

WELCOME TO NORTHFIELD TOWNSHIP

NORTHFIELD TOWNSHIP MASTER PLAN

NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN

prepared by McKenna

JUNE 13, 2019 DRAFT

WELCOME TO NORTHFIELD TOWNSHIP

ACKNOWLEDGMENTS

BOARD OF TRUSTEES 2019

Marlene Chockley, Supervisor
Kathy Manley, Clerk
Lenore Zelenock, Treasurer
Wayne Dockett, Trustee
Jacki Otto, Trustee
Janet Chick, Trustee
Tawn Beliger, Trustee

PLANNING COMMISSION 2019

Larry Roman, Chairperson
Janet Chick, Vice-Chairperson, Township Board Representative
John Zarzecki, Secretary
Brad Cousino
Sam Iaquinto
Eamonn Dwyer
Cecilia Infante

WHITMORE LAKE
TAVERN
LAKE VIEW DINING
KENO & PULL TABS
GRILLED PORK
CHOP DINNER \$13

TABLE OF CONTENTS

| | |
|-----------------------|---|
| Acknowledgments | b |
|-----------------------|---|

01. INTRODUCTION 1

| | |
|-------------------------------|---|
| How to use this plan | 2 |
| What This Plan Contains | 3 |

02. REGIONAL CONTEXT 5

| | |
|------------------------|---|
| Regional Setting | 7 |
|------------------------|---|

03. NORTHFIELD TOWNSHIP GUIDING PRINCIPLES 11

| | |
|--|----|
| Vision Statement | 11 |
| Statement of Mission and Purpose | 11 |
| Statement of Values | 11 |

04. EXISTING LAND USE AND COMMUNITY PLANS..... 13

| | |
|-------------------------------------|----|
| Past Plan Initiatives | 14 |
| Existing Land Use..... | 15 |
| Neighboring Communities | 17 |
| Growth Management Initiatives | 19 |

05. COMMUNITY GOALS AND POLICIES..... 23

| | |
|---|----|
| 2018 and 2019Public Participation | 24 |
| 2010 – Previous Public Participation incorporated | 25 |
| Northfield Township Goals | 27 |

06. TOWNSHIP SUB-AREA PLANS 37

| | |
|---|----|
| Land Preservation sub-area | 39 |
| Central US-23 Interchanges sub-area | 41 |
| Lakes Sub-area..... | 44 |

07.

FUTURE LAND USE PLAN49

| | |
|--|----|
| Future Land Use Categories | 51 |
| Agricultural Land Use | 53 |
| Residential Land Uses | 54 |
| Village Center Land Use | 56 |
| Mixed Use Land Use | 56 |
| Mixed Use - North (MU-N) | 57 |
| Mixed Use - South (MU-S) | 58 |
| Commercial Land Use | 59 |
| Industrial Land Use | 59 |
| Recreation/Conservation Land Use | 60 |

08.

TRANSPORTATION PLAN63

| | |
|--------------------------|----|
| Roadway Network | 64 |
| Access Management | 67 |
| Non-Motorized Plan | 68 |

09.

IMPLEMENTATION71

| | |
|-----------------------------------|----|
| Zoning Requirements | 72 |
| Zoning Adjustments | 72 |
| Agricultural Tourism | 73 |
| Capital Improvement Plan | 74 |
| Municipal Service Expansion | 74 |
| Plan Education | 75 |
| Plan Updates | 75 |

10.

BACKGROUND SUMMARY77

| | |
|------------------------------------|----|
| Population Trends and Growth | 78 |
| Households | 80 |

11.

SOCIO-ECONOMIC CHARACTERISTICS85

| | |
|-------------------------------|----|
| Educational Achievement | 86 |
| Income | 86 |
| Employment Industries | 87 |

12.

PHYSICAL CHARACTERISTICS89

| | |
|---|----|
| Geology, Topography, and Soils | 90 |
| Water Resources | 90 |
| Community Facilities and Services | 96 |

ATTACHED MEMORANDUMS.....101

LIST OF TABLES

| | |
|---|----|
| Table 1: Milestones and Input Participation | 3 |
| Table 2: Land Use/Land Cover | 15 |
| Table 3: Master Plan Land Use Classifications / Zoning District Comparison | 60 |
| Table 4: City, Village and Township Population in Washtenaw County, 1990-2045 | 79 |
| Table 5: Population and Household, 1990-2045 | 80 |
| Table 6: Housing Units by Type, 2010-2015 | 81 |
| Table 7: Housing Tenure, 2010-2015 | 81 |
| Table 8: Residential Building Permits, 2008-2018 | 82 |
| Table 9: Age, 2010-2045 | 82 |
| Table 10: Race and Hispanic Origin, 2016 | 83 |
| Table 11: Employment by Industrial Sector, 2015 | 87 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: 2010 Comprehensive Economic Development Strategy Economic Development Incentive Zones | 20 |
|---|----|

LIST OF MAPS

| | |
|--|-----|
| Map 1: Regional Context | 6 |
| Map 2: Adjacent Municipalities | 8 |
| Map 3: Existing Land Use | 16 |
| Map 4: Surrounding Future Land Use | 18 |
| Map 5: Sub-Area Map | 38 |
| Map 6: Future Land Use | 52 |
| Map 8: Functional Road Classification | 65 |
| Map 9: Washtenaw County Planned Right-of-Way Width | 66 |
| Map 10: Non-Motorized Pathways | 69 |
| Map 11: Natural Features | 92 |
| Map 12: Farmland Classification | 94 |
| Map 13: School Districts | 99 |
| Map 14: Community Facilities | 100 |



01.

INTRODUCTION

The Northfield Township Master Plan articulates a vision for future land preservation, growth, and development, and brings together several planning efforts that the Planning Commission has undertaken to guide future decision making processes. This Master Plan has been 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 becomes the official policy guide for the Northfield Township Board of Trustees and the Planning Commission to guide land use decisions. This Master Plan is not only a vision statement towards future land preservation, 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 are the only officially adopted documents 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 to unify land preservation and coordinate development of the Township. More specifically, the Master Plan is to be used in the following ways:

1. This Master Plan is a general statement of the Township's goals and policies. It provides a single, comprehensive view of the community's desire for the future.
2. It serves as an aid in daily decision-making with regard to development. 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 land use and development matters.
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. The Zoning Ordinance 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 federal 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 Three, Four, and Five present the basis for this Master Plan. The goals herein were developed from received from Township officials, staff and residents.
- **Future Land Use Plan** – Chapters Six and Seven provide specific visions for the future of each of the Township's sub-areas and outlines Township-wide policies for future development.
- **Transportation Plan** – Chapter Eight outlines current and future transportation enhancement and improvement related to the US-23 corridor, including non-motorized transportation, streets designed for all users (known as Complete Streets), and other opportunities.
- **Implementation** – Chapter Nine provides ways in which the goals and objectives of this Master Plan can be achieved.
- **Community Description** – Chapters Ten, Eleven, and Twelve provide information on the social, economic, and physical characteristics of the community.

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

Planning Process

This Master Plan was developed using input from Township officials, staff, and residents. Two (2) public open houses were held where participants were encouraged to suggest improvements to the existing draft, and to guide plan authors about how to shape the future of the Township. The first open house was held on October 17, 2018 at the Township Hall and the second was held on October 25, 2018 at Whitmore Lake High School. Additionally, the Township asked for big ideas from residents on a comment board in Township Hall between November 2018 and February 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 Michigan Planning Enabling Act and included a 63-day public review period and a public hearing as required by State law.

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 any community, it is essential to understand both the community of people who live there, 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. Existing 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 within 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

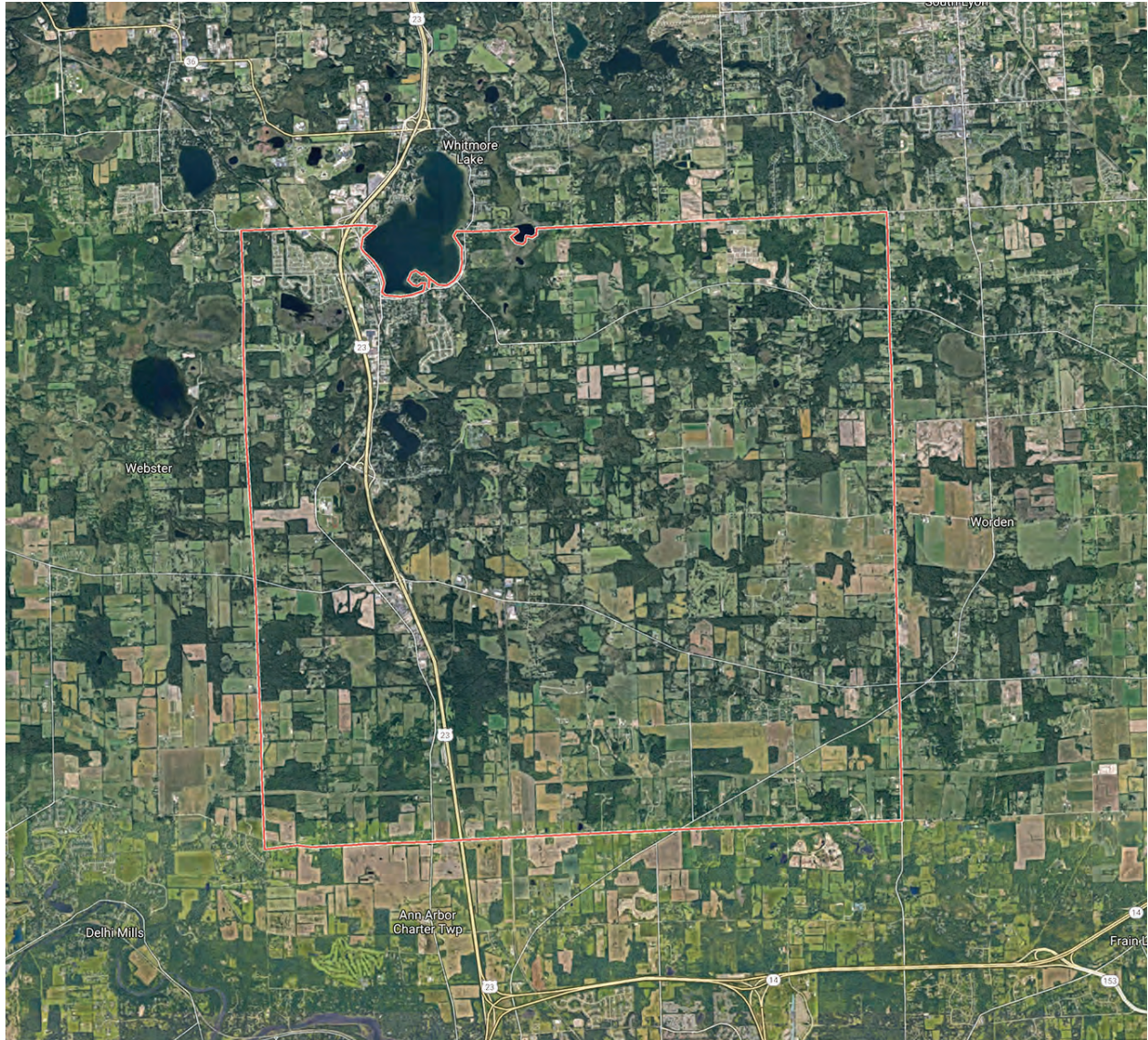


0 2.5 5 10
Miles

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

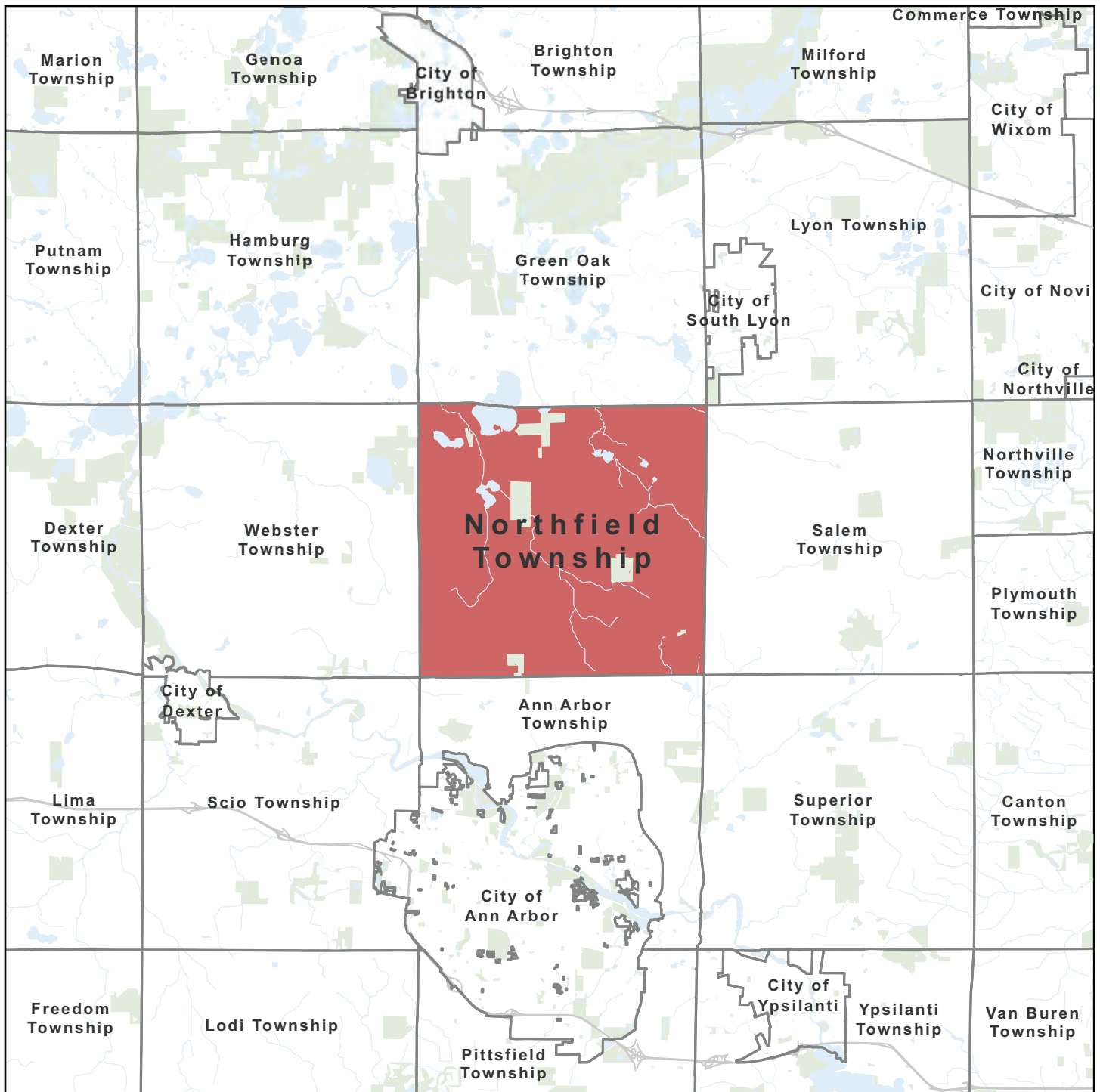


REGIONAL SETTING



Northfield Township is located in northeastern Washtenaw County, approximately one (1) mile north of the City of Ann Arbor and 47 miles west of Detroit. It 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 most populous county in 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



0 0.5 1 2
Miles

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





South Lyon



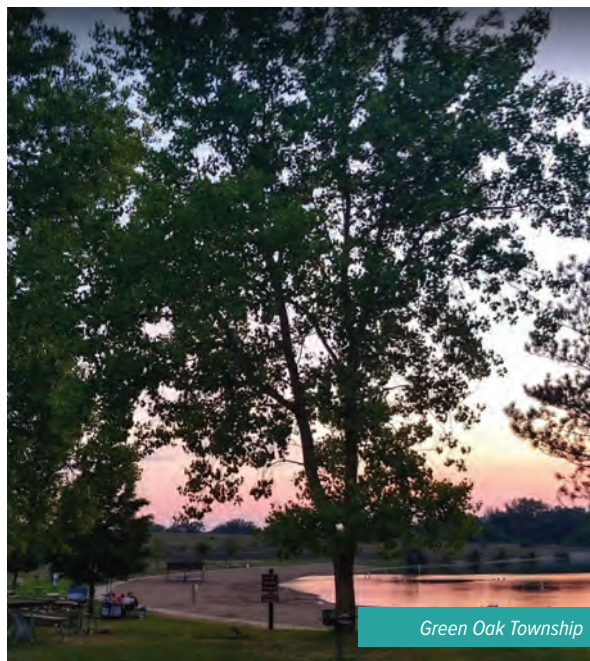
Ann Arbor Township



Webster Township



Webster Township



Green Oak Township



03.

NORTHFIELD TOWNSHIP GUIDING PRINCIPLES

In addition to the goals, objectives, and policies discussed in this Master Plan document, the Northfield Township Board has adopted the following guiding principles:

VISION STATEMENT

Northfield Township aspires to be a friendly and pleasant community that nurtures its diverse natural, historical, cultural, and social assets to foster a safe, clean, prosperous, and 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 responsible 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, the individual voice, and service for the common good.
- 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.
- Value for the enterprise of local merchants and support their efforts.



HOWATZKE

EXIT 49
N Territorial Rd

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 the future of Northfield Township. These include decentralized places of employment and increased commuting distances. Conversely, an increase in those working at home. These factors gathered from past experiences, SEMCOG studies and Census information and 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 has 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 Township'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 this site based on community goals and input received from residents. The plan, once realized, will create additional housing, open space, 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 physical 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 Downtown Whitmore Lake by providing funding for exterior building improvements that encourage good design, properly renovate or restore existing structures, and preserve the area's unique traditional and historical character. 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 (5) 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 decreases and increases, respectively, in acreage. Agriculture saw a 17% decrease in the overall amount of acreage, while Single-Family Residential experienced a 47% increase in overall 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.”

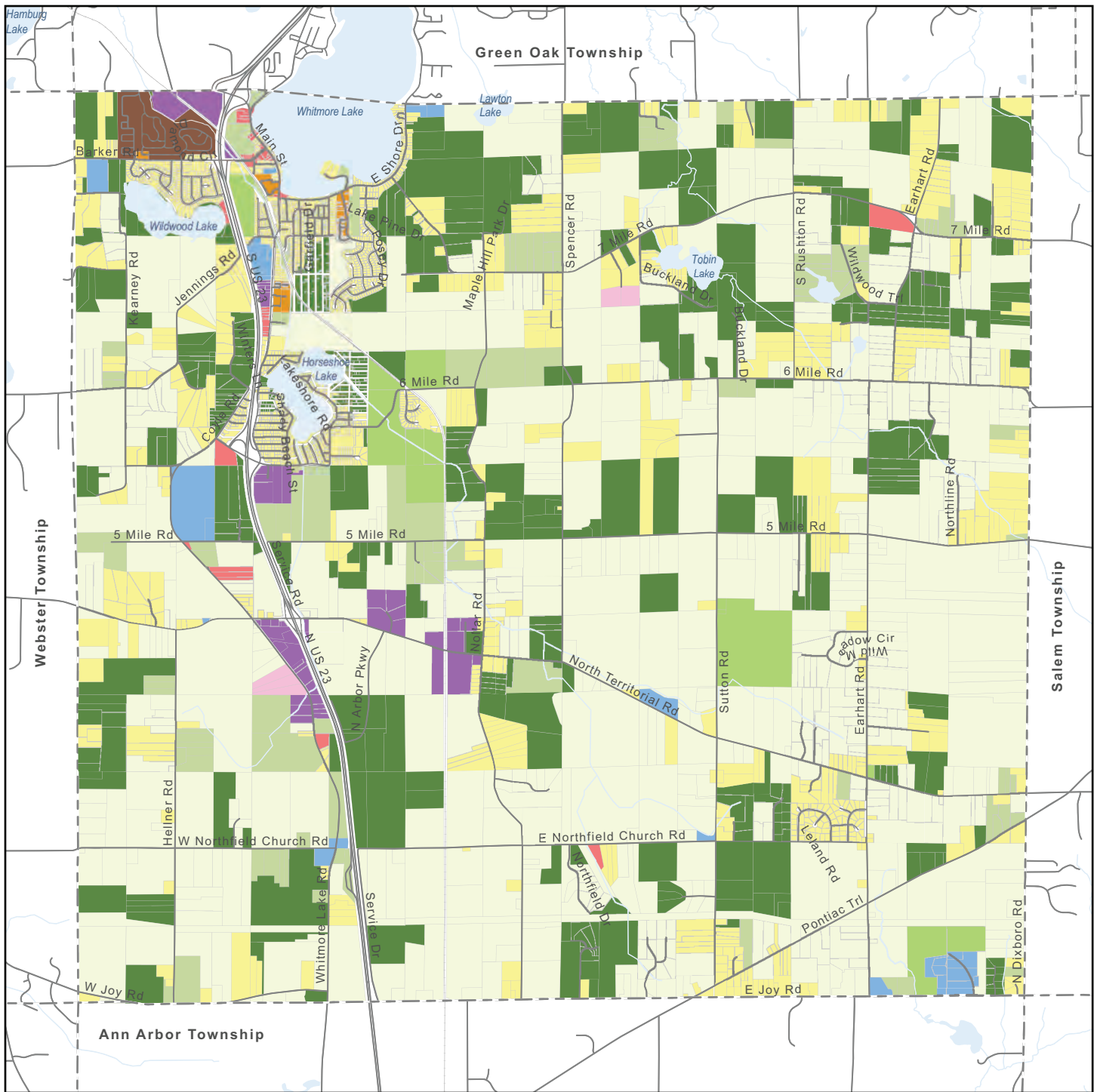
Table 2: Land Use/Land Cover

| 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.



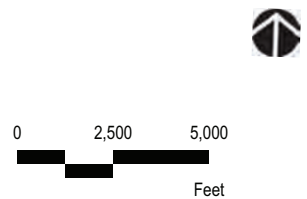
MAP 3 Existing Land Use

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

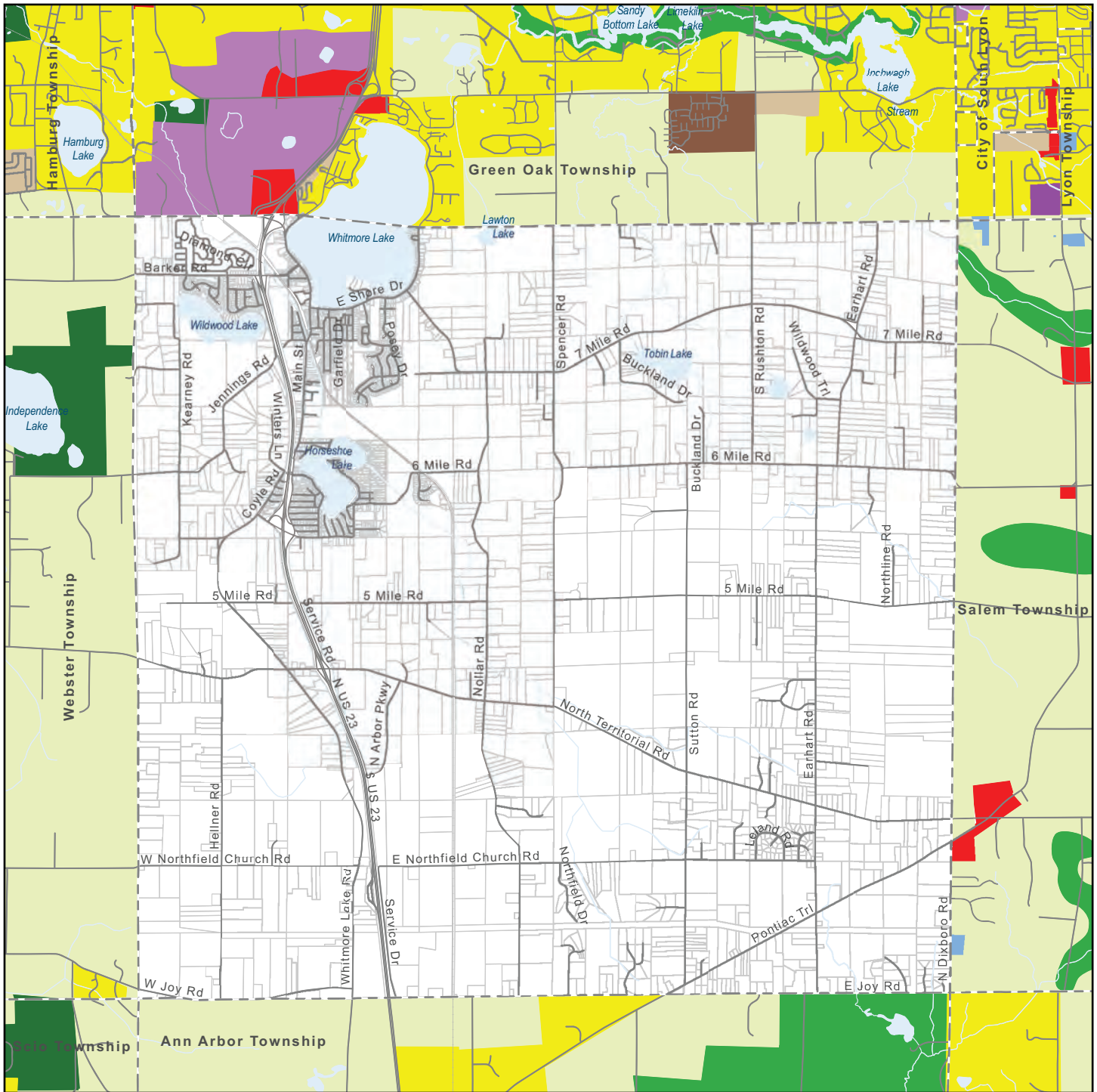


NEIGHBORING COMMUNITIES

Northfield Township borders eight (8) townships, including: Ann Arbor Township, Salem Township, Scio Township, Superior Township, Webster Township, Green Oak Township (Livingston County), Hamburg Township (Livingston County), and Lyon Township (Oakland County). While the townships generally share similar goals, such as maintaining rural character and preserving farmland, the development activities and planning policies in these communities can influence Northfield Township'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.





MAP 4 Surrounding Future Land Use

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

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



0 2,500 5,000
Feet

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



GROWTH MANAGEMENT INITIATIVES

Northfield Township is committed to managing that growth to enhance economic benefit, recreational activities, and overall quality of life for all residents while maintaining a rural character. A number of planning initiatives have recently taken place in both Washtenaw County and Northfield Township which have influenced 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 Township as described and illustrated below:

- Sustaining small city and village development encouraging social interaction and environmental health;
- Maintaining a sense of place by preserving open spaces around activity centers;
- Encourage ne activity centers which 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)

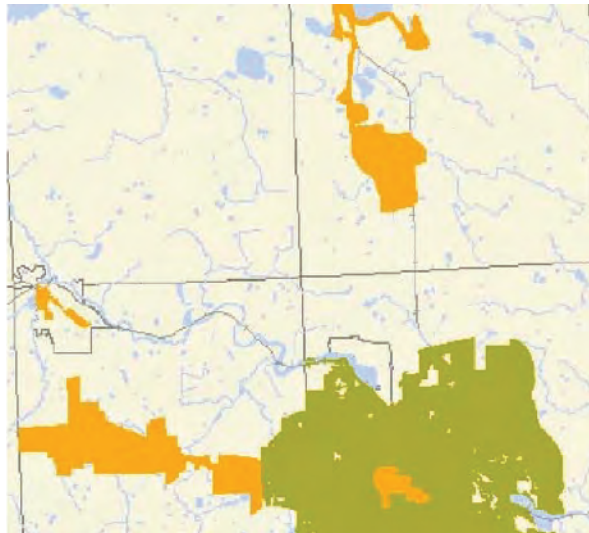
The Washtenaw Area Transportation Study has provided a 2045 Long Range Transportation Plan for the County. The plan includes goals and capital and operating improvement projects which involve reconstruction or resurfacing, transit improvements, intersection and widening projects, as well as future non-motorized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



2010 COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

Washtenaw County's Comprehensive Economic Development Strategy was adopted in June 2010. Sustained economic growth has created a need to bring the public, private, education and not-for-profit sectors together to create an economic roadmap for a diverse and strong local economy. This 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 Area Transportation Authority (AAATA) 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 Road, North Territorial Road, and Pontiac Trail as primary links for rural bike accommodations.



Focusing Growth on Northfield Township's Downtown

2002 DOWNTOWN DEVELOPMENT AND TAX INCREMENT FINANCING PLAN

The Northfield Township Downtown Development and Tax Increment Financing Plan was adopted in 2003. 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 the Main Street corridor. The 2002 plan should be updated to ensure that the DDA boundaries, capture potential, and public improvement priorities remain up to date.

2017 NORTH VILLAGE MASTER PLAN

As mentioned, prior, the North Village Master Plan outlines goals 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

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





05.

COMMUNITY GOALS AND POLICIES

Northfield Township is a growing community that faces the difficult challenge of accommodating increasing development while preserving its rural character. A key component of the Northfield Township Master Land Use Plan is articulating a vision for the Township's future growth, and the formulation of 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 have been 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 are found 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 event 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 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 presented goals and their continued importance for the community. 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 – PREVIOUS PUBLIC PARTICIPATION INCORPORATED

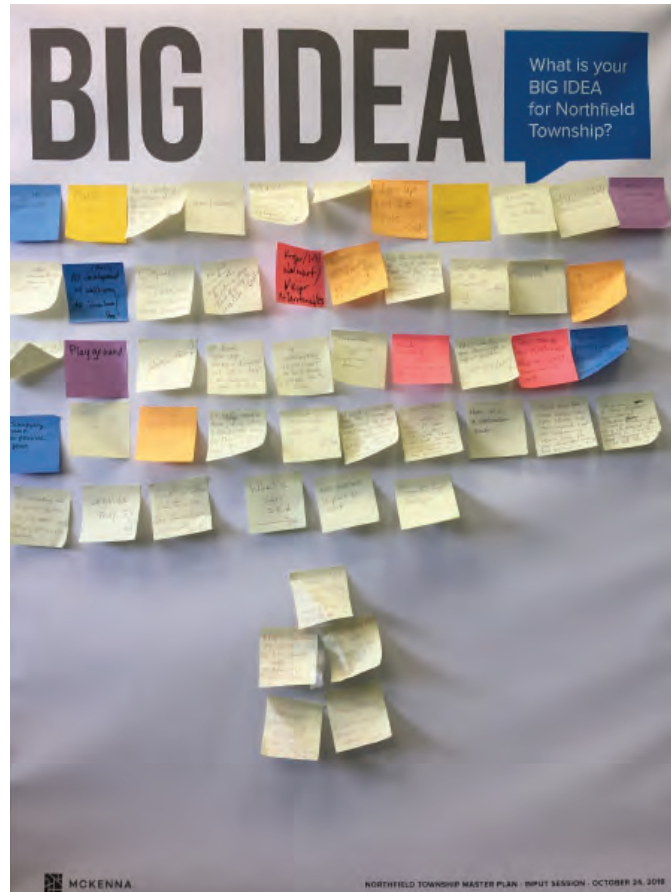
Public events in 2010 helped formulate goals and objectives that were validated in the Charrette held eight years later. In 2010, public participation was sought through a mailed survey of residents, two (2) planning fairs conducted in the summer of 2010, and a public hearing conducted by the Planning Commission on May 2, 2012.

On June 16, 2010 and July 14, 2010, the Northfield Township Planning Commission conducted Planning Fairs to encourage 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 Public Safety 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 Development

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, in 2010. Additionally, this feedback continues to be consistent with the results of the 1996 Township survey, which established land preservation as a priority policy.









At the 2018 public outreach events residents were asked to provide their big ideas for improving Northfield Township. This exhibit was also placed in the lobby of the Township Office from November 2018 to February 2019.

Master Plan Survey

In Summer 2010, Northfield Township began a comprehensive community survey. The survey is one important tool in obtaining the input of residents on many important issues facing the community. This input assisted 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 projects, open space preservation, and other Township 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 were asked for 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 future development.

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 legally commit Northfield Township to any particular recommendation, but rather provides guidance as how to take action in the future.

NORTHFIELD TOWNSHIP GOALS

The following statements reflect the primary goals of Northfield Township:

- *To maintain the rural character and preserve, the local characteristics of Northfield Township as 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.*
- *To 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.*
- *To guide residential development in a manner which will create, preserve and enhance a quality living environment for existing and future Township residents and workers.*
- *To preserve and strengthen the existing character of the downtown area as a historic, pedestrian-oriented community, with traditional site and architectural design, creating an aesthetically memorable place with vibrant streetscapes and community spaces that engage the waterfront.*
- *To encourage development of a mix of commercial, office, service and multiple-family residential uses in three (3) specific locations best situated for this use.*
- *To promote quality, job producing economic development within the Township that serves the needs of the Township residents.*
- *To provide a variety of safe, efficient modes of transportation to meet the needs of Township residents and visitors.*
- *To provide timely, efficient, and quality governmental services to Township residents.*

GOAL:

AGRICULTURAL / OPEN SPACE

To maintain the rural character and preserve, the local characteristics of Northfield Township as 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, 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 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 (Michigan Farmland and Open Space Preservation Act), Purchase of Development Rights, 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 public roads.
- Discourage extension of public sewer into areas of the Township ideally situated and conditioned for open space and natural features preservation and agriculture.
- Encourage residential development 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

To 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 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 developments on waterways, wetlands, woodlands, other natural resource areas, and groundwater recharge areas.



GOAL:

RESIDENTIAL DEVELOPMENT

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

POLICIES:

- 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 preserve open space buffers delineating village, rural and suburban landscapes.
- Provide diversity in housing stock while retaining an attractive rural character.
- Strongly encourage clustered development 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. Evaluate each development based upon the suitability of soils, impact on woodlands, wetlands, floodplains, water bodies, and infrastructure capacity, such as 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

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

POLICIES:

- 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 preserve open space buffers delineating village, rural and suburban landscapes.
- Encourage mixed-uses with the Village and that preserve character.
- Encourage an increased building height in keeping with the character of the area with residential and 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 a compatible and complimentary mix of uses within the downtown area. Utilize form-based codes 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 and 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 or non-motorized circulation system.
 - » Preserve waterfront views by carefully considering new development proposals in the area



GOAL:

MIXED USE DEVELOPMENT

To encourage development of a mix of commercial, office, service and multiple-family residential uses in three (3) specific locations best situated for this use.

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 community goals, surrounding land uses, and the environment.
- Maintain a pattern of development with clear edges, and preserve open space buffers delineating village, rural, and suburban landscapes.
- Organize commercial development into compact, unified centers that complement the scale and character of existing development, or that promote the desired character for areas wherever new development is planned.
- Design large-scale retail buildings should be designed for potential reuse if vacated by the original user.
- Avoid piecemeal, scattered development and discourage uncoordinated commercial strip development. Where individual parcels of land are to be developed for commercial uses, coordination with adjacent properties, including common parking and driveways, shall be encouraged to reduce the number of access points onto 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 shall 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

To promote quality, job producing, economic development within the Township that serves the needs of the Township residents and workers.

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.
- Organize commercial development 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.
- Discourage piecemeal, scattered development and uncoordinated commercial strip development. 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 onto 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.
- Limit commercial development areas to those properties directly adjacent to US-23 interchanges.
- Encourage a combination of mixed-use, campus-type settings 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.
- Township policy outlining infrastructure improvements that could be funded by a developer.
- Coordinate transportation improvements with the Washtenaw County Road Commission and state agencies (MDOT).
- Consider a variety of additional 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 existing sewer system. In 2015, the Township commissioned the Wastewater Treatment Plant (WWTP) Capacity Evaluation Report to study the status of the existing sanitary collection system and identify improvements necessary at the WWTP 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 new businesses. For future municipal service expansion, the Township should 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 service boundary should be considered as the preferred area for expansion of municipal services. The “leapfrogging” of Township areas to provide municipal services which create an island of services within the Township should be strongly discouraged. The idea of contiguous development requires that municipal services expand from one fully-developed area to the next area.
2. The Township may 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, Residential Equivalent Units (REU) charges, and other similar mechanisms, or as required by law.
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.



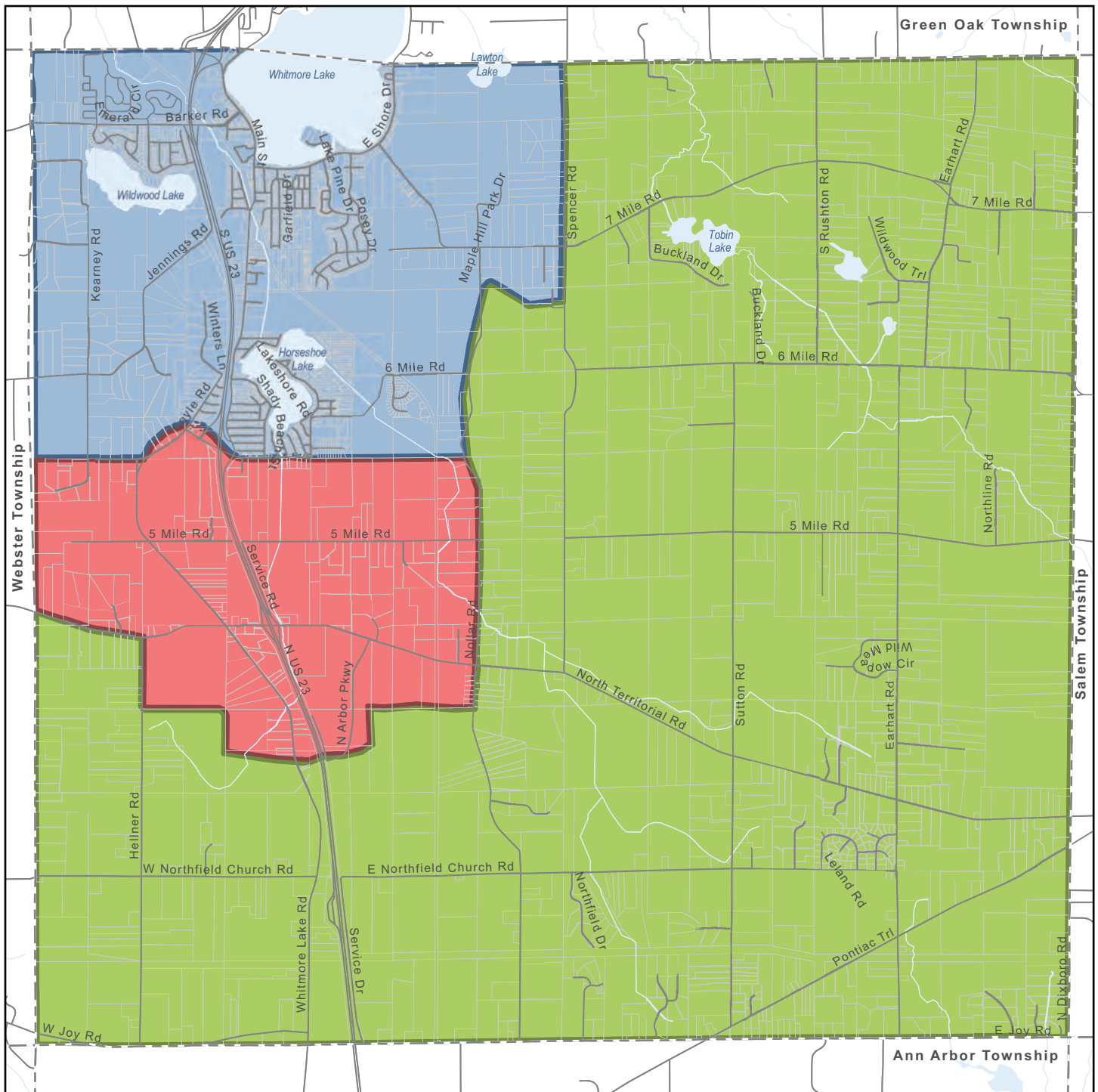
06.

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 sub-area, 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 physical 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



0 1,250 2,500 5,000
Feet

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 farmstead; and single-family residential.
- Large tracts of vacant land are intact throughout this sub-area presenting opportunities for open space preservation.
- North Territorial Road, Pontiac Trail, US-23 and Whitmore Lake Road are the paved primary roads in this sub-area.
- Major natural features within this sub-area include:
 - » 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 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 and drainage.
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, 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 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 federal programs, Washtenaw County agencies for farmland preservation, and the Ann Arbor Greenbelt.
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 freeway with exits at Six Mile and North Territorial Road. This is where office, industrial, and commercial growth is expected and planned for. 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 west.

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 present opportunities for open space preservation in the portions of this sub area where sanitary sewer service is unavailable.
- Whitmore Lake High School is located within this sub-area.
- Two (2) freeway interchanges are within/border this sub-area (US-23 / North Territorial and US-23 / Six Mile).
- US-23, Whitmore Lake Road and North Territorial Road are the primary paved roads in this sub- area.



Development Strategies

1. Maintain rural character by channeling future residential, commercial, office, and industrial uses in the portion of this sub-area nearest the US-23 and North Territorial interchange wherever sanitary sewer service is available.
2. Allow for a mix of service, office and residential uses as it relates to the US-23 and North Territorial Road interchange and along the Whitmore Lake Road corridor.
3. Consider design guidelines that promote attractive and planned commercial and industrial facilities along the Whitmore Lake corridor where sanitary sewer service is available.
4. Continue to 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.
5. Direct non-agricultural uses away from areas of the Township ideally situated and conditioned for agriculture.
6. Discourage extension of public sewer service into areas of the Township ideally situated and conditioned for open space and natural features preservation and agriculture.
7. 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.
8. Preserve open space and natural features with a priority on environmentally sensitive areas to preserve view-sheds along roadways.
9. Ensure that new residential development is compatible in density and character to existing residences and neighborhoods in the immediate area.
10. 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.
11. Allow for appropriate commercial and industrial uses adjacent to US-23 and along North Territorial Road between Whitmore Lake and Nollar Roads.
12. Emphasize development of office, research and industrial uses to generate a corporate, high tech “jobs node”.
13. Encourage the development of business campuses.
14. Actively promote business growth, job creation and tax base expansion by targeting knowledge industries and other growth industries such as health care and “green” technologies. These uses should be close to the US-23 and North Territorial interchange.
15. Develop non-motorized transportation to connect parks, Township facilities, and adjacent communities through an interconnected system of trails along major roads.
16. 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 or playgrounds.
17. Coordinate with Washtenaw County for parkland and open space acquisition and development.
18. Consider vehicular and pedestrian improvements to existing intersections as new developments are proposed.
19. Preserve open space, woodlands and natural features with conservation easements throughout the sub-area.
20. Preserve remaining farmland as active farms or as open space.

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.
3. Promote Low Impact Development (LID) techniques for storm-water management such as bioswales or other best management practices.
4. Require attractive landscape screening for industrial and commercial use along the US-23 corridor and along all public rights-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 non-motorized pathways connecting subdivisions.



LAKES SUB-AREA

The Lakes sub-area is the focal point of Northfield Township. This sub-area is both the most densely developed and populated one in the Township. 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 contains part of the Northfield 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 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 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 efficient 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 and 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; 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 and Six Mile, US-23 and Barker Road, and US-23 and Eight Mile).
- US-23, Main Street, East Shore Road, and 7 Mile are the primary paved roads in this sub-area.
- Whitmore, Horseshoe, Wildwood and Lawton 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 and Barker Roads.
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 use 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 use 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 at Eight Mile Road interchange.
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 increased building height with residential and 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 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 Whitmore Lake Downtown (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 land preservation and 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 Township's master plan includes a gradation of development densities across the rural-urban spectrum, which considers the agricultural and sensitive natural resources of the Township. The Master Land Use Plan for Northfield Township identifies three patterns of development: rural, suburban, and village.

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 Road and Northfield Church.



The suburban pattern includes areas where low to medium density residential development currently exist 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.

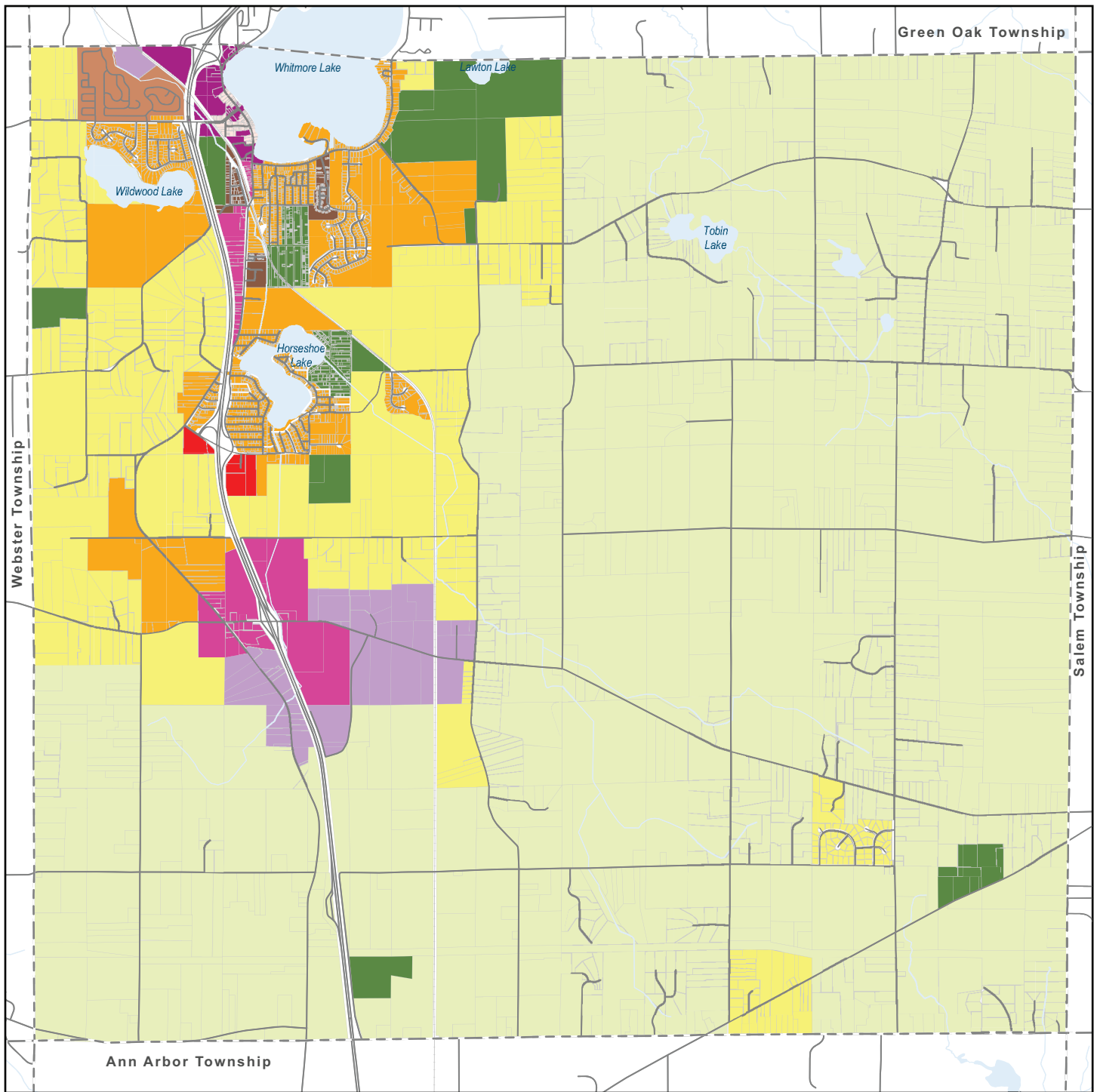


The village pattern includes areas of the Township that are contiguous to the Whitmore and Horseshoe Lakes. They encompass higher density developments, which are located near Downtown Whitmore Lake. Sewer infrastructure systems are available in this area and could potentially be expanded in the future.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

FUTURE LAND USE CATEGORIES

Specific land use categories are identified and illustrated on the future land use map on the following page. This map identifies the intent of each category, describes the desirable land uses and elements highlights, 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

June 9, 2019

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 | |



0 1,250 2,500 5,000
Feet

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 of the area, 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, but for open space preservation. 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 shall 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 sewer service area prior to a formal sewer expansion 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 in those areas served by municipal sewer service. Parcels 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.

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 land-use growth within the area planned for the Village Center land use area 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 hamlet of Whitmore Lake.

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 lakes 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 or 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 US-23 and Eight Mile interchange, the North Territorial and 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 with uses 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 to 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 a 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 shall not be compatible with the Mixed Use - North.

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 an access road) to either North Territorial Road or onto 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 and 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 US-23 Interchanges 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 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 zoning district to address this Master Plan designation. This could be developed either as a stand-alone district or as an existing 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 corridor. 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 and 6 Mile interchange. Proximity to this interchange is a necessary prerequisite for a parcel 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 LC, 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 with, and shall not be planned for, areas of known groundwater recharge and near Township wellhead protection zones.

The 2019 update of the Master Plan recognizes an increased demand in the region for light industrial and research and development. 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 service 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 include:

- 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 awareness of existing 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 or 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 must be protected and other areas that present opportunities for the development of recreation facilities. To ensure 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:

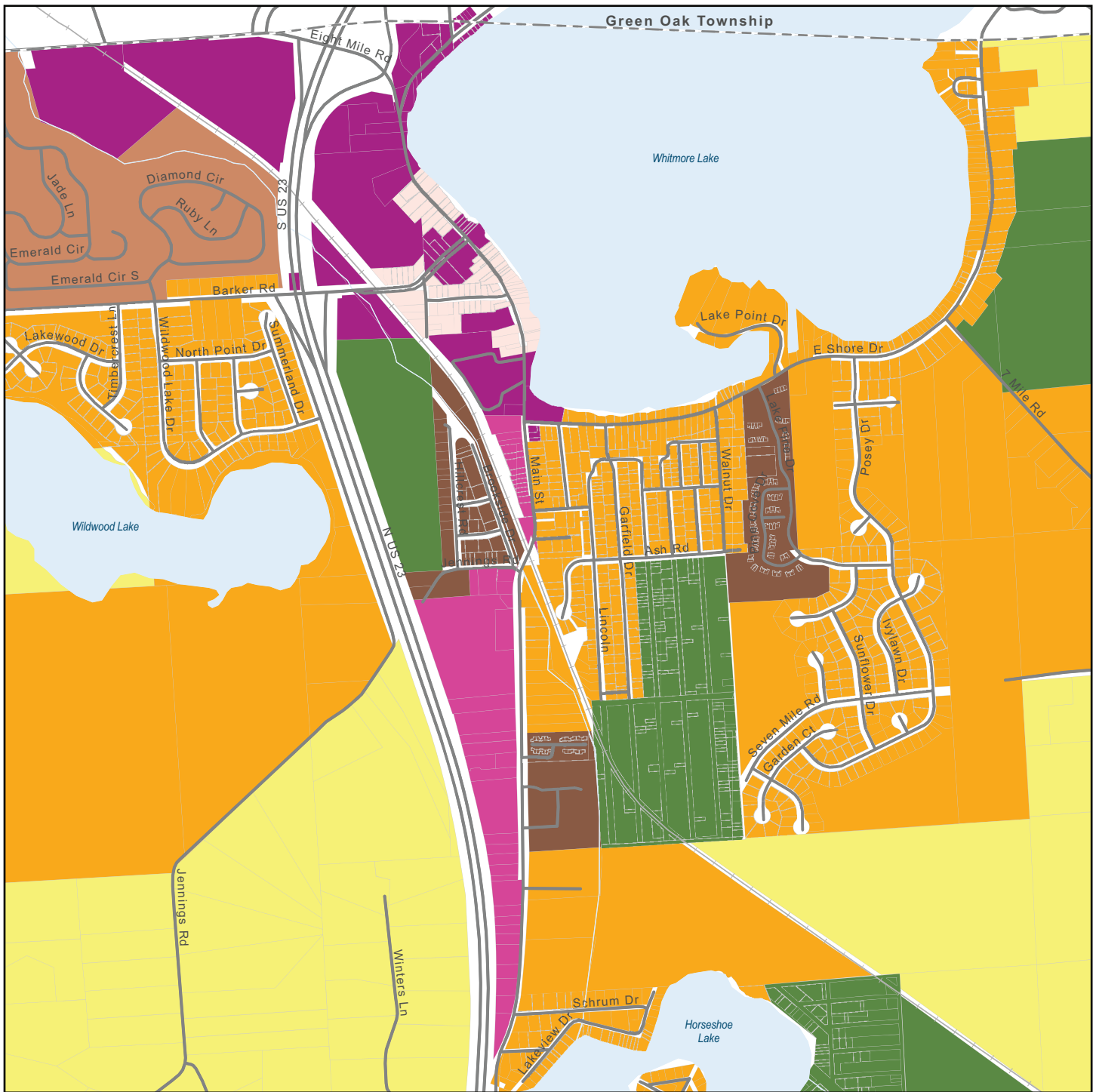
- Public or private conservation area;
- Active and passive recreational facilities; and
- Low density single-family residential land use.

Most Compatible Zoning Districts: Based on the criteria mentioned above, the zoning district most appropriate for the Recreation/Conservation is the RC, 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 DowntownFuture 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 | |

0 250 500 1,000
Feet

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





08.

TRANSPORTATION PLAN

Northfield Township is linked to the region by highway US-23, which runs north-south with exits at North Territorial, 6 Mile, 8 Mile, and Barker Roads. Within Northfield Township, the most important roads include 7 Mile, Whitmore Lake, North Territorial, Sutton, Rushton, Dixboro Roads 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, which must be considered in planning for future transportation.

There exists a strong inter-relationship between the existing road system and land use patterns. The type of pattern of land use will strongly influence traffic volumes along any 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, such as 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.

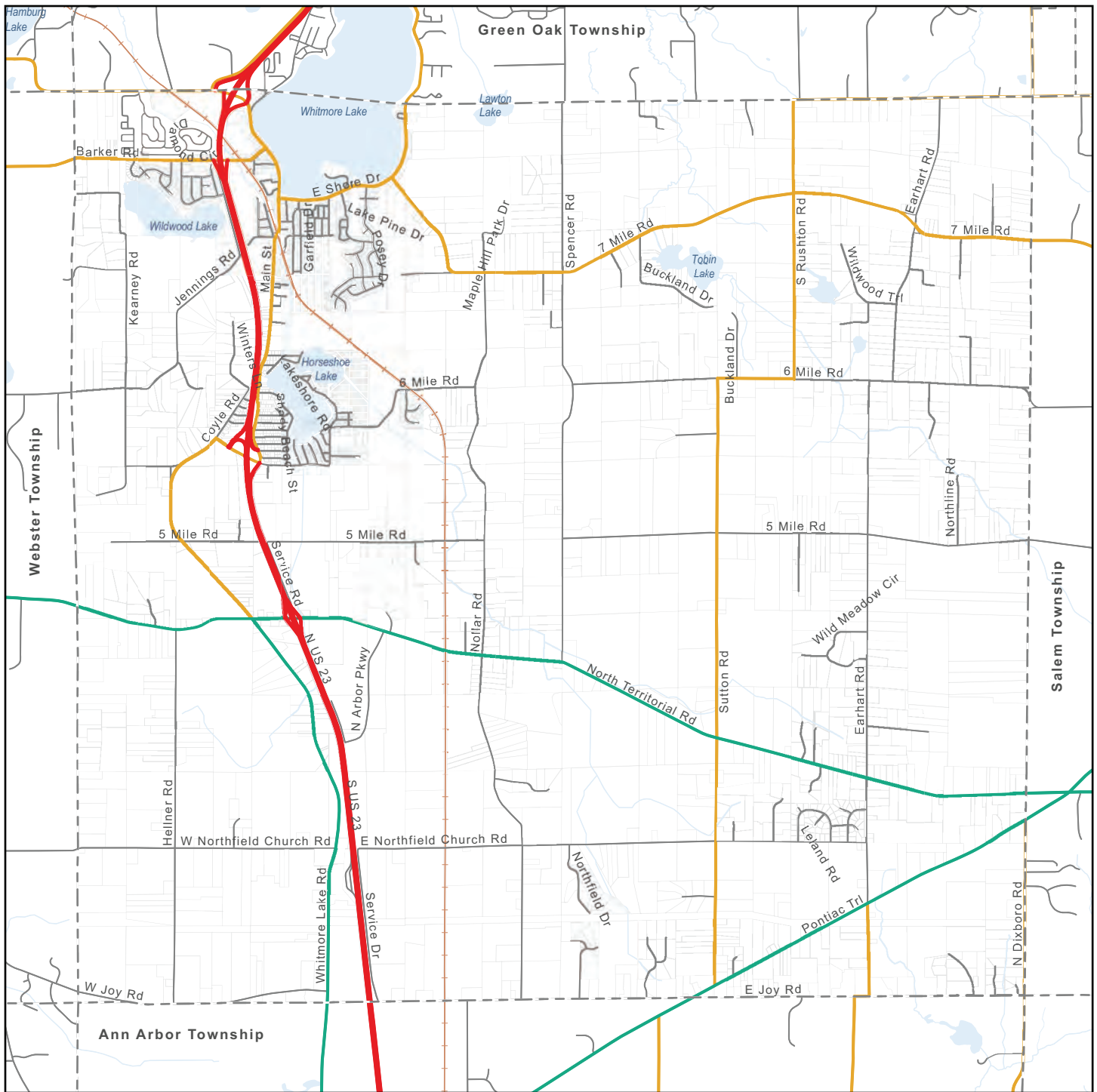
The classifications listed in the Functional Road Classification Map (Map 8) correspond to the National Functional Classification Map for Washtenaw County used by the Michigan Department of Transportation (MDOT). The road classification determines whether the road is eligible for federal aid. “Federal 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 North Territorial Road)
 - » Pontiac Trail
- **Collector Roads**
 - » Barker Road
 - » Main Street
 - » East Shore Drive
 - » 7 Mile Road
 - » South Rushton Road
 - » Sutton Road
 - » Whitmore Lake Road (remainder)
 - » 8 Mile Road (South Rushton to North Dixboro)
 - » Earhart Road (south boundary to Pontiac Trail)

Northfield Township provides direct access to US-23 via North Territorial, Six Mile, Barker and 8 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

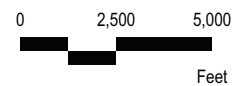
Functional Road Classification

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

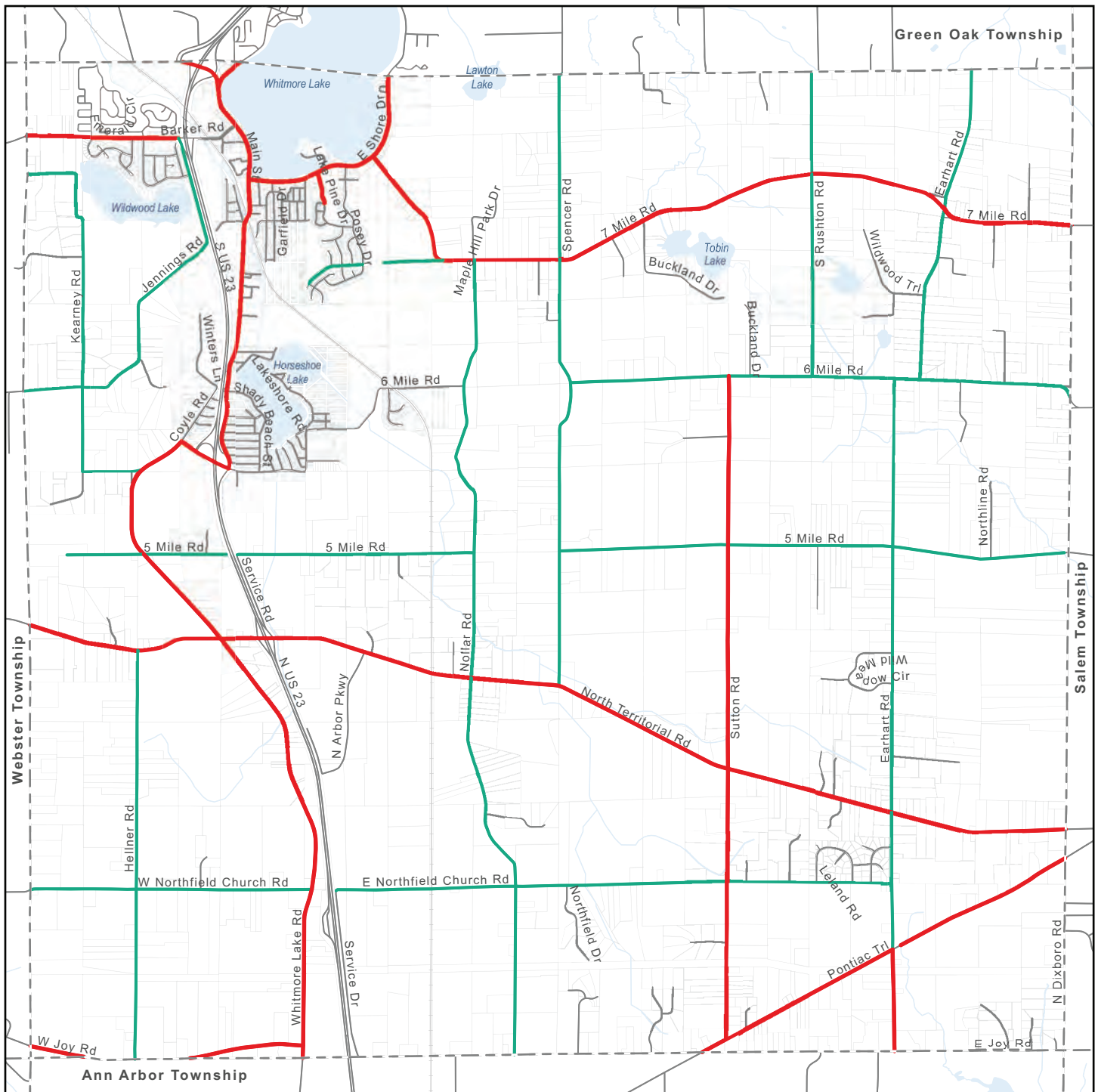
Legend

- 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

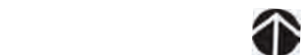
Washtenaw County Future Right-Of-Way

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



0 2,500 5,000
Feet

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 future development, such as:

1. Limiting the number of driveways and encourage alternative means of access.
2. Permitting only one access or shared access per site for smaller residential developments (less than 50 units).
3. Installing medians at appropriate location to reduce conflicting movements and direct traffic and improving safety for pedestrians.
4. Spacing of access points is important as it is related to both signalized and un-signalized locations.
5. Locating shared driveways on the property line.
6. Providing service drives at the rear of sites unless prevented by a shallow lot.
7. Considering new traffic signals or roundabouts for higher traffic generating uses.
8. Design driveways to support efficient and safe traffic operations.

Northfield Township hopes to make it safer and easier for residents to bicycle and walk throughout the Township by establishing 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.

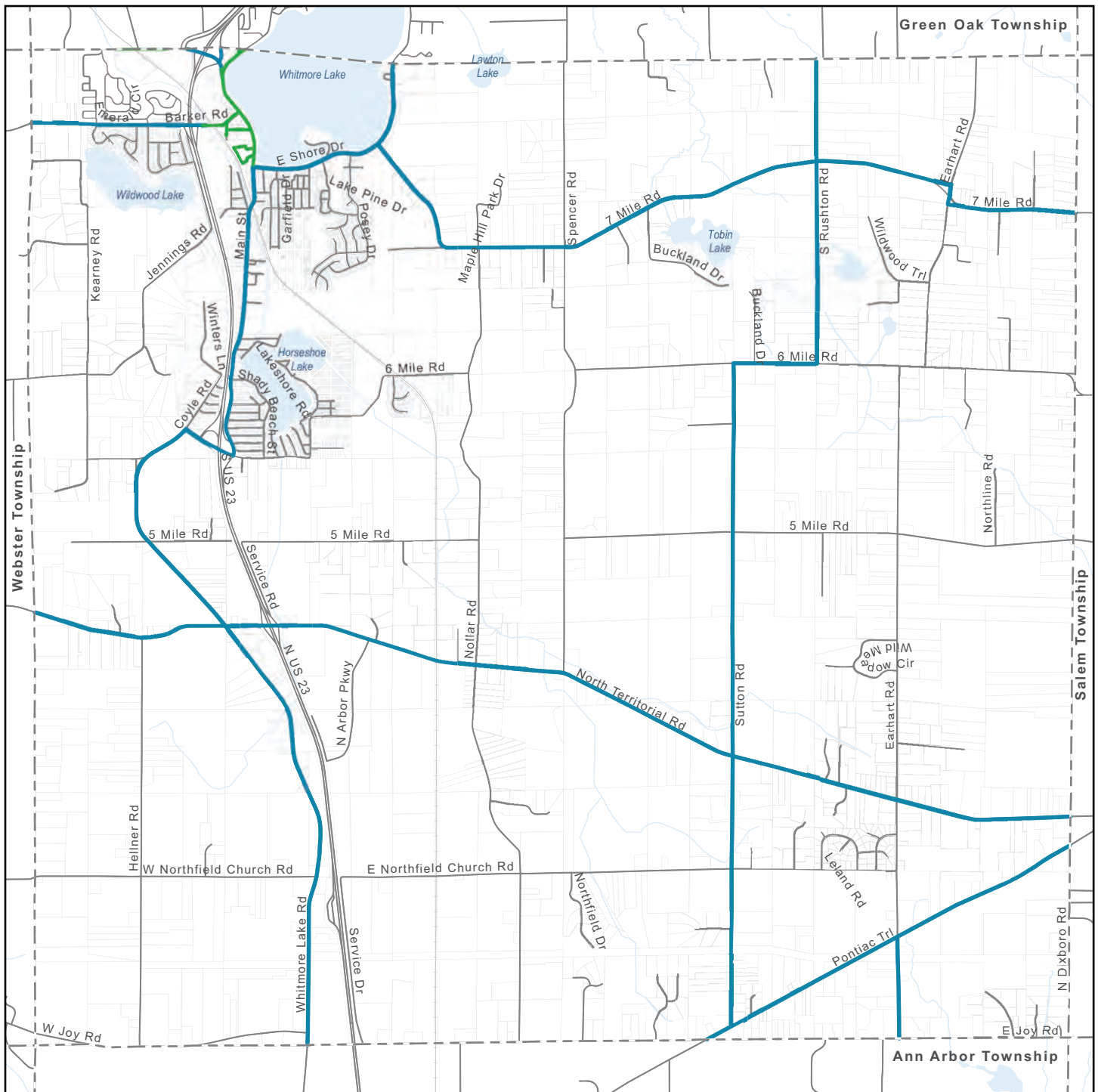
The Non-Motorized Plan is intended to guide non-motorized facility planning, design, and construction for Northfield Township. The plan is implementation oriented and utilizes community and stakeholder involvement and input. This type of plan is also intended to serve as a foundation for future grant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

The 2018 Non-Motorized Plan for Washtenaw County was developed by WATS 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 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



0 500 1,000
Feet

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



IMPLEMENTATION

The Master Plan is a statement of goals and objectives designed to accommodate future land preservation, growth, and redevelopment within Northfield Township.. 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 these 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.

This 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.

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, which include:

- To promote orderly growth in a manner consistent with land use policies and the Master Plan;
- To promote attractiveness in the Township's built environment by providing variation in lot sizes, architectural features and appropriate land uses;
- To 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;
- To guide development away from conflicting land uses, such as industrial uses adjacent to residential areas; and
- To 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 breakfasts, 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 County-wide, non-motorized network to provide opportunities for pedestrian activity such as walking, jogging, bicycling and horseback riding with the Township.
- 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 be modified. Specifically, including the intent, goals and purposes of these provisions are:

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

Goals: The goal of the agricultural tourism provisions of the Zoning 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 schoolchildren, residents, and visitors.

- To increase growing businesses that contribute to the general economic conditions and cycle of the region 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 also be updated for agricultural tourism.

CAPITAL IMPROVEMENT PLAN



The Michigan 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 Township Planning Commission for approval of the project. This would include items such as sanitary sewers, water lines, road improvements, and bridge improvements. 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. Thus, the plan should be revised and updated to reflect the capital improvement priorities moving forward.

MUNICIPAL SERVICE EXPANSION



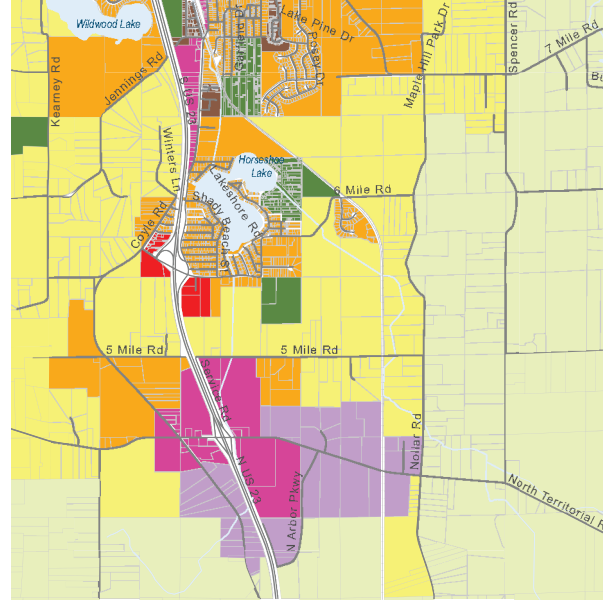
The Township should develop a municipal service expansion policy based in part on the goals of this Plan and the report given by the engineering consultant, Tetra Tech, regarding the cost of sewer expansions. The development of this policy should occur prior to the rezoning of property requiring sewer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

PLAN EDUCATION



Citizen involvement and support will be necessary as the Master 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 the State law 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 Department 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 |

Population Growth and Density

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

Per U.S. Census data, the population of Northfield Township was:

- 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.

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

Per U.S. Census data, 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, and
- The number of households without children will increase from 2,425 to 3,794.

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 respectively 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 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 Great Recession. The peak in single-family construction occurred in 2013 with 16 new constructed 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. SEMCOG projections indicate that the number of children will increase from 1,973 to 2,551 by 2045, and the number of people 65 years and older 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.

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 Washtenaw County and overall state populations. In 2016, 14.9 percent of the population above age 25 held a bachelor's degree or higher. By contrast, the State of Michigan average is 16.7 percent, and Washtenaw County's average is 25.3 percent.

INCOME

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

Men had a median earning of \$51,469 while women 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.





Coffee

OPEN

NO SMOKING

Hours
Mon-Sat:
Sunday :

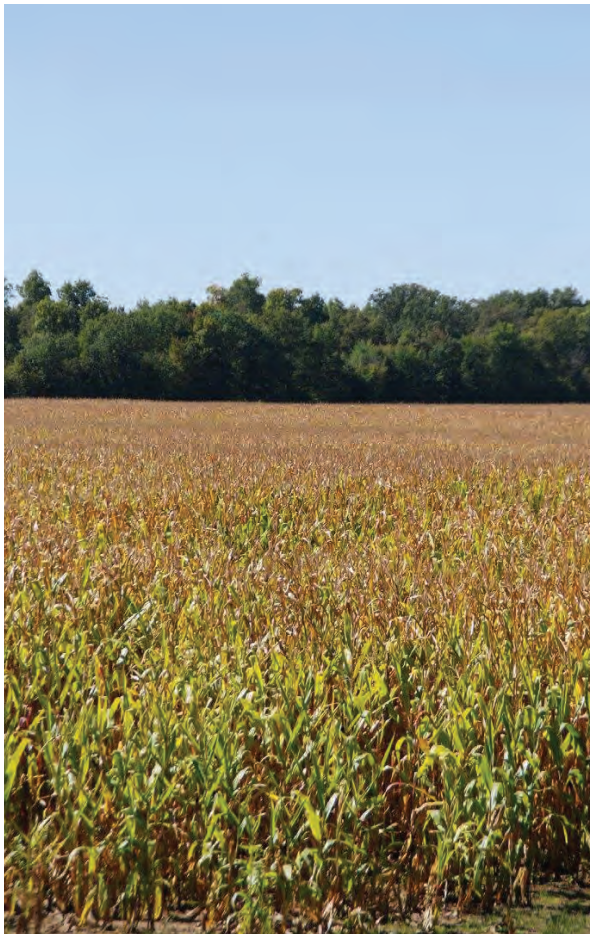


12.

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 Southern Michigan, consisting of glacial outwash plains, till plains, and moraines. Given the permeability associated with these geological features, many areas of the Township serve as 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 sub-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, the firm Orchard, Hiltz & McClimment, 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 addition to restricting water runoff, the study also evaluated stormwater detention and the possibility of lowering the lake level. Alternatives included:

- Adopt and improve stormwater ordinance and strictly enforce WCWRC criteria;
- Adopt and 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;
- Conduct periodic inspection of Horseshoe Lake outlet drain;
- Modify or eliminate the existing outlet control structure; and
- 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. 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.

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.

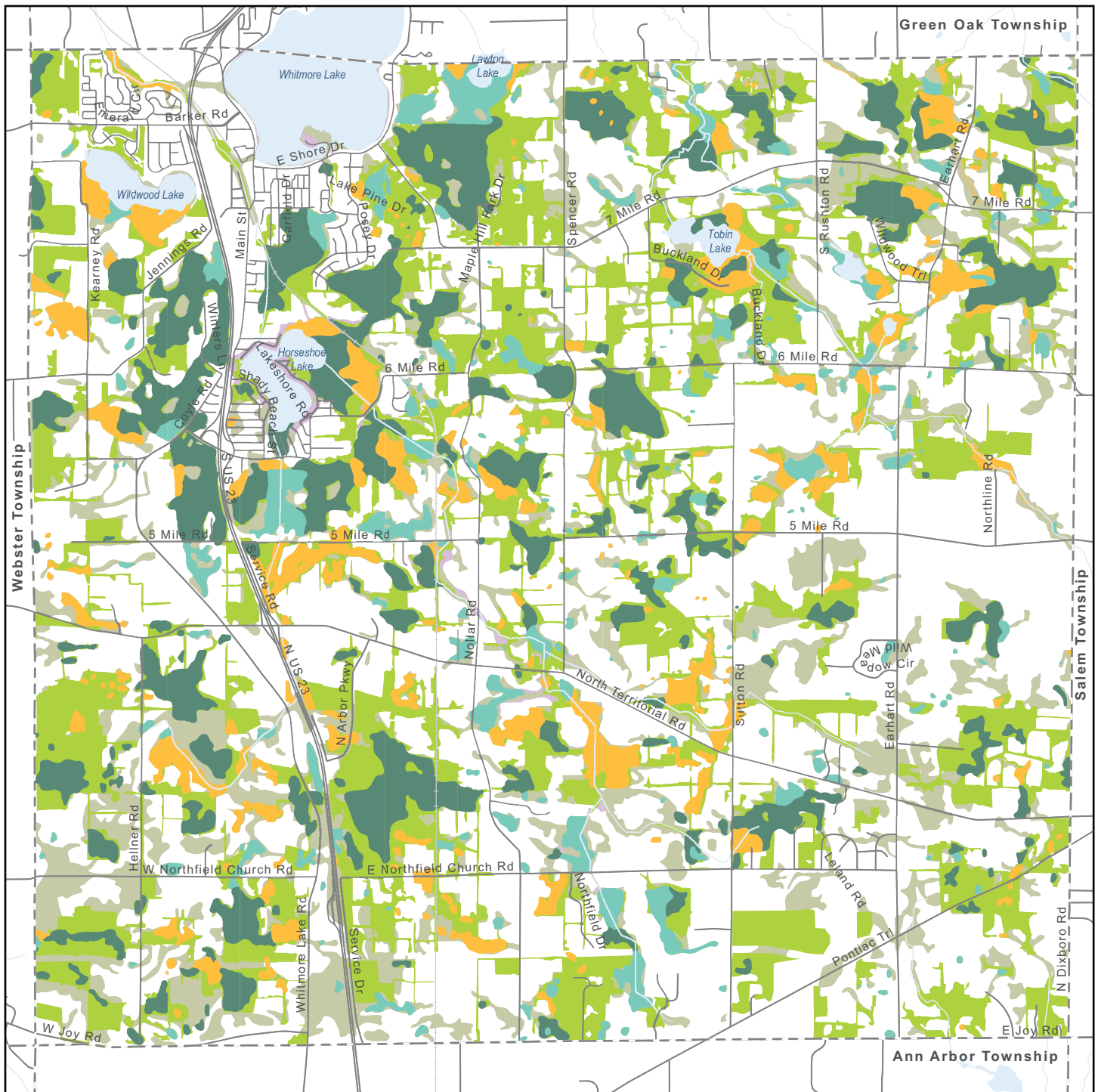
The Forested wetland class is characterized by woody vegetation that is twenty (20) feet or taller. Forested wetlands are most common in the Eastern United States and in those sections of the West where moisture is relatively abundant particularly along rivers and in the mountains. They occur only in 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 |  | City and Township boundaries |
|  | Wetland - Emergent |  | Roads |
|  | Wetland - Forested |  | Railroads |
|  | Scrub-Shrub |  | Rivers, streams, and lakes |
|  | Woodlands | | |
|  | Flood Hazard | | |



0 500 1,000
Feet

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



Farmland

There are significant concentrations of active farmland 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 defined by the 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.

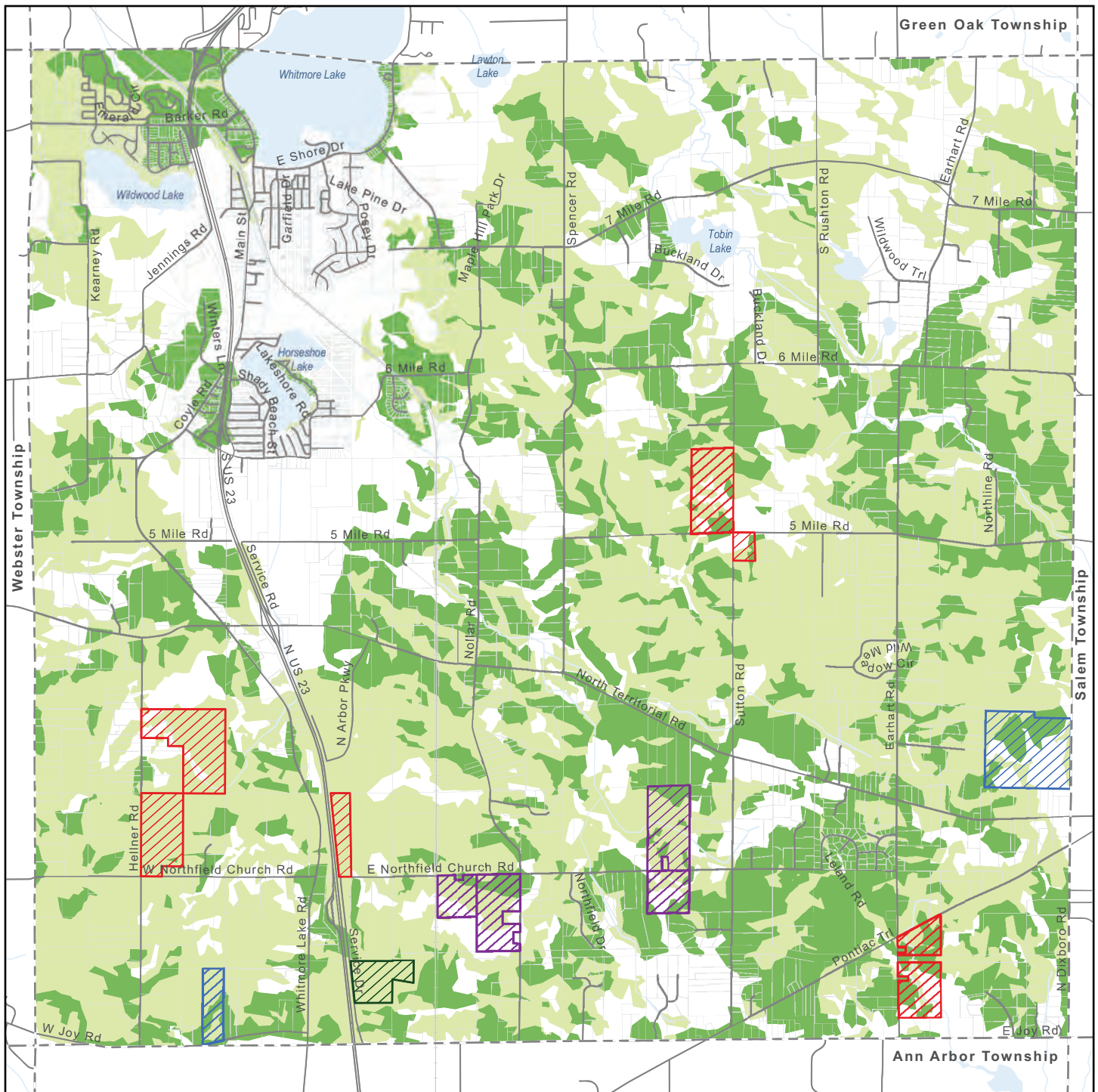
(P.A. 116) Michigan Farmland and Open Space Preservation Act properties are designed to preserve farmland and open space through agreements that restrict development, and provide tax incentives for program participation. The Act enables a farm owner to enter into a Development Rights Agreement with the 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 from 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 to, but located in, 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.
















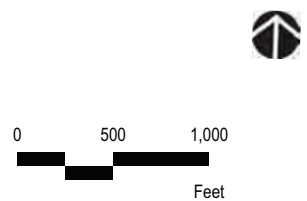
MAP 12 Farmland Classification

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

- | | | | |
|---|--|--|------------------------------|
|  | Legacy Land Conservation Conservation Easement |  | Prime farmland if drained |
|  | P.A. 116 Properties |  | City and Township boundaries |
|  | Ann Arbor Greenbelt Conservation Easement |  | Roads |
|  | Natural Area Preservation Program |  | Railroads |
|  | Prime farmland |  | 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 formed 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 Township'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 (<https://www.washtenaw.org/650/HistWeb-Story>). The Township also has an active Historical Society.

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 others.

COMMUNITY FACILITIES AND SERVICES



Government Facilities

Northfield Township 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 cost 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. The Township has a paid on-call fire department.



Wastewater, Utilities, and Solid Waste

The majority of the Township land area relies on individual on-site wastewater disposal systems. Northfield Township 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 site 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

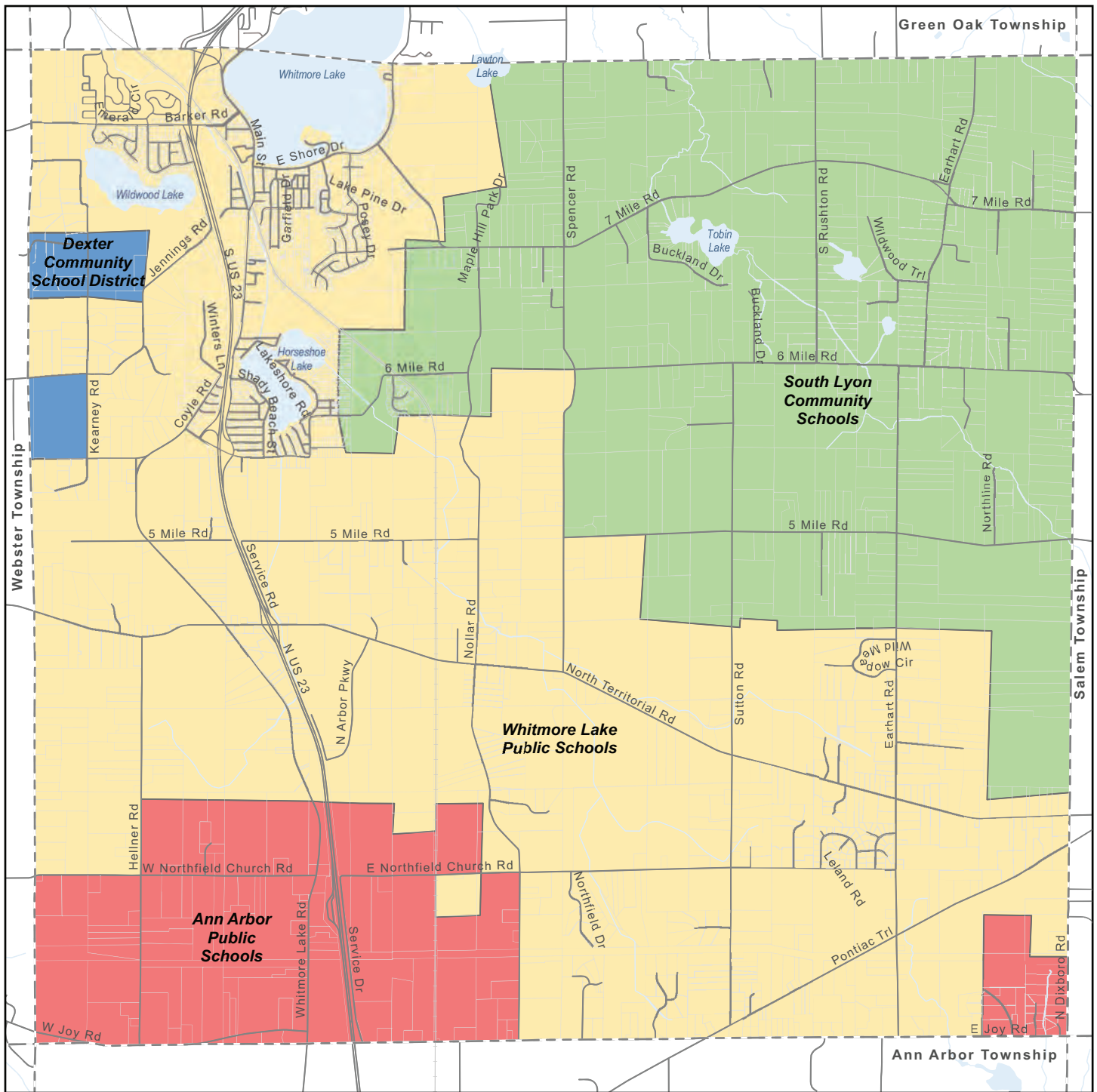
The Northfield Township Area Library is located at 125 Barker Road. The library provides many community oriented programs and events for residents of all ages. Their website allows residents to access research, genealogy, card catalog, and renewal information from home as well.

In 2018, the library built a gazebo space for community gatherings and public 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. The Township has a Parks and Recreation Board and also a Land Preservation Committee.



MAP 13

School Districts

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

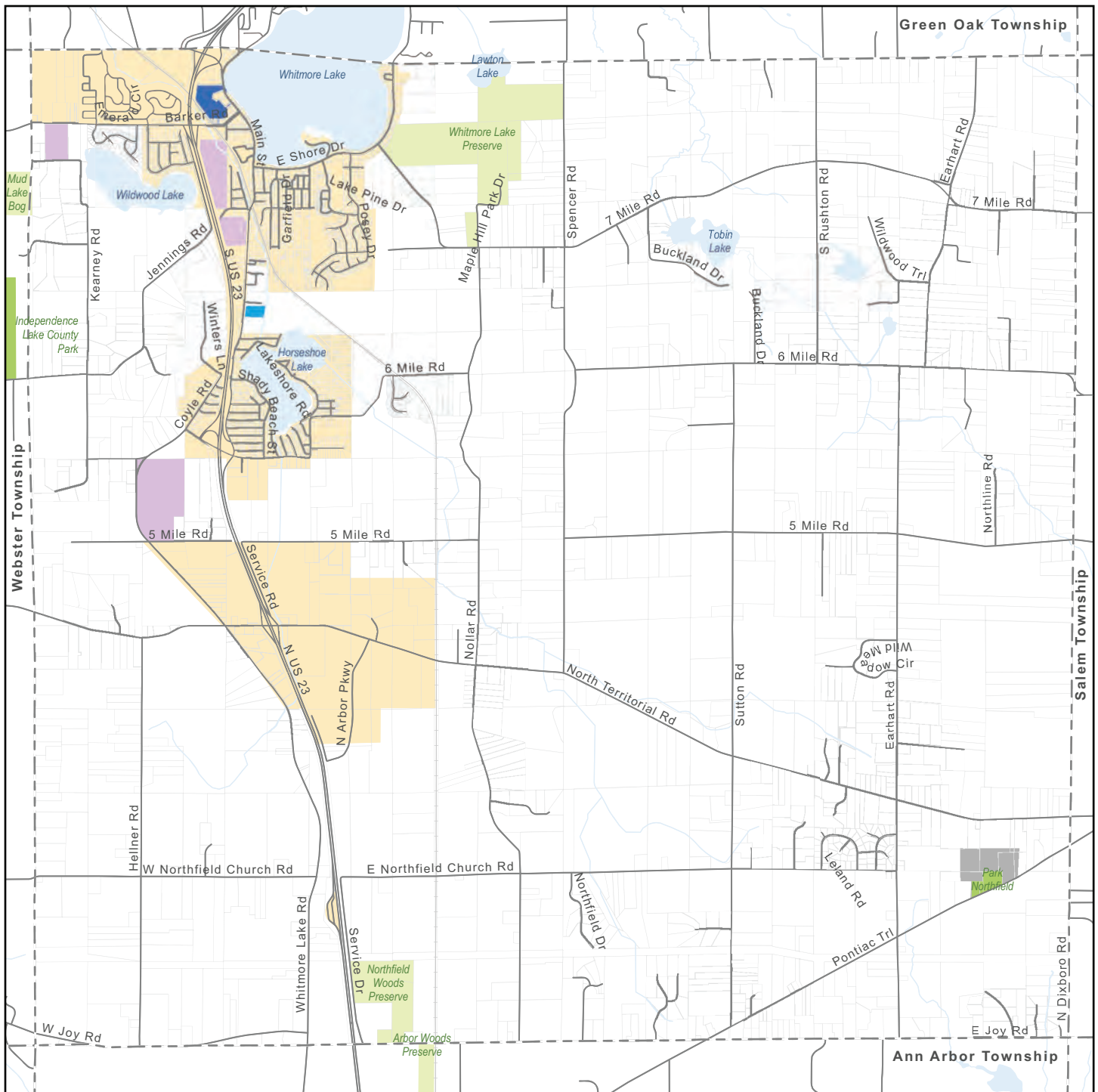
- Ann Arbor Public Schools
- Dexter Community School District
- South Lyon Community Schools
- Whitmore Lake Public Schools
- City and Township boundaries
- Roads
- Railroads
- Rivers, streams, and lakes
- Parcels



0 500 1,000
Feet

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

















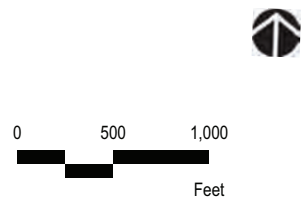
MAP 14 Community Facilities

Northfield Township,
Washtenaw County, MI

February 14, 2019
DRAFT

Legend

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



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

ATTACHED MEMORANDUMS



235 East Main Street, Suite 105
Northville, Michigan 48167
T: 248-596-0920
F: 248-596-0930
www.mcka.com

John Jackson, AICP President
Paul Lippens, AICP Project Manager
Jennifer Neal Project Planner
Alex Novak Project Planner
Irvin Wyche Project Planner
Brian Keesey, AICP GIS Manager
Carrie Leitner Art Director