural landowners regarding the farmland preservation opportunities currently available through the State Department of Agriculture, and actively assist landowners who decide to participate in these programs.
- f.) Encourage agricultural landowners to enroll in local open space easements.
- g.) Sponsor public outreach programs that would inform the public of the benefits of local farming and the methods available to preserve farmland.
- h.) Consult with local farmers in order to best meet the needs of those currently invested in agricultural property.



Preserving and maintaining the Township's productive agricultural lands is a key goal of this Plan.

NATURAL FEATURES AND THE ENVIRONMENT

Goal 2

The Township will contain environmentally healthy, attractive and permanently protected natural features that will including mature and emerging woodlands, wetlands, open fields, and stream corridors.

Objectives:

- a.) Create an inventory of the key natural features in the Township. Such an inventory will become a critical regulatory and guidance resource in the protection of the Township's important natural features and character.
- b.) Develop and implement feasible approaches to acquire and/or protect important natural areas. Such approaches may include concerted efforts to raise funds from public and private sources, universities, conservancies, and may include locally-voted taxes.
- c.) Adjust the Zoning Ordinance to provide for open space development patterns as the preferred use by right with traditional subdivision forms to be treated as special land uses.
- d.) Adjust the current standards for mining operations to provide more stringent requirements pertaining to the duration of mining activities, and the reclamation of mines when earth removal activities have ceased.

Goal 3

Water in Lake Chapin will be clean and surrounding areas will provide vital habitats for wildlife, while serving as a sustainable resource for human recreation and use.

Objectives



Protecting the health of Lake Chapin and the St. Joseph River is a key component to this Master Plan

- a.) Revise the zoning map to create buffers or overlays that protect significant streams and wetlands in the Township.
- b.) Expand and strengthen storm water management standards to reduce the quantity and velocity of runoff, and improve water quality.
- c.) Provide incentives for new developments to utilize ecologically-friendly building and development standards.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Goal 4

New and existing businesses in Oronoko Township will be clean, responsible, economically viable and located in attractive commercial developments. The Township will encourage a mix of businesses providing meaningful employment opportunities.

Objectives:

The Township will encourage a mix of businesses providing meaningful employment opportunities

- a.) Establish and implement standards for existing and new commercial and industrial developments to require and/or incentivize attractive development forms.
- b.) Encourage shared parking arrangements in adjacent developments wherever feasible.
- c.) Work with regional economic development efforts to promote the health of Township businesses and to attract desirable commercial and industrial land uses.
- d.) Revise the Zoning Ordinance to include clear site design standards that encourage or require developers to include inviting gathering spaces as a part of the development plan.
- e.) Industrial uses should be designed to preserve the natural beauty of the community by requiring landscape screening between the use and the road.
- f.) Identify economic development tools to attract, retain and enhance local businesses.

UTILITIES

Goal 5

Commercial and industrial areas along M-139 will be served with public water and wastewater systems. Expansions of these systems will be carefully coordinated with the future land use plan of the Township.

Objectives

Expansions of water and wastewater systems will be carefully coordinated with the future land use plan of the Township.

- a.) Develop and implement a plan that extends utilities along M-139 to the US-31 interchange in a rational and sequential fashion to avoid “leapfrog” development patterns.
- b.) Develop a utility plan in coordination with the Village of Berrien Springs.
- c.) Establish land use and zoning policies that take into account existing and planned extensions of utility systems.

- d.) Develop and adopt utility policies to ensure that expansion of the systems will be driven by land use objectives and not by revenue considerations.

COOPERATION AND COMPREHENSIVE PLANNING

Goal 6

To provide the highest levels of service to its residents, Oronoko Charter Township will be a leader in fostering positive and productive relationships with the Village of Berrien Springs, neighboring communities, and Andrews University.

Objectives

The Township will be a leader in fostering positive and productive relationships with Berrien Springs, neighboring communities and Andrews University

- a.) Work with the Village of Berrien Springs, Andrews University and impacted property owners in the development and implementation of a corridor plan for M-139 between the Village and the US-31 interchange.
- b.) Work with Andrews University in adopting land use guidelines and policies that account for the University's campus and the Airpark.
- c.) Develop a utility plan in cooperation with the Village of Berrien Springs. (duplicates 5, b)
- d.) Implement periodic meetings and exchanges with the school district and Andrews University to share information and plans and to jointly plan for capital improvements and recreation facilities.

Goal 7

New developments will be encouraged to adhere to environmentally sustainable and low-impact development practices to protect the natural environment for future generations.

Objectives

- a.) Implement a program of community information to heighten public understanding of alternative approaches to protect rural character and the advantages and disadvantages of each.
- b.) Adjust the Zoning Ordinance to provide for open space development patterns as the preferred use by right with traditional subdivision forms to be treated as special land uses. (Duplicates 2, c)
- c.) Provide incentives for new developments to utilize ecologically-friendly building and development standards. (Duplicates 3, c)

Goal 8

Zoning standards and regulations in Oronoko Township will be clear, fair, and broadly understood in the Township. All standards will be structured to support the goals of this plan while providing maximum flexibility to protect the property rights of landowners.

Objectives

- a.) Prepare and adopt Zoning Ordinance revisions to implement the policies of the new Master Plan.
- b.) Develop programs to disseminate information on planning and zoning standards and procedures, including extensive use of the Township's website to expand and improve communication with citizens concerning land use and zoning issues.
- c.) Regularly review the zoning ordinance to ensure that it meets the land use and development goals of the Township.

PEOPLE, HOUSING AND COMMUNITY

Goal 9

A variety of attractive and affordable housing options will be available to the entire spectrum of society, arranged in walkable, pedestrian-oriented patterns.

Objectives

- a.) Establish land use policies to coordinate the pace and distribution of new residential growth in accord with the Township's future land use plan and population projections.
- b.) Develop and implement standards to incorporate and maintain, where appropriate, pedestrian facilities and neighborhood gathering places, such as sidewalks, community greens or small-scale parks, to foster social interaction among neighbors.



The development of gathering spaces aids in fostering social interaction among neighbors

Goal 10

Neighborhoods in Oronoko Township will be well-connected to open spaces, natural areas shopping centers and employment opportunities. Pedestrian pathways and trails will be incorporated to promote walkability and community.

Objectives

- a.) Develop and implement a non-motorized pathways plan to address both recreational uses and local non-motorized commuting needs.

- b.) Develop and implement standards to incorporate and maintain, where appropriate, pedestrian facilities and neighborhood gathering places, such as sidewalks, community greens or small-scale parks, to foster social interaction among neighbors. (Duplicates 9, b)

TOURISM AND MARKETING

Goal 11

Oronoko Township will become known as a unique agricultural destination, drawing visitors from throughout the region.

Objectives

- a.) Construct attractive gateway features at the US-31 interchanges and at major entrance points into the Township.
- b.) In cooperation with the Village of Berrien Springs, undertake promotional efforts to attract visitors to area festivals, events at the fairgrounds, and cultural resources such as the Village Courthouse.
- c.) In cooperation with Andrews University, promote the University's educational and cultural facilities as a resource available to all residents.

RECREATION

Goal 12

Residents of Oronoko Charter Township will have convenient access to safe and well-maintained public and private parks and recreational facilities serving existing and emerging neighborhoods.

Objectives

- a.) Township policies will recognize and support both publicly sponsored facilities and activities and recreation uses on private lands.
- b.) The parks and recreation planning function of the Township will be coordinated with its land use planning and the planning of the public schools and Andrews University.

CHAPTER 9. FUTURE LAND USE

The Oronoko Charter Township Master Plan establishes general patterns of land use to guide growth and development for the next twenty to thirty years. This Plan constitutes a practical and integrated approach to accommodate the impacts of growth suggested by growth trends and existing patterns of development. The chief intent is to foster efficient and sustainable forms of development that preserve the community's natural features and unique character while accommodating the estimated 400 additional households anticipated in the Township by 2030.

The residents of Oronoko Township have indicated that they wish to preserve their agricultural operations in Township and protect the Township's woodlands, wetlands and other natural areas. They also recognize the economic development potential along the M-139 corridor near Berrien Springs, and this Plan will provide guidance for new development while protecting farmland and critical natural resources. To honor these values, a land use framework has been developed that seeks to preserve farmland and natural areas, encourage new development or redevelopment in appropriate areas, provide for economic opportunity and growth, and preserve the community's rural aesthetic.



Township residents indicated that they wish to preserve the Township's unique agricultural operations

The overall purpose of the future land use designations is to guide new development in logical and viable patterns while offering fair, and in some cases, value-enhancing opportunities for development, where appropriate. Public utilities are anticipated along the M-139 corridor, and most commercial development is to be directed in these areas.

The following pages describe the future land use designations as illustrated on the Future Land Use Map (Map 8). Each Future Land Use designation is intended to foster a character distinctive of that district and unique to Oronoko Township. Furthermore, it is intended that as the community develops over the next twenty to thirty years, a significant share of the natural features existing today will have been preserved.

The future land use designations on the map are meant to be seen as general with indistinct edges. Along the margins, where two or more designations adjoin, either land use may be appropriate.

Oronoko Charter Township

Berrien County, Michigan

Map 8 Future Land Use

Legend

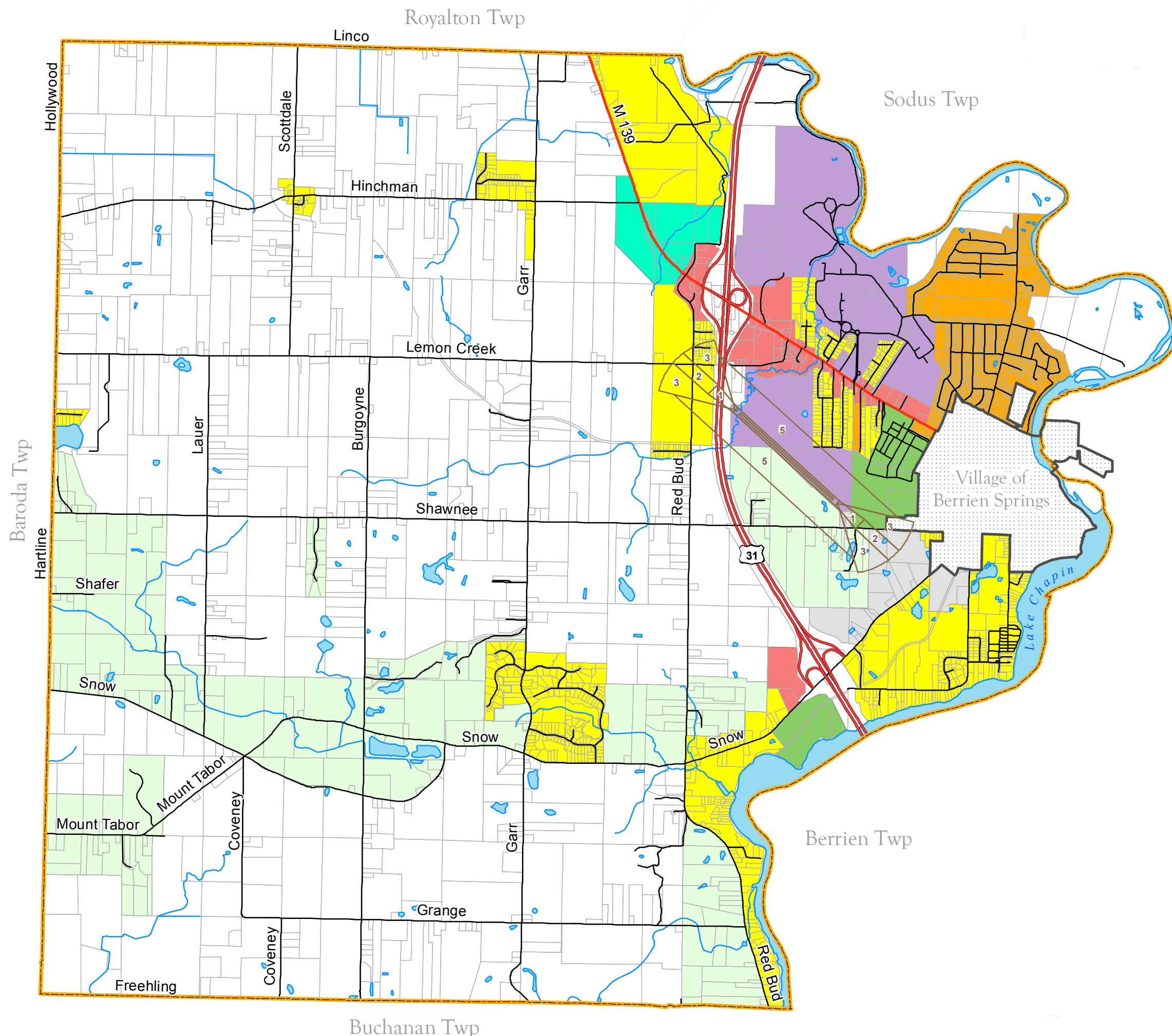
- AG, Agricultural
- CR, Country Residential
- LDR, Low Density Residential
- MDR, Medium Density Residential
- MU, Mixed Use
- C, Commercial/Office
- LI, Light Industrial
- U, University
- REC, Recreation
- Airport Safety Zones

Source: Berrien County and
the Michigan Center for Geographic Information

1 inch = 3,250 feet



Williams & Works



FUTURE LAND USE DESCRIPTIONS

Agriculture

Oronoko Charter Township contains large areas of unique agricultural lands that are crucial to the region's local economy and character. Maintaining these productive agricultural lands is a high priority among Township residents, and preserving large and contiguous tracts of productive farmland is essential to that goal. Oronoko Township contains several agricultural operations that not only produce high-quality agricultural products, but also attract visitors from throughout the region to

special events, farm markets and “u pick” during the summer months. To this end, this plan strongly encourages the continuation of these farming activities. The agricultural future land use designation is intended to preserve agricultural productivity and viability within the Township by allowing for enough land to support agriculture and related services.



The land designated as Agriculture amounts to about 15,750 acres, or approximately 77% of total land area within the Township. The most important factors informing the decision to designate particular parcels of land as Agriculture are (1) an examination of local and County data identifying productive agricultural land uses; (2) the relative size and contiguity of those agricultural properties; (3) farmland in the *Berrien County Development Plan 2003-2008* identified as prime, unique, or having local importance.



Oronoko Township's unique agricultural lands are crucial to the region's local economy and character

An important step toward the preservation of this land use designation as agricultural is for the Township to participate in the County Purchase of Development Rights program to receive State and Federal funding. This will allow the purchase of the development rights of private property owners via funds collected through grants, donations, bonds, special assessments, or general appropriations. Likewise, landowners will have the option to sell their development rights (calculated as the difference between the agricultural value of the land and the fair market value) to a public entity. Under part 362 of PA 451 (1994), this ensures the land will be preserved for agricultural use and open space in perpetuity, while, in exchange, landowners may continue to farm their own land, rent the land to another farmer, or sell the land for the remaining agricultural value.

In addition to the Purchase of Development Rights (PDR) program, zoning standards must reflect the Township's desire to protect local farmland from excessive development. There are a number of techniques available to the Township that will help to preserve the character and productivity of the Agricultural future land use designation while still providing property owners with options for some development; particularly where agricultural uses are not feasible. These techniques include, but are not limited to, the following:



A number of techniques are available to encourage landowners to preserve their land as agriculture

- **Adjustments to the Township Zoning Ordinance.** Adjustments to the zoning ordinance may include changes to the agricultural district of the zoning map or adjustments in the text that regulate development in agricultural areas.
- **PA 116 Agreements.** A temporary restriction on the land, voluntarily entered into by a landowner, between the State and the property owner that preserves the land for agriculture in exchange for certain tax benefits and exemptions for various special assessments.
- **Conservation/ Open Space Easements.** A restriction on the land, voluntarily entered into by a landowner, between the local government and a landowner that preserves the land as open space or otherwise prohibits development. In some cases, the landowner receives certain tax benefits and exemptions for various special assessments in exchange.
- **Purchase of Development Rights (PDR):** A permanent restriction on the land, voluntarily entered into by a landowner, between the State and/or Berrien County where a landowner permanently preserves the land for agriculture in exchange for a cash payment for those development rights.

Country Residential

This future land use designation is intended primarily to address the demand for large lot, single-family development in rural areas of the Township. These uses are positioned on lands where there is little or no potential for productive agricultural activities, and a conventional lot split or subdivision would not have significant negative impacts on the environment. About 2,425 acres of land are within this designation.

Much of this area is currently wooded or former agricultural properties that have been fragmented into parcels ranging between five and twenty acres in area. Primarily, land uses in this district will include single-family residential development situated on larger lots. However, conservation cluster development patterns, as well as agricultural and related uses, may

...development should preserve key natural features and views while providing low-density development opportunities consistent with the rural character of the area.



Development in the Country Residential designation should be sensitive to their unique surroundings

also be expected. Areas are expected to develop without public water and sanitary sewer service.

The largest portion of the Township under this designation is located along and north of Snow Road between the Township's western boundary and Garr Road. These areas are characterized by rolling terrain and wooded hillsides with larger lots and residential land uses at densities of less than one unit per acre. This Plan anticipates a continuation of this pattern; however, development should preserve key natural features and views while providing low-density development opportunities consistent with the rural character of the area. This may be accomplished by encouraging conservation cluster development patterns, increasing required setbacks from main roadways in scenic areas and encouraging the preservation of mature trees in new developments.

Low Density Residential

The Low Density Residential future land use designation has been established in recognition of the emerging suburban nature of the eastern portions of the Township. This district recognizes this characteristic and



Development in the Low Density Residential designation should primarily consist of single family homes

anticipates and facilitates an orderly and sequential transition from a rural area to attractive and functional neighborhoods. This designation will normally be found where utilities are or may be available in the near term to enable densities of one to three units per acre.

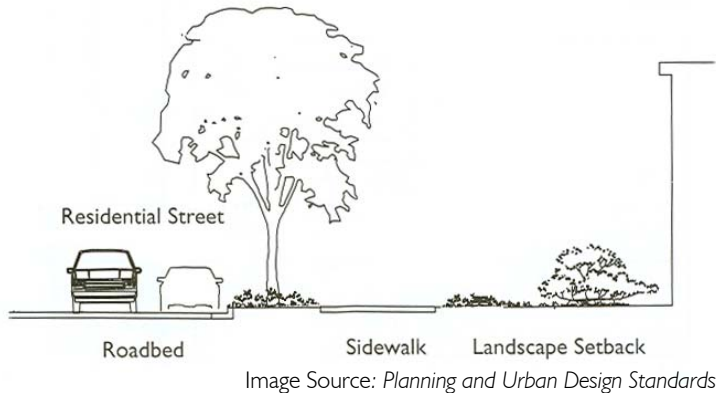
While the primary land use within the Low Density Residential area will be single-family detached housing, some mix of uses may be appropriate to serve nearby population areas. Compatible uses may include institutional (e.g., schools and churches) or recreational land uses.

New developments are encouraged to utilize extensive landscaping and vegetation to create a visually appealing sense of entry and to further the character of the community. However, the bulk, scale and positioning of buildings must be carefully managed to preserve the aesthetics of a neighborhood and any important views within the area.

Medium Density Residential

The Medium Density Residential designation is intended to accommodate residential options for people of varying ages and income levels formed in inviting communities. Development types will primarily consist of single-family detached homes, however duplexes, senior living facilities or student

housing may be expected as well, depending on the availability of utilities. Where public utilities are not available, the overall permitted density in this area should not exceed two units per acre, but density may be increased up to six units per acre if water and sanitary sewer utilities are available. These developments should be limited to locations within walking distance of commercial services and similar amenities, where the development would not significantly alter the character of the neighborhood. Within this future land use designation, flexible conservation design mechanisms will be encouraged, as appropriate, to establish open space preserves and neighborhood recreational facilities.



Development patterns in the Moderate Density Residential designation should connect to other neighborhoods and uses to enhance walkability

Playgrounds and gathering areas to provide opportunities for recreation and social interaction should be incorporated in new development.

Developments should include pedestrian walkways throughout, and street layouts should follow a grid pattern whenever feasible, and be designed to connect with future developments as they occur.

Commercial/Office

The Commercial/Office future land use designation is intended to provide for employment, goods and professional services that serve the broader community including and extending beyond Oronoko Township. Currently, most commercial land uses are located along M-139 between US-31 and Berrien Springs. This plan seeks to strengthen this corridor's role in the region by encouraging commercial and office uses. However, typical a typical suburban "strip" commercial development is neither desired nor encouraged. Rather, commercial developments in this area should be safe, walkable, and easily accessible by both motorists and pedestrians.



In the Commercial/Office designation, buildings face the street and mature trees should be preserved whenever possible

When contemplating proposed developments in this designation, the Township should pay special attention to

„,this plan encourages shared parking arrangements that reduce the overall number of parking spaces required

building form and site design. Buildings should face the street, and parking should be located on the side or behind the building. Attractive landscaping and gathering places should be incorporated into new developments, and existing mature trees should be preserved whenever possible. Where appropriate, this plan encourages shared parking arrangements that reduce the overall number of parking spaces required. To reduce unnecessary automobile trips, walking and biking paths that connect to adjacent developments, as well as along M-139, are also strongly encouraged.

Mixed Use

With Oronoko Charter Township poised to experience an increase in population over the life of this plan, a need may develop for commercial and professional services in close proximity to housing. To meet this need, a mixed use area is proposed near the US-31/M-139 interchange. The intent of the Mixed Use designation is to allow for uses in a master-planned project, giving a greater potential for walkable neighborhoods. This plan envisions a small-scale node of personal or professional service uses and medium density residential land uses along M-139, just west of US-31. Development should be carefully arranged in planned patterns that minimize curb cuts and driveways to M-139. Developments should be laid out in walkable patterns that enhance safety and promote interconnections among uses.

This plan envisions a small-scale node of personal or professional service uses and medium density residential land uses along M-139, just west of US-31

The Mixed Use designation on the east side of M-139 should connect to and be integrated with the proposed low-density residential designation north of this area. The site should be connected with sidewalks, walking/biking paths as well as roadways.

Non-residential buildings within this designation should face the street with parking located to the side or behind the buildings. Residential uses should be arranged in an efficient design that maximizes the preservation of trees and other key natural features.

Light Industrial

Industrial development provides employment opportunities for residents and investment in the community. While some industrial uses may generate objectionable off-site impacts, existing manufacturing operations in the Township have not presented significant problems for neighboring uses. This Master Plan envisions an industrial area of about 150 acres forming along the north side of Snow Road between US-31 and the Village of Berrien Springs. Currently, some industrial uses exist in this area and these will be supported and strengthened.

...extensive screening and landscaping is strongly encouraged to foster attractive developments

Development in this designation should include small-scale industrial activities, such as research and development, office, warehouse, retail, shipping and showrooms. Sites should be carefully designed to minimize off-site impacts, and extensive screening and landscaping is strongly encouraged to foster attractive developments. Uses that are adjacent to residential land uses should include transition areas and buffers to minimize potential adverse effects.

Certain non-industrial uses, such as convenience stores or small-scale restaurants, may also be contemplated in this designation to serve the workers in the area.

University and Airport Safety Zone

Enrollment at Andrews University has been increasing steadily over the past several years, and this plan recognizes the University's role in shaping the character of the community. The University future land use designation is



Andrews University plays an important role in shaping the character of the community

about 845 acres in area and consists of properties owned by Andrews University. Land uses in these areas vary significantly, and include the educational and cultural facilities on the main campus, student housing, agricultural practices and the Andrews University Airpark, located east of US-31 between M-139 and Shawnee.

Andrews University Airpark also has an impact on land uses in the area, and therefore warrants special consideration in this plan. The *Andrews University Airpark Planning and Zoning Study* contains land use guidelines in Accident Safety Zones, which are illustrated on the Future Use Map.

Generally, residential land uses and land uses that concentrate people outside should not be permitted in Accident Safety Zones, although some very low density residential uses may be permitted in Zone 3.

The study also suggests that height restrictions be placed on buildings in these Zones and permitted uses in 4 are limited to those that, by their nature, are relatively free of people. Such uses may include storage facilities or small parking lots. The Township should refer to and carefully consider the land use guidelines contained in the *Andrews University Airpark Planning and Zoning Study* whenever a development is proposed within an Accident Safety Zone.

Recreation

This designation consists of properties owned by the Berrien County Youth Fair and the Boy Scout Camp near the US-31/Snow Road interchange, and this plan supports both of these organizations. Events at the fairgrounds attract thousands of visitors to the Township, and as the fair grows, additional development may be needed at this site. This plan anticipates a continuation of current activities at Youth Fair, but recognizes the potential for expansion of its existing facilities to meet growing demand.

Additional development at the fairgrounds should be walkable, well-landscaped and arranged to minimize any impacts on adjacent properties. Additional provisions for parking and access management may also be necessary to manage traffic coming to and from events at the fairgrounds. If necessary, utilities should be extended to serve the fairgrounds to meet the demands of busier and more intense uses on the site.

ZONING PLAN

The following table includes the zoning plan for Oronoko Charter Township.

Land Use Category	Corresponding Zoning District	Notes
Agricultural	A-R Agricultural Residential	The Township should refine the A-R district to further promote Farmland Preservation.
Country Residential	A-R Agricultural Residential E-1 Estate Residential	
Low Density Residential	R-1 Single Family Residential	Portions of the Low Density Residential future land use designation are within the E-1, R-1 and R-2 zoning districts.
Medium Density Residential	R-2 Single and Two Family Residential	
Mixed Use	To be determined	The Township should consider developing a zoning district permitting residential and commercial uses as discussed on page 79 of this plan
Commercial	B Business	
Light Industrial	M-1 Limited Manufacturing	
University	U-C University - College	
Recreation	To be determined	This Recreation future land use designation is limited to properties controlled by the Berrien County Youth Fair and the Boy Scout Camp. A corresponding zoning district may not be necessary.

CHAPTER 10. IMPLEMENTATION STRATEGIES

For a Master Plan to truly impact growth and development, it must be followed and carried out. The following strategies are established to implement the goals and objectives and land use recommendations of this Plan. It is recognized that many strategies will be long-term in nature and that many entities in addition to Oronoko Charter Township will need to cooperate in order to fully implement the recommendations of this Plan. The descriptions of strategies in this Plan are intentionally general to allow the Township the flexibility to prepare specific work assignments and prioritize each strategy as a part of its overall municipal operations. Therefore, it will be important for the Township Board and staff to develop a detailed set of work assignments to set this plan in motion.

Primary responsibility for implementing the Plan rests with the Township Board, the Planning Commission, and Township staff.

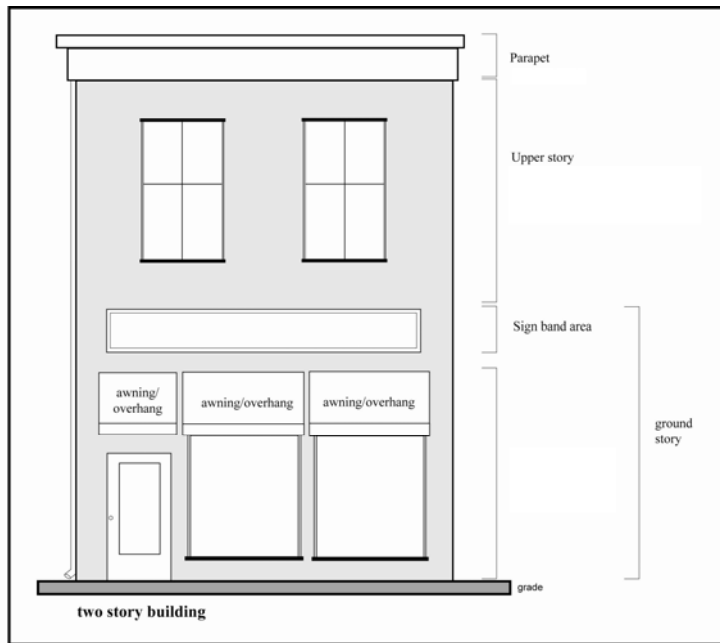
Primary responsibility for implementing the Plan rests with the Township Board, the Planning Commission, and Township staff. In order for the Future Land Use Plan to serve as an effective guide for continued preservation and growth in the Township, it must be implemented. This is done through a number of methods that may include ordinances, programs, and administrative procedures, which are described in this Chapter. Some of the implementation strategies require significant public and private investment. Each strategy is important; as it contributes to achieving the overall vision expressed by the Plan.

ZONING ORDINANCE REVISIONS

The Zoning Ordinance is the primary implementation mechanism for this Plan. This implementation strategy contemplates a comprehensive evaluation of the Ordinance in light of the community's goals, objectives, and Future Land Use Plan. This will include a revision of the Zoning Map, as appropriate, to support the future land use map, and a revision of some zoning standards to better conform to the future land use designations in this Plan. In addition, the Ordinance should be evaluated for flexibility to address innovative development techniques and for its ability to control inefficient development patterns.

Specific examples include: evaluation of the zoning map designations when compared to the Future Land Use map, design standards in commercial and industrial districts, language to encourage farmland preservation, walkability, landscaping standards and other areas.

In addition, some of the larger future land use designations (e.g., Agriculture, Country Residential) may necessitate some adjustment in the zoning district standards. This may include adjustments of the dimensional



The Township should consider the addition of form-based zoning standards for properties in the commercial and mixed use designations

standards and/or refining uses or even the establishment of new and more refined zoning districts.

During the process of revising the Zoning Ordinance, the Township should consider the addition of form-based standards for properties in the commercial and mixed-use future land use designations along the M-139 corridor. Standards pertaining to the design and placement of buildings along this corridor would be an effective tool to create an attractive, walkable corridor, and to discourage typical suburban “strip” development that is undesirable to Township residents.

Responsibilities. The Planning staff and the Planning Commission may implement this strategy. This is likely to be an extensive task with multiple elements – each with unique challenges that may require each activity to be

addressed independently – and it is likely that outside support will be needed. Any resulting amendments to the Ordinance should be reviewed by the Township’s legal counsel and ultimately adoption by the Township Board.

M-139 SUB AREA PLAN

This plan recommends the development of a sub-area plan to address the unique blend of land uses and functions along M-139.

M-139 between US-31 and the Village of Berrien Springs serves as the primary commercial corridor for the Township, and as a result, is a key component of the Township’s identity. Existing land uses along this corridor include commercial services, offices, residential, institutional and recreation. Without special consideration by the communities affected by this corridor, the potential exists for this corridor to become unattractive and monotonous.

To guide this corridor towards a future envisioned by the community, this Master Plan recommends the Township develop a sub-area plan to address its unique blend of land uses and functions. The sub-area plan may include specific recommendations pertaining to building form during development

and redevelopment, streetscaping, access management, pedestrian accessibility and safety, zoning standards and other topics.

An M-139 sub-area plan should be a cooperative effort undertaken jointly between the Township, the Village of Berrien Springs and Andrews University with the involvement of the Michigan Department of Transportation, as well as extensive input from the community's residents and land owners.

Responsibilities. The Planning Commission may implement this strategy. This element will require significant cooperation between local units of government and significant community involvement, and it is likely that outside planning support will be needed.

M-139 ACCESS MANAGEMENT PLAN

Participants in the Visioning Workshop expressed a fear that M-139 would eventually become an unattractive and unsafe “strip” commercial corridor. For many, such a corridor is an unsafe environment for pedestrians and bicyclists and results in unnecessary traffic congestion. To create a corridor that is safe, attractive and facilitates orderly traffic flow, the Township should undertake an access management plan that analyzes traffic patterns, impacts, management and related topics. Possible topics for this study may include the feasibility of a boulevard or raised landscape area, additional crosswalks, signalization, and a bike lane to aid in safe pedestrian and bicycle use along the roadway.

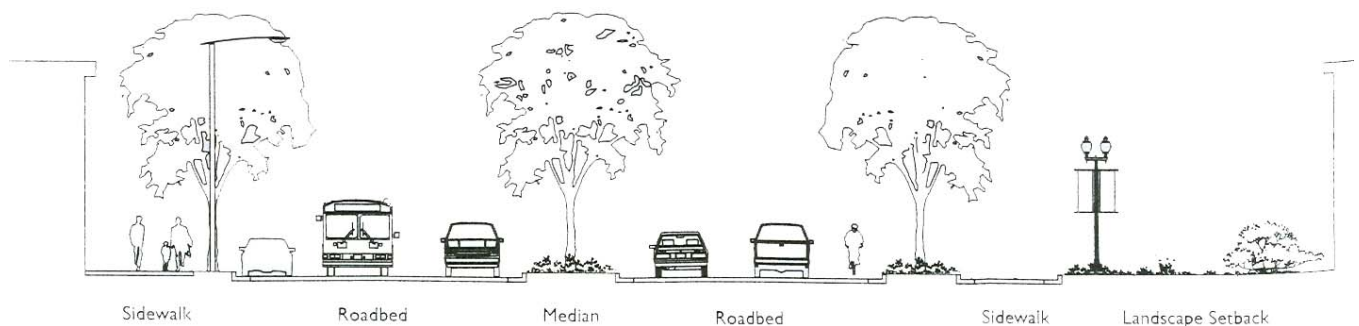


Image Source: *Planning and Urban Design Standards*

A landscaped median in M-139 could improve traffic flow and make the corridor more attractive and walkable.

It is important to note that M-139 is the Township's most important thoroughfare, and contains many of the Township's commercial and institutional land uses. It is also a State highway. Therefore, it will also be

necessary to coordinate this study with MDOT and the Berrien County Road Commission.

Responsibilities. The Planning Commission may implement this strategy. This element will require significant cooperation between local units of government, Berrien County and MDOT. It should also include an element of community involvement, and it is likely that outside support will be needed. This implementation task may be coordinated with the M-139 Sub-Area Plan discussed above.

UTILITY ORDINANCE

This task would involve developing an ordinance that governs where, when and how utilities will be extended, driven and guided by the Master Plan. Policies that direct the location of public water and sanitary sewer services are an important growth management mechanism, and are critical to the Township's goal of preserving prime agricultural land. A new utility



A Utility Ordinance would govern how, when and where utilities would be extended

ordinance would outline standards with regards to wastewater and potable water, and may also include regulations concerning time of sale septic tank and drainfield inspections.

By encouraging new development located in proximity to existing or proposed sewer and water facilities, the Township will be in the strongest position to guide and direct growth.

Responsibilities. The Planning Commission and Township Board should work in conjunction with one another to implement this strategy. Cooperation with the Village of Berrien Springs will also be needed, as will support from the Township's engineering consultant.

CONTINUE COMMUNITY EDUCATION AND OUTREACH

Description. The planning process is persistently changing with shifting social and economic concerns and unique land use challenges. Attitudes of residents toward growth, economic development, traffic, protection of natural resources, and other pertinent land use issues will likely differ from person to person depending on their personal circumstances. It is vitally important for Township officials to continue to seek educational opportunities for residents to inform them of the issues of highest priority.

An element of this strategy includes, first and foremost, the continued education of Township officials. In addition, the Township should endeavor to educate the public on current planning trends and the benefits of implementing the goals and objectives in this Plan. Every public meeting, including those hosted by the Planning Commission and Township Board, should be instructive for the public.



The Township's website should be used as a tool to educate and inform residents regarding important local issues.

Further, Township officials should encourage the establishment of committees, to which some of the responsibilities for achieving the goals of this plan may be delegated. These committees could focus on topics that are of great importance to the community, such as a Farmland Preservation Committee or a Utilities Committee.

The Township should also look for ways to provide residents with news and information regarding their Township government. Possibilities include enhancements to the Township's website, and developing a series of informational material that could be kept at the Township Hall.

Responsibilities. The Township Board, Township Planning Commission, and staff will need to be responsible for seeking and attending seminars and conferences on current planning topics, as well as establishing new community organizations that may develop and implement educational activities or publish literature that may also be posted on the Township's website.

COORDINATE WITH NEIGHBORING AND REGIONAL MUNICIPALITIES

Some of the goals in this plan will not be achievable without the cooperation of the Township's neighboring municipalities.

Some of the goals in this plan will not be achievable without the cooperation of the Township's neighboring municipalities. The Village of Berrien Springs and Andrews University should be engaged in discussions pertaining to the improvement of the M-139 Corridor. This corridor, along with local infrastructure, will likely serve as the primary catalyst for local economic development over the coming years, and the extent to which efforts to attract new business and industry can be coordinated will be helpful to the Township, the Village and the University. Additionally, coordinating some site and design standards for zoning districts along this corridor will help to create a unified aesthetic, establishing a greater sense of place within the community.

Additionally, any utility extensions along M-139 will have to be coordinated with the Village of Berrien Springs, and possibly other neighboring communities.

The Township should also work to form alliances with Berrien County and other regional organizations to market the Township as an agricultural and recreational destination. The County can also be a valuable asset in developing policies to preserve farmland in the Township, and can be an important resource in educating the public about important issues in the Township.

Responsibilities. The Township Board, Township Planning Commission, and staff will need to be responsible for advocating seasonal or bi-annual meetings with governing bodies in neighboring communities.

MARKETING AND PROMOTIONAL EFFORTS

One theme that was apparent throughout the visioning meeting was the need to increase promotional efforts to attract visitors to Oronoko Township. To this end, the Township should look to increase promotions and marketing efforts in the community. The Township should consider the following options:

- **Farmer's Market:** The Township could work with the local businesses and neighboring communities to study the potential for locating a weekly farmer's market in or near the Village to support local farmers and growers. Locating the market in the Village is appropriate given that it is located in proximity to the Village and University and is conducive to drawing patrons into other stores in the area.
- **Promote Local Businesses:** Informational materials and newsletters provided by the Township could be sponsored by a local business each month in an effort to educate residents about the economic benefits of shopping at locally-owned businesses. Studies have shown that when people shop from locally-owned businesses, only \$0.27 of every dollar leaves the community compared to \$0.57 of every dollar that leaves the community when shopping at national chain stores. Businesses would apply for the opportunity to be featured on the website or in the informational materials.
- **Regional Marketing Effort:** Many of the agricultural operations in Oronoko Township are unique, although there is a perception that they are still largely "undiscovered" by many residents of southwest Michigan. Therefore, the Township should work to raise its profile in regional marketing materials and brand itself as an agricultural destination. This may be accompanied by erecting gateway features

at key entry points to the Township to provide a sense of place within the community.

- **Promote the Township's Historical and Educational Resources.** Oronoko Township contains invaluable historical and educational resources in the Courthouse Square and Andrews University, respectively. Andrews University not only serves its students, but is a valuable asset in the community that enriches the quality of life of local residents, while the Courthouse Square is one of the most unique historical sites in the region.

The Township should be proactive in creating and/or strengthening partnerships with these vital community resources, which may provide a positive impact on the local economy. For example, the Township could assist in advertising and promotional efforts or provide additional insight to the community's history. In addition to the cultural background, the unique architecture at the Courthouse Square should be promoted.

A partnership with Andrews University should be beneficial to both the University and Township residents. For example, educational outreach programs for residents could be held at University facilities, and the Township could assist the University by providing information and/or resources for research projects.

- **Develop Township Newsletter.** This plan recommends the Township develop a semi-annual or quarterly newsletter to educate residents about their local government, key issues affecting the community, and alert them to upcoming events in the Township. It could be mailed to Township residents, posted on the Township website, or delivered via email to those who sign up for email distribution.

REFERENCES

The following agencies, websites, official reports, and individuals were consulted in the compilation of the Oronoko Charter Township Master Plan. Where conclusions or specific data was drawn from a source, it is noted in parentheses or in footnotes within the text. In all instances, the reader is encouraged to consult the sources noted below.

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APPENDIX I

VISIONING REPORT

Oronoko Charter Township



VISIONING REPORT

March 2009

Williams & Works
engineers . planners . surveyors *a tradition of service*

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INTRODUCTION AND OVERVIEW

The Township is dedicated to expressive citizen input.

Oronoko Charter Township is in the process of preparing a Master Plan to guide growth and development within the community. Citizen input is vitally important to the planning process, and the Township will be using this input to assist in evaluating trends and in forming goals and objectives for the community. To this end, the Township held an open house and visioning workshop to garner opinions of Township residents and business owners.

The event was conducted in one three-hour long session at the Oronoko Township Public Safety Building located at 4411 E. Snow Road on Wednesday, March 4, 2009. The meeting was held in two separate segments. First, an informal open house was held from 6:00 – 7:00 PM, which allowed residents to learn more about the planning process and offer comments to the Planning Commission and the consulting team. The visioning workshop was held immediately after the open house, from 7:00 – 9:00 PM. A total of about 60 people participated in these two sessions.



The Open House allowed residents to learn more about the planning process and offer comments

The Township undertook an extensive campaign to advertise the meeting to the public. A notice was posted on the Township's website, and a press releases were sent to both the both the Herald-Palladium and the Berrien Springs Journal Era. Additionally, members of the Planning Commission personally invited a number of members, and flyers were posted in several locations in the community. The materials utilized to publicize the event are shown in Appendix 1.

The event was open to the public and intended to give community residents an opportunity to voice concerns about current land use and development trends, and the impact these trends may have on demographics, agriculture, aesthetics, open space, natural features and transportation in the Township. In addition, the meetings included facilitated group discussions intended to aid participants in identifying and prioritizing the factors that may affect the quality of life in the Township immediately and in the next twenty years.

The purpose of this report is to summarize the process of the workshop and its results. In addition, this report places the output from the Visioning Workshop in the broader context of the Master Plan process.

THE VISIONING ACTIVITY

The process will assist the Planning Commission in articulating the values of residents.

The visioning activity was intended to develop a general consensus among the participants as to the likely result of a continuation of the current development trends in the Township, and what those trends may imply. This process will also assist the Planning Commission in articulating the values of Township residents. The information garnered from these activities will be significant to the later phases of the plan preparation process, as described later in this report.

Resource Materials. Before the visioning activity commenced, each participant was given resource materials to support the visioning session. These included a Community Profile Synopsis intended to give all participants a common resource to inform and support their activities. It was not intended to be a complete data set of all the critical indicators that may impact land use planning in the Township; it provided some general information from which broad conclusions could be drawn. The Community Profile Synopsis included brief analyses of population growth, housing and economic development, and land use change. Appendix 2 contains the handout materials that were given to each participant.

The Visioning Process. The purpose of the Visioning Workshops included developing general consensus among the participants as to the likely result of continuation of current development trends, and generating potential solutions to perceived issues.

The purposes of the workshop included developing general consensus as to current development trends, and generating potential solutions to perceived issues.

Williams & Works directed the workshops and facilitated group discussions. The atmosphere was open and informal, although the meetings followed an established format to assure a functional outcome. Light refreshments were provided and participants were encouraged to engage the process to provide the Township with the benefit of their experience, expertise and perspectives. The visioning workshop was structured as follows:

1. Welcome and Overview

The consultants from Williams & Works provided a brief introduction to the process and an overview explanation of how the results of the activity will be incorporated into the Oronoko Township Master Plan.

2. Land Use Images

In this activity, a series of slides were shown representing land use conditions common in West Michigan communities. Participants used a sheet of paper to note their impressions of the scenes.



The Land Use images were used to help participants think about the multiple dimensions of land use, infrastructure and growth.

When all of the slides were shown, Williams & Works led a general discussion of the images and the land use issues they may illustrate. The primary purpose of this activity was to help the participants begin to think about the multiple dimensions of land use, infrastructure and growth as a precursor for the visioning exercise. This activity also helped to “break the ice” among participants.

Several issues were raised in the context of these images, including the advantages of compact commercial developments, farmland preservation, unplanned strip mall development and utilities. Community members noted that these issues are especially relevant to a visioning session since the Township will likely continue to grow in the future.

3. Visioning Exercise

The larger group of participants was divided into smaller “breakout” groups of about 12-15 persons to discuss the most important opportunities and threats confronting Oronoko Charter Township.

Members of each group were asked to contemplate their impression (or vision) of an “ideal” future for Oronoko Township and to individually list opportunities that support the realization of their “vision.” Conversely, they were also asked to individually list threats that might impede the realization of their vision. The facilitators then led a discussion in which participants shared their lists of opportunities and threats and a group list of all ideas was developed. Once the group list was prepared, the facilitators worked with the groups to identify common items and to further expand on the descriptions to be certain that all understood each item.

The group members then ranked the list by using colored stickers to identify the most important threats and the most important opportunities. The participants received two blue dots, two red dots, and two green dots. Each participant used the following ranking system:

Blue: Greatest importance, Numeric Rank = 3

Red: Second most important, Numeric Rank = 2

Green: Third most important, Numeric Rank = 1



Participants ranked the items of the greatest importance to them, which allowed a prioritization of the issues each group discussed.

This process forced participants to select among the numerous items on the list and focus on the items of greatest interest to them. By assigning a numeric value to the colored stickers, the facilitators used a simple sum of the responses to identify threats or opportunities of highest priority according to group rankings.

The facilitators then reviewed the rankings with the group members to be certain that they understood the results and determine that a general consensus was reached. This also presented an opportunity for participants to review the relationships between some of the opportunities and threats listed.

4. Reports to Larger Group

At the completion of the final exercise, all the participants gathered for a brief report of their activities to the re-assembled larger group. Each group was represented by a “spokesperson.” The spokesperson summarized the work of their group and the most important opportunities and threats identified.

VISIONING OUTPUT

Approximately sixty residents of Oronoko Township attended the event. The quality of the discussion and the energy contributed by all participants at the Visioning Workshops was exceptional.

The tables on the following pages include the “Opportunities and Threats” input from the workshop. In each case, the “opportunity” or “threat” is listed as drafted by the group. The statements have been ranked according to total points received during the visioning exercise. The group designation (Group 1, Group 2) is not provided; rather, the



The quality of discussion and the energy contributed by all participants was exceptional

facilitator’s name is the group identifier. The raw scores given to each statement depended on the rankings of the individual group members and since the groups did not have an equal number of participants, the raw scores are not meaningful. Therefore, it is not valid to compare raw scores between and among either the statements or the groups. However, it is appropriate to compare the statements based on the relative rankings assigned by each group.

Finally, it is important to understand that because participants were forced to identify only the three most important listings on the opportunities and threats list, many of the items were not ranked. This does not mean that these items will be overlooked in the process. But it does mean that, relative to the other listings that were ranked, they may have a lower priority – at least in the minds of the participants of the workshop.

Summary. The highest-ranking opportunities were concerning the preservation and acquisition of open space in the Township. The highest-ranking threats dealt with uncontrolled growth; density; and costs of land acquisition. Issues of traffic, protecting water quality, and preserving a “small town” feel were also memorialized.

Facilitator: Lynée Wells

Rank	Opportunities	Rank	Threats
1	Development of interchange through placement of water & sewer	1	Lack of water & sewer
2	Agri-tourism	2	Road name changes – M-139, Old 31, 33, etc.
3	Berrien Co. youth fairgrounds expansion, expo.	2	Lack of coordination with local & local agencies, including Andrews
4	Tourism & seasonal visitors only 10 mi. away, prox. to Chicago	2	Perceived lack of growth – if you don’t grow you die
5	University students, family & visitors	5	Continued mistrust between village & township
5	Keep higher densities near utilities and preserve agriculture in western portion of Township	5	Lack of area for septic replacement drain fields
7	Wine country	7	Water pollution into the St. Joseph River
8	Festivals, annual events such as Passion plan, pickle fest	8	Lack of regional coordination, Baroda, adjacent Townships, utility extensions
9	Promotion of our farm/agricultural products such as Welch’s grape juice	8	Lack of resources
9	Public schools, private schools, school system	10	Landfills
9	Central location in County		
9	Recreation/trails/bike paths/lake/river – many opportunities		

Total Number opportunities: 12

Total Number Threats: 10

Facilitator: Brian Wegener

Rank	Opportunities	Rank	Threats
1	Preserving agriculture	1	Lack of planning, coordination, uncontrolled growth
2	Planning for residential growth	2	Lack of infrastructure
3	Interchange long-term planning	3	Anti-growth attitude
3	High tech infrastructure! Utilities.	4	Loss of balance between agriculture and development
5	Diversify tax – need character, mixed use / business base. Service, small start-ups.	5	Farmland development
6	Andrews – resources, expand fine arts center	6	Contamination of Lake Michigan
7	Pedestrian planning/bike trail/sidewalks/connectivity	6	SOB – sexually-oriented businesses
7	Expand fairgrounds	6	Pollution from potential industry
7	Farmland preservation zoning district		
10	Recreational possibilities – proximity to Lake Michigan/multi-purpose trail		
10	4-5 wineries		
10	Farmer’s market		
10	develop history center (courthouse in village)		
10	Tourism - courthouse		
10	Nice gateways		
10	Close proximity to South Bend airport = potential for commercial development		
10	Presence of specialty stores – expand		
10	Purchase of development rights		
10	Fishing on the river		

Total Number opportunities: 20

Total Number Threats: 8

Facilitator: Andy Moore

Rank	Opportunities	Rank	Threats
1	Fairground complex is good catalyst	1	Lack of water & sewer will stifle growth (business growth follows path of least resistance)
2	Promote agriculture	2	Bad economy/local & state
3	Strengthen relationship with Andrews University	3	Lack of job opportunities
4	Maintain rural character	4	Scattered rural development
4	More industry & business promotes tax base	4	Lack of jobs & young generation leaving town
6	Use PUDs	6	Lack of planning/vision for future
6	Support local/existing business & economy	6	Failure to market
6	Commercial growth near 31 bypass w/ water & sewer	8	Lack of youth in farming will lead to decreasing agriculture
6	Initiate “green energy” program – hydro, wind (?), solar	9	Travelers don’t stop in town
10	Protect Agriculture	9	Lack of walking paths, lack of alternatives to driving
10	Capitalize on good climate for growing fruits	10	Lack of traffic downtown could hurt businesses
10	Improve recreational opportunities	10	Uncontrolled/unplanned sprawl
13	Consider water/sewer expansion to US-31	10	Loss/reduction of private property rights
13	Make promotional signage design harmonious w/ nature environment		
15	Retirement community - Andrews provides more services		
16	Gateway features		
16	Set example for sustainability, agriculture & education		
16	Prevent too much signage/clutter along 31		
16	Keep dark skies w/ lighting standards		
16	Scenic land		
16	Maintain excellent educational system – leads to good families & values (public & parochial)		
16	Improved planning – always ask who benefits and who pays?		

Total Number opportunities: 22

Total Number Threats: 13

Facilitator: Larry Nix

Rank	Opportunities	Rank	Threats
1	Future Comm. Dev. - 31 corridor, tax base, attractive	1	Lack of sewer/utilites/31
2	Preservation of farm land [PDR's]	2	Subdivision=loss of farm land.
2	Compact & mixed use.	3	Lack of communication/planning - dig into nitty gritty
4	Enhance village core	4	Auto dominated development
5	Planned & controlled growth/community	4	Loss of rural character
5	Cooperation w/ Village	6	Lack of access to water ways/Lk Chapin
5	New farms & vineyards	4	Single use concentrated zoning
5	Renewal energy - wind	8	Lack of innovation
9	Green industry	9	Unattractive growth
9	Use of modern/innovative planning methods. Smart growth. New urbanism	9	Do not handcuff farmer
9	Improve/modernize zoning consistency	11	Highway access
12	Infra structure \$ Sewer, water, etc.	12	NIMBY attitude
12	Sewer & water - 31 corridor	12	Past disagreements
12	Natural resources - St. Jo River, Small lakes	12	High taxes
15	Unique wastewater treatment	12	Growing to quickly
15	Small industry	12	Lack of a local park
	Logical & with property owner input.		
	Ag character		
	Hotel		
	Diversity of population - age/race/etc.		
	Quality education - all levels		
	Andrews Univ. students.		
	Local/regional planning		
	Local fair. (youth) convention center		
	Afford. housing for students		
	Develop a 'plan' - Community invest.		
	Unique farmland, "fruit."		
	Young person draw		
	Architectural control		

Total Number opportunities: 29

Total Number Threats: 16

SYNTHESIS

The seven breakout groups identified 83 “opportunities” and 47 “threats” in the exercise.

It is helpful to group the opportunity and threat statements into similar categories since the four breakout groups identified 83 “opportunities” and 47 “threats” in the exercise. The following grouping is intentionally general in scope. In addition, in some instances, the placement of statements in one category as opposed to another is a matter of judgment; and other groupings are possible. However, by combining the statements into similar groupings, it is possible to begin to make some generalizations about the opinions of the participants.

Each item has been categorized into seven broad planning issues. These issues have been summarized and condensed from the participants’ suggestions in the tables on the preceding pages. While the tables on the previous pages illustrate the participants’ comments in rank order, the following lists the comments by category. The categories are:

- (1) Agriculture/Farmland Preservation
- (2) Commercial/Industrial Development
- (3) Utilities
- (4) Cooperation and Comprehensive Planning
- (5) People, Housing and Community
- (6) Tourism and Marketing
- (7) Recreation

AGRICULTURE/FARMLAND PRESERVATION

Opportunities:

- Wine country
- Preserving agriculture
- Farmland preservation zoning district
- 4-5 wineries
- Farmer’s market
- Purchase of development rights
- Promote agriculture
- Protect Agriculture
- Capitalize on good climate for growing fruits
- Preservation of farm land [PDR’s]
- New farms & vineyards
- Ag character
- Unique farmland, “fruit.”

Threats:

- Farmland development
- Lack of youth in farming will lead to decreasing agriculture
- Subdivision=loss of farm land.
- Do not handcuff farmer

COMMERCIAL/INDUSTRIAL DEVELOPMENT**Opportunities:**

- Diversify tax – need character, mixed use / business base. Service, small start-ups.
- Close proximity to South Bend airport = potential for commercial development
- Presence of specialty stores – expand
- Future Comm. Dev. – 31 corridor, tax base, attractive
- Compact & mixed use.
- Enhance village core
- Hotel
- Green industry

Threats:

- Pollution from potential industry
- Lack of traffic downtown could hurt businesses
- Auto dominated development

UTILITIES**Opportunities:**

- Development of interchange through placement of water & sewer
- Keep higher densities near utilities and preserve agriculture in western portion of Township
- High tech infrastructure! Utilities.
- Commercial growth near 31 bypass w/ water & sewer
- Consider water/sewer expansion to US-31
- Infra structure \$ Sewer, water, etc.
- Sewer & water – 31 corridor
- Unique wastewater treatment
- Renewal energy – wind

Threats:

- Lack of water & sewer
- Lack of area for septic replacement drain fields
- Landfills
- Lack of infrastructure
- Lack of water & sewer will stifle growth (business growth follows path of least resistance)
- Lack of sewer/utilities/31

COOPERATION AND COMPREHENSIVE PLANNING

Opportunities:

- Planning for residential growth
- Interchange long-term planning
- Strengthen relationship with Andrews University
- Maintain rural character
- More industry & business promotes tax base
- Use PUDs
- Initiate “green energy” program – hydro, wind (?), solar
- Set example for sustainability, agriculture & education
- Prevent too much signage/clutter along 31
- Improved planning – always ask who benefits and who pays?
- Planned & controlled growth/community
- Cooperation w/ Village
- Use of modern/innovative planning methods. Smart growth. New urbanism
- Improve/modernize zoning consistency
- Natural resources – St. Jo River, Small lakes
- Small industry
- Logical & with property owner input.
- Local/regional planning
- Develop a ‘plan’ – Community invest.
- Architectural control

Threats:

- Road name changes – M-139, Old 31, 33, etc.
- Lack of coordination with local & local agencies, including Andrews
- Continued mistrust between village & township
- Lack of regional coordination, Baroda, adjacent Townships, utility extensions
- Lack of resources
- Lack of planning, coordination, uncontrolled growth

- Anti-growth attitude
- SOB – sexually-oriented businesses
- Bad economy/local & state
- Lack of job opportunities
- Lack of planning/vision for future
- Uncontrolled/unplanned sprawl
- Loss/reduction of private property rights
- Lack of communication/planning – dig into nitty gritty
- Single use concentrated zoning
- Past disagreements
- Growing too quickly

PEOPLE, HOUSING AND COMMUNITY

Opportunities:

- Berrien Co. youth fairgrounds expansion, expo.
- Public schools, private schools, school system
- Central location in County
- Andrews – resources, expand fine arts center
- Expand fairgrounds
- develop history center (courthouse in village)
- Fairground complex is good catalyst
- Support local/existing business & economy
- Retirement community - Andrews provides more services
- Keep dark skies w/ lighting standards
- Scenic land
- Maintain excellent educational system – leads to good families & values (public & parochial)
- Diversity of population – age/race/etc.
- Quality education – all levels
- Andrews Univ. students.
- Local fair. (youth) convention center
- Afford. housing for **students**
- Young person draw

Threats:

- Perceived lack of growth – if you don't grow you die
- Water pollution into the St. Joseph River
- Loss of balance between agriculture and development
- Contamination of Lake Michigan
- Scattered rural development
- Lack of jobs & young generation leaving town
- Loss of rural character

- Lack of access to water ways/Lake Chapin
- Lack of innovation
- Unattractive growth
- Highway access
- NIMBY attitude
- High taxes

TOURISM AND MARKETING

Opportunities:

- Agri-tourism
- Tourism & seasonal visitors only 10 mi. away, prox. to Chicago
- Festivals, annual events such as Passion plan, pickle fest
- Promotion of our farm/agricultural products such as Welch's grape juice
- Tourism - courthouse
- Nice gateways
- Gateway features
- Make promotional signage design harmonious w/ nature environment

Threats:

- Failure to market
- Travelers don't stop in town

RECREATION

Opportunities:

- Recreation/trails/bike paths/lake/river – many opportunities
- Pedestrian planning/bike trail/sidewalks/connectivity
- Recreational possibilities – proximity to Lake Michigan/multi-purpose trail
- Fishing on the river
- Improve recreational opportunities

Threats:

- Lack of walking paths, lack of alternatives to driving
- Lack of a local park

KEY FINDINGS

When reviewing the outcomes of the visioning meeting, it is clear that the expansion of water and sewer services along M-139 to the US-31 interchange and the preservation of agricultural operations are two important issues to residents of the Township, as reflected by the visioning participants. This sentiment is reflected in several instances where water/sewer expansion (or lack thereof) was overwhelmingly the most important opportunity (or threat) as voted on by the participants. Many participants felt that the lack of water and sewer facilities in this area is costing the Township many opportunities for commercial and industrial development that will strengthen the community's economy and attract employment opportunities.



The quality of discussion and the energy contributed by all participants was exceptional

Farmland preservation was also a key strategy among many participants in realizing their ideal “vision” of the Township, and agriculture was also mentioned in related uses such as agri-tourism and farm markets. Most participants recognized that the Township’s unique agricultural operations are very important to the identity of the community and sought to preserve farmland as much as possible. In addition, many participants felt that opportunities exist to “brand” the Township as a destination, suggesting that the Township’s agricultural operations may attract visitors that would strengthen the local economy.

Another concern expressed by many participants was that of cooperative planning with neighboring communities and with institutions such as Andrews University. While it did not rank as highly as the issues mentioned above, discussions of planning and cooperation occurred frequently, with many residents expressing a desire to strengthen these relationships so residents may capitalize on resulting opportunities that may strengthen the community.

Some participants were concerned that scattered residential developments in the Township’s abundant agricultural lands may begin to undermine the quality of life currently enjoyed by Township residents. Other participants, however, expressed a need to protect the private property rights of those landowners. Clearly, the plan should strive to maintain a balance between protecting the agricultural land that is so critical to the Township’s identity and economy while allowing landowners to flexibility necessary to manage their land.

NEXT STEPS

The next step is the preparation of goals and objectives. The goals and objectives will form the foundation for the Master Plan. The goals and objectives are used to help guide land use decision-makers when faced with development requests. Goals and objectives also led toward implementation steps that may include amendments to different ordinances in the Township, as well as additional studies.

A goal is generally defined as a desired state or condition a community is striving to achieve. It should be fairly long-term in nature and yet within the reach of a community to attain. The goal statement should be reflective of the values and attitudes of the community; and, therefore, it should enjoy broad-based support. Generally, a goal statement should be stated in positive terms.

By contrast, an objective statement is often described as a milestone to achieving, or a sub-element of, the goal. Objectives are more specific than goals and should have some measurable aspect so that progress toward the goal may be measured.

As the planning process proceeds, future land use mapping and narrative descriptions and implementation strategies will be developed. Implementation strategies outline how the Township may achieve its goals and objectives. These will be specific strategies and will describe who should do what, when it should be done and with which resources.

APPENDIX I.

OPEN HOUSE AND VISIONING WORKSHOP
PUBLICITY MATERIALS

Oronoko Township Open House and Visioning Workshop

The Oronoko Charter Township Planning Commission will host an open house and visioning workshop on Wednesday, March 4 at the Oronoko Township Public Safety Building. Oronoko Charter Township is in the process of developing a new Township Master Plan, and this meeting will be an important chance to gather public input for the plan. A Master Plan is a document that the Planning Commission, Township Board and land owners use as a guide for growth and development decisions.

The meeting will consist of an informal open house from 6:00 PM – 7:00 PM followed by a visioning workshop from 7:00 – 9:00 PM. The open house will be informal in nature, designed for residents to “drop in” and learn more about the Master Planning process. During the visioning workshop, residents will be asked to discuss topics that are important to them as they pertain to land use and development. The goals and objectives for the next twenty to thirty years will be based on the input received at this workshop.

This will be an important activity in the community and residents are encouraged to participate. If you would like further information, please contact Oronoko Charter Township at (269) 471-2824. Refreshments will be provided.

What: Open House and Visioning Workshop

Where: Oronoko Township Public Safety Building
4411 E Snow Road, Berrien Springs MI 49103

When: Wednesday, March 4, 2009
Open House: 6:00 – 7:00 PM
Visioning Workshop: 7:00 – 9:00 PM

Attention Oronoko Charter Township Residents

We Need Your Help!

A Master Plan Open House and Visioning Workshop

will be held on Wednesday, March 4th



Oronoko Township Public Safety Building
4411 E. Snow Road

Open House: 6:00 PM – 7:00 PM
Visioning Workshop: 7:00 PM – 9:00 PM



The workshop is designed to allow residents to express their opinions about current development and land use trends in the Township. Participants in the workshop will be asked to offer their “vision” for the future of the Township. This input will assist the Township Planning Commission in writing a new Master Plan, which will help to guide growth in the community.

The Planning Commission encourages your participation!

For additional information, contact Oronoko Township at (269) 471-2824

APPENDIX 2.

VISIONING WORKSHOP RESOURCE MATERIALS

The Visioning Exercise

Introduction. By participating in this visioning exercise, you are helping to shape the growth and development of Oronoko Charter Township. There are many forces that will impact the future of the Township. Some, like the climate or the economy, are totally out of our control at the local level. However, local decision-makers can directly impact others, like the way we plan our roadways, open spaces and residential developments. The Oronoko Township Master Plan will draw together the opinions of residents and this visioning workshop is intended to get your input.

Each group will be responsible for completing this activity. The staff will circulate through each session to answer questions.

- 1. Silent Listing of Ideas.** Think about your vision of an ideal future of Oronoko Charter Township. On the lines below, list as many opportunities and threats as you can think of. Opportunities are things that will help that vision become a reality, and threats are things that may prevent your vision from becoming reality.

Opportunities	Threats
a. _____	a. _____
b. _____	b. _____
c. _____	c. _____
d. _____	d. _____
e. _____	e. _____
f. _____	f. _____
g. _____	g. _____
h. _____	h. _____
i. _____	i. _____
j. _____	j. _____
k. _____	k. _____
l. _____	l. _____
m. _____	m. _____
n. _____	n. _____
o. _____	o. _____

(over)

2. **Share Your Ideas.** Go around the table with your group and make a list that includes everyone's Opportunities and Threats. The facilitator will make a group list. Don't eliminate any items at this stage unless they duplicate something that is already listed.
3. **Discuss Your Ideas.** Look over the group list carefully. Make sure you understand what is meant by each listing. Discuss each idea as necessary. At this stage, if the group feels some ideas are very similar, they may be combined into one item.
4. **Rank the Ideas.** Using the dots your facilitator has given you, rank your top three opportunities and threats in terms of importance to your vision. Use the following system:

Blue = Top Priority; Red = Second Priority; Green = Third Priority
5. **Tabulate the Votes.** Once you have placed all six of your dots on the group lists, take a break while your facilitator tabulates the votes. When this is finished, it will be possible to assign priorities to each opportunity and threat. Those receiving the highest score would be considered most important to the group.
6. **Select the Most Important Issue.** Working with the staff, select one of your most important threats or opportunities to use in constructing a Vision Statement. To avoid duplicating the work of another group, the staff will help you select one of your highest priorities that is not being addressed by others.
7. **Prepare a Vision Statement.** Working as a group, focus on the issue, threat or opportunity that you selected in #6 above. Prepare a vision statement that describes your vision for Oronoko Charter Township in the year 2030 as it pertains to this particular topic. For example, if in step 6 your group decided that "harm to the environment" was the most important threat, your Vision statement might be:

"In the year 2030, Oronoko Charter Township will be characterized by abundant and pristine natural areas that the Township has protected from harm while permitting a limited amount of environmentally sensitive development that meets the needs of residents and incorporates attractive design elements."
8. **Report on Your Activities.** When you have finished with step 7, return to the main group and report on the activities of your group.

Thank you for your participation!

Oronoko Charter Township Land Use Images

Check the box that corresponds to your impressions of the slides that are shown or write in your own impressions if you don't like any of the suggested responses. Please be honest, there is no "right or wrong" and you don't have to put your name on this form.

1. Farm/Subdivision conflict.

Which phrase/word best applies?

- ☐ Looks good
- ☐ No problem, part of suburban living
- ☐ Odor complaints can be expected
- ☐ _____

2. Highway strip commercial.

Which phrase/word best applies?

- ☐ Unattractive development
- ☐ Good tax base
- ☐ Lacks character/identity
- ☐ _____

3. Farmland.

Which phrase/word best applies?

- ☐ Preserve and protect it
- ☐ Keep people away
- ☐ Good development potential
- ☐ _____

4. Rural housing development.

Which phrase/word best applies?

- ☐ Rural living
- ☐ Inefficient use of land
- ☐ Nice middle-class housing
- ☐ _____

5. Neighborhood strip commercial.

Which phrase/word best applies?

- ☐ Too cluttered
- ☐ Causes automobile traffic
- ☐ Not inviting; no place for people
- ☐ _____

6. Light industry/office.

Which phrase/word best applies?

- ☐ Jobs and tax base
- ☐ Will bring traffic
- ☐ Detriment to the environment
- ☐ _____

7. Littered yard.

Which phrase/word best applies?

- ☐ Looks O.K.
- ☐ Somewhat junky looking
- ☐ An eyesore
- ☐ _____

8. Wooded housing development.

Which phrase/word best applies?

- ☐ Too dense
- ☐ Good starter home option
- ☐ Site planning protects trees
- ☐ _____

9. Undeveloped lake.

Which phrase/word best applies?

- ☐ Preserve and protect it
- ☐ Keep people away
- ☐ Good recreational opportunity
- ☐ _____

10. Public utilities.

Which phrase/word best applies?

- ☐ Promotes growth
- ☐ Protects water quality
- ☐ Expensive
- ☐ _____

