

An aerial photograph of Northfield Township, Michigan, showing a large parking lot, a building, and a road interchange. The image is overlaid with a blue tint.

NORTHFIELD TOWNSHIP MASTER PLAN

NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

prepared by McKenna

February 15, 2019 DRAFT

ACKNOWLEDGMENTS

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01.

INTRODUCTION

The Northfield Township Master Plan articulates a vision for the Township's future growth and development and brings together several planning efforts that the Planning Commission has undertaken to guide its future decision making. This Master Plan was developed considering input from a variety of sources including, but not limited to: two 2018 public open houses, and past events including a public opinion survey, two (2) planning fairs, the 2017 Downtown Strategic Action Plan and Design Framework, the 2015 Parks and Recreation Plan, and the 2016 North Village Master Plan.

Once adopted, the Master Plan is the official policy guide to be used by the Northfield Township Board of Trustees and the Planning Commission to guide land use decisions and to solve community development problems. This Master Plan is not only a vision statement towards future growth and development but also a document that allows continuity in development policies as Planning Commissioners and Township Board Trustees change over the years.

HOW TO USE THIS PLAN



The Northfield Township Master Plan and Sub-Area Plans for Downtown and North Village is the only officially adopted document which sets forth an agenda for the achievement of land use goals and policies. The Master Plan is a long-range statement of general goals and policies aimed at unified and coordinated development of the Township. More specifically, this Master Plan is to be used in the following manner:

1. It is a general statement of the Township’s goals and policies and provides a single, comprehensive view of the community’s desire for the future.
2. It serves as an aid in daily decision-making. The goals and policies outlined in this Plan guide Planning Commissioners and Township Board of Trustees in their deliberations on zoning, subdivisions, capital improvements, and other matters relating to land use and development. The Master Plan provides a stable, long-term basis for decision-making.
3. State law requires that communities have a Master Plan as the foundation for the zoning ordinance and other regulations that shape the physical and social development of the community. However, the Master Land Use Plan and the zoning ordinance and map are two separate documents. Zoning is one of the many legal tools used to implement the Master Land Use Plan.
4. It attempts to synchronize public improvements and private development by coordinating development areas that best utilize existing infrastructure within the Township, aligning future land uses and future infrastructure investments, and working collaboratively with external funding sources with respect to County, State, and Interstate roadways that are within the Township’s boundaries.
5. Finally, this Master Plan serves as an educational tool and gives residents, property owners, developers, and adjacent communities a clear indication of the Township’s direction for the future.

WHAT THIS PLAN CONTAINS

The Northfield Township Master Plan begins with a brief overview of the plan as well as a description of the planning process which was used to develop the plan. The plan outlines the planning priorities for Northfield Township and covers:

- **Regional Context** – Chapters One and Two provide information related to the general location of the Township.
- **Community Goals** – Chapters Four and Five present the basis for this Master Plan. The goals were developed from input received from Township officials, staff and residents.
- **Future Land Use Plan** – Chapter Six and Seven provide specific visions for the future of each of the Township’s sub-areas and outlines Township-wide policies.
- **Transportation Plan** – Chapter Eight outlines current and future transportation enhancement and improvement opportunities related to US-23 interchanges, non-motorized transportation, streets designed for all users (known as Complete Streets), etc.
- **Implementation** – Chapter Nine provides ways in which the goals and objectives of this Master Plan can be achieved.
- **Community Description** – Chapters Ten through Twelve provides information on the social, economic, and physical characteristics of the community.

In addition, memorandums were prepared to provide a summary of the feedback received at the 2018 public open house events.

Planning Process

Recognizing the importance of public involvement in the planning process, this Master Plan was developed using input from Township officials, staff, and Township residents. Two (2) public open houses were held where participants were encouraged to suggest improvements and future directions. The first open house was held on October 17, 2018 at the Township Hall and the second was held on October 25, 2018 at the Whitmore Lake High School. Additionally, the Township asked for big ideas from residents on a comment board in Township Hall between November of 2018 and February of 2019. The Input from Township officials and the members of the Planning Commission were considered in the process. All meetings of the Planning Commission were open to the public. This Master Plan also followed the requirements of the State Planning Enabling Act and included a 63-day public review period and a public hearing.

Table 1: Milestones and Input Participation

	Community Description	Public Input	Goal Verification	Master Plan	Public Hearing	Plan Adoption
Board of Trustees		●				
Planning Commission	●	●	●	●	●	●
Staff	●	●	●	●	●	●
Residents		●	●		●	
Adjacent Community Officials			●	●		



02.

REGIONAL CONTEXT

In planning for the future of a community, it is essential to understand both the community of people to be served and the physical resources which the community has to offer.

Identifying the needs of Northfield Township residents, property owners, and businesses will help define an appropriate action plan, while available resources will help shape where and how the plan is implemented. The purpose of the following section of the Master Plan is to provide an overview of the human and physical resources of Northfield Township with the goal of understanding the unique features and opportunities the community has to offer.






MAP 1
Regional Context

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

-  City and Township boundaries
-  Rivers, streams, and lakes
-  Parks



SOURCES
 Basemap Source: Michigan Geographic
 Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019



REGIONAL SETTING



Northfield Township is located in northeastern Washtenaw County, approximately one (1) mile north of the City of Ann Arbor, 47 miles west of Detroit, and covers about 36 square miles in area. Northfield Township is bordered by Salem Township to the east, Ann Arbor Township to the south, Webster Township to the west, and Green Oak Township in Livingston County to the north.

Washtenaw County is the sixth largest county in the State of Michigan. It is located in the west area of the Southeast Michigan Council of Governments (SEMCOG) region. SEMCOG is the regional planning agency that conducts planning studies and maintains a comprehensive database of information about the following seven counties: St. Clair, Macomb, Oakland, Livingston, Washtenaw, Wayne, and Monroe.







MAP 2
**Adjacent
 Municipalities**

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

-  City and Township boundaries
-  Roads
-  Rivers, streams, and lakes
-  Parks



SOURCES
 Basemap Source: Michigan Geographic
 Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019





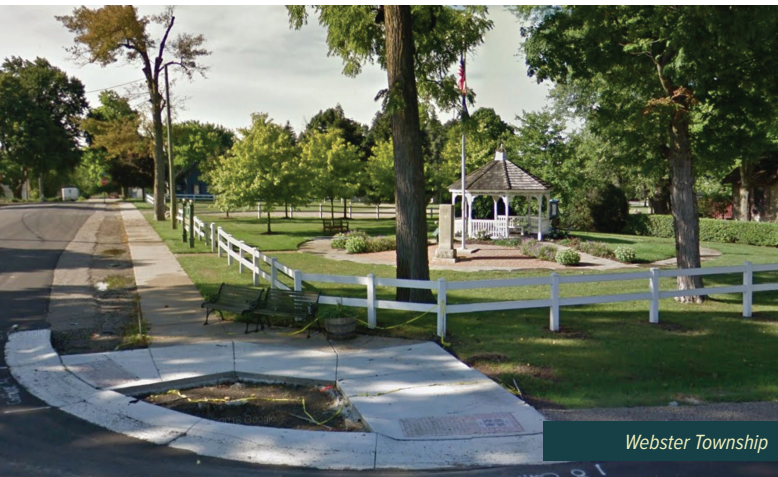
South Lyon



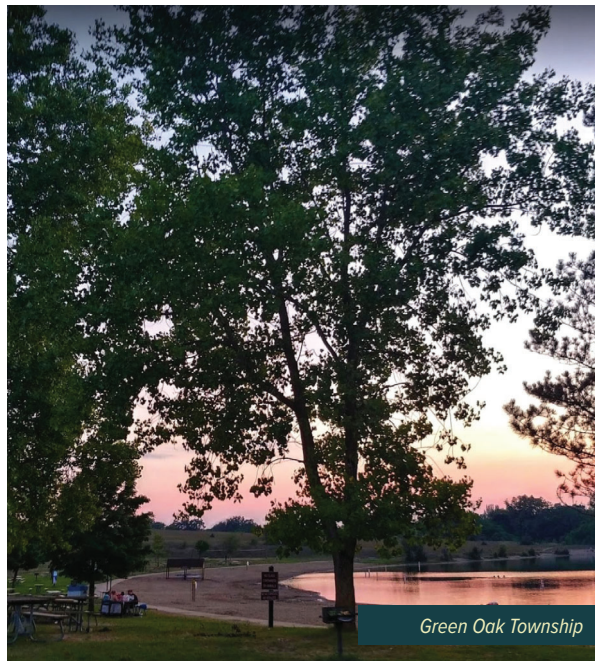
Webster Township



Ann Arbor Township



Webster Township



Green Oak Township



03.

NORTHFIELD TOWNSHIP GUIDING PRINCIPALS

In addition to the goals, objectives, and policies discussed as part of this Master Plan document, the Northfield Township Board has adopted the following guiding principles.

VISION STATEMENT

The Township of Northfield aspires to be a hospitable and pleasant community that nurtures its diverse natural, historical, cultural and social assets to foster a safe, clean, prosperous, attractive place in which to live, work, shop, grow and play.

STATEMENT OF MISSION AND PURPOSE

To provide efficient and effective Township services, through comprehensive planning based on long-term systematic principles that foster an open, honest, responsive government. To do this in an environment that provides for maximum services provided in a fiscally conservative manner.

STATEMENT OF VALUES

- Active citizen involvement in determining the direction of the Township government and the public services it provides.
- Respect for the individual and the individual voice and service for the common good.
- A responsive and responsible public service delivery system.
- Positive change, innovation, and creativity.
- Well-trained employees committed to excellent customer service.
- Respect for our heritage and cultural achievements.
- We value the enterprise of local merchants and support their efforts.

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EXIT 3

23 BUSINESS
DOWNTOWN ↗
Ann Arbor

EXIT 30
30 MPH



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04.

EXISTING LAND USE AND COMMUNITY PLANS

The pattern of development for Northfield Township reflects the influence of the Ann Arbor and Brighton regional areas. US-23 is the major roadway that links Northfield Township to both Ann Arbor and Brighton.

PAST PLAN INITIATIVES

A number of existing and anticipated circumstances will affect Northfield Township's future. These include decentralized places of employment with increased commuting distances and conversely, an increase in those working at home. These factors gathered from past experiences, SEMCOG studies and Census information, together with the attraction of the Ann Arbor area as a place to live and work will provide development opportunities and pressure on Northfield Township for many years to come.

The Township responded to these challenges in a variety of ways including a continued commitment to community planning goals and policies geared to preserving important natural features, while planning for growth in those areas most suitable for development.

The following plans, policies, and initiatives highlight Northfield's commitment to careful preservation and land use planning:

NORTH VILLAGE MASTER PLAN (2017)

The Township engaged residents and stakeholders to create a plan for a piece of Township-owned property located west of Whitmore Lake between Main Street and US-23. The North Village Plan identifies uses for the site based on community goals and input received. The plan, when realized, will create additional housing, open space and community gathering spaces, and recreation opportunities.

- The 2019 Northfield Township Master Plan includes and adopts the policies and recommendations of the North Village Master Plan.

DOWNTOWN STRATEGIC ACTION PLAN AND DESIGN FRAMEWORK (2017)

The purpose for the Downtown Strategic Action Plan and Design Framework was to create a comprehensive strategy for the revitalization of Downtown Whitmore Lake. A combined analysis of other thriving downtowns and the input gathered from the community was the foundation for the plan which outlines a community vision, strategies, and a design framework for Downtown Whitmore Lake.

- The 2019 Northfield Township Master Plan includes and adopts the policies and recommendations of the Downtown Strategic Action Plan and Design Framework.

FAÇADE IMPROVEMENT PROGRAM

In an effort to reverse the deterioration that has occurred in some of the buildings and shops in the Downtown Whitmore Lake area, the Northfield Township Downtown Development Authority (DDA) established the Grant Façade Improvement Program. The program recognized the importance of the unique architectural quality of the Downtown Whitmore Lake area by providing funding for exterior building improvements that encourage good design, properly renovate or restore existing structures, and preserve the unique traditional and historical character of the downtown. The program has since become inactive, but could be re-established should funding become available.

PARKS AND RECREATION PLAN (2015)

The purpose of a Parks and Recreation plan is to guide recreation planning and management efforts within the Township over a five (5) year period. Parks and Recreation Plans are intended to meet state standards for community recreation planning that are necessary to gain eligibility for grant programs. To maintain eligibility for Michigan Department of Natural Resources grant assistance programs, a parks and recreation plan should be updated and adopted every five years.

EXISTING LAND USE

Table 2 and the Existing Land Use Map illustrate the existing land uses or land cover in the Township.

Between 2000 and 2008, the land use categories Agriculture and Single-Family Residential experienced the largest declines and increases, respectively, in acreage. Agriculture saw a 17% decrease in the amount of acreage, while Single-Family Residential experienced a 47% increase in acreage. However, the large increase in Single-Family acreage is likely due to the removal of the “Under Development,” “Grassland and Shrub,” and “Woodland and Wetland categories.”

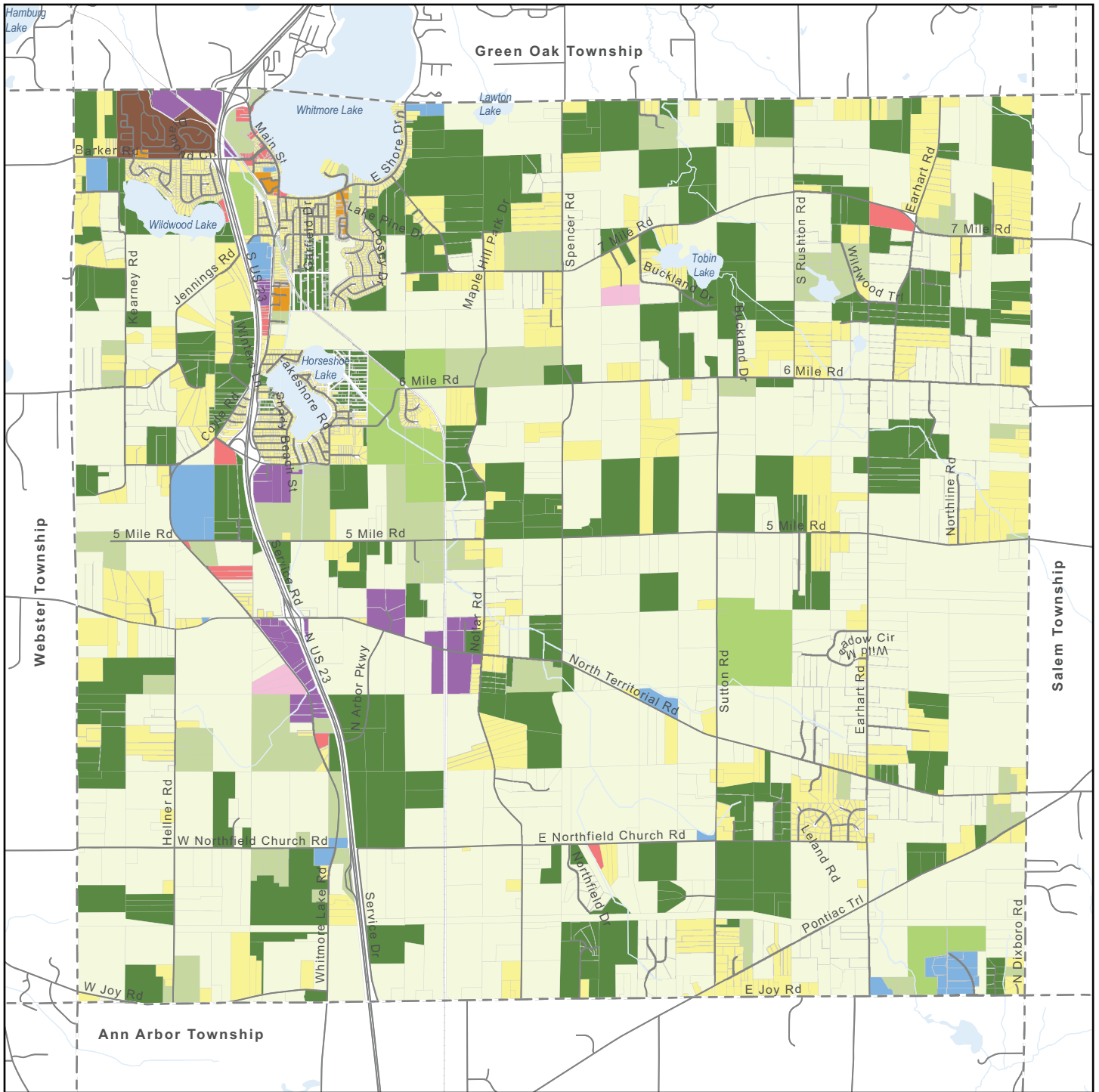
Table 2: Land Use/Land Cover

SEMCOG 2008 Land Use	2000 (acres)	2008 (acres)
Agriculture	10,771 (46%)	6,885 (29%)
Single-Family Residential	2,643 (11%)	13,498 (58%)
Multiple-Family Residential	45 (0%)	30 (0%)
Commercial	48 (0%)	558 (2%)
Industrial	206 (1%)	393 (2%)
Governmental/Institutional	85 (0%)	326 (1%)
Park, recreation, and open space	365 (2%)	420 (2%)
Airport	—	—
Transportation, Communication, and Utility	206 (1%)	706 (3%)
Water	624 (3%)	642 (3%)
Under Development*	121 (1%)	—
Grassland and Shrub*	2,104 (9%)	—
Woodland and Wetland*	6,236 (27%)	—
TOTAL	23,454**	23,456*

Source: SEMCOG

* These classifications are not represented in the SEMCOG 2008 Land Use analysis. 2008 is the most recent available land use data. Accessed February, 11, 2018.

** The difference in acreage is due to newly created water bodies and differences in interpretation between wetland and water coverage.


















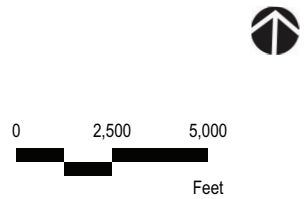
MAP 3
Existing
Land Use

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- | | |
|--|--|
|  Agricultural |  Single Family Housing |
|  Commercial |  Under Development |
|  Grassland and Shrubs |  Woodlands |
|  Industrial |  City and Township boundaries |
|  Institution |  Roads |
|  Manufactured Housing |  Railroads |
|  Multifamily Housing |  Rivers, streams, and lakes |
|  Recreational | |



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019

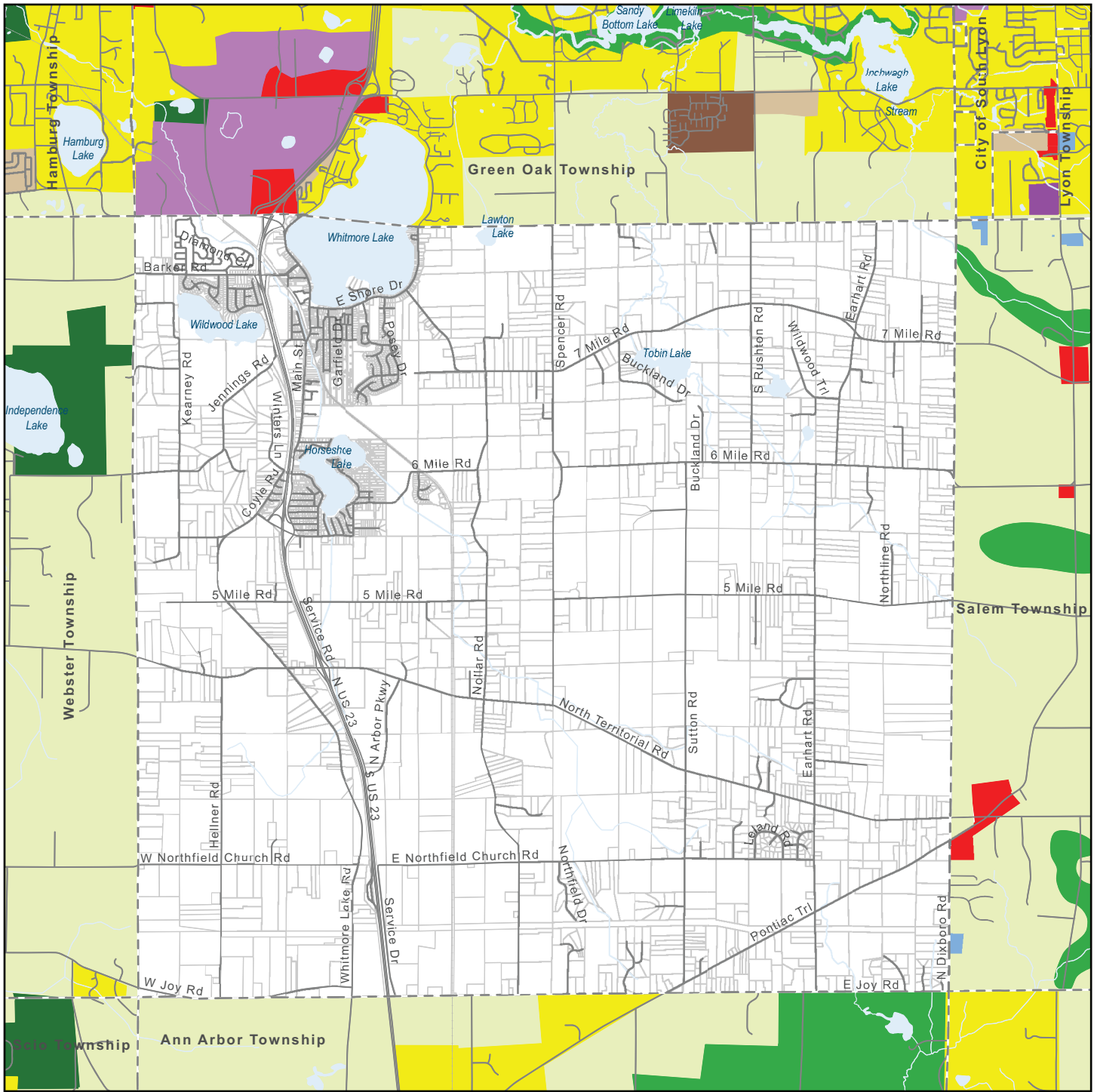


NEIGHBORING COMMUNITIES

Northfield Township borders eight (8) townships, including: Ann Arbor Township, Green Oak Township (Livingston County), Hamburg Township (Livingston County), Lyon Township (Oakland County), Salem Township, Scio Township, Superior Township, and Webster Township. While the townships generally share similar goals regarding maintaining rural character and preserving farmland, the development activities and planning policies in these communities can influence Northfield’s future character. The surrounding Future Land Use Map illustrates the different planned land uses for the areas adjacent to Northfield Township.

The areas surrounding Northfield Township to the east, west and south are planned to remain as agricultural and/or rural residential uses. Adjacent to the north, Green Oak Charter Township (Livingston County) has planned for industrial, commercial and residential uses around and to the east of Whitmore Lake that directly abut the northwest corner of Northfield Township. Similarly, to the northeast, both the City of South Lyon and Lyon Township (Oakland County) have a mixture of uses adjacent to Northfield Township including an open space conservation area and planned residential uses directly adjacent to the northeast corner of Northfield Township.





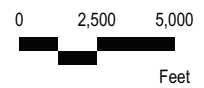
MAP 4
Surrounding
Future Land Use

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- Agriculture
- Commercial
- Industrial
- Institutional
- Multifamily
- Manufactured Housing
- Mixed Use
- Open Space
- Recreation
- Single-Family
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019



GROWTH MANAGEMENT INITIATIVES

While change is inevitable and growth will occur, Northfield Township is committed to managing that growth to enhance economic benefit, recreational activities, and overall quality of life for all residents. A number of planning initiatives recently took place in Washtenaw County and Northfield Township which have relevance to the current Plan. Elements of these various plans and initiatives are incorporated throughout this document, and are considered adopted by reference herein.

Washtenaw County Initiatives

2004 WASHTENAW COUNTY COMPREHENSIVE PLAN

The 2004 Comprehensive Plan for Washtenaw County recommends a development pattern for Northfield described and illustrated below as follows:

- Sustainable small city and village development encouraging social interaction and environmental health;
- Maintain a sense of place by preserving open spaces around activity centers;
- New activity centers promote mixed-use, pedestrian friendly development, and homes in close proximity to work and densities that support transit; and
- Maintaining agriculture and low density rural residential uses outside the urban patterns to maintain rural character.

WASHTENAW AREA TRANSPORTATION STUDY (WATS)

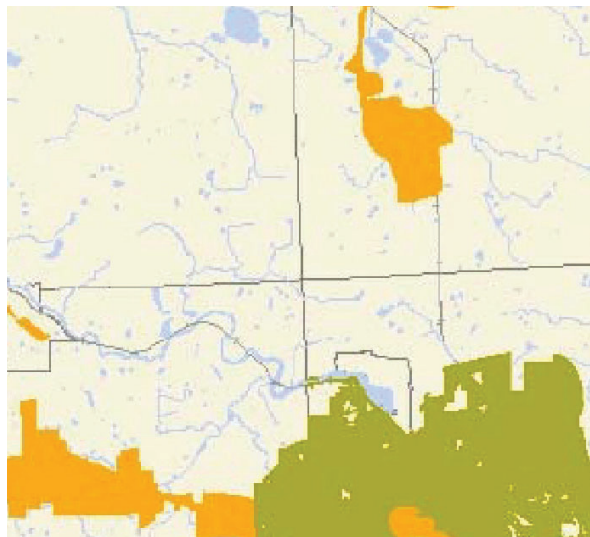
The Washtenaw Area Transportation Study has provided a 2045 Long Range Transportation Plan for the County. The plan includes goals and capital and operating improvement projects which involve reconstruction or resurfacing, transit improvements, intersection and widening projects, as well as non-motorized projects.



**2010
COMPREHENSIVE ECONOMIC
DEVELOPMENT STRATEGY**

Washtenaw County’s Comprehensive Economic Development Strategy was adopted in June 2010. Sustained economic growth created a need to bring the public, private, education and not-for-profit sectors together to create an economic roadmap to a diverse and strong local economy. The strategy provides the flexibility to adapt to global economic conditions, fully utilize the community’s unique advantages to attract private investment and maximize economic opportunity for the area.

Figure 1: 2010 Comprehensive Economic Development Strategy Economic Development Incentive Zones



- Local Government Downtown Development Authorities
- Core Communities

**2007
TRANSIT PLAN FOR
WASHTENAW COUNTY**

In an effort to move towards a comprehensive transit service in Washtenaw County, WATS initiated this effort to analyze data and to support a county wide service plan that could be developed by the Ann Arbor Transportation Authority (AATA) and the other transit providers. The Transit Plan for Washtenaw County identifies current providers of transit service within Washtenaw County, deficiencies and needs including destinations that lack adequate transit facilities.

**2018
WASHTENAW COUNTY
NON-MOTORIZED PLAN**

In 2018 WATS updated the Washtenaw County Non-Motorized Plan which inventoried existing County-wide non-motorized transportation facilities, identified missing links, and provided implementation recommendations for communities. The plan identifies Whitmore Lake Road / Main Street / 8 Mile, 7 Mile / Barker, North Territorial, and Pontiac Trail as primary links for rural bike accommodations.



Focusing Growth on Downtown

2002 DOWNTOWN DEVELOPMENT AND TAX INCREMENT FINANCING PLAN

The Northfield Township Downtown Development and Tax Increment Financing Plan was adopted in 2002. The 2002 plan focused DDA efforts upon undertaking public improvement activities that have the greatest impact on strengthening the business district and attracting new private investments within the downtown development district, which is located along the Main Street corridor. The 2002 plan should be updated to ensure that the DDA boundaries, capture potential, and public improvement priorities remain current.

2017 NORTH VILLAGE MASTER PLAN

As mentioned, prior, the North Village Master Plan outlines goals, objectives, and design objectives for the development of a 23-acre Lakefront Parcel acquired by the Township. The plan is an adopted sub-area plan of this Master Plan.

2017 DOWNTOWN STRATEGIC ACTION PLAN AND DESIGN FRAMEWORK

As mentioned, prior, the *Downtown Strategic Action Plan and Design Framework* outlines goals, objectives, and design objectives for the development and investment in downtown Whitmore Lake and Northfield Township. The plan is an adopted sub-area plan of this Master Plan.



NORTHFIELD TOWNSHIP SENIOR CENTER 9101

Senior Center
SEPT 10 LUNCH 11:15
O CASH ONLY CLOSED
LA THU 10:30
10:30 AM - 12:00 PM

Senior



05.

COMMUNITY GOALS AND POLICIES

Northfield Township is a growing community that faces the difficult challenge of accommodating increasing growth and development while retaining its rural character. A key component of the Northfield Township Master Land Use Plan is the articulation of a vision for the Township's future growth and the formulation of community goals which reflect the community's desires regarding how to respond to future development.

The goals of the community attempt to balance the various interests and ensure that each development decision is consistent with the overall vision for the Township. They help articulate preferred development patterns and outline development strategies for the Township.

The community goals were originally developed with input from residents, property and business owners, the Planning Commission, the Township Board of Trustees, and other Township officials, and then reaffirmed by the public for the 2019 plan update.

Public Participation efforts are described in greater detail in the following sections. Summaries of findings for the Public Participation Events and are prepared in memorandums and attachments to this plan.

2018 AND 2019 PUBLIC PARTICIPATION



Public Participation for the update to the Master Plan included two evening open house events. The first was held on October 17, 2018 in Public Safety Building. The meeting was held following a regularly scheduled Planning Commission meeting and was well attended by members of the Township Board of Trustees, Planning Commission, and the public. The second event was held on October 24, 2018 at Whitmore Lake High School. This was an informal, “pop-up” event that allowed visitors to the high school to stop in and ask questions or make comments. Between the two events, a variety of groups were encouraged to participate in the planning process.

During each event, the planning team set up boards for members of the public to view and provide feedback. In particular, the goals board provided a list of the

goals developed during the 2010 master planning process and were later adopted into the final version of the plan. Members of the public were asked to comment on the goals and their continued importance for the community. Additionally, future land use was a frequently mentioned topic. Several of the boards presented the Master Plan’s future land use goals and members of the public provided ample feedback related to land uses in various parts of the Township.

Based on the feedback received during these two events as well through discussions with members of the Township Board of Trustees and the Planning Commission, the planning team is able to provide an informed update to the Master Plan.

2010 PUBLIC PARTICIPATION

The Public participation conducted in 2010 was used to guide the development of the goals and objectives of this master plan. The 2018 public engagement validated this process. The 2010 Public participation was sought through a mailed survey of residents, two (2) Planning Fairs conducted in the summer of 2010, and a public hearing conducted by the Planning Commission on May 2, 2012.

On June 16, 2010 and July 14, 2010, the Northfield Township Planning Commission conducted Planning Fairs for the purpose of inviting resident involvement in the Master Planning process. The first Planning Fair was held at Fire Station #2, and the second in the upper floor of the Municipal Building. Both workshops were open to the public.

A compilation of all comments received was formulated and organized by both topic and sub-area. Generally, the topics which prompted the most discussion among participants included:

- Agriculture
- Residential Development
- Commercial Development
- Development (General)
- Natural Features / Open Space Preservation / Recreation
- Utilities / Road

Preservation of the Township's rural atmosphere and the continued redevelopment of the Downtown area represented a clear majority of participants' comments from both Planning Fair sessions.

GOALS

Place a dot by your highest priority goal. On a sticky note, write comments, projects, and ideas for each goal and place in the corresponding row.

- 1** Maintain the rural character and preserve the local characteristics of Northfield Township including a viable, stable agricultural industry by encouraging the retention and preservation of farmland and agricultural production as well as the preservation of general open space in the undeveloped areas of the Township.
- 2** Systematically preserve open spaces and greenways to maintain the quality of life in Northfield Township, to preserve critical environmental areas, and to maintain rural character.
- 3** Guide residential development in a manner which will create, preserve and enhance a quality living environment for existing and future Township residents.
- 4** Preserve and strengthen the existing character of the downtown area as a historic, pedestrian-scaled community, with traditional site and architectural design creating an aesthetically memorable place with vibrant streetscapes and community spaces that engage the waterfront.
- 5** Encourage development of a mix of commercial, office, service and multiple-family residential uses in three (3) specific locations that are situated for this use.
- 6** Promote quality, job producing economic development within the Township that serves the needs of the Township residents.
- 7** Provide a variety of safe, efficient modes of transportation to meet the needs of Township residents and visitors.
- 8** Provide timely, efficient, and quality governmental services to Township residents.

MCKENNA

NORTHFIELD TOWNSHIP - MASTER PLAN OPEN HOUSE - OCTOBER 17, 2018

Master Plan Survey

In the summer of 2010, Northfield Township began a comprehensive community survey of its residents. The survey is one important tool in obtaining the input of residents on many important issues facing the community. This input assists the Township's elected and appointed officials in the process of preparing a Master Plan. The responses provided will help guide the Township in the planning of land use and transportation, arts and culture, recreation and leisure activities, economic development, capital improvement expenditures, open space preservation, and other Township public policies.

A community survey was mailed to all Township taxpayers in the summer of 2010. Respondents had the option of returning the completed survey form to the Township Hall or completing the survey online. A total of 368 people participated in the survey which concluded in the fall of 2010.

The survey included six (6) sub-topics of questions:

- 1** **Demographics** – Inquired about age, gender, educational attainment, household income, employment status, residency, etc.
- 2** **Strengths and Weaknesses** – Asked respondents what they like best / least about Northfield Township, what the most / least important issues are facing Northfield Township, and what types of development they would like to see in the Township.
- 3** **Funding Options** – Discussed possible millage options to gauge the community's support if pursued.
- 4** **Areas of Concern** – These open-ended questions asked respondents to list specific concerns that they felt should be addressed.
- 5** **Non-Resident Questions** – These questions were intended to get specific feedback from those respondents not currently residing in the Township about their perceptions of Northfield Township.
- 6** **Contact Information** – Respondents were asked to provide their contact information.

From the Planning Fair comments and Survey results, the Northfield Township Planning Commission has formulated the following community goals and objectives to serve as the basis for the future development of Northfield Township and the Whitmore Lake community.

Goals are general statements that guide the direction and character of future development. Policies set forth a framework for action and form the basis upon which more detailed development decisions may be made. Adoption of policies does not commit Northfield Township to any particular recommendation, but, rather provides guidance as to actions consistent with policy guidelines.

NORTHFIELD TOWNSHIP GOALS

The following statements reflect the primary goals of Northfield Township:

- *Maintain the rural character and preserve the local characteristics of Northfield Township including a viable, stable agricultural industry by encouraging the retention and preservation of farmland and agricultural production as well as the preservation of general open space in the undeveloped areas of the Township.*
- *Systematically preserve open spaces and greenways to maintain the quality of life in Northfield Township, to preserve critical environmental areas, and to maintain rural character.*
- *Guide residential development in a manner which will create, preserve and enhance a quality living environment for existing and future Township residents.*
- *Preserve and strengthen the existing character of the downtown area as a historic, pedestrian-scaled community, with traditional site and architectural design creating an aesthetically memorable place with vibrant streetscapes and community spaces that engage the waterfront.*
- *Encourage development of a mix of commercial, office, service and multiple-family residential uses in three (3) specific locations that are situated for this use.*
- *Promote quality, job producing economic development within the Township that serves the needs of the Township residents.*
- *Provide a variety of safe, efficient modes of transportation to meet the needs of Township residents and visitors.*
- *Provide timely, efficient, and quality governmental services to Township residents.*

GOAL:

AGRICULTURAL / OPEN SPACE

Maintain the rural character and preserve the local characteristics of Northfield Township including a viable, stable agricultural industry by encouraging the retention and preservation of farmland and agricultural production as well as the preservation of general open space in the undeveloped areas of the Township.

POLICIES:

- Develop and support incubators for local farming activities and retain the agricultural use of prime agricultural soils and promote soil conservation.
- Guide development to foster the responsible use of land, preserve farmland and natural features, and to make the best use of existing public services, utilities and infrastructure.
- Maintain a pattern of development with clear edges and transitional areas preserved as open space buffers delineating village, rural, and suburban landscapes.
- Direct non-agricultural uses away from areas of the Township ideally situated and conditioned for agriculture.
- Encourage and support open space and agricultural operations through preservation programs, such as P.A. 116 (Farmland Preservation), Purchase of Development Rights (PDR), Conservation Easements, or other means to maintain the viability of agriculture and open space in the community.
- Maintain and promote active farmland by supporting and developing new markets for agricultural products.
- Protect existing farmland, open space and natural features views along Township roads.
- Discourage extension of public sewer or water service into rural areas of the Township ideally situated and conditioned for open space and natural features preservation and agriculture.
- In order to preserve agriculture and open space, residential development is strongly encouraged to take a form where residential lots can be clustered to allow continued agriculture and open space on the remainder of the acreage.
- Encourage protection of the Township's rural character by promoting the preservation and restoration of historic structures, including historic farm houses, barns and other farm buildings.



GOAL:

NATURAL RESOURCES

Systematically preserve open spaces and greenways to maintain the quality of life in Northfield Township, to preserve critical environmental areas, and to maintain rural character.

POLICIES:

- Guide development to foster the responsible use of land, preserve farmland and natural features, and make best use of existing public services, utilities, and infrastructure.
- Maintain a pattern of development with clear edges and preserved open space buffers delineating village, rural, and suburban landscapes.
- Preserve an interconnected system of riparian corridors, woodlands, tree rows, and open spaces.
- Protect the water quality of the Township's lakes and water systems particularly Whitmore, Horseshoe, and Wildwood Lakes.
- Consider the impact of all proposed development(s) on the waterways, wetlands, woodlands, other natural resource areas, and groundwater recharge areas.



GOAL:

RESIDENTIAL DEVELOPMENT

Guide residential development in a manner which will create, preserve and enhance a quality living environment for existing and future Township residents.

POLICIES:

- Guide development to foster the responsible use of land, preserve farmland and natural features, and to make best use of existing public services, utilities and infrastructure.
- Maintain a pattern of development with clear edges and preserved open space buffers delineating village, rural and suburban landscapes.
- Provide diversity in housing opportunities while retaining an attractive rural character.
- Strongly encourage clustered development options to preserve open space and retain the Township's rural character.
- Encourage well-planned, safe and walkable residential neighborhoods.
- Limit residential development in areas where conditions are least capable of supporting development. Consider each development based upon the suitability of soils, impact on woodlands, wetlands, floodplains, water bodies, and infrastructure capacity (roads and utilities).
- Higher density residential development should be limited to areas serviced by municipal utilities within or adjacent to the village area.



GOAL:

VILLAGE CENTER

Preserve and strengthen the existing character of the downtown area as a historic, pedestrian-scaled community, with traditional site and architectural design creating an aesthetically memorable place with vibrant streetscapes and community spaces that engage the waterfront.

POLICIES:

- Guide development to foster the responsible use of land, preserve farmland and natural features, and to make best use of existing public services, utilities and infrastructure.
- Maintain a pattern of development with clear edges and preserved open space buffers delineating village, rural and suburban landscapes.
- Encourage and permit mixed-uses with a village-scale and character.
- Encourage an increased building height in keeping with the character of the area with residential or office uses on the upper floors and retail on the ground floor.
- Encourage buildings to be built closer to the road right-of-way with reduced front setback.
- Establish a zoning district to accommodate compatible and complimentary mix of uses within the downtown area. Utilize form-based code ideas and concepts for spatial relation and dimensional requirements.
 - » Encourage infill development in a traditional neighborhood pattern with interconnected streets and walking and bicycle access to Main Street / Whitmore Lake Road.
 - » Develop well-planned, safe and walkable residential neighborhoods.
 - » Actively promote the development of community public spaces such as a beach, pavilion / event area, Township park, or other similar uses.
 - » Integrate public gathering areas within a pedestrian / non-motorized circulation system.
 - » Preserve waterfront views by carefully considering new development proposals.



GOAL:

MIXED USE DEVELOPMENT

Encourage development of a mix of commercial, office, service and multiple-family residential uses in three (3) specific nodes that are situated in a way to accommodate these types of land uses. The first Mixed Use (MU) area is found in the vicinity of the US-23 / North Territorial interchange. The second area is found between Main Street and US-23 north of the Horseshoe Lake area. The third area of consideration is the property found roughly west of the US-23 / Eight Mile Road interchange. Each of these areas are uniquely situated in proximity to either a freeway interchange or a higher volume roadway.

POLICIES:

- Guide development to foster the responsible use of land, preserve farmland and natural features, and make best use of existing public services, utilities and infrastructure.
- Accommodate a variety of land uses consistent with the community desires, surrounding land uses, and the environment.
- Maintain a pattern of development with clear edges and preserved open space buffers delineating village, rural, and suburban landscapes.
- Commercial development shall be organized into compact, unified commercial centers that complement the scale and character of existing development or that promote the desired character for areas where new development is planned.
- Large-scale retail buildings should be designed for potential re-use if vacated by the original user(s).
- Piecemeal or scattered development should be avoided and uncoordinated commercial strip development should be discouraged. Where individual parcels of land are to be developed for commercial uses, coordination with adjacent properties, including common parking and driveways, shall be encouraged in order to reduce the number of access points to public roads.
- Encourage residential or mixed use development (including residential uses) as a buffer between adjacent residential areas and other uses within this planned area. Such uses shall not create adverse impacts on existing or proposed residential or agricultural uses and will be scaled, designed and landscaped so as to complement and enhance the adjacent properties.
- Encourage high quality site and building designs that include the latest “green” technology and contribute to community sustainability, strong neighborhoods, vital shopping districts, and desirable employment centers.

GOAL:

COMMERCIAL / INDUSTRIAL DEVELOPMENT

Promote quality, job producing, economic development within the Township that serves the needs of the Township residents.

POLICIES:

- Guide development to foster the responsible use of land, preserve farmland and natural features, and make best use of existing public services, utilities, and infrastructure.
- Maintain a pattern of development with clear edges and preserved open space buffers delineating village, rural and suburban landscapes.
- Commercial development shall be organized into compact, unified commercial centers that complement the scale and character of existing development or that promote the desired character for areas where new development is planned.
- Piecemeal or scattered development should be avoided and uncoordinated commercial strip development should be discouraged. Where individual parcels of land are to be developed for commercial uses, coordination with adjacent properties, including common parking and driveways, shall be encouraged in order to reduce the number of access points to public roads.
- Encourage high quality site and building designs that include the latest “green” technology and contribute to strong neighborhoods, vital shopping districts, and desirable employment centers.
- Commercial development areas are limited to those properties directly adjacent to the US-23 interchanges.
- A combination of mixed-use, campus-type settings will be encouraged for new industrial areas, with appropriate infrastructure and landscaping provided for each development.
- Where industrial sites abut US-23, extensive buffers shall be provided to provide a more natural appearance along the freeway for passing motorists.



GOAL:

TRANSPORTATION

Provide a variety of safe, efficient modes of transportation to meet the needs of Township residents and visitors.

POLICIES:

- Maintain a transportation network that maximizes the capacity of existing roads while maintaining rural roadways and facilitating the safe and efficient movement of vehicles and pedestrians throughout the Township.
- Evaluate the impact of traffic generated by existing development and work toward improvements concurrent with new development.
- Establish access management standards for new development.
- Consider developing a township policy outlining infrastructure improvements that would be required by a developer.
- Coordinate transportation improvements with County Road Commission and state agencies.
- Consider a variety of transportation choices including public transit and non-motorized transportation.
- Create a Township-wide non-motorized network (Complete Streets) to provide opportunities for pedestrian activity such as walking, jogging, and bicycling. Complete Streets is defined by Michigan legislation as “roadways planned, designed and constructed to provide appropriate access to all legal users...whether by car, truck, transit, assistive device, foot or bicycle”.



Municipal Service Expansion Policies

The Township has made a significant investment in building the capacity, quality and reliability of the sewer systems to serve existing areas of the Township. In 2015, the Township commissioned the Wastewater Treatment Plant (WWTP) Capacity Evaluation Report to study the capital needs of the existing sanitary collection system and identify improvements necessary at the wastewater treatment plant to meet expected growth. The Report recommends the construction of an equalization basin to store and equalize peak wastewater flows. In the interim, the Township has increased the sewer tap fees for businesses that were not previously identified. For future municipal service expansion, it is recommended that the Township carefully consider the following general guidelines:

1. In order to promote orderly growth within the Township, only areas adjacent to and contiguous to the current municipal service boundary should be considered as the preferred area for expansion of services. The “leapfrogging” of Township areas to provide municipal services which create an island of services within the Township should be strongly disfavored. The idea of contiguous development requires that municipal services expand from one fully-developed area to the next adjacent area.
2. The Township shall implement the resulting policy of the 2015 capacity study. Any expansion shall be bound by capital improvements needs identified in that study.
3. Where expansion of facilities is proposed the Township should follow the recent practice of passing the costs of expansion on to those reaping the benefits of that expansion through special assessment districts, REU charges, and other similar mechanisms.
4. As a part of this policy, the Township should adopt a formal municipal service expansion procedure. In addition to the general policies, municipal sewer service should not be extended beyond those areas planned for medium density residential.



PROPOSED CONNECTION

EXISTING SERVICE STA.

EXISTING TREES, TYP.

ROWHOUSES W/ FRONT PORCHES, TYP.

MAIN ST.

PARKING

RES. LOFTS, TYP.

FISHING PIER

MARINA

MIXED USE TYP.

BEACH

EXISTING TREES

BAND SHELL

PARKING

PARKING

EOLLARDE TYP.

GREEN

EXISTING TREES

CENTRAL LAWN

PARKING

PARKING

RESIDENTIAL LOFTS, TYP.

PICNIC PAVILION

COMMUNITY GARDEN

PARKING

MAIN ST.

MIXED USE TYP.

PARKING

EXISTING TREES

NEW CONNECTING TRAIL SYSTEM

PARKING

EXIST. TREES

DOWNTOWN PARKING RESERVE

EXIST. TREES

DOWNTOWN PARKING RESERVE

BARKER RD.

BARKER RD.

US-23

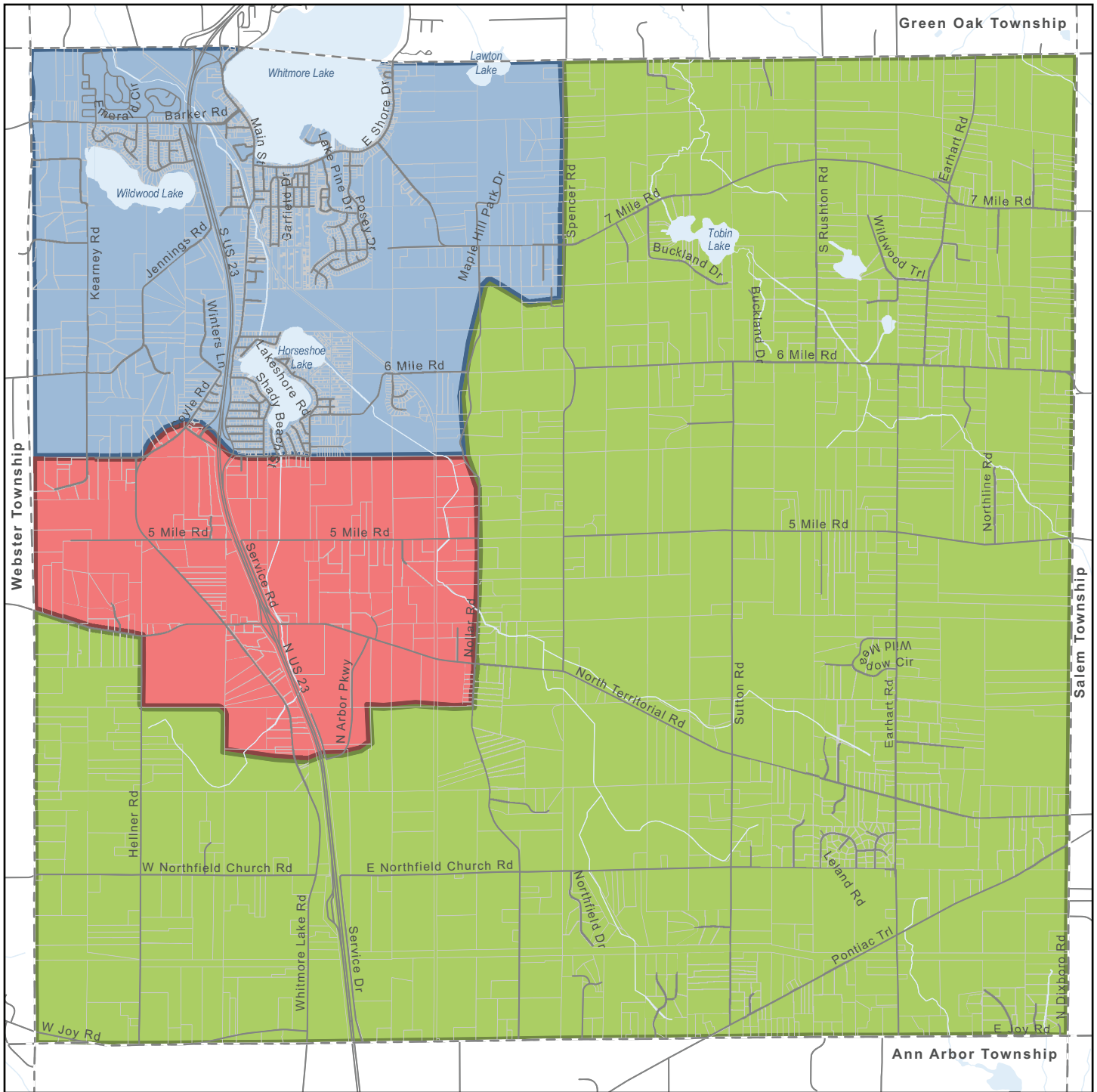
06.

TOWNSHIP SUB-AREA PLANS

In addition to the overall land use plan, the Township was divided into the following three (3) sub-areas: Land Preservation, Central US-23 Interchanges Sub-area, and Lakes Sub-area. The division of the Township into sub-areas was based primarily on each area's physical characteristics. The original sub-areas were evaluated independently during the two (2) planning fairs held to receive public input and in consideration of the future land use for the Township during the last plan update.

After review and careful consideration, the sub-area plans were modified based on each sub-area's characteristics, development strategies, and design guidelines.

The following pages address issues related to land use, land preservation, transportation, and community facilities and services for each sub-area. The preferred land use arrangement, specific development strategies, and site design guidelines for each sub-area are also discussed.



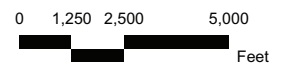
Map 5 Sub-Area Map

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

- Lake Sub-Area
- Central US-23 Interchanges
- Land Preservation Sub-Area
- City and Township boundaries
- Roads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019

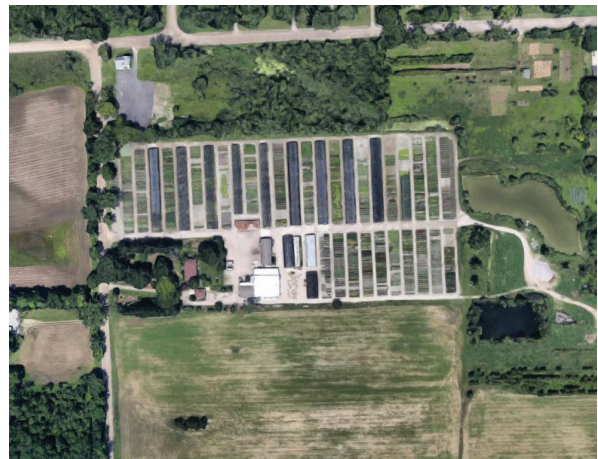


LAND PRESERVATION SUB-AREA

The Land Preservation Sub-area is characterized both by its agricultural and open spaces and residential development. Large tracts of vacant land remain intact throughout this area presenting opportunities for open space preservation. Development Strategies and Design Guidelines for this sub-area are focused on preservation of open spaces and agricultural operations, as well as maintaining scenic views and wildlife corridors. When residential development is permitted, clustered developments are strongly suggested.

Characteristics

- Existing land uses include primarily active agriculture and farmstead; and single-family residential.
- Large tracts of vacant land are intact throughout this sub-area presenting opportunities for open space preservation.
- North Territorial, Pontiac Trail, US-23 and Whitmore Lake Road are the paved primary roads in this sub-area.
- Major natural features within this sub-area:
 - » Tobin Lake
 - » Maurer, O'Conner, and Willow Marsh Drains
 - » McCarty Drain #2, Groves Drain and Horseshoe Lake Drain; and
 - » Large contiguous areas of woodlands and wetlands.



Development Strategies

1. Preserve open space, woodlots and natural features with conservation easements throughout the Land Preservation Sub-area.
2. Preserve farmlands as active farms or open space.
3. Continue to control and plan for future residential growth by strongly encouraging clustered development and by implementing policies regarding tree preservation and management, subdivision open space requirements, parkland, and trail requirements.
4. Direct non-agricultural uses away from areas of the Township ideally situated and conditioned for agriculture, such as soils, drainage, etc.
5. Discourage extension of public sewer or water service into areas of the Township ideally situated and conditioned for open space and natural features preservation and agriculture.
6. Establish programs that maintain the viability of agricultural products through new and expanding markets for locally grown products such as community supported agriculture, organic food, and agritourism and non-traditional uses that preserve the character of the area.
7. Preserve open space and natural features with a priority on environmentally sensitive areas and the open view-sheds from roadways.
8. Ensure that new residential development is compatible in density and character to existing uses, residences and neighborhoods in the immediate area.
9. Encourage non-motorized paths to connect parks, Township facilities, and adjacent communities through an interconnected system of trails along major roads.
10. Coordinate with the State and Washtenaw County for farmland preservation.
11. Coordinate with Washtenaw County for parkland and open space acquisition and development.

Design Guidelines

1. Maintain and develop greenways and wildlife corridors such as wildlife passages, creek beds, and woodlands to and from natural areas.
2. Require all new residential development to be clustered to allow continued recreational and agricultural use and open space preservation of the remainder of the acreage.
3. Promote Low Impact Development (LID) techniques for storm-water management such as bio-swales or other best management practices.
4. Promote Leadership in Energy and Environment Design (LEED) techniques for architecture and site design.
5. Maintain open views along roadways and enhance with additional plantings of native trees, shrubs, grasses, and perennials.
6. Protect key open vistas along rural roads.
7. Carefully site entrance drives and subdivision entrances.
8. Separate cars from pedestrians and provide pathways connecting subdivisions.

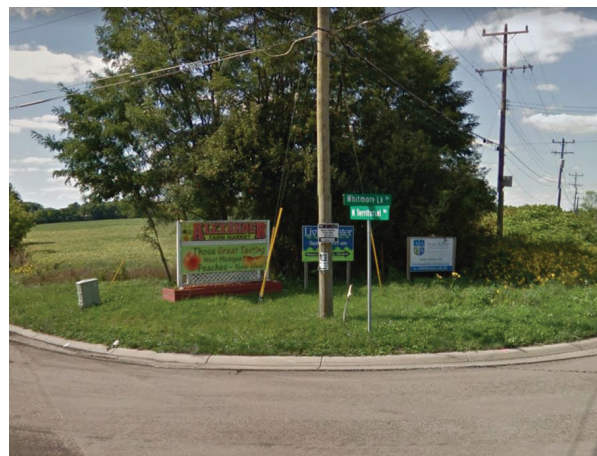


CENTRAL US-23 INTERCHANGES SUB-AREA

The central feature of this sub-area is the US-23 corridor with exits at Six Mile and North Territorial Road. This is where office, industrial, and commercial growth is planned for and expected. The western edge of this sub-area is best suited for low density residential and agricultural land uses, and can be considered a transitional area to the agricultural open spaces to the east.

Characteristics

- Existing land uses include active agriculture and farmstead; single- family residential; commercial and office; industrial; cultural, outdoor recreation and cemetery; grassland and shrub; and woodland and wetland.
- Large tracts of vacant land are intact throughout this sub-area presenting opportunities for residential, commercial and industrial development (in the portion of this sub area where sanitary sewer service is available).
- Large tracts of vacant land are intact throughout this sub-area presenting opportunities for open space preservation (in the portions of this sub area where sanitary sewer service are unavailable).
- Whitmore Lake High School campus resides within this sub-area.
- Two (2) freeway interchanges are within/border this sub-area (US-23 / N. Territorial and US-23 / Six Mile).
- US-23, Whitmore Lake Road and N. Territorial are the primary paved roads in this sub- area.



Development Strategies

1. Maintain the rural character – channel future residential, commercial, office, and industrial uses in the portion of this sub-area nearest the US-23/N. Territorial interchange where sanitary sewer service is available.
2. Preserve open space, woodlands and natural features with conservation easements throughout the Southeast Sub-area.
3. Preserve remaining farmland as active farms or open space.
4. Allow for a mix of service, office and residential uses as it relates to the US-23 / North Territorial Road interchange and the Whitmore Lake Road corridor.
5. Consider design guidelines that promote attractive and planned commercial and industrial facilities along the Whitmore Lake corridor where sanitary sewer service is available.
6. Continue to control and plan for future residential growth by requiring clustered development by implementing policies regarding tree preservation and management, subdivision open space requirements, parkland, and trail requirements.
7. Direct non-agricultural uses away from areas of the Township ideally situated and conditioned for agriculture.
8. Discourage extension of public sewer service into areas of the Township ideally situated and conditioned for open space and natural features preservation and agriculture.
9. Establish programs that maintain the viability of agricultural products through new and expanding markets for locally grown products such as community supported agriculture, organic food and agritourism and non-traditional uses that preserve the character of the area.
10. Preserve open space and natural features with a priority on environmentally sensitive areas to preserve view-sheds along roadways.
11. Ensure that new residential development is compatible in density and character to existing residences and neighborhoods in the immediate area.
12. Maintain the suburban and transitional character of the Central US-23 Interchanges Sub-area by preserving an open space greenbelt separating urban and rural landscapes.
13. Allow for appropriate commercial and industrial uses adjacent to US-23 and along N. Territorial between Whitmore Lake and Nollar Roads.
14. Emphasize development of office, research and industrial uses to generate a corporate, high tech “jobs node”.
15. Encourage the development of business campuses.
16. Actively promote business growth, job creation and tax base development by targeting knowledge industries and other growth industries such as health care and “green technologies. These uses should be close to the US-23 / N. Territorial interchange.
17. Develop non-motorized transportation to connect parks, Township facilities, and adjacent communities through an interconnected system of trails along major roads.
18. Establish parks in proximity to higher density population areas to meet the needs of the residents and include passive uses such as a dog park, playgrounds, etc.
19. Coordinate with Washtenaw County for parkland and open space acquisition and development.
20. Consider vehicular and pedestrian improvements to existing intersections as new developments are proposed.

Design Guidelines

1. Maintain and develop greenways and wildlife corridors to and from nature preserves.
2. Require all new residential development to be clustered to allow continued recreational and agricultural uses and open space preservation of the remainder of the acreage.
3. Promote Low Impact Development (LID) techniques for storm-water management such as bioswales or other best management practices.
4. Require attractive landscape screening and for industrial and commercial use along the US-23 corridor and all public right-of-way.
5. Promote Leadership in Energy and Environment Design (LEED) techniques for architecture and site design.
6. Carefully site entrance drives and subdivision entrances.
7. Promote shared drives and parking areas.
8. Screen parking with knee walls, decorative fences, and landscaping.
9. Encourage the provision of community design features with pedestrian amenities such as plazas or community gathering places.
10. Separate cars from pedestrians and provide pathways connecting subdivisions.



LAKES SUB-AREA

The Lakes Sub-Area is the focal point of Northfield Township. This area is both the most densely developed and populated. The Lakes Sub-Area also serves as the visual identity of the Township. Local business growth and both residential and mixed use development should be encouraged within this sub-area.

The Lakes Sub-area encompasses the Township's Downtown Development Authority (DDA) boundary. The general purpose of the DDA is to promote the economic growth of the district. The Northfield Township DDA and the Downtown Strategic Action Plan and Design Framework has identified the following strategies:

- Establish an identity for the hamlet of Whitmore Lake.
- Improve traffic patterns throughout the District including access to and from US-23.
- Support public improvements necessary to ensure the success of businesses in the District.
- Support business attraction efforts, as appropriate, to help ensure a healthy and successful business community.
- Encourage beautification of Downtown Whitmore Lake through the use of high-quality aesthetics, local identity, and architectural elements.
- Encourage uses in Downtown Whitmore Lake that shall identify the area as a regional entertainment destination.
- Encourage opportunities in Downtown Whitmore Lake for recreation as well celebration to promote quality of life for residents.

In addition to the DDA's identified strategies which are specific to the downtown area, the following development and economic strategies can be undertaken throughout the Lakes Sub-area. They include:

- Improve the safety and attractiveness of Main Street, Barker and other roads to support new and existing private developments.
- Initiate efforts to encourage renovation and expansion of retail businesses.
- Participate in efforts to encourage new private developments in conjunction with public improvements.
- Encourage energy efficiency in all development and redevelopment proposals.
- Encourage pedestrian, non-motorized and public transportation improvements in conjunction with private development projects.
- Encourage public/private partnerships to address infrastructure limitations.
- Encourage the provision of parks and open space in all new private developments.
- Continue to control and plan for future residential growth by requiring clustered development by implementing policies regarding tree preservation and management, subdivision open space requirements, parkland, sidewalk and trail requirements.

It is recognized that there are differences in terms of both land use and potential for future growth within the downtown and surrounding residential areas. To build on these differences and help guide future development that ensures the future success of the Lakes Sub-area. The Township's Planned Unit Development (PUD) zoning district should be utilized to attain the Lake Sub-area objectives described on the following pages.

Characteristics

- Existing land uses include active agriculture and farmstead; single- family residential; multi-family residential; manufactured home; commercial and office; institutional; industrial; cultural, outdoor recreation and cemetery; grassland and shrub; and woodland and wetland.
- Large tracts of vacant land are intact throughout this sub-area presenting opportunities for mixed use residential, commercial.
- Sanitary sewer service is available within this sub-area.
- Three (3) freeway interchanges are within/border this sub-area (US-23 / Six Mile, US-23 / Barker and US-23 / Eight Mile).
- US-23 and Whitmore Lake Road are the primary paved roads in this sub-area.
- Whitmore, Horseshoe, Wildwood and Lewton Lakes are the major natural features in this sub-area.



Development Strategies

VILLAGE CENTER

1. Plan for future commercial and residential growth by implementing policies to encourage mixed retail and residential uses within and adjacent to Downtown Whitmore Lake.
2. Allow commercial and residential uses as part of an overall mixed use project to the extent that they serve the primary uses and contribute to the development of community public spaces. Large scale retail establishments as defined by the Township Zoning Ordinance are not compatible in this sub-area.
3. Encourage infill development in a traditional neighborhood pattern with interconnected streets and walking and bicycle access to Main Street / Barker.
4. Establish a form-based code to provide flexibility in uses, but meet specific form and design guidelines for the Village Center district.
5. Promote high-density residential uses as part of an overall mixed use development.
6. Provide a variety of housing types, sizes, and price ranges.
7. Promote preservation and renovation of historic structures.
8. Actively promote the development of community public spaces such as a beach, pavilion/event area, Township park, farmer's market, community center, or other similar uses.

MIXED USE

1. Allow for a mix of service, office and residential uses.
2. Consider high-density residential uses as part of an overall mixed use development project as a PUD and only if it supports office and service uses.

COMMERCIAL

1. Regional-scale retail service uses may be permitted only where adjacent to the US-23 interchange at Six Mile Road.
2. Emphasize regional-scale commercial uses especially service uses supporting future commercial and industrial development within the Central US-23 Interchanges Sub-area.

GENERAL

1. Develop non-motorized transportation to connect parks, Township facilities, and adjacent communities through an interconnected system of trails along major roads.
2. Establish parks in proximity to higher density population areas to meet the needs of the residents and include passive uses, such as a dog park, playgrounds, etc.
3. Coordinate with Washtenaw County for parkland and open space acquisition and development.
4. Consider vehicular and pedestrian improvements to existing intersections as new developments are proposed.

Design Guidelines

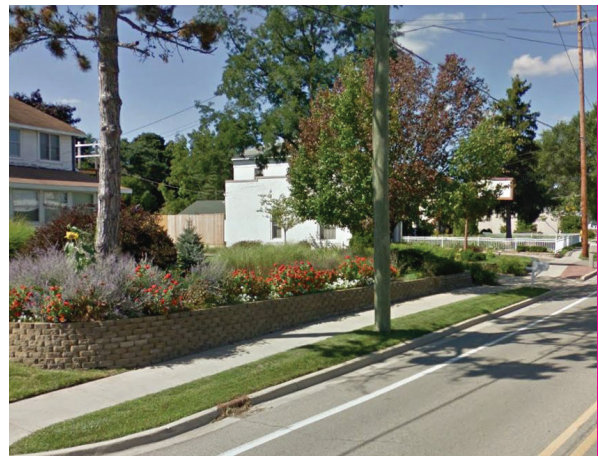
VILLAGE CENTER

1. Encourage an increased building height with residential or office uses on the upper floors and retail on the ground floor along Barker Road and Main Street.
2. Encourage buildings to be built closer to the road right-of-way with reduced front setback.
3. Encourage a variety of housing types including townhomes, duplexes, triplexes, and loft apartments.
4. Implement the North Village Master Plan and the Downtown Strategic Action Plan and Urban Design Framework.
5. Continue to implement the requirements of the WLD zoning districts and update the Districts based on the recommendations of the North Village Master Plan and the Downtown Strategic Action Plan and Urban Design Framework.



GENERAL

1. Maintain and develop greenways and wildlife corridors to and from natural areas.
2. Promote Low Impact Development (LID) techniques for storm-water management such as bioswales or other best management practices.
3. Promote Leadership in Energy and Environment Design (LEED) techniques for architecture and site design.
4. Carefully site entrance drives and subdivision entrances.
5. Promote shared drives and parking areas.
6. Screen parking with knee wall, decorative fence, and landscaping.
7. Encourage the provision of community design features with pedestrian amenities such as plazas or community gathering places.
8. Separate cars from pedestrians and provide pathways connecting subdivisions.





07.

FUTURE LAND USE PLAN

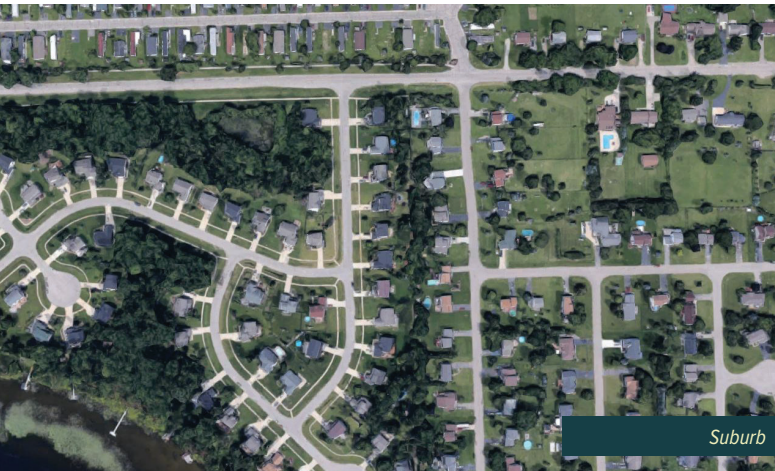
The Future Land Use Plan defines the framework for the future growth of Northfield Township. It begins with a general description of the desired pattern of development for the community and follows with a description of the future land use categories as illustrated on the future land use map.

In addition to the future land use categories, specific development strategies are formulated to achieve community goals for each of the Township's three sub-areas. The sub-areas include: Land Preservation Sub-Area, Central US-23 Interchanges Sub-area, and Lakes Sub-area.

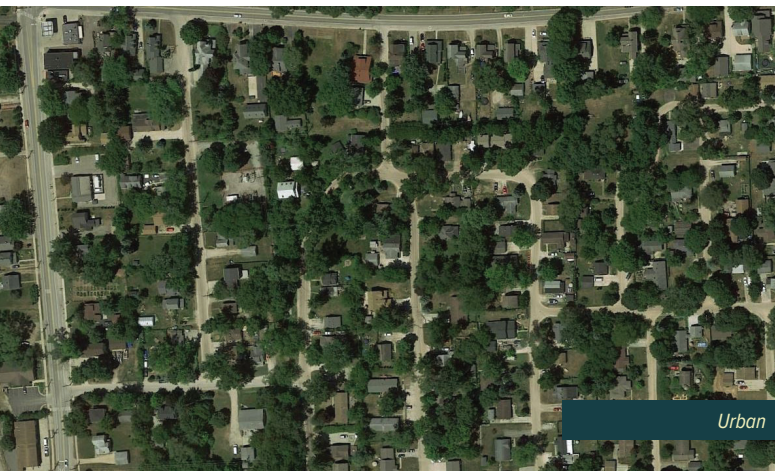


In general, the desired scenario for the Township's master plan includes a gradation of development densities across the rural-urban spectrum, knitted across sub-areas, which considers the agricultural and sensitive natural resources of the Township. The Master Land Use Plan for Northfield Township identifies three patterns of development: village, suburban, and rural.

The village pattern includes areas of the Township that are contiguous to the Whitmore and Horseshoe Lakes. They encompass higher density developments, which are located near Downtown Whitmore Lake. Sewer infrastructure systems are available in this area and could potentially be expanded in the future (See Community Facilities Map). An example of this pattern is found at Downtown Whitmore Lake.



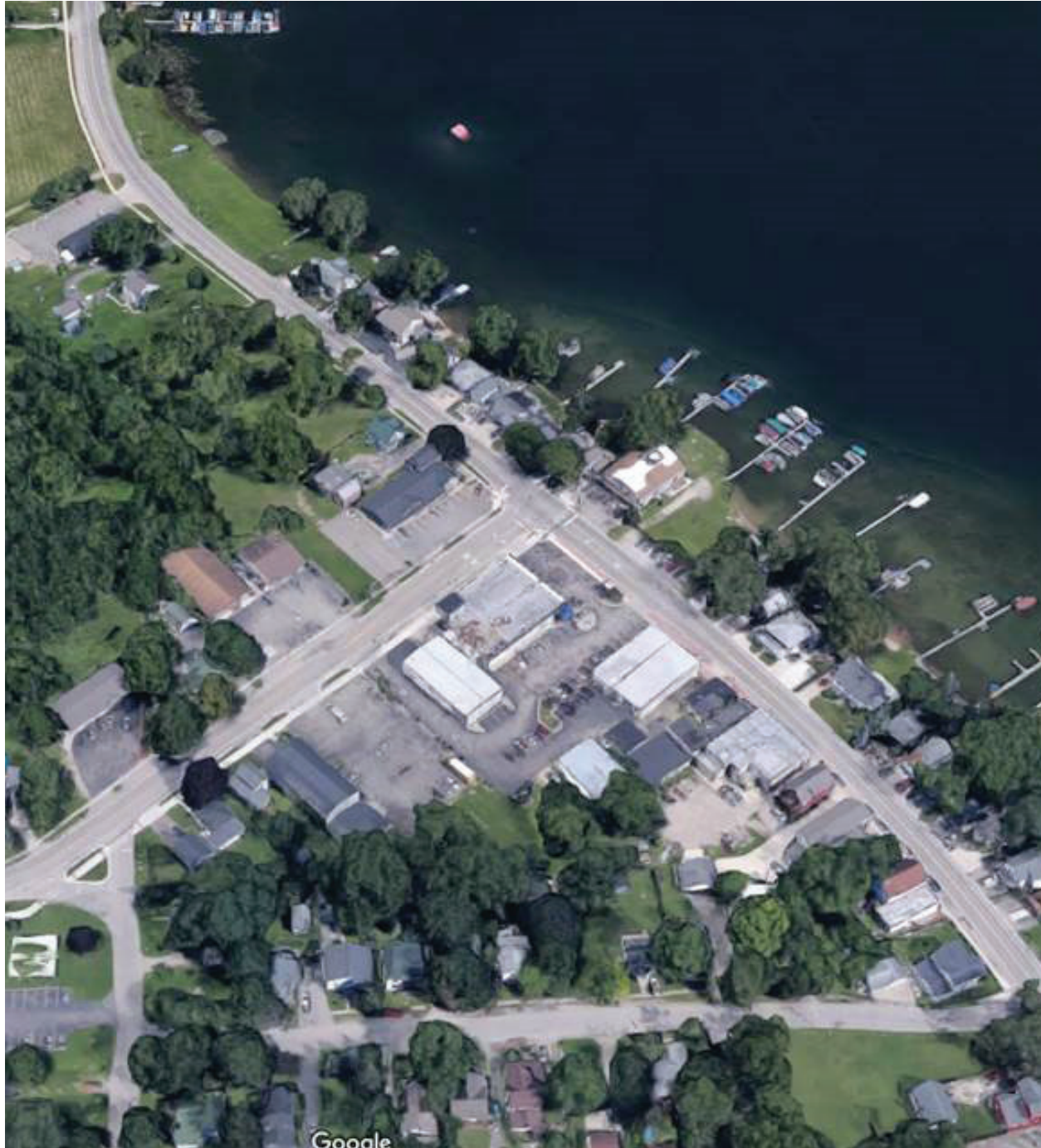
The suburban pattern includes areas where low to medium density residential development currently exists without access to water and sewer infrastructure systems. These areas are where future residential development may be attracted due to the proximity of nearby urban centers and access to open spaces and natural resources. They are, for the most part, located in portions of the Lands Preservation, Lakes and Central Whitmore Lake Road Interchange Sub-areas. New development should be sensitive to open space preservation and to the sensitive land and water resources. The preferred form of residential development is open space or cluster residential development. An example of this pattern is found at the Links of Whitmore Lake.

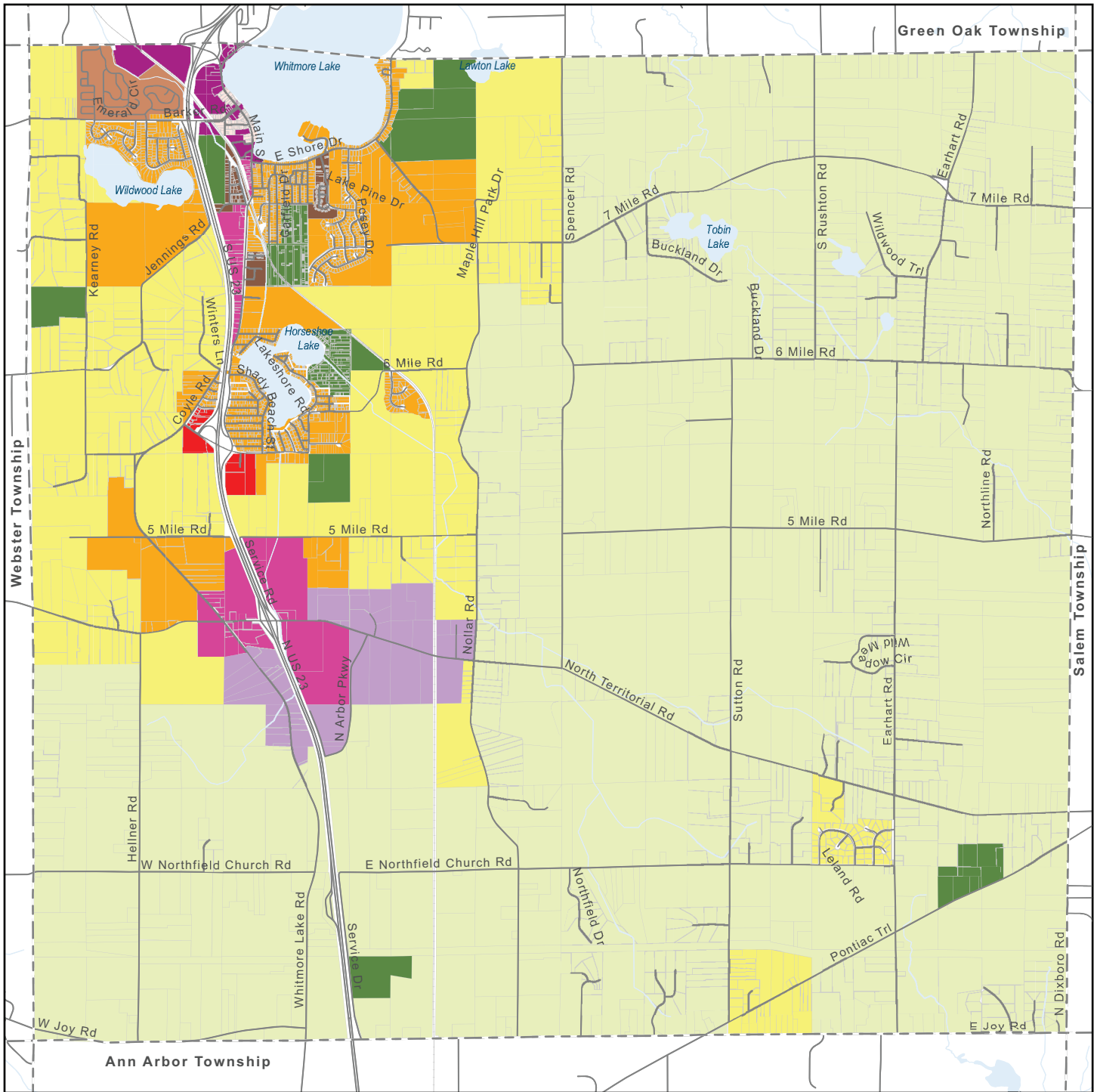


The rural pattern is comprised of low density residential uses, agricultural uses and operations, protected conservation districts, as well as wetlands and other sensitive environmental areas. New residential development should be minimized in order to maintain viable units of agricultural production, rural character, and open spaces. These areas are located primarily in the Land Preservation Sub-areas. Where residential development would occur, the preferred form of development is an open space or cluster residential development. An example of this pattern is found at Sutton and Northfield Church.

FUTURE LAND USE CATEGORIES

Specific land use categories are identified and illustrated on the future land use map. The following identifies the intent of each category, describes the desirable land uses and elements, the land use relationship with physical and natural features, and lists the corresponding zoning districts.




















MAP 6
Future
Land Use

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- | | |
|--|--|
|  Agricultural |  Mixed Use |
|  Commercial |  VC-Mixed Use |
|  High Density Residential |  VC-Cottage Retail |
|  Industrial |  City and Township boundaries |
|  Recreation/Conservation |  Roads |
|  Low Density Residential |  Railroads |
|  Medium Density Residential |  Rivers, streams, and lakes |
|  Manufactured Home | |



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019



AGRICULTURAL LAND USE



Intent: The intent of this category is to protect existing agricultural land uses, maintain rural character, minimize population density, and preserve open spaces. Accordingly, the Agricultural land use designation is intended to allow low density residential development only when it promotes open space preservation and is compatible with maintaining existing agricultural operations.

Description: Agricultural areas are those lands characterized as primary crop and/or livestock production lands. These lands should not be considered land banks for future development. In this area, the focus shall be on open space preservation and any future residential development shall cluster residential units on the most suitable portions of a site, with remaining areas permanently dedicated as open space. The clusters of residences are intended to be small and integrated into significant amounts (at least 50 percent of the site) of open space.

Relationship to Physical and Natural Features:

The Agricultural land use category is located in areas where public utilities are not present and soil suitability for septic systems may be poor. Thus, these factors put limitations on the potential density of development. Wetlands, woodlots, and environmentally sensitive areas are intended to be preserved. The agricultural designation will help preserve woodlands, wooded road fronts, wetlands, large and small scale agricultural operations, and wildlife habitat. To insure appropriate use of these areas, it is recommended that an Environmental Impact Assessment (or similar environmental land use analysis) be completed to minimize negative development impacts.

Most Compatible Uses: Desirable land uses and elements of the Agricultural designation include:

- Farming operations, and similar uses of land;
- Low density clustered single-family residential development where a minimum of fifty percent (50%) of buildable area is permanently preserved as dedicated open space;
- Single-family dwellings on parcels 5 acres in size or greater;
- Scenic road corridors, defined by tree-lined borders and narrow road widths;
- Landscape features such as orchards, outbuildings such as silos and barns, fences, and sound farm structures; and
- Scenic views consisting of natural and cultural features.

Most Compatible Zoning Districts: Based on the above criteria the zoning district most appropriate for the Agriculture category is the AR, Agricultural District.

RESIDENTIAL LAND USES

Low Density Residential Land Use

Intent: The intent of this designation is to accommodate low density single- family residential housing in areas not intended to be serviced with sanitary sewer and water services. This category is designed to preserve a predominately rural character, including agricultural operations.

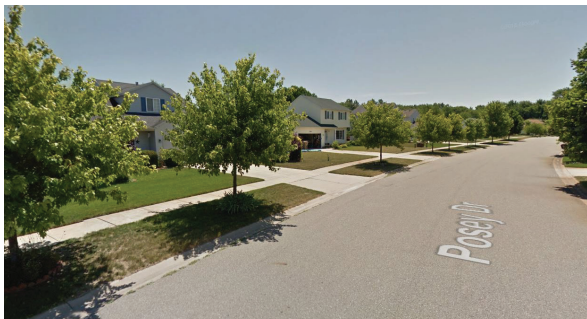
Description: Land designated as Low Density Residential (LDR) include areas where soils are generally suitable for septic field and building construction. Maximum density will be one (1) dwelling unit per two (2) acres.

Relationship to Physical and Natural Features: Significant natural features may still be present within this category. Residential developments shall cluster residential units on the most suitable portions of a site with the remaining area permanently dedicated as open space.

Most Compatible Uses: Desirable land uses and elements of the Low Density Residential designation are:

- Agricultural productions;
- Single-family residences in either clustered or conventional subdivision/site condominium development; and
- Parks, open spaces, and conservation areas.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning district most appropriate for the LDR category is the LR, Low Density Residential District.



Medium Density Residential Land Use

Intent: The intent of this designation is to promote a moderate density single- family category with a predominately suburban character. This is achieved by accommodating medium density single-family residential housing in areas of the Township that may be served with municipal sanitary sewer services or are in close proximity to such services.

Description: Land designated as Medium Density Residential Land Use (MDR) include residential densities ranging from one (1) to four (4) dwelling units per acre, depending on the availability of municipal sewer services. Where municipal sewer facilities are not available, a maximum of one (1) unit per acre shall be permitted.

Where sewer service is not currently available, expansion shall only occur in accordance with the Township's Municipal Service Expansion Policy as described in this Master Plan. Further, it is the policy of this plan that no areas of the Township be brought into the Township sewer service area prior to a formal sewer expansion policy and procedure being developed by the Township Board.

In order to utilize existing capacity of the municipal sewer system and to limit the possibility of higher density residential developments leapfrogging the current sewer service boundary. It is the intention to limit residential density to four (4) dwelling units per acre only to those areas served by municipal sewer service. Property to be served by privately owned community sewage systems shall be limited to one (1) dwelling unit per acre in the MDR category.

Relationship to Physical and Natural Features: Significant natural features may still be present within this category but to a lesser degree than the Agriculture or LDR categories. Land designated as MDR has access to collector roads and internal subdivision paved roads.

Most Compatible Uses: Desirable land uses and elements of the Medium Density Residential designation are:

- Single-family residences in either clustered or conventional subdivision/site condominium development;
- Two-family dwellings; and
- Parks, open spaces, and conservation areas.

Most Compatible Zoning Districts: The MDR land use category coincides with the following residential zoning designation: SR-1, Single-Family Residential District.

High Density Residential Land Use

Intent: The intent of this category is to create areas for higher density residential development in those areas fully serviced by public sanitary sewer facilities.

Description: Planned High Density Residential (HDR) land uses are found in the Lakes Sub-area. The Township encourages and supports innovative housing such as attached and cluster developments that preserve open space and protect natural features. Density may range between six (6) to 14 dwelling units per acre. However, greater densities may be allowed in cases showing exceptional design and conservation.

Relationship to Physical and Natural Features: As mentioned above, this area is entirely served by utilities and constitutes the most urbanized portion of the Township.

Most Compatible Uses: Desirable land uses and elements of the HDR designation include:

- Single-family residences, attached and detached;
- Two-family dwellings;
- Apartments;
- Innovative housing projects, including senior and assisted living options;
- Parks, open spaces, and conservation areas; and
- Community support facilities such as churches, schools, and public buildings.

Most Compatible Zoning Districts: The HDR land use category would coincide with all other residential zoning designations that have access to and are serviced by municipal sewer and water services including SR-2, Single Family Residential Two and MR, Multiple-Family Residential.



Mobile Home Park Land Use

Intent: The intent of the MHP category is to allow mobile home park development in suitable areas of the Township adequately serviced by essential public services, such as: public sanitary sewer facilities and police and fire protection.

Description: The Mobile Home Park designation is focused on the Lakes Sub-area where essential services are provided, and the densest residential development currently exists.

Relationship to Physical and Natural Features: As mentioned above, this area is entirely served by utilities and constitutes the most urbanized portion of the Township.

Most Compatible Uses: Desirable land uses and elements of the MHP designation include:

- Mobile home dwellings

Most Compatible Zoning Districts: The MHP land use category would coincide with the following zoning classification: MHP, Mobile Home Park.



VILLAGE CENTER LAND USE

Intent: The intent of the Village Center designation is to encourage and permit mixed uses with a village scale and character within the Whitmore Lake community. Future growth within the area planned for Village Center is intended to be flexible in land uses, but meet specific form and design guidelines that will be required through modifications to the Township Zoning Ordinance.

The Village Center Land Use designation has additional design recommendations in the North Village Master Plan and the Downtown Strategic Action Plan and Urban Design Framework; and it includes two sub-categories: Village Center Mixed Use and Village Center Cottage Retail.:

Description: The Village Center designation is focused on the Whitmore Lake community.

Relationship to Physical and Natural Features:

This area is the most urbanized within the Township; however, it is also environmentally sensitive due to the location of the Township's water bodies and the desire of people to reside near bodies of water.

Most Compatible Uses: Desirable land uses and elements of the Village Center district are:

- Mixed-use development;
- Neighborhood commercial uses;
- Single-family residences;
- Two-family dwellings;
- Multiple-family dwellings;
- Innovative housing projects;
- A farm and artisan market and community center;
- Parks, open spaces and conservation areas; and
- Community support facilities such as churches, schools, and public buildings.

Most Compatible Zoning Districts: The Village Center Land Use designation is most compatible with the WLD-D, Whitmore Lake-Downtown, WLD-NV, Whitmore Lake-North Village, and WLD-W, Whitmore Lake-Waterfront zoning districts.

MIXED USE LAND USE

Intent: The intent of the Mixed Use designation is to provide areas where local commercial, service, office and residential activities can all take place. This designation is intended to allow a flexible approach to development at specific nodes along the US-23 corridor within the Central US-23 Interchanges and Lakes Sub-areas. Uses envisioned are of a general retail / service nature to serve the residents of Northfield Township. The Mixed Use category is intended to provide transitional service area between the US-23 corridor and Whitmore Lake Road.

Description: The Mixed Use designation is focused on the Lakes and Central Whitmore Lake Road Interchange Sub-areas.

Relationship to Physical and Natural Features: Areas planned for the Mixed Use designation shall have direct or indirect (access roads) access to the Eight Mile / US-23 interchange, the North Territorial / US-23 interchange, and the Main Street Area North of Horseshoe Lake.

Most Compatible Uses: Desirable land uses and elements of the Mixed Use designation are:

- Neighborhood commercial;
- Service;
- Office; and
- Multiple-Family Residential.

Any use which requires the need for outdoor storage is not compatible with the Mixed Use designation as described.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning districts most appropriate for the Mixed Use category are the LC, Local Commercial, GC, General Commercial, RO, Residential-Office, and Multiple-Family Districts. Mixed use developments in these Zoning Districts can be accommodated through the Township's Planned Unit Development (PUD) process.

MIXED USE - NORTH (MU-N)

Intent: The intent of the Mixed Use - North designation is to provide areas where local commercial, service, office and residential activities can all take place. This designation is intended allow a flexible approach to development generally on the west side of Main street, south of the Hamlet of Whitmore Lake within the Lakes Sub-areas. Uses envisioned are of a general retail, office, and service nature to serve the residents of Northfield Township. The Mixed Use category is intended to provide transitional service area between the US-23 corridor and Main Street.

Description: The Mixed Use - North designation is focused on the Lakes Sub-area.

Relationship to Physical and Natural Features: Areas planned for the Mixed Use designation shall have direct access to the Main Street Area North of Horseshoe Lake.

Most Compatible Uses: Desirable land uses and elements of the Mixed Use designation are:

- Neighborhood commercial;
- Service;
- Office; and
- Multiple-Family Residential.

Any use which requires the need for outdoor storage is not compatible with the Mixed Use - North designation as described.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning districts most appropriate for the Mixed Use category are the LC, Local Commercial, GC, General Commercial, RO, Residential-Office, and Multiple-Family Districts. Mixed use developments in these Zoning Districts can be accommodated through the Township's Planned Unit Development (PUD) process.



MIXED USE - SOUTH (MU-S)

Intent: The intent of the Mixed Use - South designation is to provide areas where commercial, service, office, research technology, and related residential activities can all take place. This designation is intended to allow a flexible approach to development along the US-23 corridor within the Central US-23 Interchanges Sub-Area.

The Mixed Use - South designation is where more intensive office, research, and commercial growth is planned for and expected. Higher density residential growth is also permitted within the sub area when developed as a part of an overall development scheme. Stand-alone high density residential is not compatible with the MU-S designation.

Description: The Mixed Use designation is found exclusively within the Central US-23 Interchange Sub-Area of the Master Plan and generally centered at the intersection of US-23 and Whitmore Lake Road.

Relationship to Physical and Natural Features: Areas planned for the MU-S designation shall have the following characteristics:

- Planned development within the MU-S designation shall have direct or indirect access (via access road) to either North Territorial Road or to Whitmore Lake Road.



- Planned development within the MU-S designation shall be within or adjacent to the Northfield Township sewer service district.
- Planned development within the MU-S designation shall take into consideration traffic capacity and impacts to the area and specifically to the US-23/ North Territorial interchange. It is intended that new development will occur concurrently with needed improvements to the adjacent road system based on applicable traffic impact studies.

Most Compatible Uses: Desirable land uses and elements of the Mixed Use designation will:

- Emphasize office research and retail land uses in keeping with the “jobs node” concept of the Central sub-area.
- As appropriate consider a limited amount of industrial uses.
- As appropriate promote high density residential uses as part of an overall mixed-use development project and only as a part of an overall PUD.
- Encourage buildings to be built closer to the road right-of-way with reduced front yard setback when developed as a mixed-use PUD.
- Encourage an increased building height with residential and/or office land uses on the upper floors.

Any use which requires the need for outdoor storage is not compatible with the Mixed Use designation as described and as noted above, stand-alone high density residential is also not compatible in this area.

Most Compatible Zoning Districts: There is no compatible zoning district to accommodate the intent and description provided above. The Township should consider the development of a new mixed-use district to address this Master Plan designation. This could be developed either as a stand-alone district or as an overlay district. Prior to the development of new zoning language, mixed use developments in these Zoning Districts can be accommodated through the Township’s Planned Unit Development (PUD) process.

Development within the MU-S designation is intended to be completed in a comprehensive approach.

Single site uses may be considered by the Township, but their overall compatibility with the adjacent properties shall be considered by the Township in determining compliance with the Township Master Plan.

COMMERCIAL LAND USE

Intent: The intent of the Commercial designation is to provide locations for specialized commercial uses directly related to the US-23 Freeway within Northfield Township. Uses envisioned are related to automobile travel for both Township residents and those traveling through the Township.

Description: Commercial uses are planned in the area centered on the US-23 / 6 Mile interchange. Proximity to this interchange is a necessary prerequisite to be included in this district.

Relationship to Physical and Natural Features: As noted, this category will have a direct relationship to the freeway interchange. Areas outside this interchange shall not be considered. This category shall not be considered within known groundwater recharge areas or within any designated wellhead protection areas.

Most Compatible Uses: Desirable land uses and elements of the Commercial category area are:

- Gasoline, diesel, and fuel stations,
- Lodging, and
- Restaurants.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning district most appropriate for the Commercial category is the C, Commercial District.



INDUSTRIAL LAND USE

Intent: The intent of the Industrial designation is to provide locations for industrial operations that may have moderate effects on adjacent properties because of noise, odor, traffic, and storage of materials. Uses are categorized as needing larger tracts of land and outdoor storage of materials and equipment.

Description: Due to potentially negative external impacts, the Industrial designation is limited in scope. Any areas planned for this designation that are contiguous with residential uses are encouraged to be planned with less intensive uses and/or buffering bordering such residential uses. Industrial designations are not compatible and shall not be planned for areas of known ground water recharge and near Township wellhead protection zones.

The 2019 update of the Master Plan recognizes an increased demand in the region for light industrial, research and development, and the marijuana cultivation and processing industries. To accommodate these changes to the economy, an area south of the MU-S land use area is now designated as industrial.

Relationship to Physical and Natural Features: Municipal sewer and water shall be available in the Industrial area. Areas planned for this designation encompass both existing and future industrial uses and vacant land in proximity to US-23. Where parcels about US-23, extensive buffers shall be provided to help provide a more natural appearance along the freeway for passing motorists.

Most Compatible Uses: Desirable land uses and elements of the Industrial category are:

- Manufacturing, processing, packaging or assembling uses; and
- Trucking and cartage facilities.

Most Compatible Zoning Districts: The appropriate zoning classifications for this designation are the LI, Limited Industrial, GI, General Industrial and RTM, Research, Technology, Manufacturing Districts.

RECREATION/CONSERVATION LAND USE

Intent: Land designated as Recreation/Conservation is intended to provide areas for an open space system that preserves and enhances significant natural features including floodplains, woodlands, and wetland areas as well as providing recreational opportunities for Township residents. It is not the intention to prohibit development within areas identified as Recreation/Conservation, but rather to raise the awareness of significant natural features that should be considered in any development proposal.

Description: This category is intended to protect and preserve the unique Township natural resources while broadening recreational opportunities and an appropriate use of the land. Residential land use may be permitted within the Recreation/Conservation designated areas as a conditional use at a density of ten (10) acres and greater per single-family dwelling unit.

Relationship to Physical and Natural Features: Land in this use category generally includes environmentally sensitive areas where natural features need to be protected and other areas that present opportunities for the development of recreation facilities. To insure appropriate use of these areas, it is recommended that an Environmental Impact Assessment (or similar environmental land use analysis) be completed to minimize negative development impacts.

Most Compatible Uses: Desirable land uses and elements of the Recreation/Conservation category are:

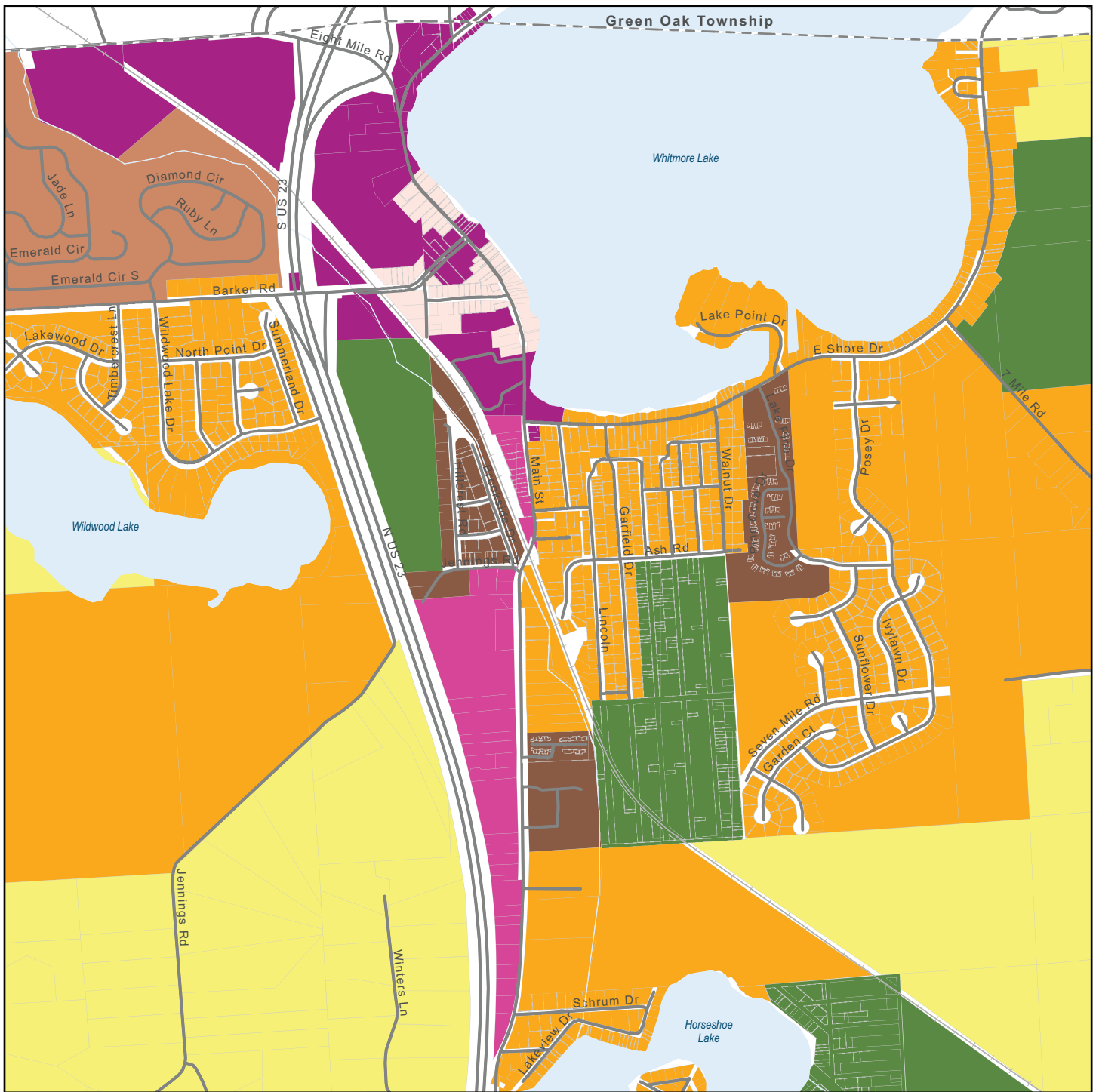
- Public or private conservation area;
- Active and passive recreational facilities; and
- Low density single-family residential land use.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning district most appropriate for the Recreation/Conservation is the R-C, Recreation Conservation District.

The table below demonstrates the zoning district classifications that coincide with each of the Master Plan Future Land Use designations.

Table 3: Master Plan Land Use Classifications / Zoning District Comparison

Master Plan Land Use Designations		Zoning District Classifications	
RC	Recreation Conservation	RC	Recreation Conservation
AR	Agriculture	AR	Agriculture
LDR	Low Density Residential	LR	Low Density Residential
MDR	Medium Density Residential	SR-1	Single-Family Residential
HDR	High Density Residential	SR-2 MR	Single-Family Residential Two Multiple Family Residential
MHP	Mobile Home Park	MHP	Mobile Home Park
VC	Village Center	WLD-D, WLD-NV, WLD-W	
MU	Mixed Use	LC ES RO MR	Local Commercial Enterprise Service Residential-Office Multiple-Family Residential Districts
C	Commercial	LC GC	Local Commercial General Commercial
I	Industrial	LI GI RTM	Limited Industrial General Industrial Research, Technology, Manufacturing


















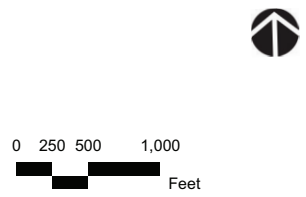
MAP 7
Downtown
Future Land Use

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- | | |
|--|--|
|  Agricultural |  Mixed Use |
|  Commercial |  VC-Mixed Use |
|  High Density Residential |  VC-Cottage Retail |
|  Industrial |  City and Township boundaries |
|  Recreation/Conservation |  Roads |
|  Low Density Residential |  Railroads |
|  Medium Density Residential |  Rivers, streams, and lakes |
|  Manufactured Home | |



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019



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EXIT 49
N Territorial Rd ↗

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08.

TRANSPORTATION PLAN

Northfield Township is linked to the region by highway US-23, which runs north-south with access at N. Territorial, 6 Mile, 8 Mile, and Barker roads. Within Northfield, the most important roads include 7 Mile, Whitmore Lake, N. Territorial, Sutton, Rushton, Dixboro and Pontiac Trail. These roads provide access to the adjacent communities and the surrounding region. The remainder of the road system is composed of county primary roads and local residential roads.

ROADWAY NETWORK

Adequate roads are essential to the conduct of commerce and daily activities. The automobile will continue to be the dominant mode of transportation due to scattered land use patterns, population densities and personal preferences. However, energy availability and cost will make non- motorized transportation more attractive, a factor which must be considered in future planning.

There exists a strong inter-relationship between the road system and land use patterns. The type of pattern of land use will strongly influence traffic volumes along a given road. Likewise, adequacy of a road may determine the type of adjacent land development that occurs. Therefore, the benefit of the Transportation Plan is to assist in establishing priorities for future road improvements based on the function of roadway services.

Roads are classified as follows:

- **Interstate.** Provides major “through traffic” between municipalities and states.
- **Principal Arterial Roads.** Primary function is to carry relatively long distance through travel movements and/or to service important traffic generators, i.e. airports or regional shopping centers.
- **Minor Arterial Roads.** Similar to Principal Arterial Roads with trips carried being shorter distances to lesser traffic generators.
- **Collector Roads.** Funnel traffic from residential or rural areas to arterials. Collector Roads also provide some access to property.
- **Local Roads.** Primary function is to provide access to property, i.e., residential neighborhoods or rural areas.

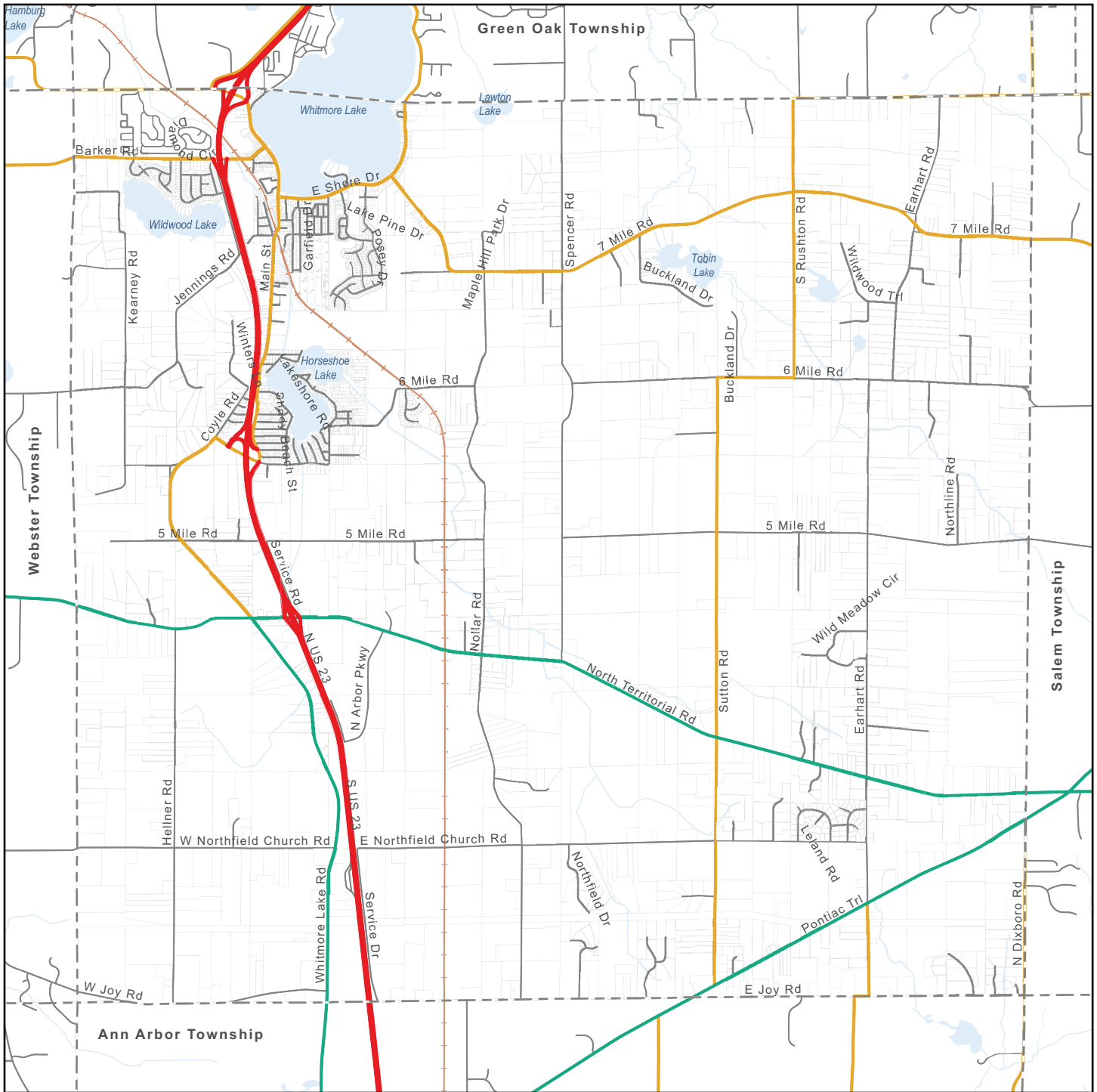
The classifications listed in the Functional Road Classification Map (Map 8) correspond to the National Functional Classification Map for Washtenaw County used by the Michigan Department of Transportation Bureau of Transportation Planning. The road classification determines whether the road is eligible for federal aid. “Federal aid” roads include all principal arterials, all minor arterials, all urban collectors, and all rural major collectors.

The following describes all primary roads within Northfield Township along with their designations:

- **Interstate**
 - » US-23
- **Minor Arterial Roads**
 - » North Territorial Road
 - » Whitmore Lake Road (Township border north to N. Territorial Rd.)
 - » Pontiac Trail
- **Collector Roads**
 - » Barker Road
 - » Main Street
 - » E. Shore Drive
 - » 7 Mile Road
 - » S. Rushton Road
 - » Sutton Road
 - » Whitmore Lake Road (remainder)
 - » 8 Mile Road (S. Rushton to N. Dixboro)
 - » Earhart Road (south boundary to Pontiac Trail)

Northfield Township provides direct access to US-23 via North Territorial, Six Mile, Barker and Eight Mile Roads. The development of these interchanges has the potential to alter the composition of the Township if not carefully considered and planned for.

The Right-of-Way Width map (Map 9) depicts the Washtenaw County Road Commission’s Future Right-of-Way Plan for those County initiated improvements within Northfield Township. Coordination and cooperation of the Township and County agencies regarding transportation improvements can prove beneficial both strategically and financially.



MAP 8
Functional Road
Classification

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

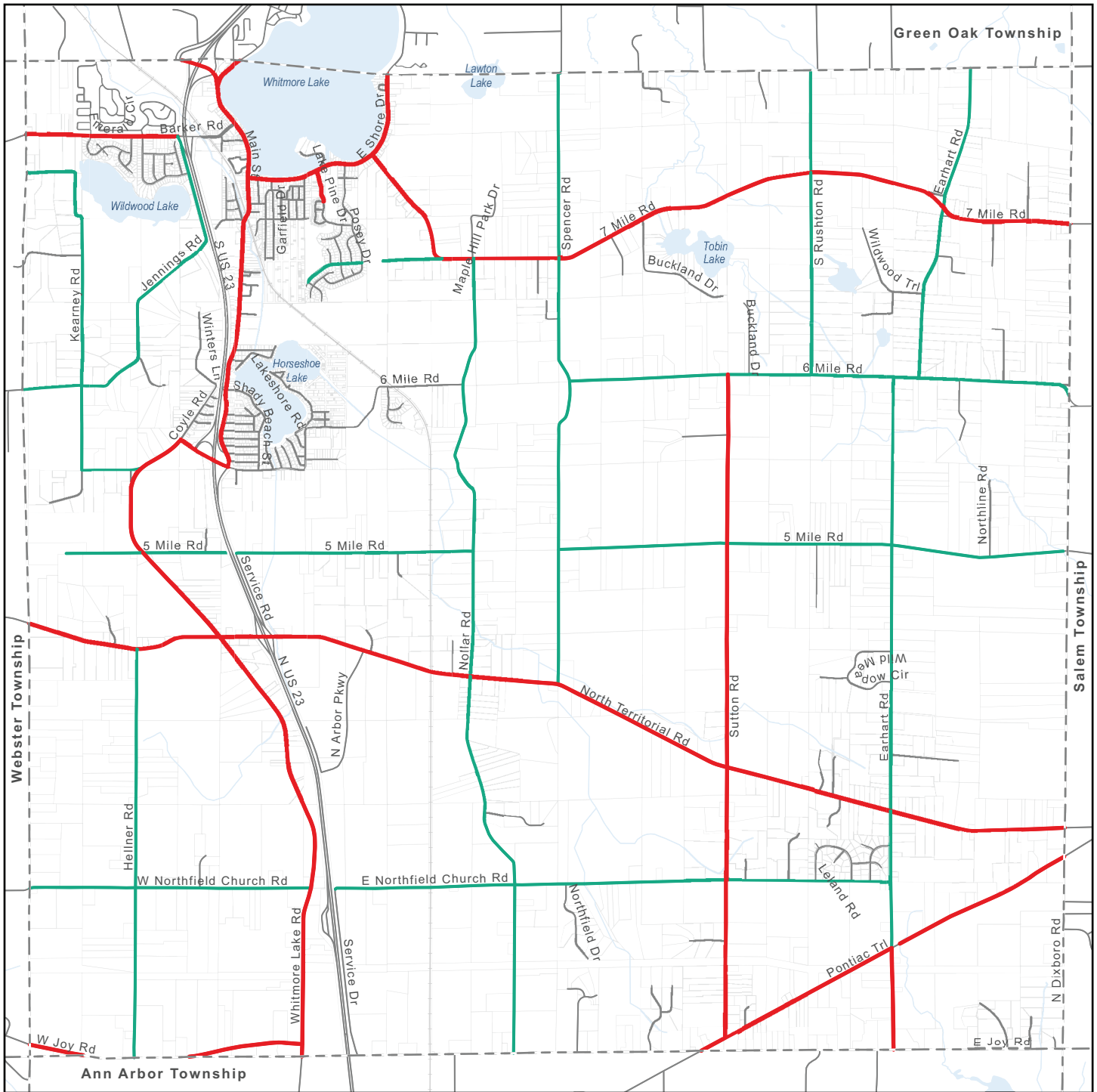
Legend

- Principal Arterials
- Minor Arterials
- Major and Minor Collectors
- Local
- Railroads
- City and Township boundaries
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic
 Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019





MAP 9

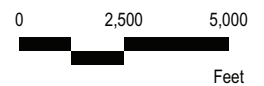
**Washtenaw County
Future Right-Of-Way**

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

- 120-Foot Right-of-way
- 86-Foot Right-of-way
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: Washtenaw County Road Commission 2006



ACCESS MANAGEMENT

Although the roads in Northfield Township are within the jurisdiction of either the Washtenaw County Road Commission or MDOT, Northfield Township has a strong interest in an effective road system. To ensure safe management of traffic, several elements should be considered for new development, such as:

1. Limit the number of driveways and encourage alternative means of access.
2. Permit only one access or shared access per site for smaller residential developments (i.e. less than 50 units).
3. Medians at appropriate location to reduce conflicting movements and direct traffic and improve safety for pedestrians.
4. Spacing of access points is important as it is related to both signalized and un-signalized locations.
5. Locate shared driveways on the property line.
6. Provide service drives at the rear of sites unless prevented by a shallow lot.
7. Consider new traffic signals or roundabouts for higher traffic generating uses.

Design driveways to support efficient and safe traffic operations.

Northfield Township hopes to make it safer and easier for more people to bicycle and walk throughout the Township with the establishment of non- motorized transportation facilities.



NON-MOTORIZED PLAN



The purpose of a Non-Motorized Plan is to articulate a vision for non-motorized transportation in Northfield Township. The plan would provide a vision for a township-wide non-motorized network, a plan for non-motorized facility development, and a clear direction for the implementation of non-motorized facilities throughout the Township.

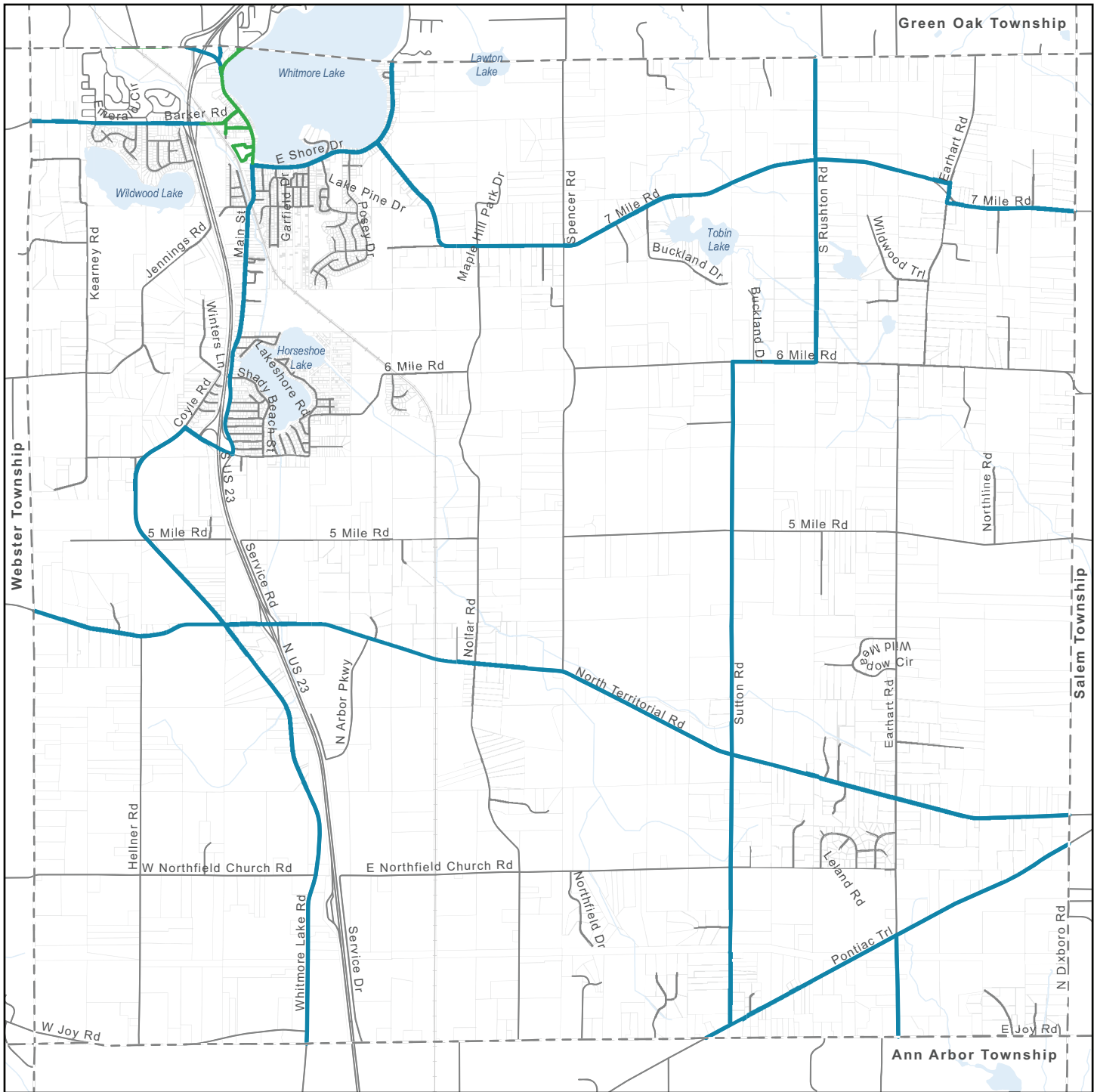
A Non-Motorized Plan is intended to guide non-motorized facility planning, design, and construction for Northfield Township. The plan is implementation oriented and utilizes community and stakeholder involvement and input. This type of plan is also intended to serve as a foundation for future grant applications and funding requests.

As Northfield Township has become increasingly active in the construction of pedestrian pathways, a Township Non-Motorized Plan becomes more important to ensure coordinated development of non-motorized facilities.

Northfield, along with several other Washtenaw County communities, belongs to and supports the efforts of the Washtenaw Area Transportation Study (WATS), an organization coordinating regional transportation planning. WATS is responsible for monitoring the conditions of county roads, bicycle and pedestrian paths, airports, and public transit systems. WATS has been instrumental in Complete Streets programming and non-motorized plans throughout Washtenaw County.

The 2018 Non-Motorized Plan for Washtenaw County developed by WATS plans for future county-wide non-motorized bike and pedestrian improvements. The Non-Motorize Pathways Map depicts the future improvements outlined by WATS as they relate directly to and adjacent to Northfield Township. The blue represents areas where there is a lack of non-motorized transportation methods in rural areas. These areas are where potential pedestrian facilities could be located.

Additional local non-motorized pathway improvements are also highlighted on the map. They address non-motorized improvements recommended in the downtown plan for Northfield Township. The non-motorized improvements for Northfield are different from other improvements because they were identified by the Township and not the county. The improvements are also more pedestrian friendly and consider the proximity of the park, downtown, and the waterfront. The Township priority improvements are highlighted on the map in green.



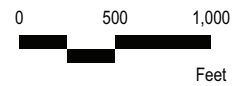
MAP 10
Non-Motorized Pathways

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- Local Non-Motorized Pathways
- Potential Non-Motorized Improvements
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: Washtenaw County Non-Motorized Plan 2018



ALEXANDER

FARM MARKET
& GREENHOUSES

Providing dedication and quality since 1978



09.

IMPLEMENTATION

The Master Plan is essentially a statement of goals and objectives designed to accommodate future growth and redevelopment. As stated in the introduction of this document, the Master Plan is the only officially adopted document that sets forth an agenda for the achievement of goals and policies. It helps develop a balance of orderly change in a deliberate and controlled manner that permits controlled growth. As such, it provides the basis upon which zoning and land use decisions are made.

The Plan forms the philosophical basis for the more technical and specific implementation measures. It must be recognized that development and change will occur either with or without planning, and that the Plan will have little effect upon future development unless adequate implementation programs are established. This section identifies actions and programs that will be useful if the Plan is to be followed.

A variety of programs or administrative tools are available to allow the Plan to succeed. This is discussed on the following pages.

ZONING REQUIREMENTS

Zoning is the development control that has been most closely associated with planning. Originally, zoning was intended to inhibit nuisances and protect property values. However, zoning should also serve additional purposes that include:

- Promote orderly growth in a manner consistent with land use policies and the Master Plan;
- Promote attractiveness in the Township’s physical (built) environment by providing variation in lot sizes, architectural features and appropriate land uses;
- Accommodate special, complex or unique uses through mechanisms such as planned unit developments, overlay districts, or special land use permits—specifically within the Lakes Sub-Area and industrial districts in order to allow complimentary uses;
- Guide development away from conflicting land uses (i.e., industrial uses adjacent to residential areas); and
- Preserve and protect existing land uses and significant natural features in accordance with the Master Plan.

The Zoning Ordinance and Future Land Use map are an essential element of the long-range planning policy of the Township. However; the entire Master Plan is a statement of planning policy, and zoning is a primary tool to implement and enforce the policy.

ZONING ADJUSTMENTS

Zoning Adjustments for Master Plan Implementation:

- Review existing zoning and subdivision ordinances to determine whether districts, permitted uses, and regulatory standards implement the policies of the Master Plan.
- Consider revising the WLD form-based code districts allowing for increased density within the downtown area by allowing residential units and encouraging development of compatible residential and commercial uses in the downtown area.
- Review the Agricultural Zoning Districts in relation to permitted, special, and accessory uses that promote the continued use of the land in an agricultural manner. This may allow accessory commercial land uses within the Agricultural District including tours, bed and breakfast, and seasonal family events. The sale of locally grown products should be encouraged both on and off-site.
- Regularly review open space zoning regulations and revise to reflect the goals and policies of open space preservation within the Township.
- Address the goals and recommendations of the 2015 Parks and Recreation Plan.
- Continue to review Township environmental regulations and ordinances to address the goals remain current on the use of “green” building and development techniques.

POLICY INITIATIVES FOR MASTER PLAN IMPLEMENTATION:

- Continue to work with property owners to preserve farmland, open space and significant natural features in order to maintain the Township’s rural character.
- Continue to work with WATS on development of a Township-wide, non-motorized network to provide opportunities for pedestrian activity such as walking, jogging, bicycling and horseback riding.
- Continue to work with residents and business owners to implement the recommendations of the North Village Master Plan and the Downtown Strategic Action Plan and Urban Design Framework.
- Develop local historic preservation policies that are compatible with community values.

AGRICULTURAL TOURISM



In an effort to expand agricultural tourism opportunities to help sustain the profitability of farm operations and preserve farmland and open space within the Township, local zoning ordinances will need to be modified. Specifically, including the intent, goals and purposes of these provisions are:

Intent: Promote and maintain local farming. The following activities have become necessary for the sustainability of farms: storage, retail or wholesale marketing, or processing of agricultural products; cider mills or wineries; on- farm market or roadside stand; seasonal u-pick fruit and vegetable operations; seasonal outdoor mazes; food sales/processing; bakeries; playgrounds; petting farms; hayrides; nature trails; bed and breakfasts; restaurants; etc.

Goals: The goal of the agricultural tourism provisions of the Ordinance should be:

- To maintain and promote agriculture and its related activities, such as agricultural tourism.
- To preserve open space and farmland.
- To maintain both an agricultural heritage and rural character.
- To increase community benefits by having fresh, local produce for sale and working classrooms for school children's and urban residents' education.

- To increase growing businesses that contribute to the general economic conditions and cycle of the local area and State.

Purposes:

- To provide standard definitions related to agricultural tourism operations.
- To provide a list of permitted activities under an agricultural tourism operation.
- To provide a list of activities that need a special land use permit to guide and regulate agricultural tourism businesses on agriculturally zoned land.
- To provide for a clear understanding of the expectations for agricultural tourism businesses for operators, local residents, other businesses and local officials.

In addition to the intent, goals, and purposes, regulations related to parking and signage should be considered for agricultural tourism uses.

CAPITAL IMPROVEMENT PLAN



The Township Planning Act (PA 465 of 2006, as amended) authorizes master plans and the creation of a planning commission. Once a Planning Commission has drafted and adopted a Master Plan, in whole or in part, the act requires that all public works occurring within the municipality be submitted to the Planning Commission for approval of the project. This would include items such as sanitary sewers, water lines, road improvements, bridge improvements, etc. These public works and capital improvement projects must be coordinated and reviewed for consistency with the Master Plan. Currently, the Capital improvement plan is for 2013-2018 the plan should be revised and updated to reflect the capital improvement priorities moving forward.

MUNICIPAL SERVICE EXPANSION



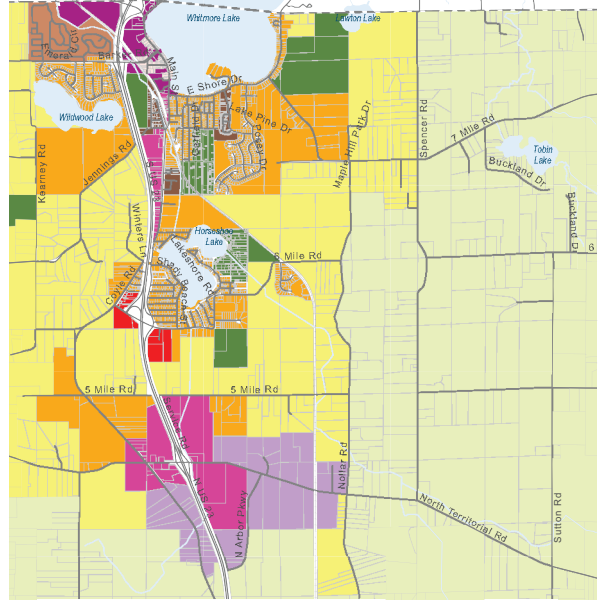
The Township should develop a municipal service expansion policy based in part on the goals of this Plan and the report given by the Tetra Tech regarding the cost of sewer expansions. The development of this policy should occur prior to the rezoning of property requiring sewer service.

PLAN EDUCATION



Citizen involvement and support will be necessary as the Plan is implemented. Local officials should constantly strive to develop procedures that make citizens more aware of the planning and zoning process and the day-to-day decision making which affects implementation of the Plan. A continuous program of discussion, education, and participation will be extremely important as the Township moves toward realization of the goals and objectives contained within the Master Plan.

PLAN UPDATES



The Plan should not become a static document. The Township Planning Commission should attempt to re-evaluate and update portions of it on a periodic basis. In accordance with Michigan Public Act 33 of 2008, as amended, the Township is required to review the Plan every five years to determine whether to commence the procedure to amend or adopt a new Plan. However, the Planning Commission should set goals for the review of various sections of this Plan on a yearly basis. The Master Plan should also be coordinated with the Township Parks and Recreation Plan to provide proper long-range planning for parks and recreation improvements. When large shifts in demographic, housing and market forces occur, it is necessary to conduct analysis to update policy and plan recommendations.



10.

BACKGROUND SUMMARY

POPULATION TRENDS AND GROWTH

Population

Northfield Township is the eighth most populated community in Washtenaw County. It includes two percent of the total population living in Washtenaw County.

Community	Rank
City of Ann Arbor	1
Ypsilanti Township	2
Pittsfield Township	3
Scio Township	4
Ypsilanti City	5
Superior Township	6
York Township	7
Northfield Township	8
Augusta Township	9
City of Saline	10

Northfield Township counted:

- 3,975 people in 1970,
- 4,672 people in 1980,
- 6,732 people in 1990,
- 8,252 people in 2000,
- 8,245 people in 2010, and
- 8,483 people in 2016

The 2016 American Community Survey reported the population to be 8,483 people currently living in Northfield, and SEMCOG projects that 12,388 people will live in the Township in 2045 (August 2018). This data indicates a 46% population growth for the Township over the 29-year time period.

Population Growth and Density

Northfield Township experienced most of its growth between 1980 and 2000. The population declined slightly in 2010, but shows steady growth through 21016 and is predicted to increase substantially through 2045. Table 5 presents the population growth since 1990 in Washtenaw County.

Table 4: City, Village and Township Population in Washtenaw County, 1990-2045

Community	1990	2000	2010	2016	2045 Forecast	Change 2010-2045	Percent Change 2010-2045
Ann Arbor City	111,801	114,740	113,934	118,087	132,325	14,238	12%
Ann Arbor Township	3,473	4,385	4,361	4,473	8,625	4,152	93%
Augusta Township	4,415	4,813	6,745	6,939	12,207	5,268	76%
Barton Hills Village	320	335	294	293	385	92	31%
Bridgewater Township	1,304	1,646	1,674	1,544	1,652	108	7%
Chelsea City	3,772	4,398	4,944	5,140	6,913	1,773	34%
Dexter City	1,497	2,338	4,067	4,319	4,641	322	7%
Dexter Township	4,407	5,248	6,042	6,286	7,326	1,040	17%
Freedom Township	1,486	1,562	1,428	1,460	1,220	-240	-16%
Lima Township	2,132	2,517	3,307	3,580	4,869	1,289	36%
Lodi Township	3,902	5,710	6,058	6,320	7,138	818	13%
Lyndon Township	2,228	2,728	2,720	2,744	3,067	323	12%
Manchester Township	1,739	1,942	4,569	4,672	4,721	49	1%
Manchester Village	1,753	2,160	2,091	2,258	3,253	995	44%
Milan City Part	3,060	3,065	3,770	3,893	3,397	-496	-13%
Northfield Township	6,732	8,252	8,245	8,483	12,388	3,905	46%
Pittsfield Township	17,668	30,167	34,663	37,225	55,486	18,261	49%
Salem Township	3,734	5,562	5,627	5,867	8,034	2,167	37%
Saline City	6,660	8,034	8,810	9,082	8,711	-371	-4%
Saline Township	1,276	1,302	1,896	1,954	4,377	2,423	124%
Scio Township	9,580	13,421	20,081	17,041	26,281	9,240	54%
Sharon Township	1,366	1,678	1,737	2,049	1,713	-336	-16%
Superior Township	8,720	10,740	13,058	13,483	19,330	5,847	43%
Sylvan Township	2,508	2,734	2,833	2,907	4,693	1,786	61%
Webster Township	3,235	5,198	6,784	6,561	7,104	543	8%
York Township	6,225	7,392	8,708	8,921	17,334	8,413	94%
Ypsilanti City	24,846	22,237	19,435	20,577	24,480	3,903	19%
Ypsilanti Township	45,307	49,182	53,362	54,475	61,121	6,646	12%
Washtenaw County	282,937	322,770	344,791	358,082	452,791	94,709	26%

Source: U.S. Census Bureau, ACS 2016 5-Year Estimate, and SEMCOG.

HOUSEHOLDS

Northfield Township had:

- 2,449 households in 1990,
- 3,154 households in 2000,
- 3,303 households in 2010, and
- 3,337 households in 2016

The 2016 American Community Survey reported Northfield Township currently has 3,337 households, and SEMCOG projects the Township will have 5,283 households by 2045 (August 2018). Population growth and the number of households is projected to rise by substantially by 46% and 58% respectively.

Through 2045, SEMCOG also projects that:

- The number of households with children will increase from 912 to 1,489 from 27 to 28 percent, and
- The number of households without children will increase from 2,425 to 3,794 or from 73 to 72 percent.

In summary, there has been a steady increase in households in the Township between 1990 and 2016. Future projections show that an increase will continue for both households and population, but will take place over the 29-year timeframe. Meanwhile household size dipped below 2.50 in 2010, but picked back up to 2.53 in 2016. However, by 2045 household size is expected to decrease. Decreasing household size reflects many factors including families with fewer children, aging population, and changes in the mix of households.

Table 5: Population and Household, 1990-2045

	1990	2000	2010	2016	2045 Forecast
Population	6,732	8,252	8,245	8,483	12,388
Households	2,449	3,154	3,303	3,337	5,283
Household Size	2.77	2.57	2.49	2.53	2.32
Household Types					
Households with Children	925 (38%)	1,159 (37%)	959 (29%)	912 (27%)	1,489 (28%)
Households without Children	1,524 (62%)	1,995 (63%)	2,344 (71%)	2,425 (73%)	3,794 (72%)

Source: U.S. Census Bureau, ACS 2016 5-Year Estimate, and SEMCOG.

Housing Characteristics and Development Trends

Single-family homes remain the predominant housing type, however, mobile homes and multi-family housing account for 22 percent and 34 percent of the housing stock. However, in Northfield Township, these two were the only categories to decrease in number of units. Overall, there was a 6 percent and 1 percent increase in the number of housing units.

Table 6: Housing Units by Type, 2010-2015

	Northfield Township		Washtenaw County	
	2010	2015	2010	2015
One-Family Detached	2,002 (58%)	2,557 (69%)	83,255 (57%)	84,994 (56%)
One-Family Attached	117 (3%)	170 (5%)	8,337 (6%)	9,645 (6%)
Two-Family / Duplex	111 (3%)	151 (4%)	4,304 (3%)	4,086 (3%)
Multi-Family	359 (10%)	322 (9%)	45,265 (31%)	45,046 (30%)
Mobile Homes	891 (26%)	486 (13%)	6,108 (4%)	5,271 (4%)
Other Units	—	—	—	—
Total Housing Units	3,480	3,686	147,269	149,098

Source: U.S. Census Bureau, ACS 2016 5-Year Estimate, and SEMCOG.

Northfield Township owner occupied units increased 5 percent between 2010 and 2015, while renter occupied units decreased by 17 percent over the same time period.

Table 7: Housing Tenure, 2010-2015

	Northfield Township		Washtenaw County	
	2010	2015	2010	2015
Owner Occupied Units	2,599 (72%)	2,721 (74%)	83,483 (57%)	82,525 (55%)
Median Housing Value	\$183,728	\$162,700	\$237,998	\$208,200
Renter Occupied Units	704 (20%)	582 (16%)	53,710 (36%)	55,542 (37%)
Median Gross Rent (In 2015 dollars)	\$1,057	\$863	\$953	\$953
Vacant Units	298 (8%)	383 (10%)	10,380 (7%)	11,031 (7%)
Total Housing Units	3,601	3,686	147,573	149,098

Source: U.S. Census Bureau, 2010 Census, ACS 2016 5-Year Estimate, and SEMCOG.

The housing stock is relatively new in Northfield Township with over half of the housing stock in the Township constructed since 1970 and a very small percentage constructed prior to 1939.

In addition to the general increase in population, households, and housing units, the Southeast Michigan region has recently experienced a reemergence in residential construction. As shown in Table 8, there has been a general increase in new single-family construction since the recession years. The peak in single-family construction occurred in 2013 with 16 units. There has been no change in the number of new attached and multi-family housing units constructed.

Table 8: Residential Building Permits, 2008-2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Annual Average
Single-Family Units	7	3	3	6	8	16	12	11	12	15	9	9.27
Two-Family/ Duplex Units	0	0	0	0	0	0	0	0	0	0	0	0.00
Townhouse/ Attached Condo	0	0	0	0	0	0	0	0	0	0	0	0.00
Multi-Family/ Apartment Units	0	0	0	0	0	0	0	0	0	0	0	0.00
Total New Units	7	3	3	6	8	16	12	11	12	15	9	9.27
Total Units Demolished	3	2	4	0	3	3	1	0	6	3	2	2.45
Net Total	4	1	-1	6	5	13	11	11	6	12	7	6.82

Source: SEMCOG, Northfield Township Building Records.

Age Profile

As noted in Table 9, children (under age 19) make up 23 percent of the total population in Northfield Township, while people 65 years and over represent 14 percent of the population. Projections by SEMCOG indicate that the number of children will increase from 1,973 to 2,551 (an increase of 578) by 2045, and the number of people 65 years and will nearly triple (an increase of 1,951) affecting the proportion of children and seniors in the Township.

Table 9: Age, 2010-2045

	2010		2016		2045 Forecast	
0-4	508	6%	631	7%	732	6%
5-19	1,576	19%	1,342	16%	1,819*	15%
20-24	455	6%	776	9%	492**	4%
25-54	3,834	47%	3,226	38%	4,787	39%
55-64	1,064	13%	1,367	16%	1,466	12%
65-84	731	9%	1,086	13%	2,234	18%
85+	77	1%	55	1%	858	7%
TOTAL	8,245		8,483		12,388	

* Age group 5-17 ** Age group 18-24

Source: U.S. Census Bureau, 2010 Census, ACS 2016 5-Year Estimate, and SEMCOG.

Racial Profile

Northfield Township is predominantly White (92%), while Black, Native American, Asian, and other races make up the balance of the population. Hispanic people of any race comprise three percent of the population.

Table 10: Race and Hispanic Origin, 2016

	2016	
White	7,839	92%
Black	6	0%
American Indian	27	0%
Asian	75	1%
Pacific Islander	0	0%
Other Race	107	1%
Multi-Racial	429	5%
Persons of Hispanic Origin	263	3%
TOTAL	8,483	

Source: U.S. Census Bureau, ACS 2016 5-Year Estimate



11.

SOCIO-ECONOMIC CHARACTERISTICS

EDUCATIONAL ACHIEVEMENT

Northfield Township's educated population is lower than the county and state populations. In 2016, 14.9 percent of the population above age 25 held a bachelor's degree or higher. The State of Michigan average is 16.7 percent, and Washtenaw County's average is 25.3 percent.

INCOME

According to ACS 2016, the median income for a household in Northfield Township was \$56,898. This is between the median household income of the state (\$50,803) and the county (\$62,484). The median income for a family was \$72,788.

Males had a median earning of \$51,469 while females earned \$41,884. The per capita income for the Township was \$33,514. About 5.5 percent of families and 8.2 percent of the population were below the poverty line, including 8.4 percent of those under age 18 and 2.1 percent of those ages 65 or over.



EMPLOYMENT INDUSTRIES

Table 11 provides the employment industries in Northfield Township and projects changes in these sectors over the next 30 years. The largest employment sectors in the Township with the largest growth are expected to be professional, administrative support, and leisure and hospitality.

Table 11: Employment by Industrial Sector, 2015

Industry Sector	2015	2045	Change	Percent Change
Natural Resources and Mining	380	299	-81	-21%
Manufacturing	216	127	-89	-41%
Wholesale Trade	95	50	-45	-47%
Retail Trade	275	229	-46	-17%
Transportation, Warehousing, and Utilities	84	55	-29	-35%
Information and Financial Activities	256	228	-28	-11%
Professional, Technical Services, and Corporate HQ	337	564	227	67%
Administrative Support and Waste Services	249	481	232	93%
Education Services	214	250	36	17%
Health Care Services	236	286	50	21%
Leisure and Hospitality	283	349	66	23%
Other Services	146	100	-46	-32%
Public Administration	78	88	10	13%
Total Employment	2,849	3,106	257	9%

Source: SEMCOG.



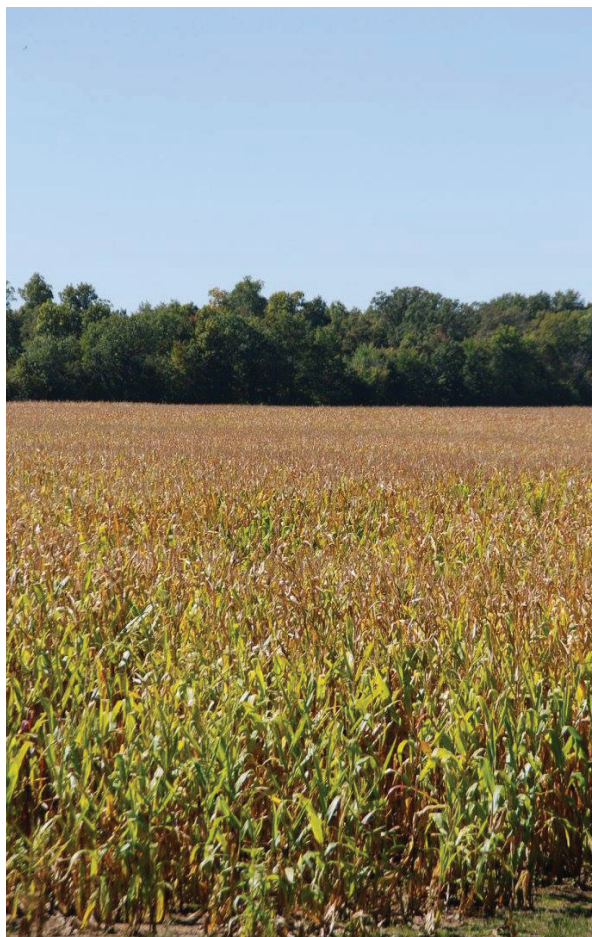


12.

PHYSICAL CHARACTERISTICS

The natural features of Northfield Township have played a major role in influencing growth and development of the area. Like much of Michigan's southern Lower Peninsula, the Township's landscape was formed through glacial action. The glacier's movement shaped the topography and created many different types of soils. Plant communities, in turn, developed in response to soil conditions.

GEOLOGY, TOPOGRAPHY, AND SOILS



Northfield Township is characterized by glacial geology typical of much of southeastern Michigan, consisting of glacial outwash plains, till plains, and moraines. Given the permeability associated with these geological features, many areas of the Township serve valuable groundwater recharge functions. Groundwater recharge areas can be found in several locations throughout the Township including the wetland and floodplain areas associated with the Lakes Area and the various creeks and drains.

The glacial geology of the area has resulted in topography that ranges from nearly level to gently rolling. Fertile agricultural soils are found across much of the Township.

WATER RESOURCES

Whitmore, Horseshoe, Wildwood and Tobin Lakes are the key water features of Northfield Township. In addition to the lakes, both natural waterways and County drains under the jurisdiction of the Washtenaw County Water Resource Commission (WCWRC) flow through the Township to the Huron River. All of Northfield Township is found within the Huron River Watershed.

Of particular importance are drainage issues reported by the residents of Horseshoe Lake for a number of years. In 2001, Orchard, Hiltz & McCliment, Inc. was retained to conduct a Horseshoe Lake Drainage Study. The study found that Horseshoe Lake has only one outlet, located at the north end of the lake. The outlet does not have sufficient capacity to discharge incoming water during a storm event. The study goes on to conclude that “as long as future developments restrict the stormwater runoff such that the capacity is not exceeded, the current flooding problem should not worsen and actually should gradually improve as development occurs based on assumptions found within the report along with enforcement of WCWRC or stricter requirements”.

In additions to restricting water runoff, the study also evaluated stormwater detention and the possibility of lowering the lake level. Alternatives included:

- Adopt/improve stormwater ordinance and strictly enforce WCWRC criteria;
- Adopt/improve stormwater ordinance and enforce more restrictive runoff rates than WCWRC criteria;
- Evaluate existing wetlands for the feasibility for stormwater storage and cost of storage;
- Periodic inspection of Horseshoe Lake outlet drain;
- Modify or eliminate the existing outlet control structure; and/or
- Evaluate detention options and costs based on subdistricts.

The protection of Northfield Township’s water bodies and waterways is of high importance to the overall environmental quality of the Township. Much of the Township’s woodlands and wetlands are associated with these water bodies and waterways.

Flood plains

Generally, floodplains are low lands along river banks, lakes and coastlines subjected to periodic inundation. Floodplain areas within Northfield Township are associated with the Whitmore and Horseshoe Lake areas. They are designated by the Federal Emergency Management Agency (FEMA) with the 100-year floodplain generally recognized as unsuitable for development and fill activities.

Wetlands

Three (3) types of wetlands are found throughout Northfield Township: emergent, scrub-shrub, and forested.

The Emergent Wetland class is characterized by erect, rooted, herbaceous hydrophytes, excluding moss and lichens (an organism consisting of fungus and green algae living in association). This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants. Emergent Wetlands are known by many names including marsh, meadow, fen prairie pothole, and slough.

The Class Scrub-Shrub Wetland includes areas dominated by woody vegetation less than twenty (20) feet tall. The species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions. Scrub-Shrub Wetlands may represent a successional stage leading to Forested Wetland or they may be relatively stable communities. They occur only in the Estuarine and Palustrine Systems, but are one of the most widespread classes in the United States.

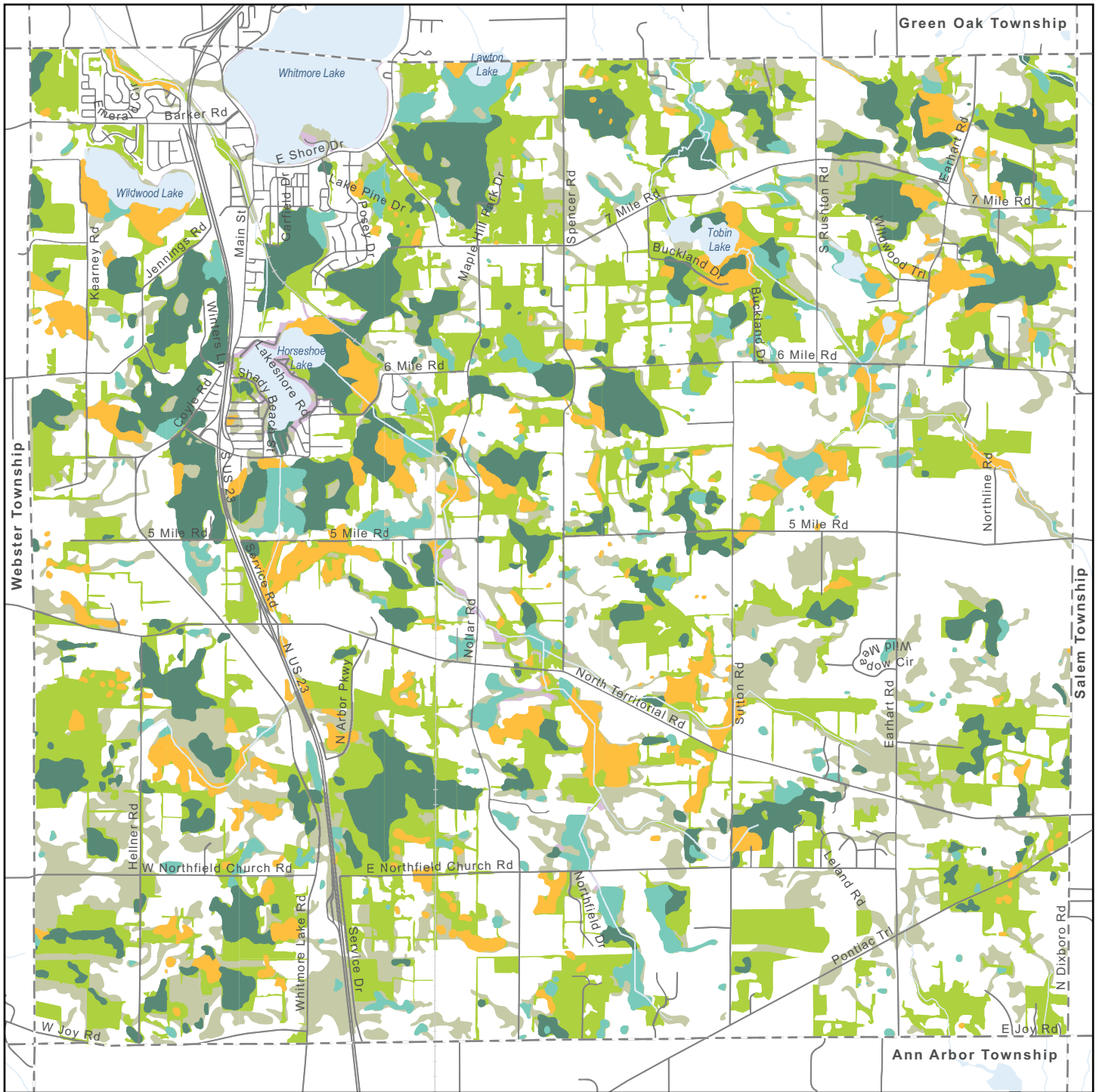
The Forested Wetland class is characterized by woody vegetation that is twenty (20) feet or taller. Forested Wetlands are most common in the Eastern United States and in those sections of the West where moisture is relatively abundant particularly along rivers and in the mountains. They occur only in Estuarine and Palustrine Systems and normally possess an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer.

Woodlands

Woodlands are defined as low-density forest with an open canopy allowing plenty of sunlight and limited shade. Woodlands may support an understory of shrubs and herbaceous plants, including grasses. Woodlands are found scattered throughout the Township. Many of these existing wooded areas exist in association with wetlands that remained intact because those land areas held little agricultural value.

Small networks of interconnected tree rows and woodlots exist in a number of places throughout the Township, and provide habitat, habitat linkages, and scenic features. These linkages (or greenways) should be protected from development, as they provide wildlife corridors within the Township.

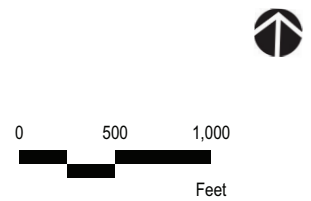




MAP 11
Natural Features
 Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

- Legend**
- Wetland - Other
 - Wetland - Emergent
 - Wetland - Forested
 - Scrub-Shrub
 - Woodlands
 - Flood Hazard
 - City and Township boundaries
 - Roads
 - Railroads
 - Rivers, streams, and lakes



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: Washtenaw County 2016



Farmland

There are significant concentrations of active farmlands throughout the Township. Northfield Township's farmland can be described in one of three ways: prime farmland, prime farmland if drained, and farmland of local importance.

Prime Farmland—as a designation assigned by U.S. Department of Agriculture —is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time and they either do not flood frequently or are protected from flooding.

Areas considered prime farmland if drained would be considered Prime Farmland if adequate soil drainage were provided.

Farmland of Local Importance is land important to the local economy as defined by each county. Farmland of local importance is either currently producing, or has the capability of production, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland.

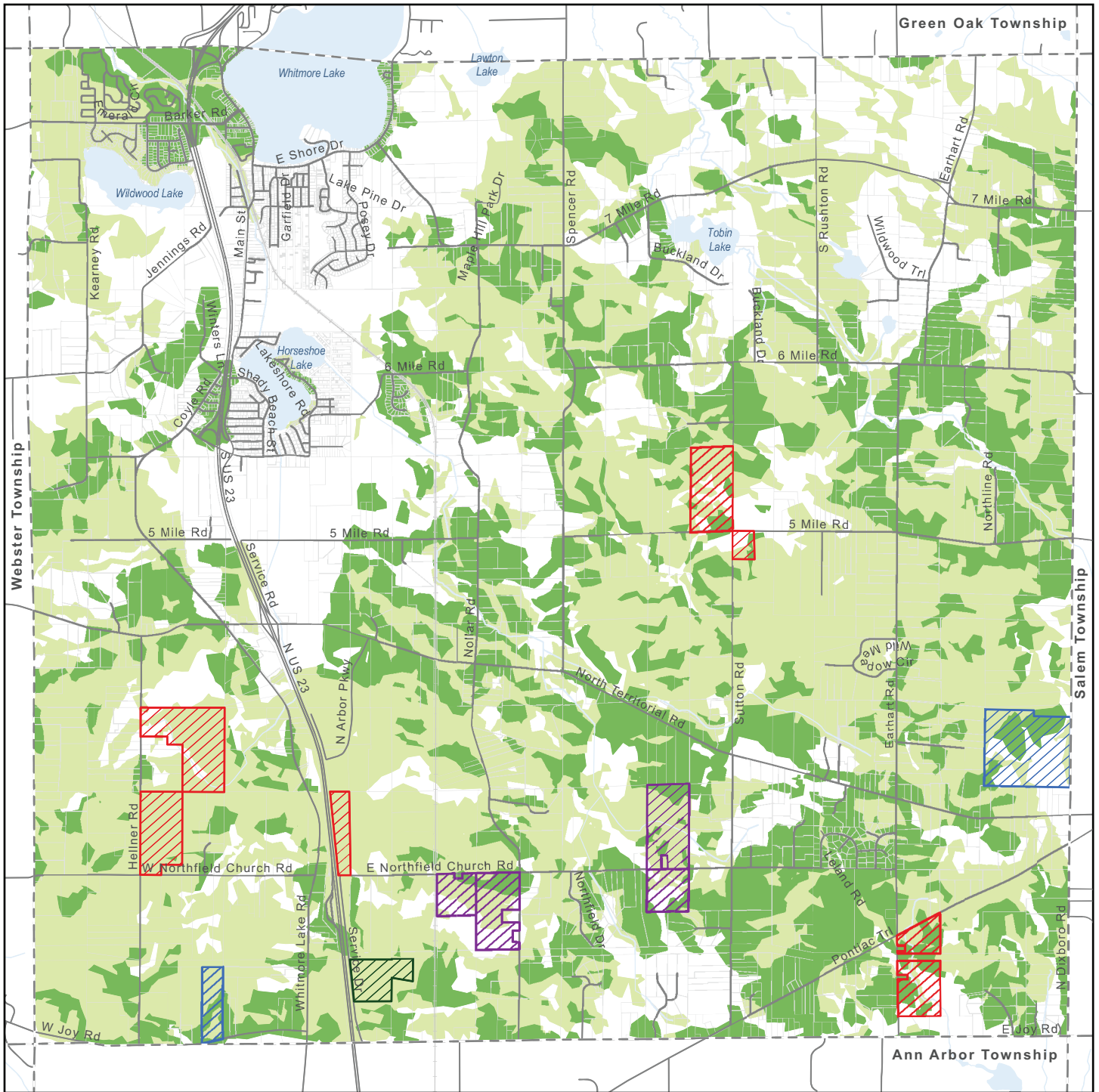
P.A. 116 Properties (Farmland and Open Space Preservation Program) are designed to preserve farmland and open space through agreements that restrict development, and provide tax incentives for program participation. The Act enables a farm owner to enter into a Development Rights Agreement with the State of Michigan. The agreement ensures that the land remains in agricultural use for a minimum of ten (10) years, and is not developed for any non-agricultural use. In return for maintaining the land in agricultural use, the landowner may be entitled to certain income tax benefits, and the land is not subject to special assessments for sanitary sewer, water, lights, or non-farm drain projects.

In addition to the P.A. 116 program, Northfield Township has participated in the Legacy Land Conservancy's Purchase of Development Rights Program (PDR). The PDR program offers several advantages to participating Townships, such as:

- Eligibility points form the Michigan Agricultural Preservation Fund program – specifically intergovernmental cooperation points, which comprises 10% of the total state's points. These points are limited for single township programs.
- Conservancy staffing of the program, including required administrative costs associated with both the application process and the acquisition process.
- Allows land owners who have land that is adjacent but located in two separate Townships to apply for their entire property, provided both Townships are members of the Conservancy program.

Over the years, some of the farmland has been converted to residential and other uses. The remaining active farmland is located in the eastern and southwestern portions of the Township. The Farmland Classification Map illustrates the farmland classifications throughout the Township in addition to the properties enrolled in the P.A. 116 Farmland Preservation Program.
















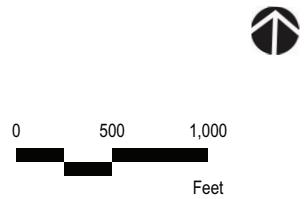
MAP 12
Farmland
Classification

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

-  Legacy Land Conservation Conservation Easement
-  P.A. 116 Properties
-  Ann Arbor Greenbelt Conservation Easement
-  Natural Area Preservation Program
-  Prime farmland
-  Prime farmland if drained
-  City and Township boundaries
-  Roads
-  Railroads
-  Rivers, streams, and lakes
-  Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019, Northfield Township 2019, ESRI 2017





Historic and Scenic Resources

Northfield Township was established in 1832. It is believed its name was derived from either its location in the northern part of the county or after the hometown of the first settlers, Northfield Township, Massachusetts.

In 1822, the Michigan Territorial Legislature formed Washtenaw County out of the western portions of Wayne and Oakland Counties. It would be more than one year later before the first small wave of settlers would trickle into Washtenaw.

In the nineteenth century, almost all of Northfield’s residents lived on family farms and depended on farming for their living, but the size of the first family farms were quite small, about 20 to 40 acres per owner. By 1874, much larger farms – 80, 120, 160 acres and more were formed.

Historic properties located in Northfield Township are listed on the Washtenaw County historic resources database known as HistWeb.

Scenic vistas are prevalent throughout Northfield Township along many of the local roads. Views of special significance include the vistas along North Territorial Road, Sutton Road, Northfield Church, and the views associated

COMMUNITY FACILITIES AND SERVICES



Government Facilities

Northfield residents are represented by an elected seven-member board consisting of three officers and four trustees – all of which are elected every four years. Limited by law in the amount of taxes that can be levied without voter approval, Township officials must be creative in delivering quality services with the least possible burden to taxpayers. The Northfield Township administrative offices are located in the Public Safety Building located at 8350 Main Street north of Six Mile Road. The Public Safety Building houses the Township’s Administrative offices, Police Department and Fire Station #1.

Police and Fire Services

Northfield Township maintains two (2) fire stations. Headquarters are located in the first floor of the Public Safety Building, and Fire Station #2 is located at 2727 E. North Territorial Road. The Fire Department is staffed with a Fire Chief, a Deputy Fire Chief, four (4) Lieutenants, and an administrative assistant.

The Northfield Township Police Department is staffed with a Director of Public Safety, one (1) Lieutenant, two (2) Sergeants, seven (7) full-time officers, four (4) part-time officers, five (5) reserve officers, and two (2) civilian administrative personnel.

Wastewater, Utilities, and Solid Waste

The majority of the Township land area relies on individual on-site wastewater disposal systems. The Northfield provides public wastewater disposal within designated service area, there are no plans for expansion of the service area in the future. The areas currently served by sanitary sewers include the majority of the Whitmore, Wildwood, and Horseshoe Lakes residential areas, and the area surrounding the N. Territorial Road / US-23 interchange. The Township may consider system upgrades and capacity improvements according to the Capital Improvement Plan and as outlined in the 2015 *Northfield Township WWTP Capacity Evaluation Report*.

The Township’s Wastewater Treatment Facility is located at 11500 Lemen Road and is a tertiary treatment facility. Flow is pumped to the plant via fifteen (15) pumping stations.



Public Transportation

Northfield Township participates in an on-demand door-to-door transportation service for income qualified people through People’s Express, which is operated by Northfield Human Services. People’s Express provides specialized transportation services to the U.S.-23 corridor and greater Ann Arbor and Ypsilanti area from the bordering townships of Oakland and Livingston Counties.

People’s Express is currently working on new siting near downtown Whitmore Lake



Downtown Development Authority

Northfield Township established a Downtown Development Authority (DDA) in 2002 that generates revenue through tax increment financing (TIF). The DDA includes the Main Street corridor area from the northern Township border to the area immediately north of Northfield Church Road. The DDA has focused their efforts upon undertaking public improvement activities that have the greatest impact on strengthening the business district and attracting new private investments.

To implement the recommendations of the North Village Master Plan and the Downtown Strategic Action Plan and Urban Design Framework, the DDA should consider an update to the TIF plan and contributing property boundaries to include a current of priority projects and strategies for improving the downtown area.



Schools

The Township is currently served by four (4) public school districts: Whitmore Lake Schools, Ann Arbor Public Schools, Dexter Community Schools, and South Lyon Community Schools.

Library

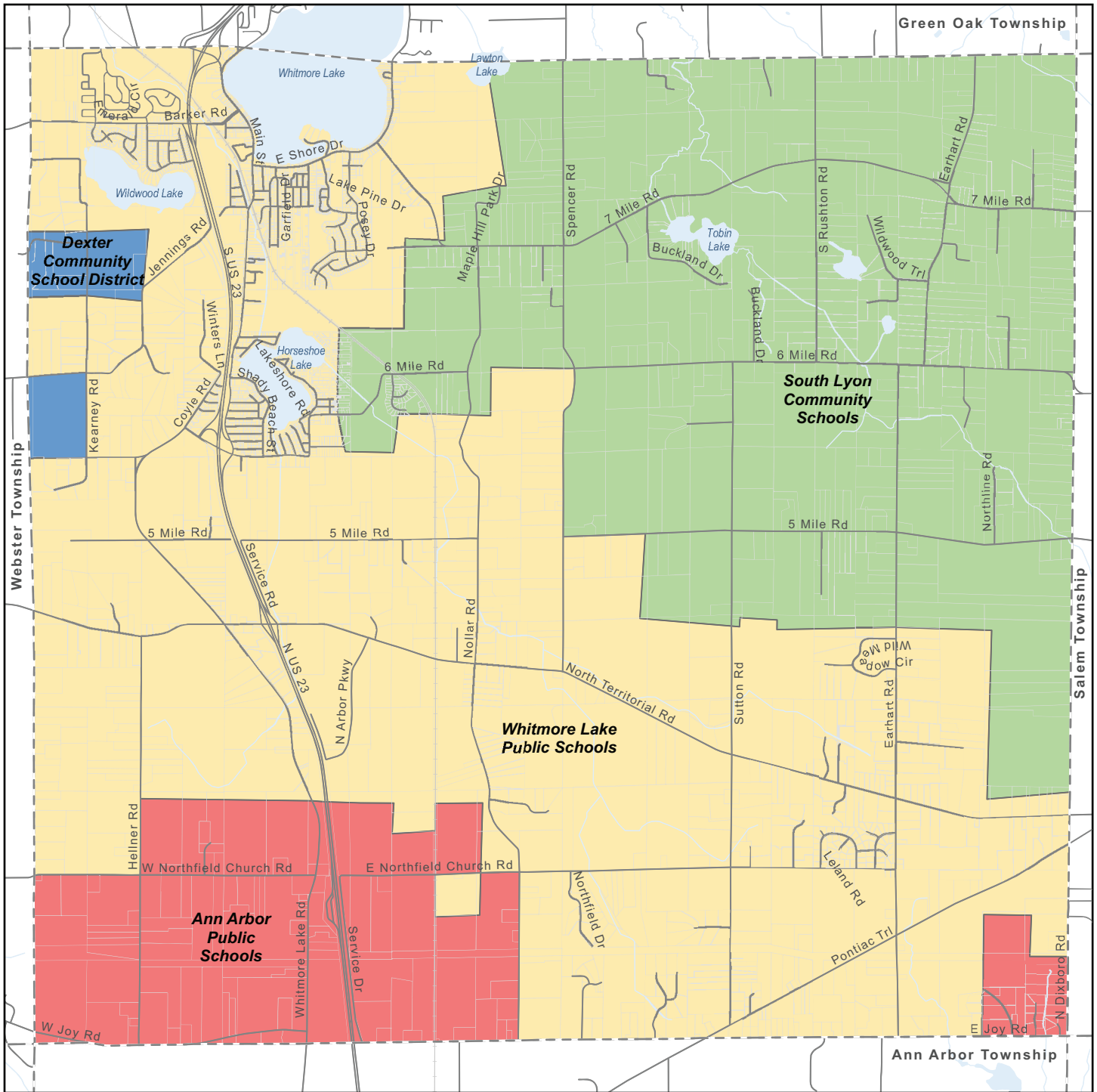
The Northfield Township Area Library is located at 125 Barker Road. The library provides many community oriented programs and events for residents of all ages. Their website allows residents to access research, genealogy, card catalog, and renewal information from home as well.

In 2018, the library built a gazebo space, for community gatherings and enjoyment.



Parks, Open Spaces, and Recreation

Northfield Township has two (2) publicly-owned preserves and open spaces, and private recreational facilities as depicted on the Community Facilities Map. Additionally, the Township invested in the creation of a multi-modal trail on Barker Road as well as the purchase of the North Village Area, a vacant property, that will, when fully developed, serve as a Township gathering space and recreation amenity.



MAP 13

School Districts

Northfield Township,
Washtenaw County, MI

February 14, 2019
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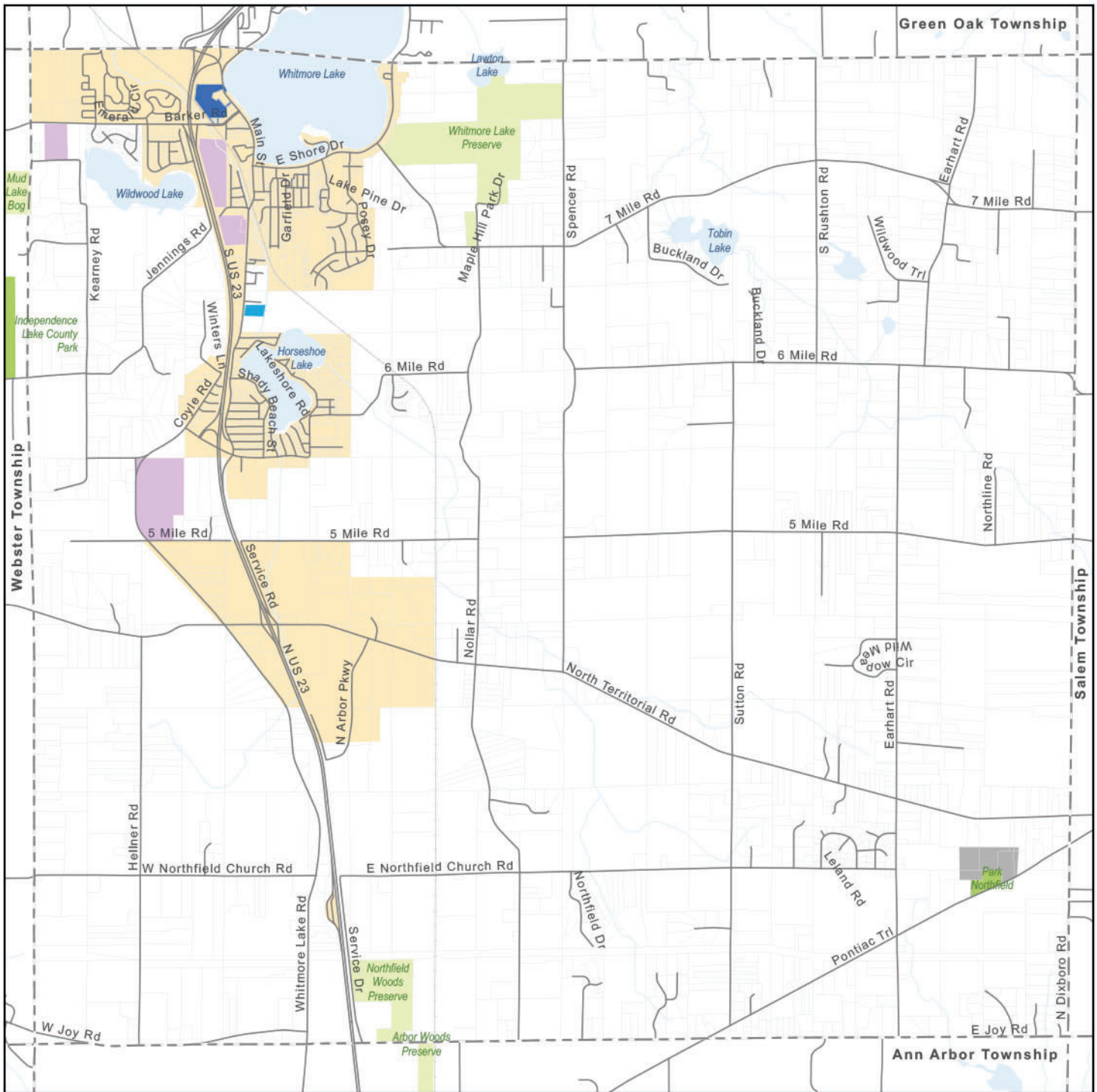
Legend

- Ann Arbor Public Schools
- Dexter Community School District
- South Lyon Community Schools
- Whitmore Lake Public Schools
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: Northfield 2017





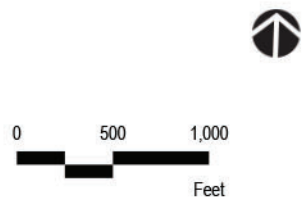
MAP 14
Community Facilities

Northfield Township,
 Washtenaw County, MI

February 14, 2019
 DRAFT

Legend

- Northfield Sewer Service Area
- Park
- Preserve
- Township Office
- North Village
- School Properties
- Protected Land
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



SOURCES
 Basemap Source: Michigan Geographic Framework 2019, SEMCOG 2019
 Data Source: McKenna 2019, Northfield Township 2017



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