

OPPORTUNITIES *2030*

INDEPENDENCE TOWNSHIP

Master Plan

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ACKNOWLEDGEMENTS

Planning Commission

Sam Moraco, Chair
Ronald Ritchie, Board of Trustee Rep
David Boersma
Kevin Bushroe
Brian Galley
Brent Savidant
Judy Tully

Township Board

Patrick Kittle, Supervisor
Barbara Pallotta, Clerk
Paul Brown, Treasurer
Jose Aliaga
David Lohmeier
Ronald Ritchie
Andrea Schroeder

Building and Planning Department

David Belcher, Department Director

Township Planning Consultant

Carlisle / Wortman Associates, Inc.

Recommended for Approval by Planning Commission:

October 8, 2015

Approved by Township Board:

February 16, 2016

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TOWNSHIP OFFICES
(248) 625-5111
FAX: (248) 625-2585

PATRICK J. KITTLE
Supervisor

BARBARA A. PALLOTTA
Clerk

PAUL A. BROWN
Treasurer

TOWNSHIP TRUSTEES
JOSE ALIAGA
DAVID LOHMEIER
RONALD A. RITCHIE
ANDREA K. SCHROEDER



CHARTER TOWNSHIP OF INDEPENDENCE
6483 WALDON CENTER DRIVE CLARKSTON, MICHIGAN 48346
www.indetwp.com

STATE OF MICHIGAN
COUNTY OF OAKLAND
CHARTER TOWNSHIP OF INDEPENDENCE

RESOLUTION 2016-001

Resolution Approving the 2015 Amendments to the Charter Township of Independence Master Plan

Motion #2016-02-020:

Moved by Aliaga
Seconded by Ritchie

At a Regular Meeting of the Board of Trustees of the Charter Township of Independence, County of Oakland, State of Michigan, held in the Independence Township Hall on February 16, 2016, at 7:00P.M., with those present and absent being,

PRESENT: Kittle, Pallotta, Brown, Aliaga, Lohmeier, Ritchie, Schroeder

ABSENT: None

WHEREAS, On or about April, 2013, the Charter Township of Independence (referred to herein as the "Township"), through its Planning Commission, began the process of reviewing and updating its 2008 Vision 2020 Update Master Plan, as amended in the interim by the 2014 Vision 2020 Master Plan – Sashabaw Road Target Plan (together referred to herein as the "Master Plan"), pursuant to the Michigan Planning Enabling Act, Public Act 33 of 2008, as amended, being MCL 125.3801 – MCL 125.388 (referred to herein as the "Planning Act").

WHEREAS, The Township Planning Commission previously provided notification of its intent to discuss and consider amendments to the Master Plan to the various planning commissions, agencies, companies, utilities, and other entities, as required under Section 39(2) of the Planning Act.

WHEREAS, The Planning Commission, Township's staff and planning consultant then undertook and completed the process of reviewing and developing proposed amendments to the Master Plan.

WHEREAS, As required under Section 41 of the Planning Act, the Planning Commission submitted a Master Plan containing the proposed amendments to the Township Board for review and comment and for authorization to distribute said proposed amended Master Plan to the entities described under such statute for review and comment, and the Township Board provided such authorization by way of its Resolution No. 2015-012, adopted on June 23, 2015, which included the Township Board's decision to assume the role of final adoption of any proposed amendments to the Master Plan; and

WHEREAS, The Master Plan containing the proposed amendments was then distributed to each municipality located within or contiguous to the Township, the Oakland County Coordinating Zoning Committee, each public utility company and railroad company owning or operating a public utility or railroad within the Township, and any governmental entity that had registered its name and mailing address with the Township for purposes of notification, for review and comment.

WHEREAS, On September 8, 2015 the Oakland County Coordinating Zoning Committee held a meeting at which it considered and voted unanimously to endorse the Township's proposed amended Master Plan, finding that the proposed amendments were not inconsistent with the master plans of the surrounding communities and suggesting certain minor clarifications and corrections which were subsequently incorporated into the proposed amended Master Plan.

WHEREAS, On October 8, 2015, after proper public notice, the Planning Commission held a public hearing on the proposed amendments to the Master Plan, during which members of the public were given the opportunity to comment on the proposed amended Master Plan.

WHEREAS, After the public hearing, the Planning Commission voted unanimously to approve and forward to the Township Board for final approval the proposed 2015 amendments to the Master Plan, which are embodied in the document entitled "Opportunities 2030, Independence Township Master Plan".

WHEREAS, The Township Board has determined that the proposed 2015 amendments to the Master Plan, as approved and forwarded by the Planning Commission, with the accompanying maps, figures and descriptive matter, accurately reflects the Planning Commission's and Township Board's guide for the development of the areas of the Township affected; and

WHEREAS, Pursuant to Section 43(3) of the Planning Act, the final step in the adoption of the proposed Master Plan amendments is to be by resolution of the Township Board.

NOW, THEREFORE, IT IS RESOLVED, That pursuant to the Planning Act, the Township Board of the Charter Township of Independence hereby approves and adopts the proposed 2015 amendments to the Master Plan, which are embodied in the document entitled "Opportunities 2030, Independence Township Master Plan", dated October 28, 2015.

IT IS FURTHER RESOLVED, That pursuant to Section 43(3) of the Planning Act, a statement recording the Planning Commission's and Township Board's approval of the amended master plan, signed by the Township Clerk and the Secretary or Chairperson of the Planning Commission, shall be included on the inside of the front or back cover of the document entitled "Opportunities 2030, Independence Township Master Plan", dated October 28, 2015 and on the corresponding future land use map if kept as a separate document.

IT IS FURTHER RESOLVED, That pursuant to Section 43(5) of the Planning Act, a copy of this Resolution shall be delivered by the Township Clerk to the Secretary of the Planning Commission, who is hereby directed to submit a copy of the document entitled "Opportunities 2030, Independence Township Master Plan", dated October 28, 2015, including the corresponding future land use map, to each municipality located within or contiguous to the Township, the Oakland County Coordinating Zoning Committee, each public utility company and railroad company owning or operating a public utility or railroad within the Township, and every governmental entity that had registered its name and mailing address with the Township for purposes of notification.

AYES: Kittle, Pallotta, Brown, Aliaga, Lohmeier, Ritchie, Schroeder

NAYS: None

ABSENT: None

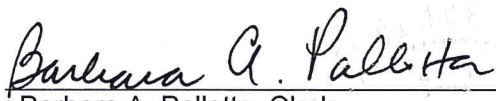
ABSTENTIONS: None

THE RESOLUTION WAS DECLARED ADOPTED.

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

I, the undersigned, the duly qualified and elected Clerk of the Charter Township of Independence, Oakland County, Michigan, do hereby certify that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board of Trustees held on February 16, 2016, the original of which is on file in my office.

IN WITNESS WHEREOF, I have hereunto affixed my official signature on February 16, 2016.



Barbara A. Pallotta, Clerk
Charter Township of Independence

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PREFACE

Opportunities 2030: Planning for a Vibrant, Prosperous, and Healthy Future

It is the responsibility of the Township Planning Commission to prepare and adopt a Master Plan on behalf of the Township. Independence Township derives its authority to prepare a Master Plan from the Michigan Planning Enabling Act, PA 33 of 2008. The Act requires that at least every five years the Planning Commission review the Plan and determine whether revisions may be necessary.

Planning is a process that involves the conscious selection of policies relating to land use, development, delivery of services, enhancement of community character, and maintenance of a quality of life which meet the expectations of Township residents. The purpose of the Opportunities 2030 process has been to identify the goals, policies, programs, and strategies which the Township and its residents wish to pursue. Opportunities 2030 involved a thorough investigation of past trends, current conditions, and alternative futures for the Township. The overall process has been structured to allow for broad participation, expression of new ideas, and creation of new concepts that will help the Township make the most of its opportunities. The unique aspect of the proposed approach is its comprehensive outlook. The Opportunities 2030 approach has coordinated all aspects of physical development (i.e. roads, land use, recreation, infrastructure, etc.) in an attempt to create efficiencies, anticipate unforeseen problems, and search for multi objective opportunities.

A BROAD, SYSTEMATIC PLANNING PROCESS WILL ENABLE THE TOWNSHIP TO CAPITALIZE ON OPPORTUNITY WHILE PROTECTING THE EXISTING CHARACTER OF THE COMMUNITY.

FIGURE 1: PLANNING PROCESS



The previous plan consolidated the Master Plan and Strategic Plan into one document. Therefore, Opportunities 2030, the 2015 update of Vision 2020, consists of two documents:

BACKGROUND STUDIES – The Community Profile consists of basic data and information that establish a baseline of conditions in the Township. Background Studies consist of three components: community characteristics, significant trends, and identification of community issues.

MASTER PLAN – The Master Plan represents the long range view of the Township, focusing on more of the traditional elements considered in planning such as future land use, thoroughfares, and community facilities. The Master Plan also takes into consideration the goals and strategies found in the Strategic Plan adopted in 1999 and updated in 2008. Specific objectives are also identified to address those goals and issues identified through the Master Plan process. As with the previously adopted Vision 2020 Strategic Plan and the Master Plan adopted in 2008, Target Plans have been developed and updated for various geographic areas of the Township to provide solutions to specific problems and/or issues.

The end result of updates to Vision 2020 is the adoption of plans which will serve as the embodiment of official Township policies regarding the future of the community. The Opportunities 2030 master plan serves the following functions:

- Provide a general statement of the Township's goals and policies and provide a comprehensive view of the community's desires for the future.
- Define the future character of the community.
- Serve as an aid to both short term and long range decision- making. The goals and policies outlined in the Plans will guide the Planning Commission and Township Board in their deliberations on matters relating to land use and the physical development of the community.
- Assist in establishing priorities for public improvements so that such improvements will provide the greatest benefit to the Township and its residents.
- Serve as an educational tool and provide citizens, property owners, developers, and adjacent communities with a clear indication of the Township's direction for the future.
- Provide direction to private property owners regarding the use of their property.

INTRODUCTION

Encouraging Context Sensitive Solutions

The Township has maintained a Master Plan which has been updated several times over the past twenty five years. Although plans existed in some form as far back as the 1940s, the first formal document appeared in 1966, was updated in 1975, 1984, 1987, and 1990, with a series of amendments and/or minor revisions in 1991, 1992, 1993, and 1994. The Plan was updated again in 1999 and 2008.

Previous Plans

THE MASTER PLAN WAS EXTENSIVELY REVISED IN 1984. As part of the process to rewrite the plan, the Township was divided into various subareas which were thoroughly analyzed. Natural resources, road adequacy, existing land use patterns, and community goals figured prominently in the consideration of various concepts for future land use in the Township.

FURTHER REVISION OF THE MASTER PLAN TOOK PLACE IN 1987 after additional analysis was performed by a joint Growth Committee, formed of members from the Planning Commission and the Economic Development Corporation. Specifically, the Growth Committee sought to evaluate areas of the Township where new development acceptable with community standards could be attracted.

ANOTHER REVISION WAS MADE IN 1990, as a result of recent growth pressures both within the Township and nearby communities. The primary emphasis in the 1990 revision was to evaluate residential densities in areas where sewer service was not available or not expected to be extended in the near future. Thirty five different areas were amended. The vast majority of the changes resulted in a less intense land use designation.

THE 1991 REVISION was a study area consisting of Section 25 and Section 36, north of I-75. The revision was initiated in order to evaluate the effort of recent developments in adjacent areas on the study area. The land use designation in the study area changed from Rural Residential to Suburban Residential.

IN 1992, the Safety Path Plan was incorporated into the Master Plan. In 1993, amendments focused upon Sections 19 and 30 making Dixie Highway more appropriate for multiple family residential use, and in Section 22 at the I-75 and Sashabaw exit where intensity of commercial use was decreased.

IN 1994, Sections 10 and 15 were re-evaluated and an area that was Rural Residential was changed to Recreation and Suburban Farm Residential.

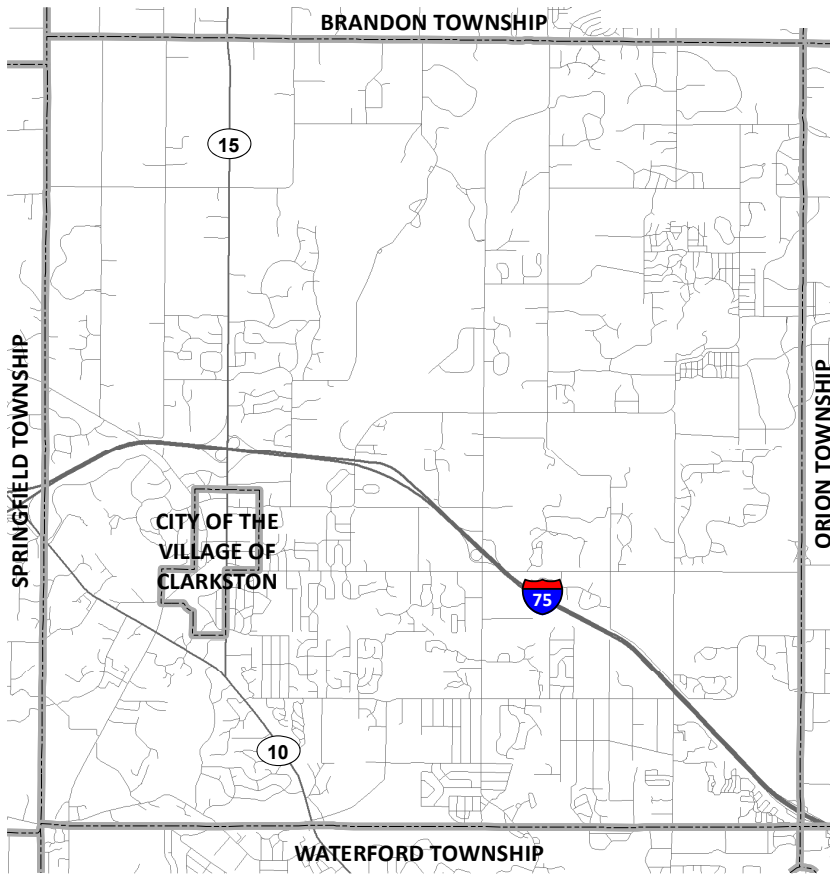
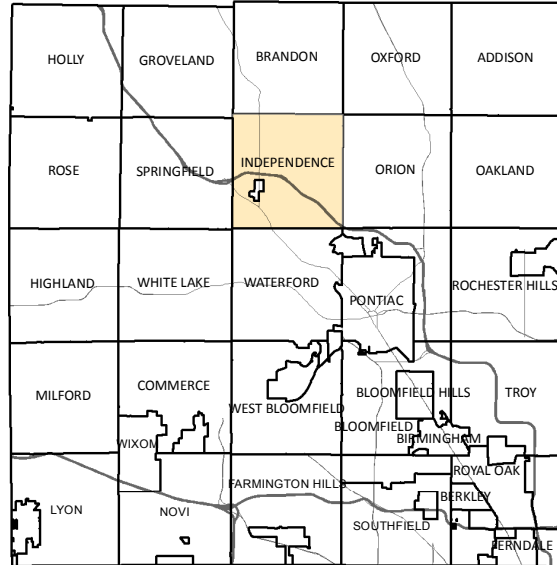
AS A RESULT OF THE VISION 2020 PROCESS, THE MASTER PLAN WAS REVISED EXTENSIVELY AND ADOPTED IN 1999. The rural, northwestern area of the Township was changed to entirely Rural Residential outside of the sewer district in order to preserve that area's rural character. Several land use categories were amended or added. The Planned Mixed Use category was added and referenced to the Target Plans for the specific areas. Suburban Farm Residential was changed to Estate Residential in order to more accurately reflect the use. A Mobile Home Park category was also added to reflect existing development in the Township, as well as allow for affordable housing opportunities. Traditional Lake Front Residential was added to reflect the historical pattern of development that took place around the lakes.

A Single Family Attached/Detached Residential category was added to achieve the goal of providing more housing opportunities. And the category of Industrial Office Park was added as an industrial designation which is in keeping with Township goals. Boundaries for several areas were changed to more accurately reflect existing land uses and address inconsistencies.

PRIOR TO THE CURRENT EFFORT, THE MASTER PLAN WAS LAST UPDATED IN 2008. Of significance to this update was the consolidation of the Master Plan and Strategic Plan into one comprehensive document. All of the Target Plans for specific geographical areas in the Township were updated. One of the significant elements added to the Plan was a Greenways Plan.



MAP 1: REGIONAL SETTING



OAKLAND COUNTY

INDEPENDENCE TOWNSHIP

Regional Setting

Independence Township is located in north central Oakland County, Michigan. The Township is approximately thirty-six (36) square miles in area. It is bordered by Springfield Township to the west, Brandon Township to the north, Orion Township to the east, and Waterford Township to the south.

The City of Detroit is located approximately 40 miles to the southeast of Independence Township. Other nearby urban centers include Pontiac (10 miles) and Flint (25 miles). The City of the Village of Clarkston is located within the Township area.

Plan Organization

Following the Preface and Introduction, the Independence Township Master Plan is comprised of the following sections: Background Studies Summary, Goals and Objectives, Master Land Use Plan, Target Plans, Infrastructure Plan, Green Infrastructure Plan, and Implementation. Also included in the plan is a Glossary of Terms. The full text of the Background Studies was published in 2013 under separate cover as the INDEPENDENCE TOWNSHIP COMMUNITY PROFILE.

BACKGROUND STUDIES SUMMARY

Building on Assets and Identifying Challenges

The Background Summary is a condensed version of the more detailed Community Profile. The following summarizes significant findings, including past trends, current conditions, and future projections. The complete text of the Community Profile is available under separate cover.

Historic and Rural Resources

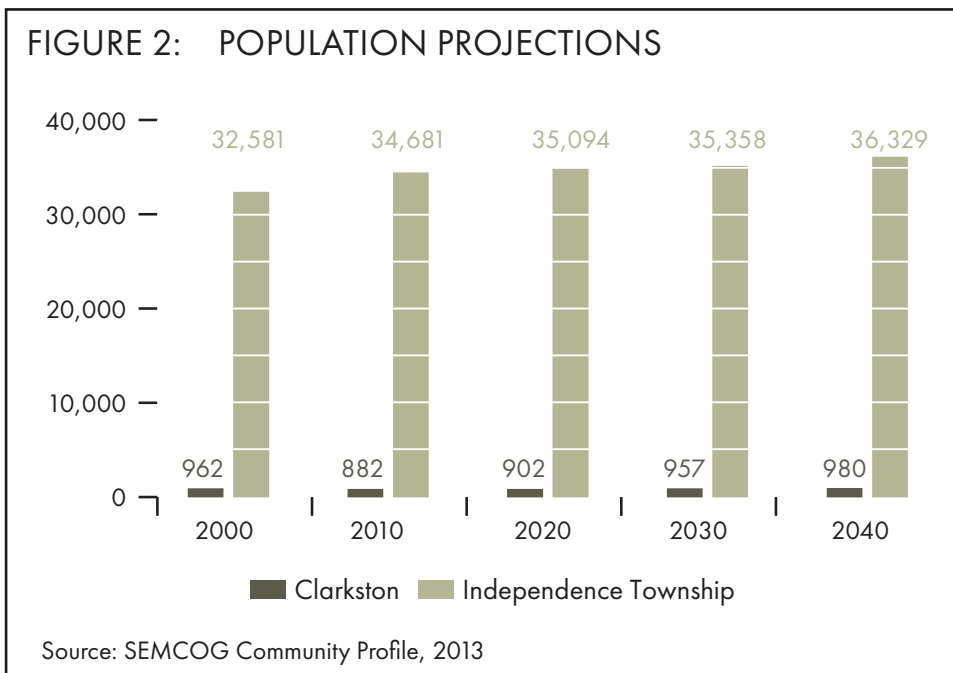
Independence Township has many areas and elements which can be identified as rural areas. These areas are located north of I-75, primarily in the northwest and northeast quadrants of the Township. Both natural resources, such as large expanses of open space and woodlands, and cultural features, such as buildings, identify this rural landscape. This rural landscape gives the Township its character. As part of the regional effort to connect and protect green infrastructure, the Township is prioritizing the conservation of high quality wetlands, woodlands, and priority water bodies.

One of the most evident components of the rural landscape are structures and buildings that served generations of Township residents. In 1991, the Township conducted a detailed inventory of structures built before 1900.

Population

Independence Township is situated in an area of the state which has historically exhibited steady population growth. In 1930, Township population numbered 1,803 persons, which included 639 in the Village of Clarkston. Over the past 80 years, attractive natural features, a strategic location, and convenient accessibility have attracted a stream of new residents.

By December 2013, the Township’s population is estimated to have grown to 36,600, an increase of more than 12% over the 2000 population of 32,581 and 6% over the 2010 population of 34,681.



In past decades, population growth and economic growth have been highly interrelated. Oakland County's economy continues to perform at higher levels than the State of Michigan as a whole and many of the communities continue to see population growth, rather than decline. Economically strong cities and townships in Northwest Oakland County are predicted to see some population growth, while some of the more rural communities are projected to see population decline in the coming decades. Generally, as people live longer, families get smaller, and women have children later in life the rate of population growth is slowing.

SEMCOG projections seem to respond to these new trends, projecting a Township population of 36,329 people for the year 2040. The 2040 projected population is an increase of 1,648 people, or 4.8%, from the 2010 population of 34,681 (See Figure 2). However, current building trends seem to indicate the SEMCOG projections will need to be revised upward.

The current Township population is fairly evenly distributed between age cohorts. Approximately 28% of the Township population is 19 or younger. Over 17% of the Township population is over 60 years of age. The remaining 55% is between 20 and 59 years of age. The 2010 Township median age is 39.5, up from 36.4 in 2000. Independence Township has been and will remain an attractive environment for families due to excellent schools, quality housing, recreation and abundant natural features. Similar to most southeast Michigan communities, Independence Township has an aging population that is increasing at a faster rate than other age cohorts. The 2010 Census shows the age group 65 years and over as the fastest growing segment of the population and this trend is projected to continue.

AGING-IN-PLACES: Planning for an Aging Population

Planning for tomorrow's populations must begin with and be founded on the needs and desires of the people who live in the Township. All voices must be heard, respected, and addressed. The Township will remain an attractive community for families. However, as is the trend everywhere, by 2040, 24.8% of Independence Township residents will be 65 years and over (SEMCOG).

Aging-in-Places begins with an integrated, asset-based approach to community and economic development. As a result, the following questions are of critical importance:

- Is there a mix of houses that will be in demand 30 years from now?
- Do building codes allow – or, better yet, require – accessible configurations and features in new construction?
- Are there places and programs for social and cultural engagement, offered by the township or other agencies?
- Are parks equipped for adult fitness, relaxation, and engagement?
- Can people who can't or choose not to drive easily walk to their destinations or use public transit?
- Are health care facilities nearby and convenient?

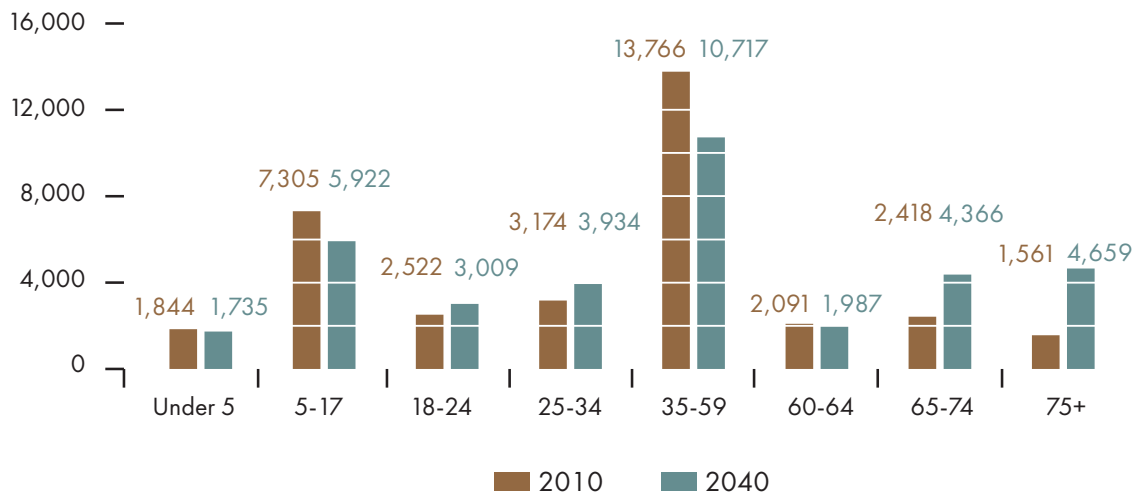
Between 2010 and 2040, SEMCOG predicts a 127% increase in the 65 years and over age group. Conversely, the 35-59 age group is expected to drop significantly, with a projected decrease of 28% during that same time. In addition, the school age population is projected to drop.

For 2010, the percentage of Township residents 65 years and over is less than Oakland County (13.2%) and the State of Michigan (13%), but the increase in this age group will be significant over the three decades. In 2040, the percent of residents 65 years and over is expected to be Independence Township, 24.8%, Oakland County, 24.5%, and State of Michigan, 19.6%. The realities of changing demographics require strategies that address the needs of an aging population and help maintain a stable tax base capable of supporting township services.

To remain a vibrant community, a healthy mix of young families is needed, even as the population ages. Families with children fill our schools, use our parks, and spend their money here. The infrastructure is in place to support families, so long lead time projects aren't required. Regular monitoring of school age populations would allow the Township to recognize if the forecasted reduction in 35-59 year olds actually materializes, thereby giving the Township time to react.

An overall trend of increased affluence is noted when comparing the various data collected over the last thirty years. The per capita income of Independence Township residents was \$15,653 in 1985, \$21,271 in 1990, \$33,067 in 2000, and \$34,552 in 2010. The U.S. Census Bureau reports that median household income for the Township was \$53,784 by 1990, and grew by almost 40% to \$74,993 by 2000, and fell slightly to \$71,191 in

FIGURE 3: TOWNSHIP POPULATION CHANGE BY AGE COHORT (2010-2040)



Source: SEMCOG Community Profile, 2013

2010.

Housing

The growth in the local housing stock continues to exceed population growth. Population increased by 37% from 1990 to 2000 and 6% from 2000 to 2010, while the number of housing units increased 49% and 11% respectively (See Figure 4). This difference is attributable to a decline in the number of persons per household.

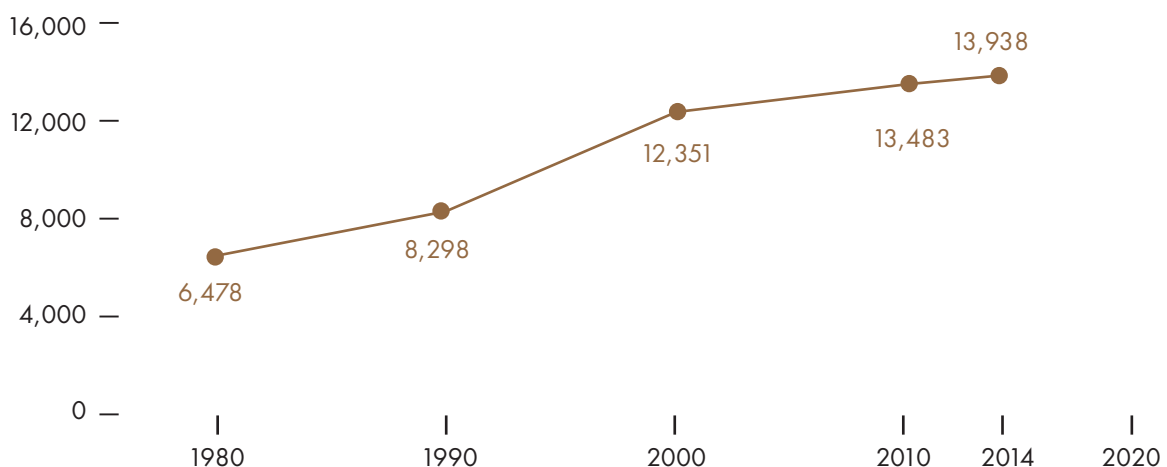
Although the predominant housing type in Independence Township is the traditional single-family unit, there are also a significant variety of other housing types available. Although 80% of Township dwelling units are single family homes, multiple family dwelling units comprised about 14% of the housing stock, and 5.6% are mobile homes. The percentage of multiple family units has been increasing slightly since 1990 and the percentage of mobile home units has more than doubled in the past

20 years. Age of the Township’s housing stock is relatively new.

As the Township’s population continues to mature, the availability of housing targeted to “empty nesters” will be an important component of a strategy to maintain an important segment of the community. As distinguished from senior housing, such as independent and assisted living, housing for empty nesters is typically targeted to a group ranging from 50-85 years of age.

Residential building permits for single family homes have generally decreased in Independence Township since a peak in 1998. In comparison to other communities in Oakland County, the Township ranked only once (in 1994 it was sixth) among the top ten communities in the County in terms of the number of building permits issued. There have been 374 single family detached and 33 townhouses permitted between 2010 and 2014.

FIGURE 4: NUMBER OF TOWNSHIP HOUSING UNITS



Source: SEMCOG Community Profile, 2014

Although there is a perception that a large amount of the Township's housing is new, nearly 30% of the housing stock was built prior to 1970. Much of this housing is located in the southern third of the Township, although there are concentrations around several lake areas in the northeast portion of the Township that started as cottage development.

The significance of the age of the housing stock is the corresponding age of the neighborhood. As time goes on, the Township may need to devote attention to many of these areas to ensure that these neighborhoods remain viable.

Community Facilities and Services

The Independence Township Hall and Administrative Offices are located on Waldon Center Drive in the Sashabaw Corridor Target Area. The Township Hall contains the offices of the Supervisor; Clerk; Treasurer; Building and Planning; Assessing; Parks, Recreation, and Seniors; and support staff and meeting rooms. The Department of Public Works (DPW) has a separate facility on Flemings Lake Road that contains administrative offices, storage, and maintenance garages. The Township Senior Center is located at Clintonwood Park.

The Township Library is located on Clarkston Road at Perry Lake Road in a structure built specifically to be used for library purposes. The Fire Department has three stations within the Township: Fire Station No. 1 on Citation Drive; Fire Station No. 2 at the intersection of Clarkston and Sashabaw Roads; and Fire Station No. 3 at the intersection of Pine Knob and Maybee Road.

Independence Township students are enrolled in one of three school districts: Waterford Schools, Lake Orion Schools, or Clarkston

Schools. Only Clarkston Schools has facilities located in Independence Township.

Independence Township has a fully staffed Parks and Recreation Department committed to providing recreation services to the community. Detailed park and recreation plans and policies are contained in the 2012 PARKS AND RECREATION MASTER PLAN. The Township operates five recreational facilities, including: Bay Court Park, Clintonwood Park, Senior Center, Deer Lake Beach, and Sashabaw Plains Park. The City of the Village of Clarkston and Oakland County operate Depot Park and Independence Oaks located in Independence Township. Independence Township also manages the Clarkston Community Garden at the Stickney-McCord property.

Independence Township provides public sewer and water service to approximately 50% of the Township and to portions of the City of the Village of Clarkston. The map depicting the Township's water and sewer service districts is provided on page 130.

Natural Features

The natural features of Independence Township have played a major role in attracting and influencing growth and development. Like much of Michigan's southern Lower Peninsula, the Township landscape was formed as a result of glacial processes. The landforms are characterized by very hilly to undulating end and ground moraines, which include kettles, outwash plains, and drainage channels. In turn, topography and soils are the result of glacial activity and plant communities develop in response to soil conditions.

The local topography exhibits a high degree of variation and relief. Steep slopes are found throughout the area, but are not common. Most steep slopes are found in the north central region of the Township.

Soil types within the Township are identified in the Oakland County Soil Survey. The most important limiting factor influencing land development is the soil's ability to support septic systems. Most of the north part of the Township relies on individual septic systems for sewage disposal. Because of this reliance upon septic systems, soils become an important element in the location of future land uses. Land uses which produce large volumes of sewage, such as large multi-family residential developments and heavy industrial uses, are not compatible with septic systems.

The Township has substantial expanses of forested areas. These include deciduous woodlots composed primarily of central hardwoods and lowland hardwoods in the southwest. A number of larger wooded areas coincide with those areas where grades are in excess of 10%. The most noteworthy expanses of vegetation are located in the low lying areas of the Township in conjunction with the Clinton River, Sashabaw Creek, and their associated wetlands.

The Township has five drainage basins: Clinton River, Sashabaw Creek, Paint Creek, Deer Lake, and Kearsley Creek. Drainage basins are delineated on the Natural Features maps on page 138. The Clinton River Basin is the largest watershed, encompassing nearly 50% of the Township. The headwaters of the Clinton River are located in the northern part of the Township.

Wetlands cover a considerable area of Independence Township. Many small wetland areas (two to three acres) are found scattered throughout the low areas. The largest wetland systems are found along the Clinton River within the north central region of the Township and along the Sashabaw Creek in the eastern part of the Township.

There is also an abundance of lakes scattered throughout the Township, with the exception of the northwestern region. The small lakes are typically 2 to 10 acres in size and the larger lakes are generally 90 to 125 acres in size. Associated with the lakes are numerous streams and intermittent streams.

The North Oakland Headwaters Land Conservancy, formerly known as the Independence Land Conservancy, was founded in 1972 (one of the first two in Michigan) to protect and link the remaining high-quality natural areas. The Conservancy is an independent, private organization that serves as an education and information source for landowners, neighborhood groups, and towns. The conservation easement is one of the primary tools used for conservation purposes by the conservancy. Current land holdings total more than 500 acres in Independence, which are located throughout the Township in the form of preserves and conservation easements.

The Township has adopted a Greenways Plan that is included in the Master Plan. The Greenways Plan is intended to reduce the visual and habitat fragmentation within the natural landscape by encouraging connections between distinct tracts of open space so as to form a network. The plan's components are the waterway/wetland corridors and other natural resources, the safety path system,

established tree canopied streets, parks and other preserved areas, and cluster developments with private open space. By identifying these features, the plan illustrates the existing and potential networks of open space throughout the Township. In this way, the Greenways Plan communicates how development, land use, acquisition, and design can be directed in a way that encourages those links.

Transportation

The Township is traversed in a northwest to southeast direction by I-75. Two intersections of I-75 are located within the Township at Sashabaw Road and M-15. The only U.S. trunk line passing through the Township is Dixie Highway (U.S.-10). Both I-75 and Dixie Highway convey large volumes of traffic through the Township. Dixie Highway also serves as a major artery within the Township, along with Ortonville Road (M-15), and Sashabaw Road. The only State route within the Township is M-15.

Primary roads are established by, and the responsibility of, the Road Commission for Oakland County upon approval of the Michigan Department of Transportation. There are 26.3 miles of primary roads; 24.9 miles have a hard top surface and 1.4 miles have a gravel surface. The incidence of unpaved local roads is overwhelmingly higher than primary roads.

There are 48.8 miles of local roads; 39 miles have a gravel surface and 9.8 miles have a hard top surface. Combining both local and primary roads, there are a total of 75.1 miles of road in the Township with 40.4 miles (53%) of gravel surface and 35.7 miles (47%) of paved surface. Since the

Vision 2020 Plan, there has been an increase in the amount of paved local roads in the Township as a result of development.

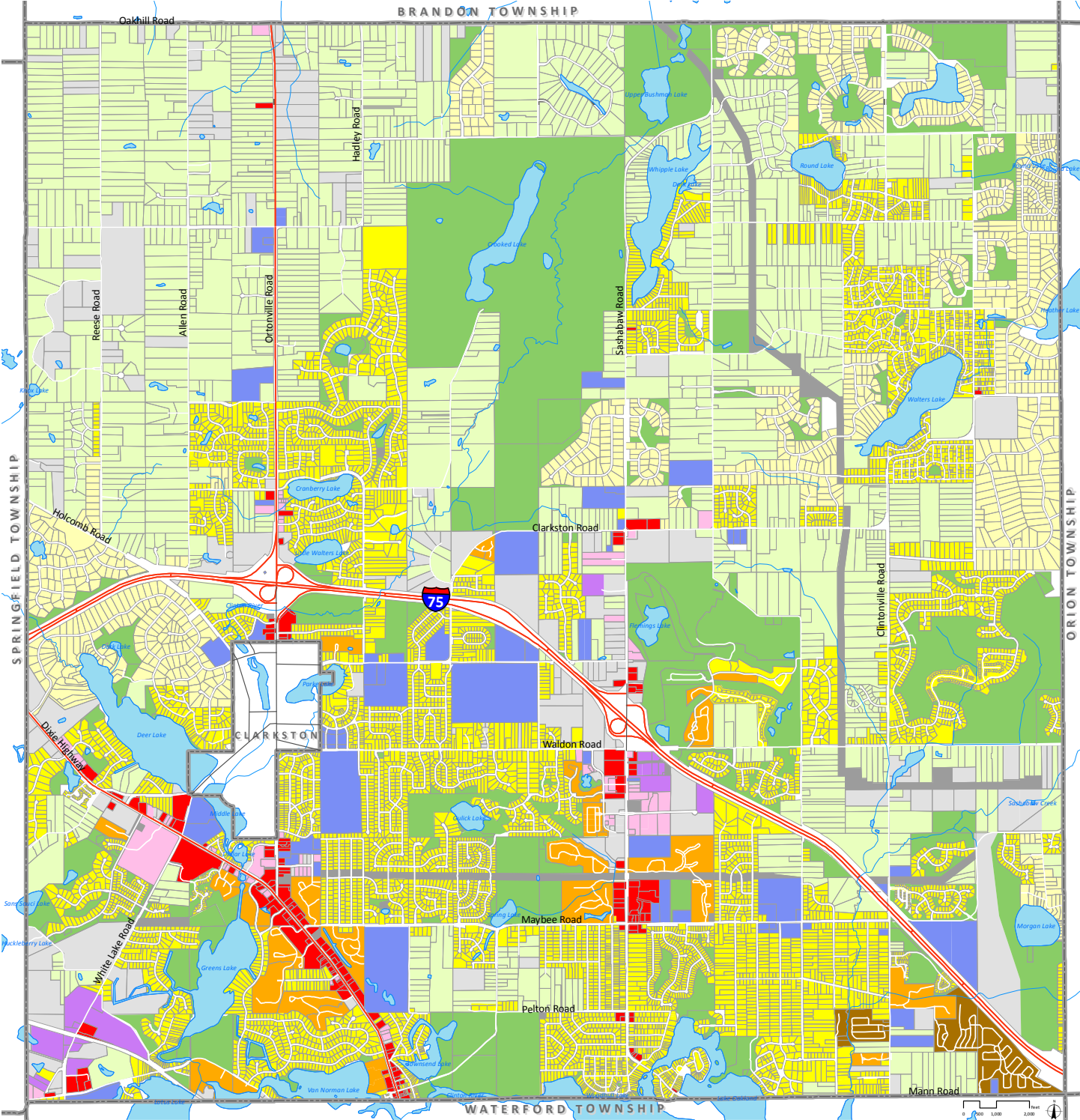
In addition to the roadway network in Independence Township, the Grand Trunk Railroad traverses the southwestern corner of the Township and is still an active line. General aviation services are available at the Oakland International Airport, located approximately four miles from the City of the Village of Clarkston. Detroit Metropolitan Airport, located thirty five miles to the south, as well as Flint Bishop Airport, located 30 miles to the north, provides the area with full aviation services.

Existing Land Use

An understanding of existing land use patterns is essential to formulate a well-reasoned plan for the future. Mapping of existing land use has been updated from aerial photographs and field verification. The Existing Land Use Map, included at the end of this section, depicts the land development patterns of the Township.

Mapping of existing land use has been updated from aerial photographs and verified by field observation. The following classifications have been applied to Township land uses:

- VACANT AND AGRICULTURAL: Vacant lands which have no specific use and upon which no buildings have been constructed, or land being used exclusively for agricultural purposes.
- RURAL RESIDENTIAL: Areas composed of single family dwellings sited predominantly on lots of 3 acres or larger.
- ESTATE RESIDENTIAL: Areas consisting of single family dwellings sited on lots which are 1.5 acres in size.
- SINGLE FAMILY RESIDENTIAL: Areas containing single family dwellings sited on lots less than 1 acre.
- MULTIPLE FAMILY RESIDENTIAL: Areas which include two family dwellings, apartments, townhouses, condominiums, and other similar attached structures.
- MOBILE HOME PARK: Areas which have been planned and developed with the facilities and services necessary to provide sites for a community of mobile homes.
- COMMERCIAL: Areas which contain both local and community commercial retail and service. Includes neighborhood stores, shopping centers, drug stores, and highway-oriented uses such as gas stations and drive through restaurants.
- OFFICE: Areas which include uses such as medical, dental, veterinarian, and real estate offices, banks, and other similar uses.
- INDUSTRIAL: Areas related to the manufacturing, warehousing, and assembly of goods.
- PUBLIC AND SEMI-PUBLIC: Areas which are devoted to schools, churches, cemeteries, fraternal organizations, and public buildings and grounds.
- RECREATION/CONSERVATION: Areas which include public and private recreation sites and/or dedicated open space.
- UTILITIES: Areas which are devoted to utilities, including telephone, electric, gas, and water and sewer services.



MAP 3: EXISTING LAND USE

- Vacant/Agricultural
 - Rural Residential
 - Estate Residential
 - Single Family Residential
 - Multiple Family Residential
 - Manufactured Home
- Commercial
 - Office
 - Recreation/Conservation
 - Industrial
 - Public/Semi-Public
 - Utilities

FIGURE 5: TOWNSHIP LAND USE

	1983		1990		1999		2005		2012		2005-2012 % Change
	Land Area	% of Total	Land Area	% of Total	Land Area	% of Total	Land Area	% of Total	Land Area	% of Total	
Single Family	7,931	18.1	9,660	21.3	12,904	62.8	13,150	56.8	13,281	57.3	1.0
Multiple Family	78.5	0.3	346	1.5	360	1.8	502	2.2	525	2.3	4.6
Mobile Home Park	13.7	0.1	13.7	0.6	135	0.7	153	0.7	153	0.7	0
Office	17.3	0.1	52.3	0.3	58	0.3	129	0.6	176	0.8	36.4
Commercial	109.7	0.5	162.2	0.7	221	1.1	279	1.2	265	1.1	-5.1
Industrial	97.8	0.4	97.8	0.4	121	0.6	142	0.6	132	0.6	-7.0
Extractive	122	0.5	207.3	0.9	0	0	0	0	0	0	0
Public, Semi-Public, Recreation and Utilities	2,204	9.5	2,529	11.0	3,489	17.0	4,584	19.8	4,915	21.2	7.2
Vacant or Agricultural	12,358	54.3	10,093	43.6	3,238	15.8	4,222	18.2	3,714	16.0	-12.0

Source: Independence Township GIS

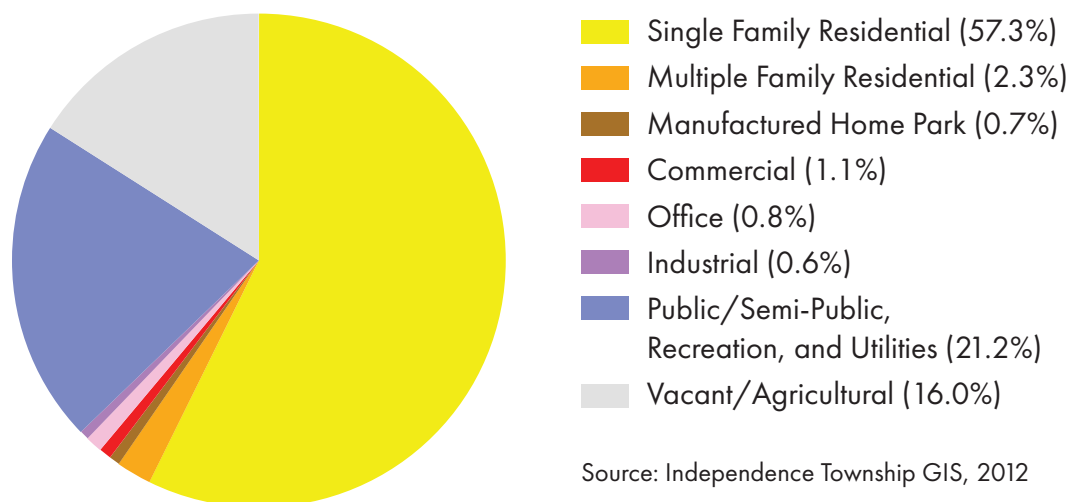
Land Use Acreages

Land use acreage by category for inventories 1983, 1990, 1999, 2005, and 2012 are illustrated in the Figure 5. Unlike past planning intervals, land use changes between 2005 and 2012 were minimal. Economic conditions resulted in very little development and the conversion of undeveloped property to developed property. The following is a detailed discussion of land use patterns in the Township.

RURAL, ESTATE, & SINGLE FAMILY RESIDENTIAL: Residential land use remains the most significant category and is classified as rural residential (more than 3 acres), estate residential (1.5 acres), and single family residential (less than 1 acre) to distinguish between rural estate and subdivision types of residential development. Such a distinction is important to depict since the northern half of the Township has a predominance of low density residences, while the southern half is developed in higher density housing. The most significant increases in rural and estate residential land use in the 1990s have been in the northeast quadrant of the Township. However, there was little change between 2005 and 2012.

Until the 1970s, non-lake single family residential development was largely confined to those areas south of I-75 connected to sewer. Through most of the 1980s and 1990s, new subdivisions and single lot residences spread to other parts of the Township. Residential growth began to slow early after 2000 and has only recently begun to increase.

FIGURE 6: TOWNSHIP EXISTING LAND USE



Source: Independence Township GIS, 2012



Several residential developments such as Coulter Lake Estates, Oakhurst, and Arlington Park developed in the northeastern half of the Township. South of I-75, the infilling of vacant tracts of land within more developed areas has also occurred. Other significant developments include Bridge Valley and the Parks of Stonewood. In the Township single family residential land use increased just 1% between 2005 and 2012.

A general observation of residential land use patterns indicates that the pastoral setting in the northern half of the Township has been maintained for residents desiring a low density pattern of living through large lot zoning and cluster lot development. However, such patterns have also contributed to a higher level of land consumption than for other categories of land use. As a result, greater amounts of land are being reserved to support fewer numbers of people.



MOBILE HOME PARK: The southeastern corner of the Township south of I-75 has two areas with existing mobile home parks. The major increase in mobile home units occurred in the 1990s. Clinton Villa is an older park with 498 units and Independence Woods is a modern mobile home park consisting of 430 units.

MULTIPLE FAMILY RESIDENTIAL: There are a number of areas in Independence Township devoted to multiple family residential housing. Comprising approximately 525 acres of land, multiple family residential witnessed little increase between 2005 and 2012. Older multiple family areas developed in the 1970s are located in the southwest portion of the Township. Additional growth in the availability of multiple family units occurred between 1990 and 2000 with the construction of the Bridgewater

Apartments and Hidden Lake Apartments at Sashabaw and Maybee Roads, Fox Creek on Clintonville Road, and the Lancaster Apartments and Clarkston Bluffs Condos on Dixie Highway. More recently, a number of mixed use projects within the Sashabaw corridor have included owner-occupied condominium units.

OFFICE: A total of 176 acres of land is used for office purposes. Most office uses are found on M-15 north and south of Clarkston, in arbitrary locations on Dixie Highway, and along Sashabaw Road. Office uses in the Township are primarily devoted to real estate, engineering, medical, and banking activities. Medical office development witnessed increased interest in the 1990s and has been a main reason for the increase in office land area in the 2000s and early 2010s. Office acreage was one of the few categories which showed a significant increase between 2005 and 2012, partly due to the start of the McLaren medical campus.

COMMERCIAL: Commercial land use comprises nearly 265 acres in the Township, an increase of almost 66% since 1990. Three commercial concentrations exist in the Township. The largest number of commercial uses are located in a strip development fashion along Dixie Highway and M-15 south of Clarkston. The majority of commercial uses located in this area are automobile related, shopping center, single site retail, and restaurant activities. A number of properties on Dixie Highway which were vacant in 1983 have since been redeveloped for commercial use.

A second commercial concentration is located on M-15, just north of the City of the Village of Clarkston. This area consists of a limited number of commercial uses and a large concentration of office uses. A final cluster is located at the Sashabaw/Maybee intersection and Sashabaw/Waldon intersection. Development of the Sashabaw Road corridor has resulted in an increase of commercial space since 1999. Other single commercial uses are scattered throughout the Township along major thoroughfares such as M-15, Sashabaw, and Clarkston Roads.

INDUSTRIAL: As with commercial land use, industrial development in the Township is limited. A total of 132 acres of land, spread between two areas, are currently devoted to industrial use. The largest area of industrial land use is on White Lake Road, south of Clement Road, and is devoted to general manufacturing and contractor's yards. Light industrial uses, Rectical and LC&I Shefler have also been developed in the Bow Pointe area, east of Sashabaw Road.

EXTRACTIVE: The 1983 land use survey indicated three general areas in the Township devoted to the extraction of sand and gravel. There are no longer any active extractive operations in the Township. Former sites have been reclaimed and converted into residential or industrial office park usages.

PUBLIC, SEMI-PUBLIC, RECREATION, AND UTILITIES: Public, semi-public, recreation and utilities occupy 4,915 acres in the Township representing the largest non-residential land use category. The majority of land use in this category is devoted to public and private recreation.



The largest public recreational property in the Township is the Independence Oaks County Park consisting of 1,276 acres surrounding Crooked Lake. Independence Oaks serves as a regional recreational attraction providing water based activities such as swimming, boating and fishing, picnicking, hiking, and nature study areas.



The Township owns four parks, and leases a fifth site. Clintonwood Park is a 120 acre community park located on Clarkston Road in Section 16. The Township also owns a 50 acre park in the southwest corner of the Township called Bay Court. The Township has another park site located on Maybee Road, east of the intersection of Maybee and Sashabaw Roads, called Sashabaw Plains Park. A fourth park devoted to passive recreation is called Stickney McCord Park, located at the corner of Pine Knob and Stickney Roads. Deer Lake Park, located on the east end of Deer Lake Road at White Lake Road, is leased from Clarkston to provide access to swimming and boating for Township residents.

Non recreational public land use in the Township consists of Township and school facilities. The Township Hall and offices are on Waldon Center Drive in the Sashabaw Road corridor. The Township maintains three fire stations at the following locations: Fire Station No. 1 on Citation Drive; Fire Station No. 2 at the intersection of Clarkston and Sashabaw Roads; and Fire Station 3 at the Pine Knob and Maybee Roads. Other Township facilities include the Library on Clarkston Road) Public Works Building on Flemings Lake Road, and Lakeview Cemetery on the northeast corner of White Lake and Dixie Highway.

The Clarkston Public Schools have nine schools plus administrative facilities which occupy approximately 200 acres. In addition to the building, each public school has surrounding grounds for outdoor recreation.

Major private recreation facilities located within the Township include the following: the Pine Knob Country Club, Oakhurst Golf Club, Fountain Golf Club, DTE Music Theater, and the Oakland County Sportsmen's Club.

Other major land uses in the public, semi-public, recreation, and utility category include private cemeteries, churches, and utility easements. The largest private cemetery in the Township is Ottawa Park which contains 80 acres. The Township owns its own cemetery, named Lakeview Cemetery, located at the northeast corner of White Lake Road and Dixie Highway. Over 293 acres are devoted to Detroit Edison power line easements which traverse a distance of 12 miles within the Township. Nearly a dozen churches are located throughout the Township.

VACANT OR AGRICULTURAL: The remaining undeveloped land in the Township is classified as vacant or agricultural. In actuality, very little land is currently put to productive agricultural uses. The majority of the land which is vacant may be planned for some future use or is unsuitable for any development purpose. The vacant land category also includes water bodies and wetlands. The category has seen the greatest loss in total acreage. There was nearly a 12% decline in the amount of vacant and agricultural land from 2005-2012.

GOALS AND OBJECTIVES

Setting a Course



This portion of the Master Plan establishes goals and objectives for the Township thereby setting forth the basis for action. The goals and objectives reflect the community's concept and concerns which emerged through the visioning process, and accomplish the following:

- Give direction to private property owners regarding the physical environment desired by the citizens of Independence Township.
- Provide direction for more detailed analysis and eventual changes in existing regulations.
- Establish a framework to assist governing bodies and staff in assessing the impact of their planning and zoning decisions.



GOALS represent a desired outcome, and OBJECTIVES are a breakdown of the issues the goals are meant to address. More concrete and action oriented strategies can be found in the 2020 Strategic Plan and the Target Plan(s).

For Opportunities 2030, transportation and utilities have been combined into Infrastructure. Goals and objectives are organized into the following six (6) topics.

Residential Land Use

The strength of Independence Township lies in its residential areas and neighborhoods. As other land use sectors in the community develop, care will be taken to preserve, protect and maintain our residential base. Efforts will be directed at recognizing the changing housing needs of current and future residents.

VISION: In the year 2030, we envision the residential atmosphere and land use characteristics of Independence Township to be as follows:

Rural character is maintained north of I-75 through the preservation of natural features and open space, ample building setbacks from rural roadways, and lower density.

The residential environment of the Township is preserved, protected, and maintained.

Housing is provided for people at all stages of life, recognizing that additional housing options, will be required as the population ages.

Residential development reflects the limitations of infrastructure.

Preservation of open space and natural features is encouraged within residential developments, and coordinated between adjacent developments.

GOAL: To preserve residential character and enhance the strong residential base of the community while continuing to recognize and plan for future housing needs.

OBJECTIVES:

- Provide for a logical arrangement of residential densities which recognizes the physical and natural characteristics of the land, the availability of and proximity to public services and utilities, and the compatibility with existing land use patterns.
- Recognize the importance of older existing neighborhoods and take positive action to ensure their viability through investments in neighborhood conservation, infrastructure and code enforcement. Maintain a low density residential development pattern in the northwest and northeast portions of the Township.
- Encourage housing that meets a variety of needs while maintaining the residential values that are attractive to families
- Provide alternatives to residential land development patterns that will result in more efficient and better arranged land uses, increased open space, and the preservation of natural and rural resources, both with and between contiguous developments.
- Encourage housing for an aging population and persons with disabilities in appropriate locations based upon the availability of services and compatibility with existing land use conditions.

Commercial, Office, and Industrial Land Use

Independence Township has been and will continue to be primarily a residential community. However, there are opportunities to enhance tax base, provide employment opportunities, and serve the needs of residents, while maintaining the character of the community.

VISION: In the year 2030, we envision commercial, office and industrial land use characteristics in Independence Township to be as follows:

A centralized Town Center district with a mixture of land uses, quality architecture and site design, elements of small town character, and improved walkability, supported by adequate roads and utilities.

Capitalization upon new economic development opportunities arising from the McLaren medical campus.

Renewed investment in the Dixie Highway commercial corridor that increases availability of goods and services to Township residents.

Increased commercial entertainment and recreational opportunities which meet the needs of Township residents.

An enhanced commercial tax base to support community services.

Office, industrial and commercial land use developed in common themes and located harmoniously with residential areas providing effective separations and transitions.

Policies which consolidate and restrict commercial development to designated areas within the Dixie Highway and Sashabaw Road corridors, and industrial development to designated areas within the White Lake Road and Sashabaw Road corridors.

A strong office-service base which responds to the demand for professional services.

GOAL: To maintain and attract quality businesses in appropriate areas to serve the needs of residents, contribute to the tax base, and provide jobs.

OBJECTIVES:

- Encourage flexibility of use to boost investment in otherwise obsolete or underutilized properties that provide amenities to workers and residents.
- Provide a consistent and sustained approach toward attracting high quality industrial, research office, office service, and commercial development that is compatible with the predominant residential character of the Township.
- Concentrate economic development activities in targeted areas with a varied emphasis such as the Sashabaw Corridor, White Lake Road, Dixie Highway, and M-15/I-75 Interchange.
- Provide commercial land use that serves the needs of Independence Township as a residential community.
- Provide office-services land use that meets the demands for professional services and provides for appropriate transitions between higher intensity and lower intensity uses.

- Recognize trends in work patterns and the workplace through home-based businesses and offices and live-work units.
- Encourage redevelopment and increase density at nodes, particularly along Dixie Highway.

Historic and Rural Preservation

Independence Township is rich in historic and rural character. Preservation efforts are necessary in order to retain these assets which are vital to the character of the community, and which reflect the history of the community and the values of its citizens.

VISION: In the year 2030, we envision the historic and rural, characteristics of Independence Township to be as follows:

Strong support for the preservation and adaptive reuse of historic homes, barns, structures, and scenic landscapes.

Designated natural beauty/scenic roads and natural trails, which maintain the rural character of the northeast and northwest portions of the Township.

GOAL: To recognize and promote the importance of the historic assets and rural character of the community, and foster preservation initiatives.



OBJECTIVES:

- Promote awareness and appreciation of the Township's unique historic and natural assets which are vital to the heritage of the community and its residential character.
- Maintain and increase the visual appeal of Township rural roadways in order to preserve rural character and natural beauty.
- Ensure that future road improvements minimize tree removal and are sensitive to the rural residential context.
- Recognize that low density residential land use patterns are vital to maintaining the rural and scenic resources of the northeast and northwest portions of the Township.
- Explore incentives to ensure preservation and adaptive reuse of historic homes, out-buildings, structures, and barns.
- Make greater use of Township's historic structure survey to raise public awareness of the Township's history of settlement.



Open Space and Natural Resource Preservation

Rolling hills, wetlands, scenic beauty wooded areas, lakes, and the Clinton River and its tributaries form essential natural elements of the fabric of Independence Township. Preserving these vital assets is integral to maintaining the character and environmental integrity of the Township.

VISION: In the year 2030, we envision the open space and natural resource characteristics to be as follows:

Encourage the preservation of natural features and open space within all developments.

Ensure that park lands are provided with a balance between both active and passive uses.

Continue stringent enforcement of Township ordinances related to preservation of natural resources and open space.

GOAL: To continue to value open space and natural resource preservation as vital elements to the high quality of life provided to Township residents.

OBJECTIVES:

- Strengthen preservation efforts for those areas containing unique natural resources in the Township.
- Promote clustering and other forms of alternative development which maximize open space preservation and are sensitive to fragile natural features such as steep slopes, riparian zones, animal habitats, wetlands, and lakes.
- Recognize the importance and promote protection of the Clinton River, Sashabaw Creek, and other river and stream corridor resources.
- Continue to implement the Township Green Infrastructure plan coordinated with the Safety Path Master Plan and Oakland County’s Link Trail and Path Network.
- Maintain a greenbelt along portions of I-75 as designated in the Green Infrastructure Plan.
- Protect the Township’s groundwater to ensure the reliable supply and quality of drinking water.
- Protect the quality of Township surface waters.
- Encourage stormwater management best practices appropriate for density and use.
- Protect and preserve native vegetation and work to remove invasive species.

Infrastructure

The movement of people, goods, and utilities within and through the Township in a safe and efficient manner is a top priority. In addition, the quality of utilities and service are inextricably tied to the quality of living, working and conducting business in the Township.

Vehicular transportation, as well as pedestrian and bicycle pathways will continue to be a focus within our community. Meeting the basic needs and expectations of Township residents, maintaining a high quality of service and cost effective delivery will also remain a priority.

VISION: In the year 2030, we envision the infrastructure characteristics in Independence Township to be as follows:

A well designed and maintained road system that efficiently directs traffic within our community with improved paving and drainage, coordination with surrounding communities, "smart road" concepts, computerized traffic flow, vehicle speed control, and integrated light control.

A transportation system to serve all ages and levels of mobility.

Transportation alternatives provided such as biking, buses, pedestrian paths, additional park and rides, senior and handicap "on call" services, and pedestrian access to recreational facilities from other than main roads.

Expand and connect the Township's network of safe and attractive of non-motorized pathways.

A road system which incorporates boulevards and parkways, passing lanes, consolidations of driveways/single entrances to subdivisions and businesses.

Appropriate sewer and water services are maintained as necessary to accommodate existing areas as well as new development within the Township's utility services district.

Police, fire and other services continue to meet Township needs.

GOAL: To provide an infrastructure system which facilitates the safe, efficient transportation for all users, as well as efficient and reliable utilities and services in keeping with Township policies to meet resident and business needs.

OBJECTIVES:

Transportation

- Utilize the Master Plan to establish priorities for road improvements which improve traffic flow, relieve congestion, and facilitate economic development in targeted areas of the Township.
- Prioritize access management for commercial redevelopment along roadway corridors.
- Encourage the development of complete streets that recognizes the needs of any and all users.
- Road improvements, both public and private, are sensitive to the context in which they are located.



- Improve transportation facilities and services for children, seniors, and individuals with limited-mobility.
- Pursue improved access to and from I-75 via a limited interchange at Clintonville Road.
- Encourage a parkway concept for M-15 improvements as noted in the M-15 and Northwest Area Target Plan.
- Complete the safety path system that links destination points with residential areas throughout the Township and coordinates with Oakland County's Link Trail and Path Network and ITC corridors.
- Improve pedestrian and non-motorized crossings at major development nodes, including intersection or mid-block crossings.
- Require pedestrian connections to Township safety paths for all new development.

Utilities

- Develop a multi-purpose stormwater management system, which reduces the potential for localized flooding and enhances water quality.
- Provide the necessary water supply in order to provide fire services for the entire Township.
- Extend sewer and water to all portions of the Township which are within the water and sewer service district.
- Support cooperative efforts which promote cost effective development of utility infrastructure and efficient use of utilities.
- Ensure that the impact on utility and services is a primary consideration when making land use decisions.

Community Facilities

The type and quality of the community facilities provided in the Township directly reflects upon the quality of life in the Township. As growth continues in the Township, the demand for improved community facilities will increase.

The Township and its residents will face significant challenges to improve and update existing facilities and provide new facilities in order to keep pace with changing demands and needs.

VISION: In the year 2030, we envision the community facilities of Independence Township to be as follows:

A community in which educational, recreational, and cultural events and facilities are provided for all ages.

Additional land is acquired for open space, greenbelts, and parks.

Utilize the utility corridors to connect recreation facilities to neighborhoods and corridors.

Provide a central civic space for the community within the Town Center.

Police, fire, and other services continued at levels which meet Township needs.

GOAL: To provide comprehensive community facilities which promote public health, safety, and welfare, and enrich the quality of life for Township residents.

OBJECTIVES:

- Continue to develop a community civic space that provides recreation, cultural and community activities in the Town Center.
- Provide a comprehensive library system which meets the needs of the Township.
- Ensure that there are adequate cemetery facilities to serve the current and future needs of the Township.
- Improve and maintain existing parks and recreation facilities in a manner which meets current and future Township needs.

MASTER LAND USE AND TARGET PLAN

Land Patterns, Design and Images

The Land Use Plan presented on the following page illustrates the proposed physical arrangements of land use for Independence Township. The Land Use Plan serves to translate community goals into a narrative and graphic illustration. It is based largely upon the existing land use, current zoning, planning analysis, and the desires of the residents of the Township.

The plan is prepared to serve as a policy for the Township regarding current issues, land use decisions, investments in public improvements, and future zoning decisions. The plan is intended to be a working document which will provide for the orderly development of the Township, and assist the community in its effort to maintain and enhance a pleasant living environment while fostering economic development and redevelopment where needed.

The land use plan is based on consideration of a number of factors. These factors include:

- Citizen opinion and input
- Existing land use
- Natural features
- Existing plans
- Population projections and characteristics
- Community facilities, utilities, and parks
- Socio-economic considerations
- Traffic and circulation
- Community goals, objectives, and strategies

Of special emphasis in the Land Use Plan are the public comments and opinions that have been gathered on a continuous basis since inception of the Opportunities 2030 planning. Public input has been considered in both a formal manner at stakeholder meetings, public hearings, and also in a more informal manner with comments made at Planning Commission meetings and written comments submitted through MiCommunity Remarks.

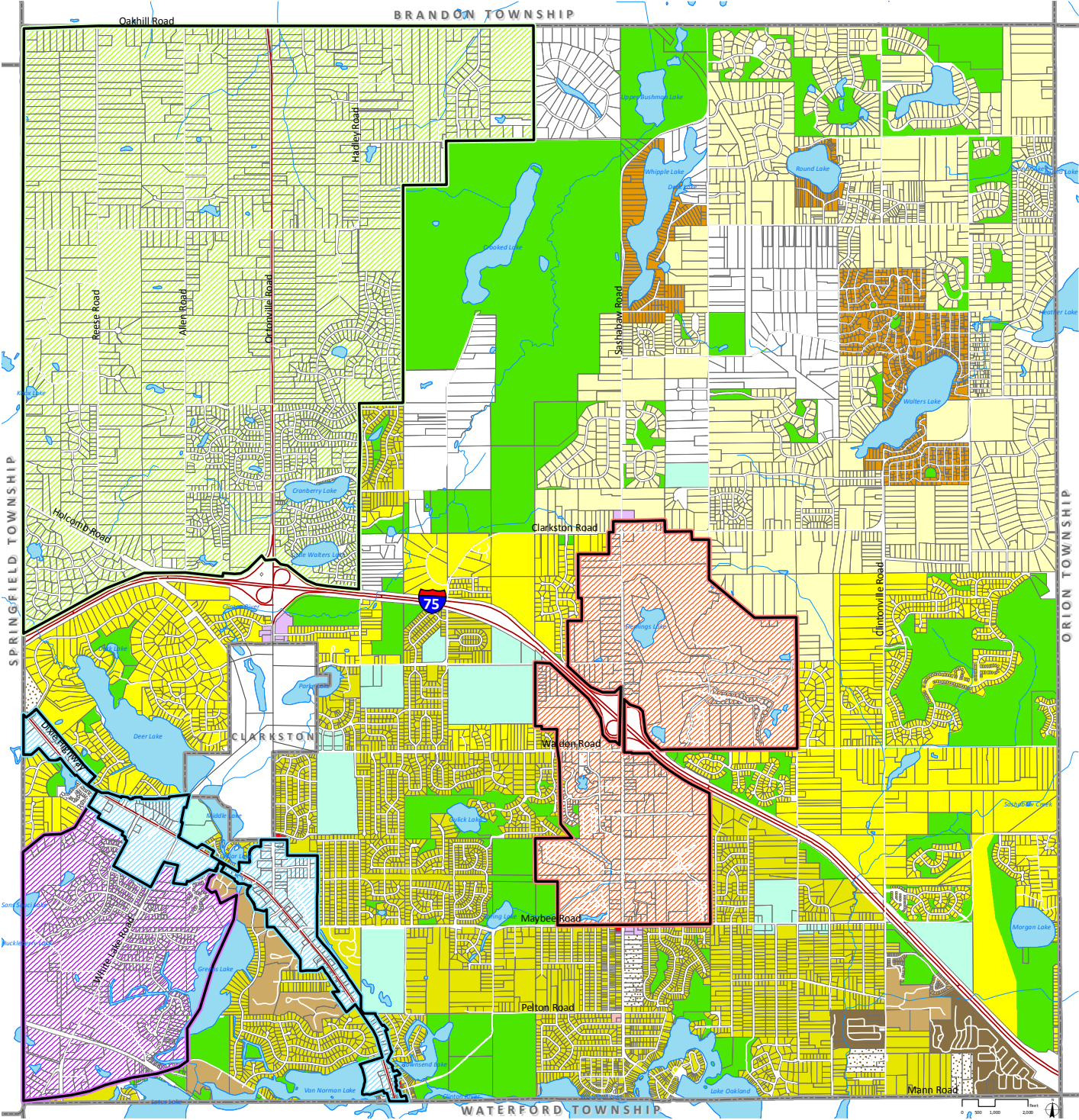
Land Use Designations

Land use categories were developed in an effort to create a long term plan for the systematic, efficient, and appropriate development of Independence Township. These classifications are described below.

Residential Land Use

The predominant developed land use in the Township is residential. In keeping with the Community Goals, the Land Use Plan permits a range of housing types and development concepts which take into consideration the capability of roads, services, natural features, and the needs of the Township's population. The following categories of residential land uses are planned in order to achieve these goals:

RURAL RESIDENTIAL calls for single-family residential development at three (3) acres or more per dwelling unit. Rural Residential land use is planned for areas with existing very low density development and least capable of supporting development due to natural resources, road conditions, and existing land use patterns. Rural Residential is intended to preserve open space, natural areas, and the rural atmosphere in specific areas of the Township. It is unlikely that areas planned for



MAP 4: TOWNSHIP FUTURE LAND USE

- Rural Residential
- Estate Residential
- Suburban Residential
- Single Family Residential
- Traditional Lakefront Residential
- Single Family Attached/Detached
- Multiple Family Residential
- Mobile Home Park
- Office Service
- Local Commercial
- General Commercial
- Recreation/Conservation
- Public/Semi-Public
- Dixie Highway Target Area
- M-15 and Northwest Target Area
- Sashabaw Target Area
- White Lake Target Area

Rural Residential will be served by improved, paved roads or sewers. Areas planned for Rural Residential are located almost entirely in the northwestern quarter of the Township north and outside of the sewer service boundary line.

ESTATE RESIDENTIAL permits single-family residential development at one and one-half (1-1/2) acres per dwelling unit. Estate Residential land use is planned for areas with existing low density and with development restrictions. Estate Residential serves as a transitional zone between the least dense Rural Residential and other more dense residential uses. It is unlikely that areas planned for Estate Residential will be served by improved, paved roads or sewers in the near future. The northeastern quarter of the Township north and outside of the sewer service boundary line is designated primarily for Estate Residential.

SUBURBAN RESIDENTIAL provides for single-family residential at one (1) acre per dwelling unit. Suburban residential is planned primarily for areas of low density development and serves as a transitional residential use between rural residential, estate residential, and single-family residential. Suburban residential is located in areas more capable of supporting development due to fewer natural resource limitations. The general areas planned for suburban residential include existing residential areas on both sides of Dixie Hwy near I-75, the area north of I-75 on both sides of Clarkston Road, and the area north of I-75 in the vicinity of Clintonville and Maybee Roads.

SINGLE-FAMILY RESIDENTIAL calls for single-family residential development at 15,000 sq. ft. of lot area per dwelling unit. This category is planned for areas with existing similar densities and capable of supporting such densities due to the availability of sewer and water utilities, capability of natural resources, and adequacy of roads. Areas designated for single-family residential are located primarily in the area south of I-75 and east of White Lake Road, and the sewer service area to the north of the I-75/M-15 interchange.

TRADITIONAL LAKEFRONT RESIDENTIAL reflects the traditional pattern of residential development that occurred predominantly in the 1930s characterized by small lots 30 to 40 feet wide mainly used for recreational cottages. Many houses have been enlarged and lots combined to reflect permanent residences. Traditional lakefront residential is focused around Walter's Lake, Round Lake, and Whipple Lake. This area is not intended to reflect the low density patterns that are evident in the balance of the northeastern quadrant of the Township.

MULTIPLE-FAMILY RESIDENTIAL designates areas for multiple-family dwellings defined as three (3) or more dwelling units per structure. Planned density ranges from 5-6 units per acre. This designation is the densest residential development permitted by the Township. Multiple-family residential is planned for areas of existing multiple development, available sewer and water utilities, and improved roads. The general areas of multiple-family residential designation are in the southeastern corner of the Township south of I-75, in the general area of the Sashabaw Corridor, and along Dixie Highway.

SINGLE-FAMILY ATTACHED/DETACHED RESIDENTIAL calls for single-family, owner-occupied residential development with structures either standing alone or attached with a density not to exceed 4 units per acre. This designation is also designed to permit alternative housing options, such as elderly housing. Elderly housing may be considered at a higher density than other types of single family attached/detached units. It is planned for areas with available sewer and water utilities, improved roads, and nearby services. Single-family attached/detached residential is designated along the east side of Sashabaw Road in the Town Center Subarea, in the east and west side in the Pine Knob Subarea, and near the I-75 exit for Dixie Highway.

MOBILE HOME PARK calls for single-family residential development of mobile homes which are intended to be permanently located at the site. These are areas of higher density which allow 4 units per acre. Mobile Home Park developments are in areas where sewer and water utilities and improved roads are available. This residential land use is intended to permit affordable housing options. Two Mobile Home Parks are designated in the southeastern corner of the Township south of I-75.

SENIOR HOUSING calls for higher density residential development with on-site or nearby services to support older residents. This includes a variety of senior care and housing options such as independent living, assisted living, and nursing homes.

Commercial Land Use

The Land Use Plan recognizes that the predominant commercial corridors in the Township exist along Dixie Highway, M-15, and the Sashabaw Corridor. The Township desires to restrict strip commercial development and cluster new commercial development into specific areas as identified in the Opportunities 2030 Target Areas Plans. These Target Area Plans are for the White Lake Road Area, M-15 and Northwest Area, Dixie Highway Corridor, and Sashabaw Corridor. The commercial patterns in the Land Use Plan directly reflect these Target Area Plans. The following commercial land use categories are included in the plan:

LOCAL COMMERCIAL is designed to serve the convenience retail and service needs of neighboring residential areas. Local commercial is the primary commercial development planned for Dixie Highway, the Sashabaw/Clarkston intersection, the Sashabaw/Pelton intersection, and White Lake/Andersonville Intersection.

GENERAL COMMERCIAL provides larger commercial areas to serve both convenience and comparison shopping needs. General commercial is planned for Central Dixie Highway and in the Sashabaw Corridor Town Center Subarea

COMMERCIAL/OFFICE is designated in the Town Center Subarea of the Sashabaw Corridor. This use category calls for mixed use centers that provide a cohesive mix of local commercial and office uses.

Office and Industrial Land Use

The Land Use Plan places a great deal of emphasis on providing new areas for office and research-office development. Such emphasis is a result of recent trends in new office development in the Township, especially medical office space, and the recognized advantage that the Township enjoys due to its strategic regional location. Less emphasis has been placed on industrial land use due to changing market conditions and the growth of the Township as primarily a residential service community.

The Township desires to consolidate and restrict strip development and cluster new Office and Industrial development into specific areas as identified in the Opportunities 2030 Target Areas Plans. The office and industrial land use patterns in the Land Use Plan directly reflect these Target Area Plans.

The Land Use Plan, as it reflects the Opportunities 2030 Plan, identifies many areas for office and research-office uses in the White Lake Road, M-15 and Northwest Area, Dixie Highway Corridor, and Sashabaw Corridor areas.

The emphasis placed upon office and planned research-office uses lessens the need for additional area set aside for industrial land use. The lack of available land area served by utilities, improved roads, and sufficient isolation distance from residential areas provides further limitations. Areas of industrial designation include a small area within the Sashabaw Corridor and White Lake Road areas. Categories of office service, commercial/office, Industrial Service, and General Industrial are provided.

INDUSTRIAL SERVICE is intended to accommodate office, research and development, and very limited manufacturing in a planned campus setting. These uses are intended to be enclosed within a building, and external effects are not to be experienced beyond their property boundaries. An area on the east side of Sashabaw directly south of the I-75/Sashabaw exit and an area near the northeast corner of White Lake Road and Andersonville Road are designated as Industrial Service.

GENERAL INDUSTRIAL provides area for more expansive industry and broader categories of industrial uses. General Industrial is designated at White Lake Road north of Andersonville Road.

OFFICE SERVICE sets aside areas for medical, professional, general, and service-related uses that are dependent upon and supportive of an office environment. The office service designation is intended for areas where there is a need for a compatible transition between higher and lower intensity uses. Significant areas designated for office service use include M-15 at I-75, Northwest and Central Dixie Highway, and the Sashabaw Corridor in the Town Center and Pine Knob Subareas

MEDICAL SERVICE AND TECHNOLOGY is intended for health care services and medical technology uses primarily planned in a planned campus. There are two areas designated for this corner: the McLaren site on the east side of Sashabaw at Bow Pointe and the site approved for McLaren (former POH) at the southwest corner of White Lake Road and Dixie Hwy.

Public, Semi-Public Land Use

The Land Use plan designates existing areas set aside for institutional uses such as schools, cemeteries, and other public and quasi-public activities. These sites are scattered throughout the Township; however, most are south of I-75.

Recreational Land Use

The designation of Recreational-Conservation land provides areas for both active recreation and conservation of natural resources. This land use can be either publicly or privately owned. The predominant areas designated as Recreational-Conservation are within proximity to the Clinton River corridor, Sashabaw Creek, and the attendant watersheds. Maintenance of these areas is essential to the preservation of fish and wildlife habitat, water quality, wetlands, scenic amenities, and outdoor recreation opportunities. Other significant areas are designated throughout the Township and include public parks and lands deeded to the Independence Land Conservancy.

Target Plans

The individual Target Plans offer a detailed description of their land use designations for these four (4) Target Areas. For the Dixie Highway and Sashabaw Corridor Target Areas, future land use designations are designed to encourage flexibility in use by allowing for mixed-use development.

DIXIE HIGHWAY CORRIDOR traverses the southwest portion of Independence Township, connecting Waterford and Springfield Townships. It is one of the major commercial corridors in Independence Township and is generally built-out.

M-15 AND NORTHWEST AREA is located in the northwest corner of the Township. This area is predominantly rural residential, with an important employment node near the M-15/I-75 interchange.

SASHABAW CORRIDOR is the located in the heart of the Township. It is the core mixed use, commercial corridor in Independence Township. Centered around the Sashabaw/I-75 interchange, the Sashabaw Corridor is home to a wide range of services and uses, including medical, recreational, educational, housing, office, and commercial.

WHITE LAKE CORRIDOR is located in the far southwest corner of Independence Township. This area exhibits a variety of uses ranging from residential to commercial, warehousing and industrial uses.

DIXIE HIGHWAY CORRIDOR

Target Area Plan



Dixie Highway is a corridor of necessity. It is indispensable to the community and the region, but today it seems to follow neither form nor function. This historic route is home to a diversity of uses including local commercial, office, and service, but these uses are inconsistent over the length of the corridor.

Dixie Highway also provides an alternative route to I-75 for north/south commuting, but this condition frequently results in conflicts between turning vehicles and through traffic – not to mention pedestrians – particularly at peak hours. The corridor has high traffic volumes capable of supporting additional commercial uses and is surrounded by higher end residential uses and multifamily development, but Dixie Highway is not yet a destination.



Current traffic congestion, poor pedestrian connectivity, and existing irregular development patterns are major road blocks to successful redevelopment and revitalization of the commercial corridor. This plan aims to elevate the aesthetic quality of the corridor, create a recognizable gateway for the Township and Downtown Clarkston, and foster an attractive environment for investment through context sensitive solutions.

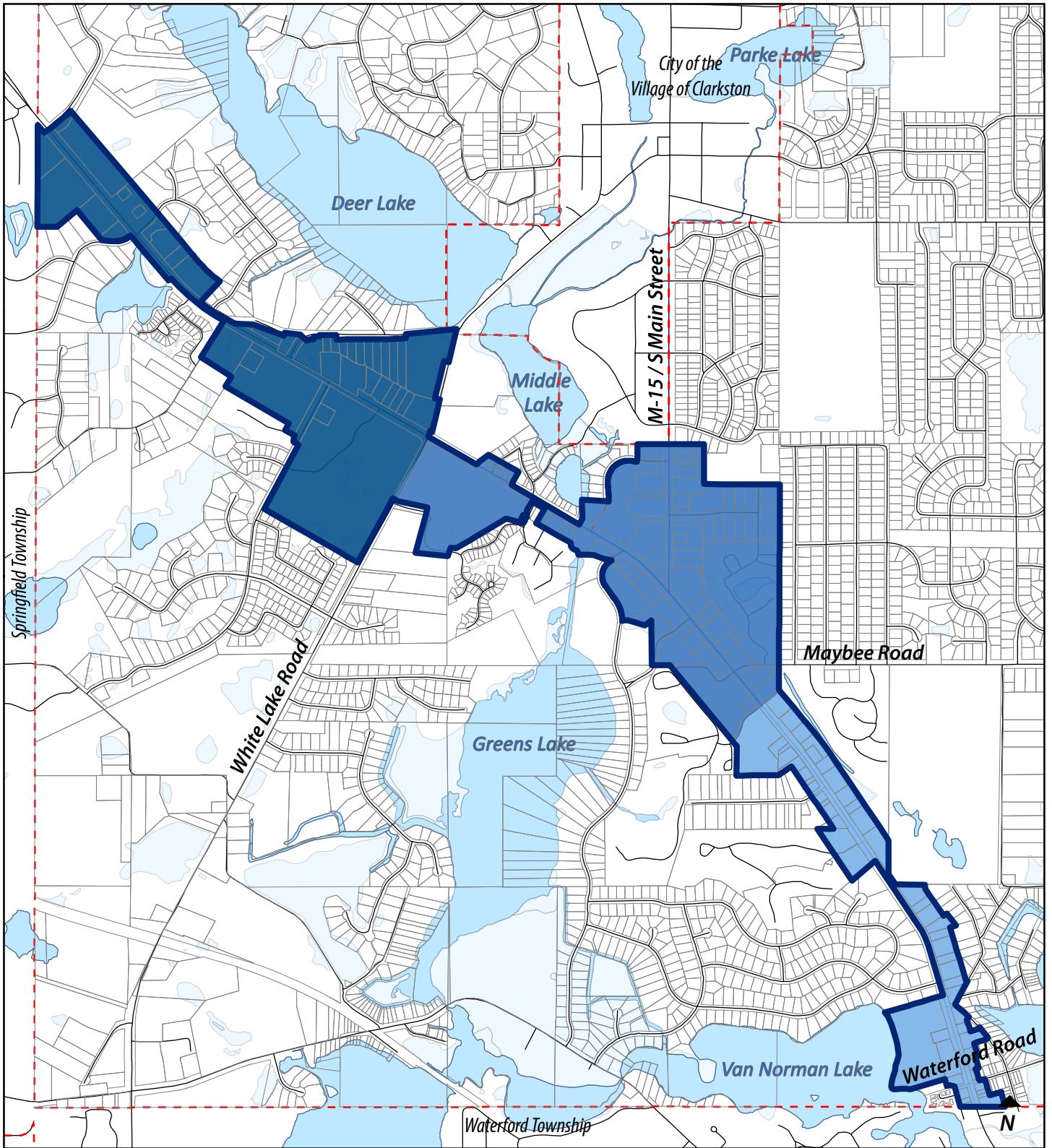
The revised Dixie Highway Corridor Target Area plan builds on the Dixie Highway Corridor Revitalization Study prepared in 2009 with feedback from the Township, Township residents, and Dixie Highway stakeholders. Based on community input, planned future development, and an evaluation of the area, the Dixie Highway Target Area has been redefined to include the entire length of Dixie Highway as it travels through Independence Township.

This revised area combines the original subarea as defined by the 2008 Master Plan Northwest Dixie Highway with the Dixie Highway Overlay District to include properties from the I-75 off ramp to just south of Waterford Road. The plan also expands the Target Area further to include commercial properties along M-15, south of Downtown Clarkston, while leaving out much of the single family residential property to the north. Based on an analysis of opportunities and challenges, the Dixie Highway Target Area was divided into three unique subareas:

- NORTHWEST DIXIE HIGHWAY from Springfield Township to White Lake Road
- CENTRAL DIXIE HIGHWAY from White Lake Road to the Maybee Road intersection
- SOUTHEAST DIXIE HIGHWAY from just south of Maybee Road to Waterford Township

The following plan conveys the broad, long-term vision and future land use plan for Dixie Highway. For each subarea, the plan identifies opportunity nodes and challenge areas, and provides targeted recommendations for land use. The Target Area Plan also provides corridor-wide design, pedestrian circulation, and vehicular circulation strategies.

MAP 5: DIXIE HIGHWAY CORRIDOR



 Dixie Highway Target Area

 Northwest Subarea

 Central Subarea

 Southeast Subarea



THE NORTHWEST section of Dixie Highway has the most flexibility and development potential along the corridor. There are a few large, vacant sites, located close to the freeway. Some of the central sites in this area include the former Pontiac Osteopathic Hospital - now McLaren - medical campus, Parks of Stonewood development site, and Deer Lake Athletic Club.



THE CENTRAL DIXIE HIGHWAY subarea has the most redevelopment and infill potential. With two shopping centers, several family-owned and uniquely Dixie businesses, surrounded by multiple family residential developments, this area has the potential to be very walkable. It serves as a gateway to Downtown Clarkston and the shopping centers serve local residents as well as commuters. Some of the central sites in this area include White Lake Commons, Oakland Medical Building, Clarkston Oaks, and Bowman Chevrolet.



SOUTHEAST DIXIE HIGHWAY is comprised primarily of small commercial parcels with single family residential in close proximity to the commercial corridor. While the green area on Waterford Hill provides a generous landscape buffer for residential uses along the west side of Dixie, the topography – combined with the small parcel land use pattern – create access and visibility challenges for the commercial properties. Some of the central sites in this area include Independence Commons and the apartment development on Van Norman Lake.

Public Participation

While citizen input is important to every planning effort, it is particularly important to Dixie Highway where implementation will be largely stakeholder driven. In addition to traditional methods including a joint Planning Commission and Township Board Planning Workshop, a Real Estate Forum was held with Dixie Highway developers and business owners. This round-table discussion was designed to ensure the right issues were prioritized and plan recommendations were reasonable. The Township is encouraged to engage these participants in the creation and continuation of various Task Forces as set forth in the Action Plan. The Action Plan was created in June 2014 to assist the Township in addressing short-term goals related to organization, master planning, zoning, visual improvements, economic incentives, and pedestrian enhancements along Dixie Highway. Both documents, the Action Plan and the Master Plan, stress that public participation and enthusiasm cannot end with the creation of the plan.

ONLINE ENGAGEMENT

The Township utilized the MiCommunity Remarks geographic information tool to obtain comments from community members. As of February 5, 2014, there were a total of 41 comments specific to Dixie Highway received on the site. Participants were asked to comment on four topics, including:

- What can be done to improve identity and visual image along the corridors?
- Where are opportunities for commercial and residential development?
- Where are the needs and opportunities to improve traffic movement and safety?
- Where do we need improved pedestrian access?

Comments revealed that Dixie Highway lacks an identity. Participants also indicated that it is important to encourage and incentivize commercial redevelopment, while ensuring appropriate buffers and transitions between new commercial and existing residential uses. Connecting safety paths and improving access management were also identified as high priority items.

REAL ESTATE FORUM

In an effort to bring greater focus to Dixie Highway and improve communication with the business and development community, Independence Township hosted a Real Estate Forum on Wednesday, June 4. Approximately 20 business owners, developers, and community leaders came together to identify the assets, opportunities, and challenges along Dixie Highway. As community experts and experts in their fields, attendees posed questions and offered potential strategies for the revitalization of this historic corridor.



Real Estate Forum discussion included:

LAND USE

- Encourage more diverse mix of uses, including senior and assisted living facilities, sports entertainment complex, restaurants, and grocery/market
- Protect new investments and anchor businesses with complementary retail and service uses

IDENTITY AND VISUAL IMPROVEMENTS

- Introduce greater flexibility to the sign ordinance
- Place entry/gateway signage, banners, and other wayfinding signage
- Encourage placemaking through arts, culture, and recreation
- Address blight and clean up vacant/unmanaged buildings and sites

FINANCIAL INCENTIVES

- Reduce or waive tap fees for existing buildings
- Introduce façade improvements program/incentive
- Pursue federal, state, county, and private grant/lending opportunities
- Reinstate Dixie Highway Downtown Development Authority (DDA) or establish Corridor Improvement Authority (CIA)

EDUCATION AND COLLABORATION

- Work with developers and business owners to implement the vision of the corridor
- Educate and engage neighboring residents on the benefits of density
- Work with Michigan Economic Development Corporation (MEDC) and Oakland County to bring greater focus to corridor revitalization

TOWNSHIP OPERATIONS

- Streamline development and approval process and provide incentives for new businesses
- Encourage coordinated and creative planning and development

Background

Dixie Highway runs from Miami, Florida to Sault Saint Marie in the Upper Peninsula. It served as the primary route from the southern state to the north from the early 20th century until the advent of the national highway system. It was a compilation of roads with differing numerical designations rather than a single road. Today, the land uses, building forms, and development potential along Dixie Highway change as the highway passes through the different communities, and as a result each section offers its own set of opportunities and challenges. Dixie Highway is one of the major commercial corridors in Independence Township. As such, the businesses located on the road

In Independence Township, the Northwest, Central, and Southeast subareas were determined based on similar land and development patterns, as well as the location of major intersections. By targeting strategies and recommendations to existing conditions and character, the end result will be a more attractive, cohesive, and economically viable corridor.

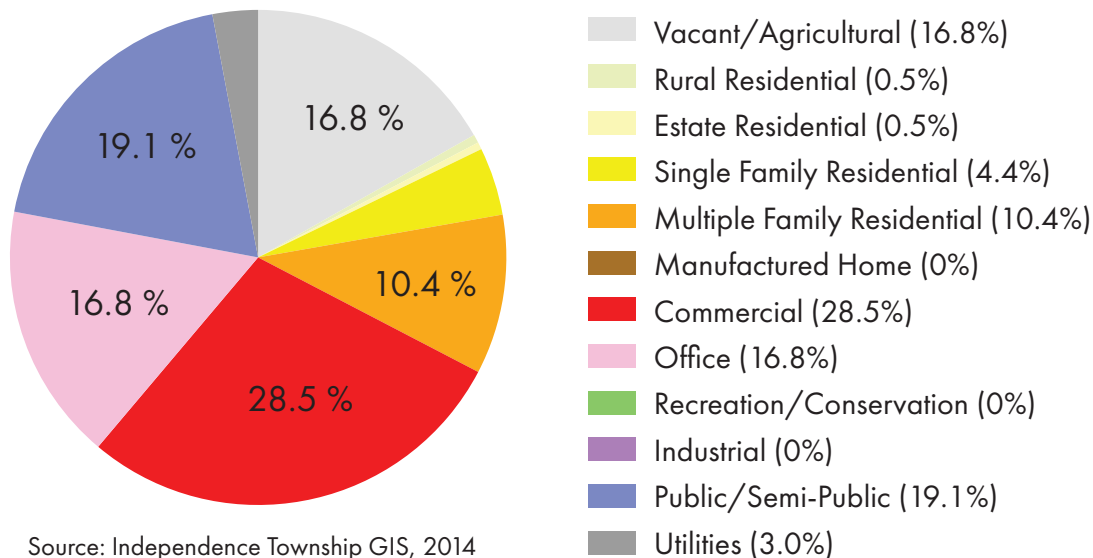
The Dixie Highway Auto Trail provided the major link between Pontiac and Saginaw prior to the construction of I-75. Dixie Highway still plays a critical role in the regional road network, therefore addressing congestion at intersections and conflict between traffic and turning vehicles is vital to the success of the corridor. This can be achieved through coordinated efforts with Michigan Department of Transportation

(MDOT) and Road Commission of Oakland County (RCOC) and better access management for private development. This plan also prioritizes non-motorized connectivity and Complete Streets principles to address real and perceived concerns regarding pedestrian and bicyclist safety. While 2013 SEMCOG traffic reports indicate relatively few accidents compared to the regional system and that most accidents are rear-end, property damage only and occur at intersections or in work zones, many people view Dixie Highway as a harsh environment for pedestrians and a stressful one for drivers.

Lot sizes and shapes along Dixie Highway do not follow a consistent pattern. As a general observation, the largest contiguous lots are concentrated from the White Lake Road intersection northwest to Springfield Township. Buildings are primarily one story in height. The multiple family buildings are two stories. Blight is apparent, but not overwhelming. It is found in many forms, but primarily in unkempt properties and sign clutter. Reinvestment is evident but is overshadowed.

The Township installed a common shoebox light fixture on both sides of the roadway when the DDA was in operation and the fixtures appear to be in working order. A majority of the corridor has installed landscaping in the greenbelt. Many also provide site landscaping but overall, additional landscaping should be increased in the parking areas.

FIGURE 7: DIXIE HIGHWAY EXISTING LAND USE



Signage along the corridor has evolved over the last thirty years, specifically in the Central and Southeast subareas. Much of the corridor used to have pole signs, similar to the visual environment of Dixie Highway in Waterford Township, but as sites have been redeveloped, ground signs have started to appear. Several properties in the Southeast subarea do not meet the current sign ordinance.

In the neighborhoods surrounding the corridor there are 5,856 households with an average household income of approximately \$85,000. The number of households and household income translate to spending power within the market area. Given the formal and functional challenges of the existing corridor, this is likely untapped retail potential.

Due to the economic downturn, the Township has not seen significant implementation of the 2008 Northwest Subarea Plan, but conditions are changing and there are opportunities for redevelopment and infill development. Twenty-nine (29) percent of Dixie Highway is commercial use, 19 percent is public/semi-public, 17 percent is office, and 17 percent is vacant or agricultural land. Attracting new investment that is cohesive, compatible, and pedestrian-friendly will be fundamental to the revitalization of the corridor. For 2013, the taxable value of the existing Dixie Highway Overlay District was \$34.8 million. This is one third of Sashabaw Corridor’s taxable value; a commercial corridor that – while slightly larger in area - still has many undeveloped parcels. It is now time to shift some of the Township’s focus to Dixie Highway. With thoughtful planning and concentrated effort, Dixie Highway can experience the same investment and growth as Sashabaw Road.



Vision

The main goals of the Dixie Highway Corridor Target Area plan are to create an attractive environment for investment, encourage a greater mix of land uses, and alleviate traffic congestion and pedestrian challenges. With sustained Township and stakeholder support and cohesive enhancements to the built environment, Dixie Highway has the potential to generate notable economic development, pedestrian activity, and a renewed sense of place.

Dixie Highway is largely built-out, so it does not offer the flexibility of an undeveloped corridor; however, the existing infrastructure and business community are major assets for redevelopment and revitalization of the corridor. The goal is to return form and function to the commercial corridor by establishing a strong identity, a complementary mix of uses, safe and convenient access, and pedestrian friendly nodes of development. Creating this environment for investment will require financial incentives, new zoning strategies, consistent design guidelines, and improved wayfinding.

As the Township welcomes new investment to the corridor, a clear understanding of what is desirable will be critical for attracting development while also protecting the adjacent residential neighborhoods. New development should offer convenience and enhance the local character. Encouraging a complementary mix of uses within walking distance will help protect anchor retail centers as well as future development, including the Clarkston 52nd District Court-2nd Division in Northwest Dixie Highway.

Establishing these development nodes with proper internal pedestrian circulation connected to existing Township safety paths will also help reduce vehicle trips and encourage non-motorized transportation.

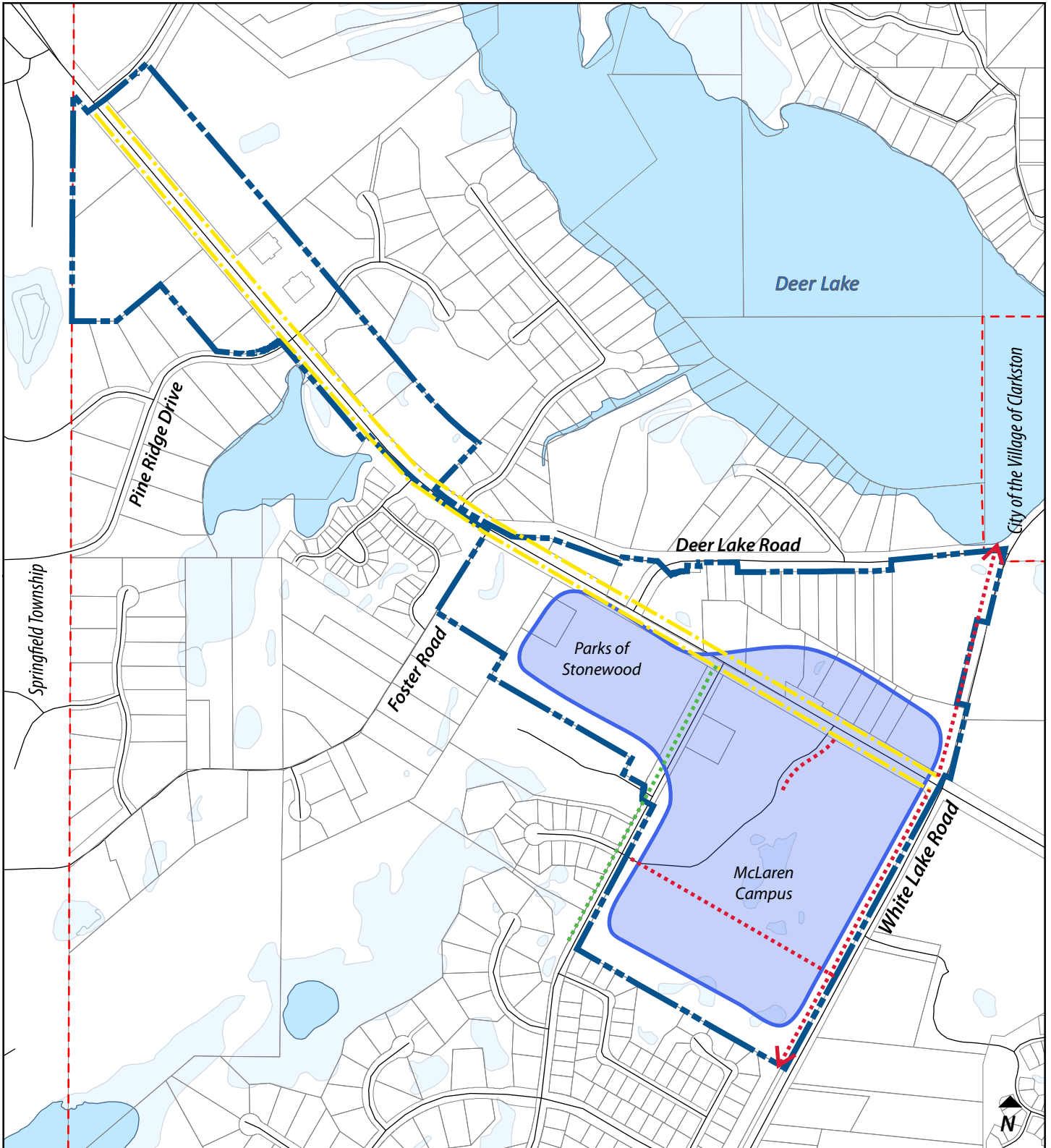
In terms of design aesthetic and placemaking, Dixie Highway has no clear identity. The road is wide, the building setbacks vary, and the lighting fixtures are designed for cars. There are also some blighted properties and vacant buildings that create a negative perception for visitors and a disincentive for owners to renovate their business or property. The plan aims to create a sense of place that is unique to Dixie Highway and encourage redevelopment of vacant and underutilized properties. Every streetscape and building improvement will improve the function and form.

For instance, pedestrian-scaled lighting fixtures and canopy trees will provide the obvious function of light and shade; in addition these vertical elements will also help to separate the sidewalk from the street creating a safe and inviting pedestrian realm. Likewise, access management and façade improvements will provide businesses better visibility to existing and potential customers, while creating a more pedestrian-accessible environment. In the end, the overall look and feel of the corridor will be made more cohesive through the use of high-quality materials, generous landscaping, attractive wayfinding signage, and standard development guidelines. A strong image will help the corridor attract investment and retain tenants.

In summary, the following goals are applicable to the entire Dixie Highway Corridor:

- Permit a mixture of commercial, office, service, and residential uses that are compatible with adjacent neighborhoods.
- Establish positive entries into the Township at I-75 to the north and the Waterford boundary to the south with new Township identification signage.
- Improve the visual appearance of the corridor with enhanced landscaping, aesthetic focal points at key nodes such as White Lake Road, M-15, and Maybee Road.
- Improve pedestrian access along Dixie Highway by expanding and enhancing the safety path system, improving pedestrian crossings, and creating better connections between the corridor, the development sites, and the adjacent neighborhood through safety path extensions and internal circulation paths.
- Control vehicular access through access management and cross-access connections between properties.
- Improve building and site design through the adoption of design guidelines tied to zoning regulations.

MAP 6: NORTHWEST SUBAREA OPPORTUNITY NODES & CHALLENGE AREAS



Northwest Subarea



Pedestrian Intense Activity Areas



Sidewalk Safety Path



Paved Shoulder



Successful

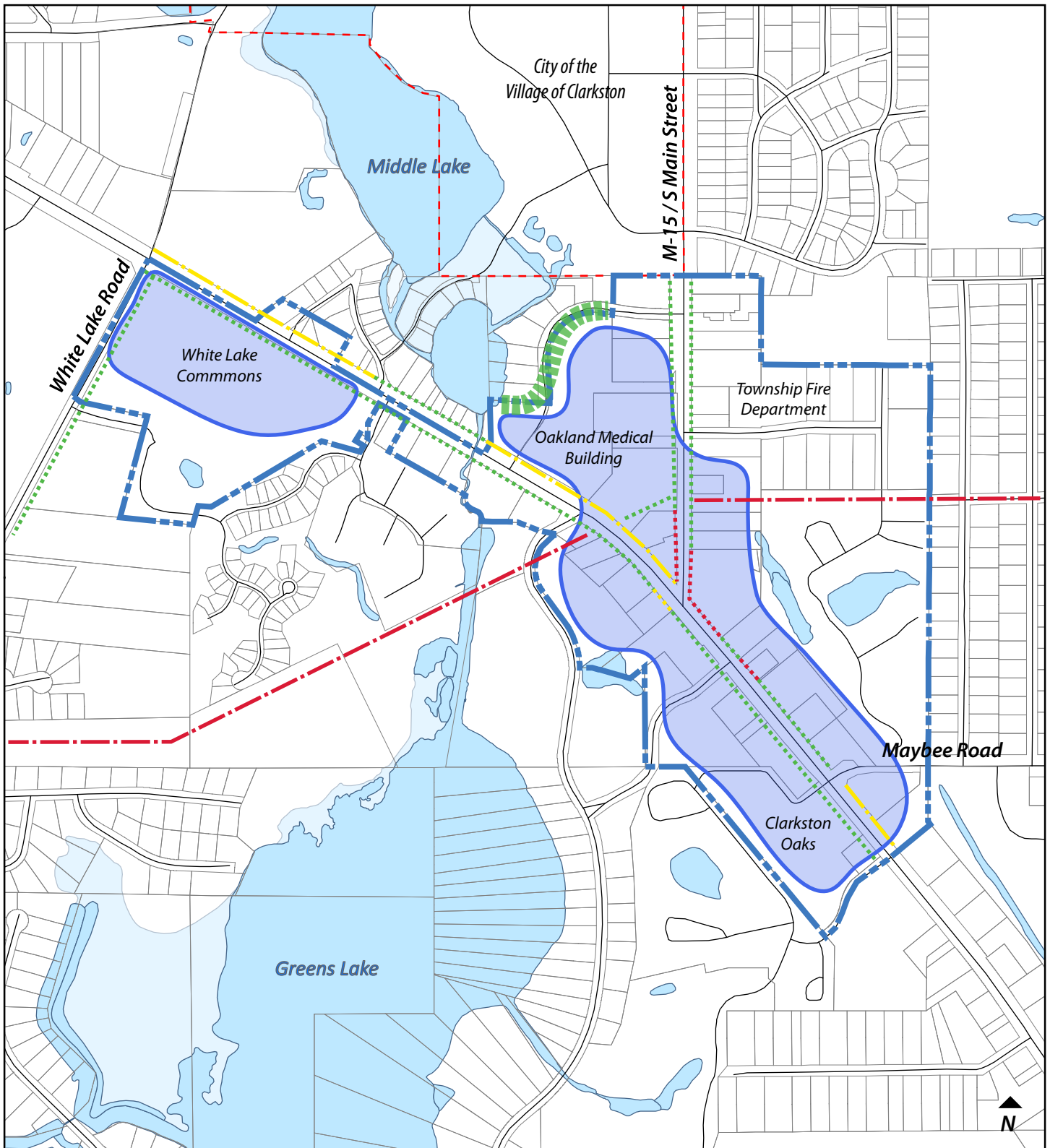










Challenge/Opportunity



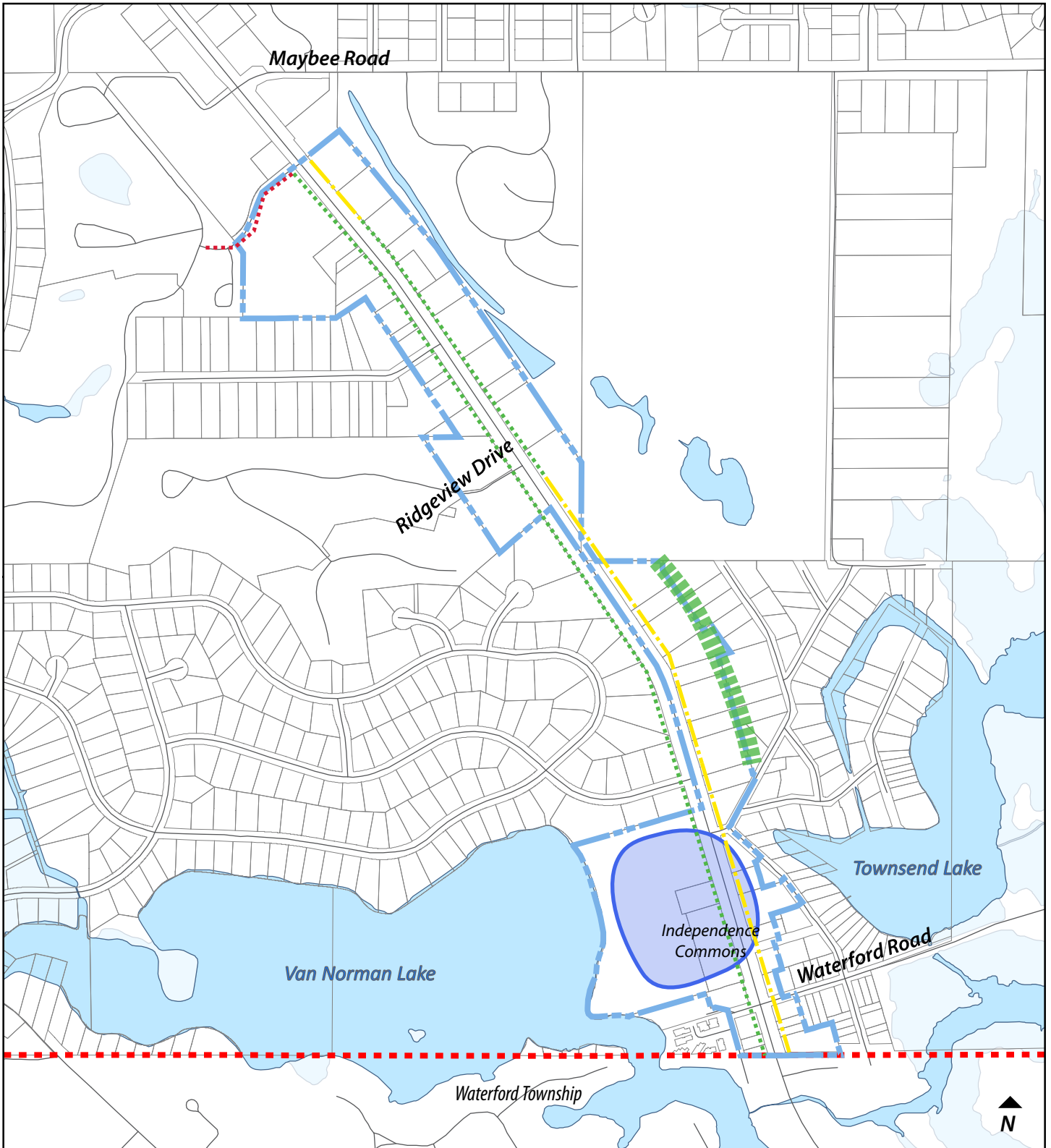
High Need

MAP 7: CENTRAL SUBAREA OPPORTUNITY NODES & CHALLENGE AREAS









- | | | | | | |
|---|-----------------------------------|---|----------------------|---|-----------------------|
|  | Central Subarea |  | Sidewalk Safety Path |  | Successful |
|  | Pedestrian Intense Activity Areas |  | Paved Shoulder |  | Challenge/Opportunity |
| | |  | Transition |  | High Need |

MAP 8: SOUTHWEST SUBAREA OPPORTUNITY NODES & CHALLENGE AREAS



-  Southeast Subarea
-  Pedestrian Intense Activity Areas

-  Sidewalk Safety Path
-  Paved Shoulder
-  Transition

-  Successful
-  Challenge/Opportunity
-  High Need

Design and Layout

Along with economic development, safety, and land use compatibility, a major goal of this Target Area plan is to create a unified image for Dixie Highway. The following strategies and recommendations are intended to promote high-quality development, with attractive, functional design and layout. Development standards, public engagement, and community investment are all part of this collaborative approach to placemaking. Redevelopment should not only serve the needs of residents, but should also express the aspirations and spirit of the community by incorporating public art and wayfinding.

Dixie Highway Corridor establishes an important link between the adjacent residential neighborhoods, commercial mixed-use nodes, employment centers, and daily destinations. It should be safe, welcoming, and pulsing with activity. The Target Area plan describes these pulses of activity and development as nodes, while the properties in between provide the connective tissue or links that help to unify the corridor.

NODES are centers of pedestrian activity and connectivity. They are mixed use, multifunctional developments with anchor retail and complementary uses. Nodes offer one-stop convenience, with pedestrian amenities, shared parking facilities, and attractive landscaping. Nodes provide the opportunity for mixed use development with retail at the street level and office or residential on the upper floors. Gateways and wayfinding should be incorporated into the overall design.

LINKS provide continuity to the corridor and help to reinforce its identity. They can be developed with commercial uses or left natural to provide a buffer for adjacent residential. Links serve the needs of residents by providing safety paths and infrastructure. Links also accommodate auto service and auto oriented uses, which are less appropriate for a mixed-use node.

The following design and layout considerations are recommended in order to create a unified image for Dixie Highway:

- **ADOPT DESIGN GUIDELINES:** Encourage landscaping and site design that ensures businesses are visible from the street. Design guidelines form standards and criteria for façade improvement program. Encourage development that creates a sense of place and promotes the relationship between pedestrian activities and site design. Promote pedestrian access and opportunities for interaction. Establish high standards for material quality, layout, and aesthetics while still providing the developer with flexibility in design.
- **PRESERVE AND ENHANCE CHARACTER:** Protect the character and identity of Dixie Highway through context sensitive development and thoughtful design decision. Independence Township offers a wealth of natural features including lakes and woodland areas, and for many residents and business owners this is why they came here. As the corridor continues to develop and redevelop, it will be important to preserve natural areas and create a campus feel, where appropriate. Township gateway signage and wayfinding systems should embrace Dixie Highway's history as well as its future.



- **EMPHASIZE THE STREETWALL:** Promote façade improvement for existing buildings, bring infill development up to the street, and encourage outlot development at the nodes. Buildings should have a pedestrian entrance along Dixie Highway and transparency and architectural details should wrap the corner.
- **REINFORCE AND PROTECT NEW DEVELOPMENT:** Draw anchor businesses and fill shopping centers with complementary retail and service uses. Encourage compatible, creative redevelopment of the Clarkston Theater and the Bowling Alley sites that take advantage of site conditions and complement adjacent uses. Protect new investments along the corridor.
- **CONSOLIDATE PROPERTIES:** Encourage redevelopment and consolidation of parcels. The presence of small, underutilized lots and irregularly shaped lots has been identified as one of the constraints affecting future development in portions of the Dixie Highway Target Area. It is desirable to encourage the consolidation of smaller lots into larger development sites in order to achieve better access management, higher quality development, and a better mix of uses. If lots are redeveloped comprehensively and constructed in one phase, the Township may allow applicants greater height, reduced parking, or reductions in processing fees, in lieu-fees, or utility connection fees.

-
- **CREATE FUNCTIONAL PUBLIC SPACE:** Design gathering spaces that everyone – residents, shoppers, and employees – will use. Shade trees, lighting, seating, landscaping, sculpture, and paths should be used to create an atmosphere that welcomes pedestrian activity. Public spaces should be integrated with new development with direct, barrier-free connections to the Township’s safety path system.
 - **TRANSITION BETWEEN LAND USES:** Establish buffers between new development and adjacent uses. Landscaping and screening should create separation and privacy without completely eliminating access and connectivity.

NORTHWEST DIXIE HIGHWAY serves as a gateway into the community from the west, so it will be important to create a sense of identity and place through consistent design and development standards that showcase the character of the corridor. The McLaren Campus and Parks of Stonewood site form the primary node for the Northwest area.

Design Objectives:

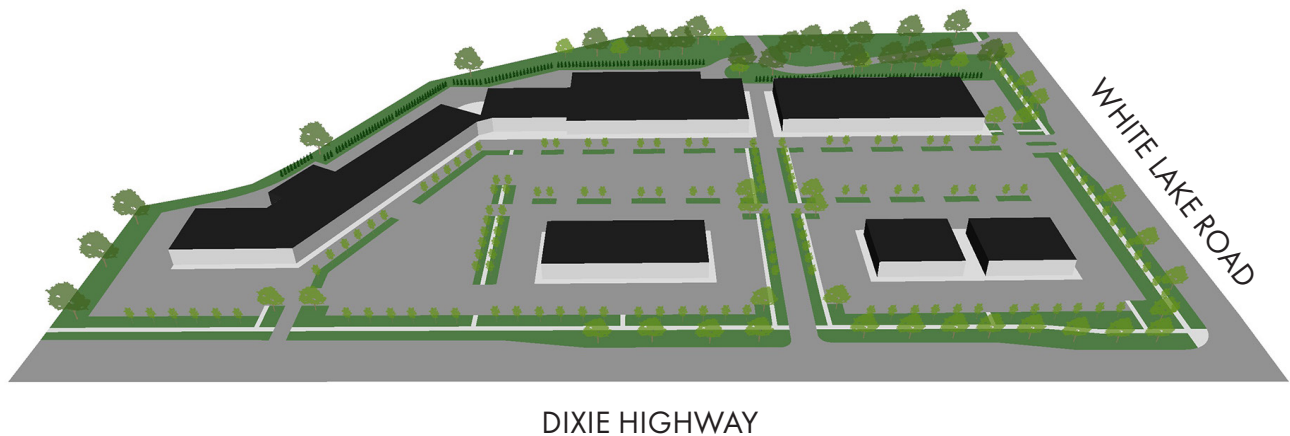
- Expand non-retail uses such as memory care, medical uses, and alternative housing choices for an aging population
- Incorporate uses that will transition between the commercial corridor to single family residential
- Encourage complementary housing options that may be associated with medical and senior care
- Preserve and incorporate natural features of the site while still maximizing investment opportunities
- Increase pedestrian and vehicular connectivity



THE CENTRAL SUBAREA serves as the core of Dixie Highway, so it will be important to create a sense of identity and place through consistent design and development standards that contribute to a vibrant and walkable corridor. Dixie Highway from Clarkston Oaks shopping center to the Oakland Medical Building was identified as one of the nodes for the Central subarea.

Design Objectives:

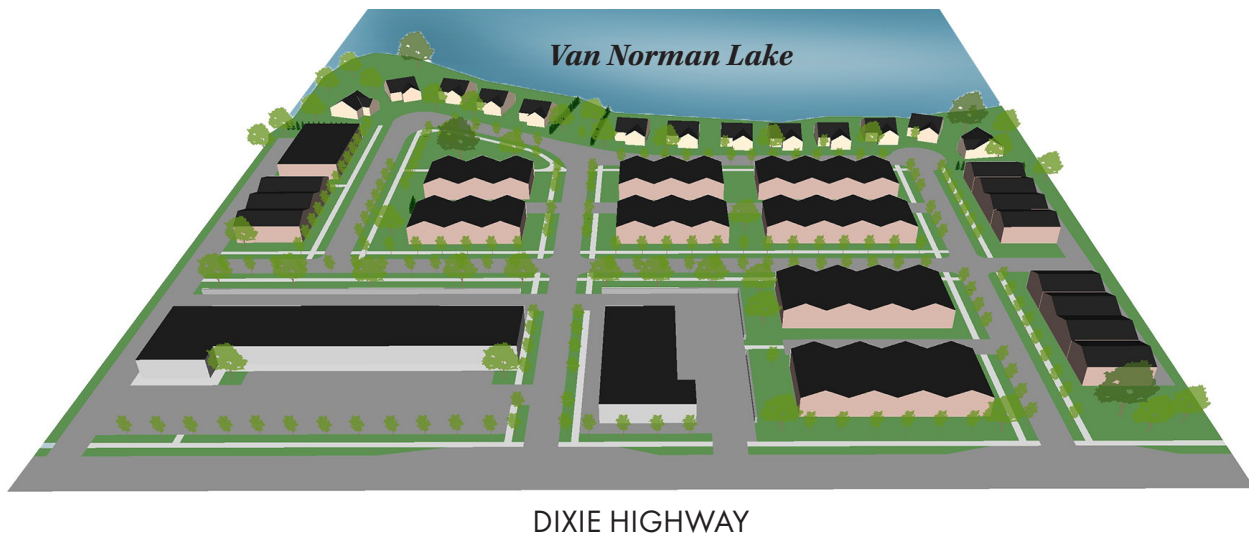
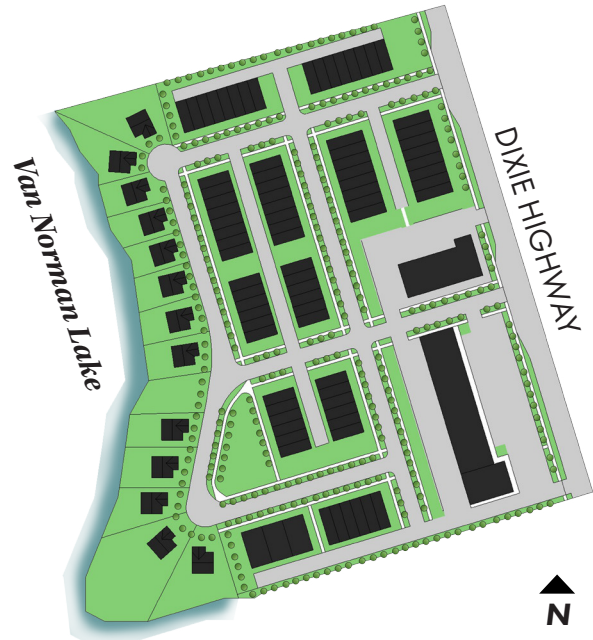
- Establish a more defined streetwall with pedestrian-oriented outlot developments
- Incorporate public plazas and landscape features
- Anchor site with complementary uses
- Promote ground level commercial with residential/office uses on upper floors



THE SOUTHEAST SUBAREA provides a gateway to Dixie Highway from Waterford Township. Priorities include façade improvements and the creation of a welcoming pedestrian realm. Given the small parcels and adjacent residential, reducing the visual clutter of signage, revitalizing the building facades, and enhancing landscaping are key strategies for transforming this area. The Southwest Subarea node includes Independence Commons and the surrounding multiple family residential.

Design Objectives:

- Redevelop commercial area to complement new residential
- Create pedestrian connectivity and establish an internal street grid
- Establish alternative housing options such as townhomes, cottage lots, attached residential, and rental housing that meets modern standards
- Incorporate open space, common yards, and pocket parks



Pedestrian Circulation

The street is the largest public open space along Dixie Highway and should be considered part of the public realm. Independence Township has an extensive safety path system across the community but it is not complete. The corridor presents a number of challenges for pedestrians and bicyclists. In addition to the gaps in the safety path, there are numerous curb cuts and access drives along Dixie Highway that can create hazards for pedestrians. The opportunity nodes and challenge areas map indicates the types of pathways that are present on Dixie Highway.

Pedestrian safety paths, are provided for many of the commercial nodes and for the Waterford Hill area, but this path is not continuous. Additionally, most of the corridor has a paved shoulder, which can be best described as an eight foot sidewalk directly adjacent to the curb. These non-motorized facilities do not meet the Township's design standards for paths.

Future development at the Dixie Highway nodes should establish a visual and physical connection to the adjacent neighborhoods. Visual connections may refer to additional landscaping or context sensitive building design, for instance development that wraps the corner providing transparency and architectural detail along the side of the building. Physical connections include sidewalks, pocket parks, and trails. Overall, Dixie Highway should be made a more comfortable place to walk by providing continuous, safety paths and direct pedestrian access to businesses along the corridor.

In order to create a safe, accessible environment for all users along Central Dixie highway, it is recommended the following options be considered:

1. **EXTEND AND ENHANCE SAFETY PATHS:** Promote safety path as recreation amenity with better pedestrian connections to private development. The existing safety paths provide a fairly generous landscape buffer, but user experience would be significantly improved with the addition of more street trees, pedestrian-scaled lighting, and direct pedestrian connections to new and existing businesses. Additional pedestrian amenities should be considered along the corridor. As development occurs north of White Lake Road and properties are redeveloped within the Central and Southeast Subareas, paved shoulders should be replaced with enhanced safety paths.
2. **IMPROVE PEDESTRIAN CONNECTIONS:** Require properly designed sidewalks and driveway crosswalks that provide internal and external site connections to adjacent parcels and the Dixie Highway safety path. New development or redevelopment, particularly at the nodes, should provide direct, barrier-free connections. Incorporating high visibility crosswalks such as stamped concrete or colored pedestrian crossings will help increase safety. Wayfinding systems and directional signage that is visually and dimensionally appropriate can also bring greater awareness of non-motorized traffic.

3. ENHANCE PEDESTRIAN CROSSINGS:

Improve pedestrian crossing at intersections and mid-block. Techniques include high visibility crosswalks and improved timing at signalized intersections near the nodes, specifically White Lake Road, M-15, Maybee Road, Waterford Road, and Citation Drive. Given the distance between the intersection, it may also be beneficial to introduce mid-block crossings at Rockcroft Boulevard in the Southeast Subarea and at Ritter's Country Square, just south of Lingor Drive, in the Central Subarea. Introducing pedestrian facilities such as mid-block Z crossings and pedestrian refuge islands will allow pedestrians to cross safely while also encouraging drivers to slow down and pay attention to their environment. Technology can also be used to improve safety along the corridor, from low cost speed feedback signs to the higher cost pedestrian hybrid beacons and rectangular rapid flash beacons.

- ### 4. ESTABLISH NEW CONNECTIONS:
- Use the utility corridor to establish a non-motorized connection between Dixie Highway and the residential neighborhoods east to the golf course. The proposed stretch is just over a mile long and would provide greater connectivity, as well as a recreational opportunity. Redevelopment of the southern portion of the McLaren site also offers opportunities to create pedestrian connections between the residential areas and the mixed use nodes.



Vehicular Circulation

Dixie Highway has a five (5) lane cross-section with two (2) through lanes in each direction and a center turn lane. MDOT recently invested \$20 million in resurfacing, safety improvements, and utility maintenance along Dixie Highway. A majority of Dixie Highway north of M-15 has a paved shoulder. The speed limit is forty-five (45) miles per hour south of White Lake Road and fifty-five (55) miles per hour north of White Lake Road.

Traffic congestion is one of the most significant concerns of residents, customers, business owners, and Township officials. A review of recent street and traffic conditions has been completed using Southeast Michigan Council of Governments (SEMCOG) data for four road segments across the Target Area.

While the greatest number of accidents occur in the Southeast Subarea, between Maybee Road and Andersonville Road, significantly more accidents per mile occur between M-15 and Maybee Road. This is not surprising due to the small commercial parcel size, number of curb cuts, and the large volume of traffic in this area. Traffic accident counts were also documented for the White Lake Road, M-15, and Maybee Road intersection.

- WHITE LAKE ROAD – 119 crashes were recorded between 2009-2013 averaging over 24 crashes per year. This intersection is ranked as the fourth highest crash frequency in Independence Township.
- M-15 – 88 crashes were recorded over the five year period averaging almost 18 crashes per year. This intersection is ranked as the sixth highest crash frequency in Independence Township.

FIGURE 8: ROAD SEGMENT TRAFFIC DATA

SUBAREA	ROAD SEGMENT	LENGTH	TRAFFIC COUNT ¹	ANNUAL CRASHES ²	ACCIDENTS PER MILE
Northwest	I-75 to White Lake Road	1.252	29,800	28	22.4
Central	White Lake Road to M-15	0.654	27,600	18	27.5
	M-15 to Maybee Road	0.237	41,900	34	143.5
Southeast	Maybee Road to Andersonville Road	1.275	34,400	35	27.5

Notes: (1) Observed AADT, 2012. (2) Annual Crash Average, 2009-2013.

Source: SEMCOG Road Segment Report, October 2014.

- MAYBEE ROAD – 156 crashes were recorded over the five year period averaging just over 31 crashes per year. This intersection is ranked as the third highest crash frequency in Independence Township.

Through observation, the number of drives and street connections per mile is higher in the Central and Southeast Subareas where the businesses are primarily standalone buildings and the sites are narrower. This translates into an increase in the number of properties and access drives per mile. The following approximated numbers of driveways and local street connections are indicated in Figure 9. The number of access drives along the M-15 to Maybee Road road segment makes it difficult for turning vehicles and through traffic, creating the prime conditions for accidents.

The auto-centric nature of Dixie Highway, including multiple travel lanes and long blocks, means employees and residents who venture out on foot to destinations have difficulty crossing. Providing safe crossings for pedestrians and cyclists is an integral strategy for walkability, and applicability for specific techniques should be determined based on site context and budget.



FIGURE 9: ROAD SEGMENT ACCESS DATA

SUBAREA	ROAD SEGMENT	ACCESS DRIVES	ACCESS DRIVES PER MILE
Northwest	I-75 to White Lake Road	28	22.4
Central	White Lake Road to M-15	24	36.7
	M-15 to Maybee Road	17	71.7
Southeast	Maybee Road to Andersonville Road	62	48.6

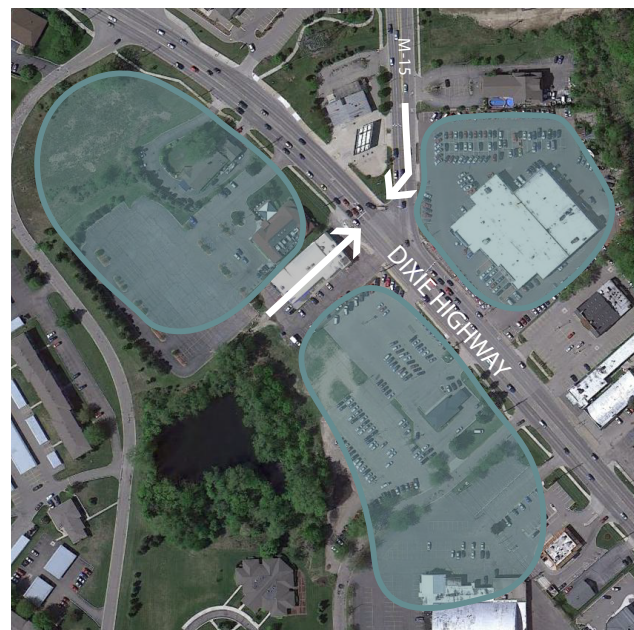
Source: SEMCOG Road Segment Report, October 2014.

In order to facilitate a smooth and safe transportation network along Dixie Highway, it is recommended the following options be considered:

- **PROMOTE ACCESS MANAGEMENT:** Reduce driveway density by consolidating existing access points. Access management will increase the capacity of Dixie Highway, manage congestion, and reduce crashes.
- **ENCOURAGE SHARED PARKING:** Provide vehicular access between adjacent sites in order to create a safer pedestrian and automobile environment by reducing the need for multiple site curb cuts. Connect properties at the rear with parking lot connections, access easements, or an alley. Shared parking facilities for small commercial parcels and new development.
- **IMPROVE INTERSECTIONS:** Improve safety, visibility, and traffic control at intersections through design, signalization, and enforcement. The first step is road realignment at M-15 and Dixie Highway and the alignment of Big Lake Road and Deer Hill Drive to create 90-degree intersections. Ninety-degree intersections allow for increased lateral stability and speed control while negotiating the intersection. No turn on red can also reduce conflicts between turning vehicles and through traffic.
- **INITIATE MDOT TRAFFIC STUDY:** Partner with Michigan Department of Transportation (MDOT) to evaluate the cost and feasibility of particular changes to the roadway.



BIG LAKE ROAD INTERSECTION



M-15 INTERSECTION

Land Use

Dixie Highway Corridor is primarily commercial with some office/service and multifamily residential. The land use pattern will largely remain but the new Target Area Plan provides more site specific recommendations that will help protect new investment and gradually shape the appearance and character of the corridor. In all of these areas, mixed use may be considered by the Township. However, redevelopment should be compatible with the existing adjacent uses and provide neighborhood services and amenities.

To promote a mixed use environment over the long term, it may be in the Township's best interest to develop a Form Based District for the Dixie Highway Target Area. Form Based zoning combines site, building, and use recommendations into a single set of standards. It is more robust than the existing Dixie Highway Overlay District.

As an alternative, the Township should extend the Dixie Highway Overlay District to the Springfield Township boundary including parcels to the west of White Lake Road. The district should also incorporate properties along M-15 / S Main between Dixie Highway and the City of the Village of Clarkston boundary.

NORTHWEST

The important land use goal for this area is to ensure compatibility with the existing adjacent single family land use. Two of the largest vacant parcels along Dixie Highway are located in the Northwest Subarea. These are the front portion of the Parks of Stonewood and the rear portion of the McLaren property.

The following are the land use recommendations for the Northwest Subarea:

- The area south of the I-75 access ramp is designated as Office/Service use. This area includes several vacant properties with good development potential. Given the convenient access to the freeway and other amenities along the Dixie corridor, the intended use for the area is office, research, and related uses that will support the new District Court campus.
- By 2018, the population 65 years and over living within the market area is projected to increase by 13.8 percent. Planning for an aging population will mean building and maintaining a variety of housing options for Independence Township residents. The Senior Housing use provides assisted living accommodations to this demographic.
- The commercial component of the Northwest Subarea is located between Fuller Road and White Lake Road, primarily on the north side of Dixie. Local Commercial is the primary use along Dixie Highway. These commercial uses serve basic needs such as pharmacy, banking, personal care, services, and local dining and entertainment establishments.
- The Medical Campus use on the southwest corner of White Lake Road and Dixie Highway should expand its services, becoming a mixed use, walkable development with integrated healthcare, senior living, and other related uses.

CENTRAL

The important land use goal for this area is to protect investment and provide a complementary mix of uses in which anchor businesses are surrounded with service and retail amenities. White Lake Commons, the Oakland Medical Building, and Clarkston Oaks can serve as development nodes for Central Dixie Highway. White Lake Commons offers significant opportunity for redevelopment, especially along the Dixie Highway frontage. If the demand for medical offices changes, both the Oakland Medical Building and site offer potential for mixed use development, including lower level convenience or office in the building and housing on the site.

The following are the land use recommendations for the Central Subarea:

- Commercial uses in this subarea include community and local commercial. Community commercial provides for convenience and comparison shopping with large anchor stores, typically grocery. Community commercial is planned for the southeast corner of the White Lake Road intersection and the west side of Dixie Highway at Maybee Road. Local Commercial use makes up the core of the subarea, including the area along M-15 / S Main Street which leads into Downtown Clarkston. Local commercial uses include food service, automotive sales and service, dining, personal care, and banking.
- Office/Service uses are designated on the north side of Dixie Highway at Cummings Drive and Hidden Lane, and also along Citation Drive east of M-15 / S Main Street. These are primarily medical and professional offices.
- Public/Semi-Public uses are located along Citation Drive east of M-15 / S Main Street. These uses include the US Post Office, 52nd District Court, and Oakland County sheriff's department.
- High density residential helps support commercial and service uses along the corridor. The area northeast of the M-15 / S Main Street intersection is designated as Multiple Family Residential use.

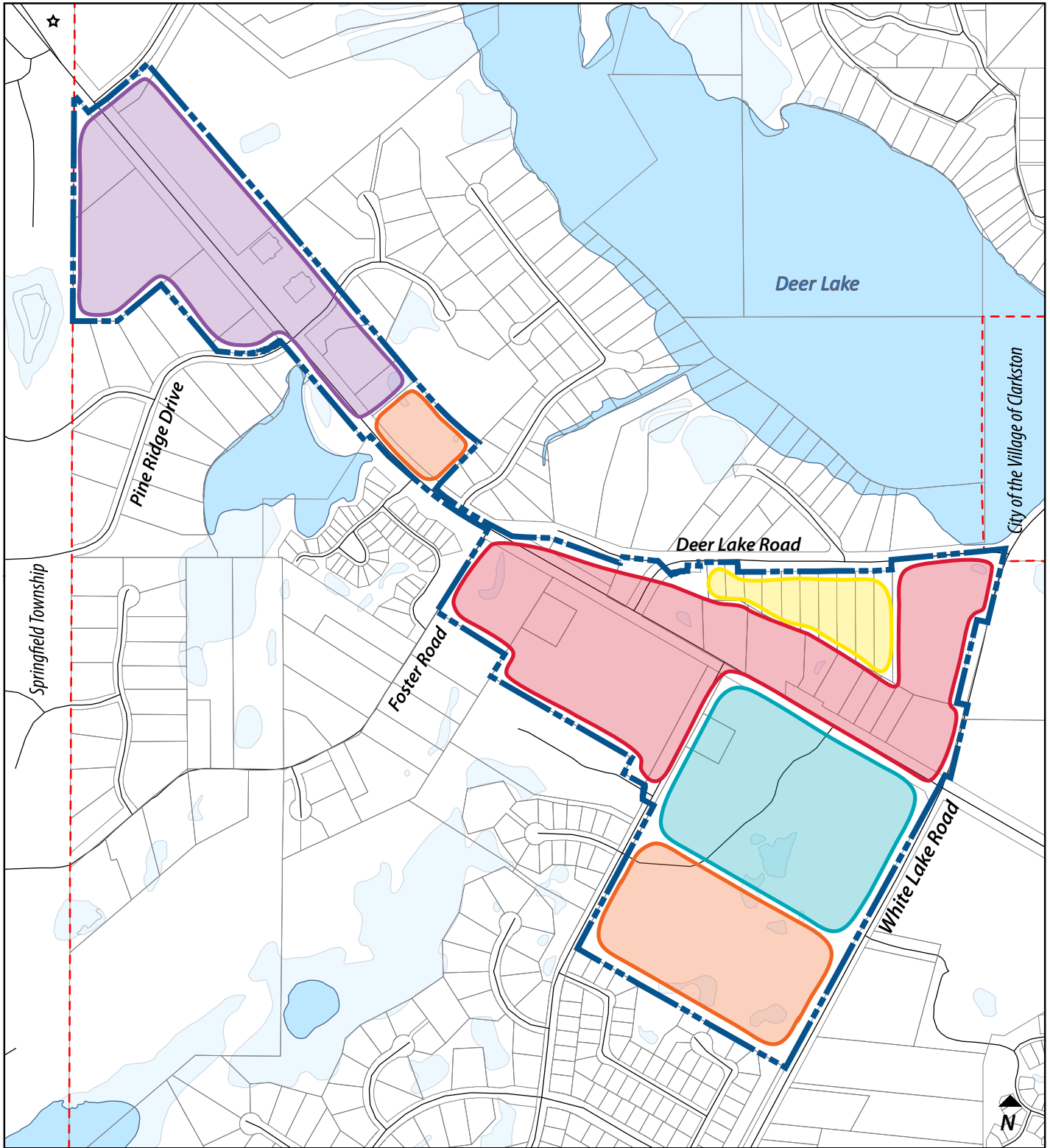
SOUTHEAST







This area is almost exclusively commercial and will likely continue as commercial; therefore, effort needs to be directed towards improving appearance, site function, and traffic circulation. Redevelopment should be compatible with the existing adjacent single family land use and provide neighborhood services and amenities. There is potential for a development node near the Waterford Road intersection.

The following are the land use recommendations for the Southeast:

- Local Commercial use is designated along the length of Dixie Highway. In the Southeast Subarea, these uses are primarily small specialized retailers. Local commercial uses should be targeted to the surround residential market.
- Multiple Family is designated on the west side of Dixie Highway between Van Norman Lake and the Independence Commons shopping center. The location is desirable and could be enhanced with better pedestrian connections and site amenities.

MAP 9: NORTHWEST SUBAREA FUTURE LAND USE

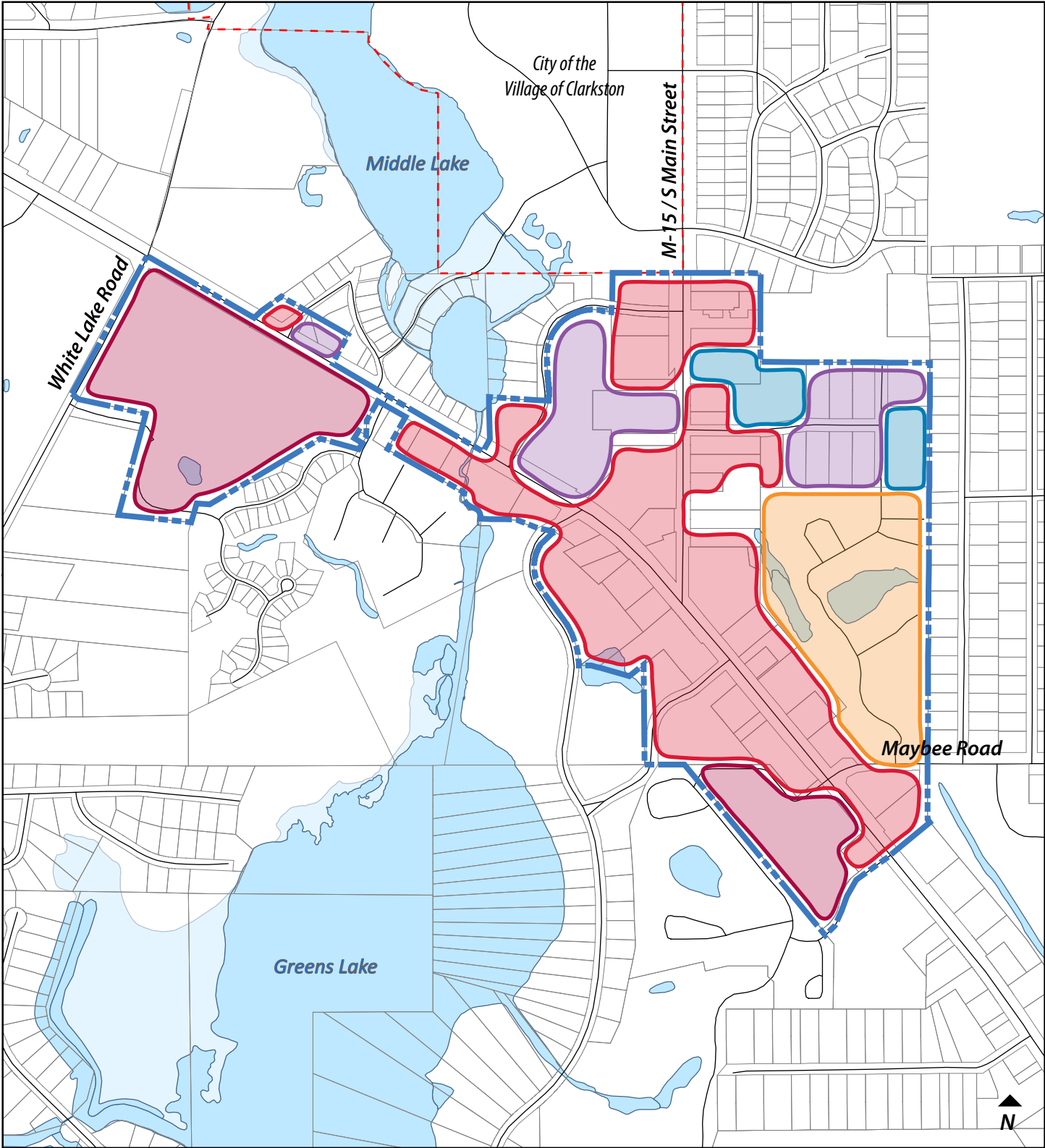


- | | | | |
|---|----------------------------------|---|--------------------|
|  | Single-Family Attached/Detached |  | Local Commercial * |
|  | Senior Housing |  | Office Service |
|  | Medical Service and Technology * |  | Northwest Subarea |

* These categories may also include mixed use.

☆ Area added to Township by Agreement

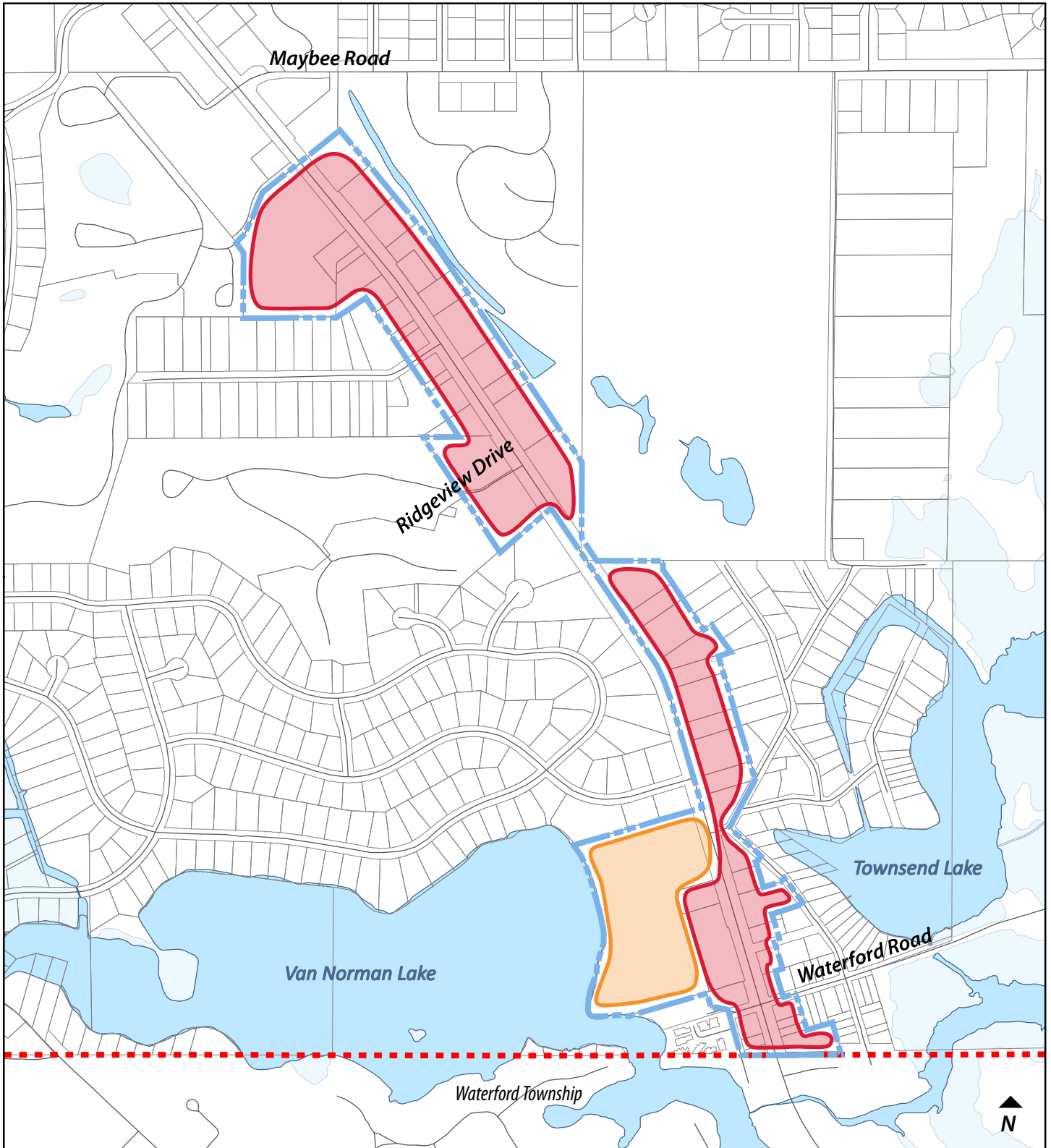
MAP 10: CENTRAL SUBAREA FUTURE LAND USE






- General Commercial *
- Local Commercial *
- Office Service
- Multi-Family
- Public/Semi-Public
- Central Subarea

* These categories may also include mixed use.

MAP 11: SOUTHEAST SUBAREA FUTURE LAND USE



-  Multi-Family
-  Local Commercial *
-  Southeast Subarea

* These categories may also include mixed use.

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M-15 and Northwest Area *Target Area Plan*



As part of the current Master Plan process, the Township recognizes the need to balance preservation and development. As such, Opportunities 2030 combines the Northwest Area and M-15/I-75 Interchange Target Plans into a single Target Plan,

The northwest portion of the Township remains an area of scenic beauty, natural features, large parcels, and a pastoral setting. Throughout the Vision 2020 process it was apparent that the desire to maintain the rural character of the Township was a priority. The desire is unchanged with the current update of the Master Plan.



The following target plan describes the potential actions and policies necessary to preserve the rural and historic character of the northwest area, and encourage high quality development at the interchange.

Background

The actions, policies, and Plan implementation of the Township over the past twenty years has mitigated the threat of strip commercial development between I-75 and Cranberry Lake Road and an office-service environment has been introduced. However, the manner in which vacant property on the north side of the interchange is developed will be key to maintaining the character of the area and supporting surrounding residential uses.

M-15 is a state trunk line, which bisects the Northwest Area connecting I-75 with Independence Township and communities to the north. While M-15 is required to carry ever increasing volumes of traffic, future widening improvements to the roadway would have negative implications for the Township if not approached properly. Widening the road to a 3 to 5 lane configuration might relieve traffic problems, but would significantly damage the character of the northwest portion of the Township, discourage further rural residential use, and encourage unwanted non-residential (i.e. commercial) use.

Given the amount of developed property adjacent to Little Walters Lake, efforts should focus on preserving the existing natural features. Specifically, the southwestern edge of Little Walters Lake must be protected when this area is developed and the view of Little Walters Lake from M-15 must be preserved. A further limitation to this area is constrained access to M-15, due to steep slopes and natural features.

Vision

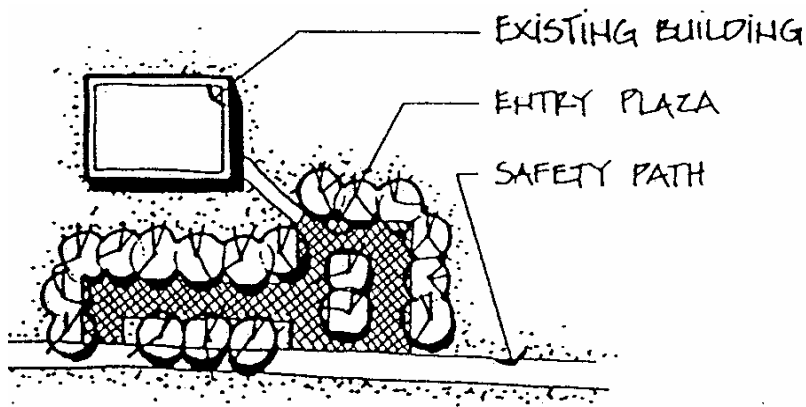
The main goal of the M-15 and Northwest Area is to balance the preservation of natural features and rural residential character with employment growth and development potential. Independence Township is known for its wooded landscape and water resources, maintaining the natural beauty, generous tree canopy, and low impact development pattern for the area north of I-75 is high priority. New development should be clustered to protect existing greenways and prevent suburban sprawl.

The future development of M-15 and I-75 interchange has significant importance for the Township. Including this area as a Target Plan provides the Township with an opportunity to encourage research and office uses situated in a campus like setting, capitalize on the visibility from I-75, and promote an efficient and interrelated circulation system. The M-15/I-75 interchange has the potential to become a key employment node that provides new economy jobs, enhances quality of life, and respects the natural landscape.

Design and Layout

The residential area is characterized by large lots and single family homes. The intent for the research and office uses establish areas that are south of Cranberry Lake Road and primarily in a campus-like setting. Elements which contribute to this type of setting include the following:

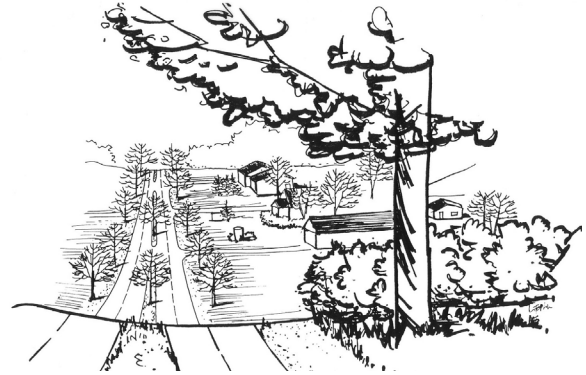
- Buildings oriented around a central plaza or park
- Pedestrian connections between buildings
- Shared parking located at the periphery of the building cluster
- Buildings with similar and compatible design elements such as building material or roof pitch.
- Landscape design unifying the different buildings and elements.



Circulation

The Northwest Area exhibits a road pattern that follows section and half-section lines typical of rural farm communities developed during the mid-19th century. With the exception of M-15 (Ortonville Road), all roads are designated local and have an extensive tree canopy and gravel surface.

M-15 is a state trunk line, which bisects the Northwest Area connecting I-75 with Independence Township and communities to the north. While M-15 is required to carry ever increasing volumes of traffic, future widening improvements to the roadway would have negative implications for the Township if not approached properly. Widening the road to a 3 to 5 lane configuration might relieve traffic problems, but would significantly damage the character of the northwest portion of the Township, discourage further rural residential use, and encourage unwanted non-residential (i.e. commercial) use.



An approach which maintains and enhances the rural and natural character of the existing M-15 corridor is encouraged. This approach would entail a “parkway” concept with the following elements:

- A parkway with a heavily landscaped median
- The width of the entire boulevard cross section would be limited to 120 to 150 foot right-of-way
- Maintenance and enhancement of the natural trees and vegetation which lines both sides of the existing corridor
- Planting of center median and adjacent roadside with trees and vegetation native to the area
- A limitation on new curb cuts from adjacent property

It is recommended that the following actions be pursued:

- Provide one access to the Research/Office Service area from I-75 aligned with Amy Drive. This will allow for greater safety and efficiency. No access will be provided from the Research/ Office Service area north to Cranberry Lake Road.
- Allow private roads for new development with reduced width and gravel surface so that trees and other natural features can be preserved.
- Limit individual access drives from main roads.
- Preserve and/or replace the existing tree canopy along roadways with rural character and to increase the greenbelt between the road and the adjacent residences where appropriate.
- Ensure that improvements to M-15 north of I-75 maintain the rural character of the area.
- Work in cooperation with the Road Commission for Oakland County and utility companies to ensure road improvement impacts on mature trees and vegetation is minimized.
- Require extensive buffering between residential developments and M-15, in particular when rear yards abut the roadway.

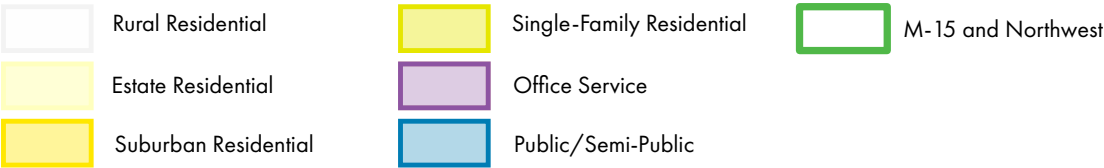
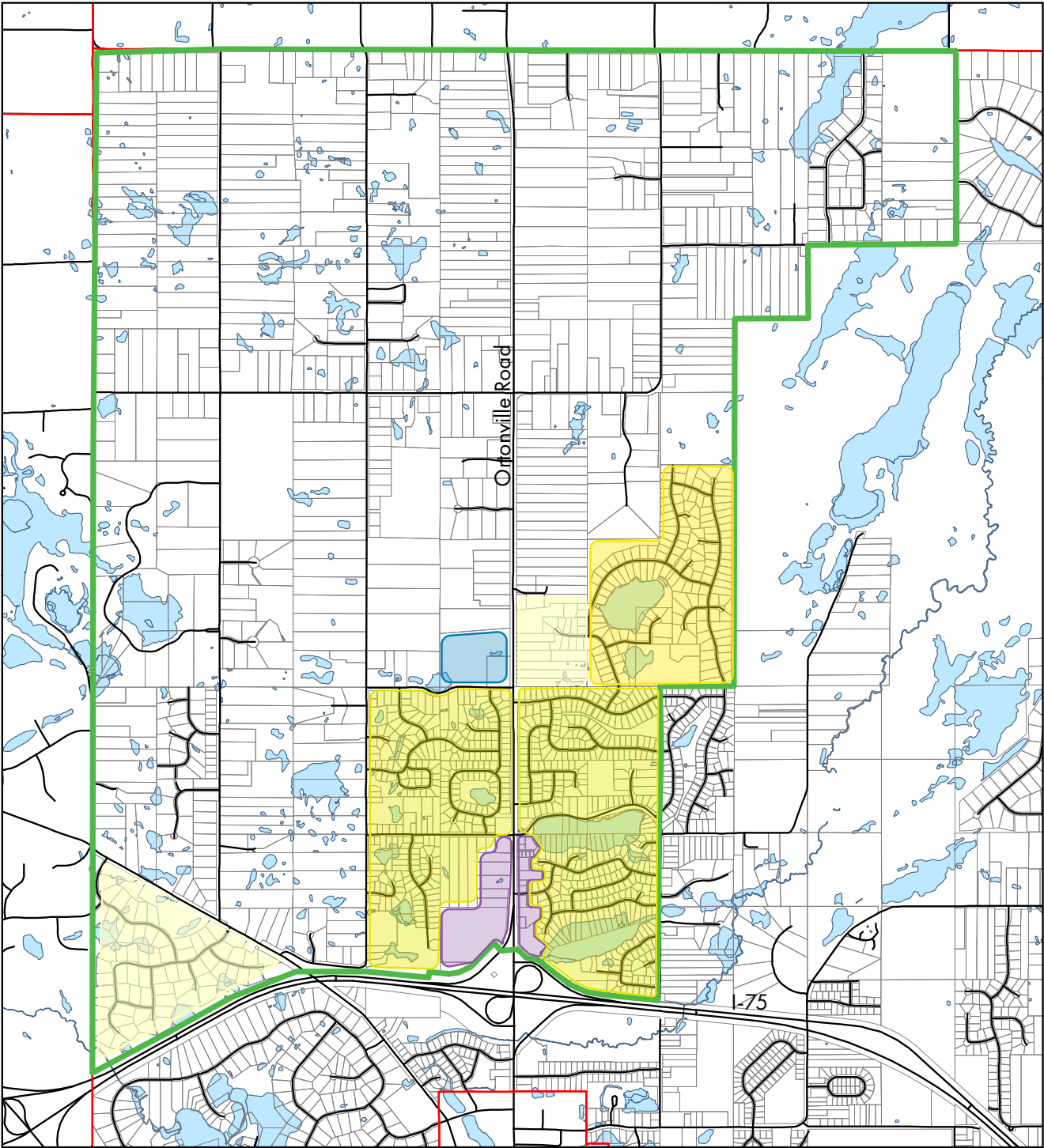
An approach which maintains and enhances the rural and natural character of the existing M-15 corridor is encouraged. This approach would



Rural and historic character is generally made up of a combination of the following features in conjunction with farm structures and historic buildings:

- Tree lined narrow roads
- Woodlots and large wooded areas
- Natural streams, river banks, wetlands, and lakes
- Farmsteads, farms, orchards, outbuildings, fences, and ruins
- Absence of commercial development

MAP 12: M-15/NORTHWEST FUTURE LAND USE



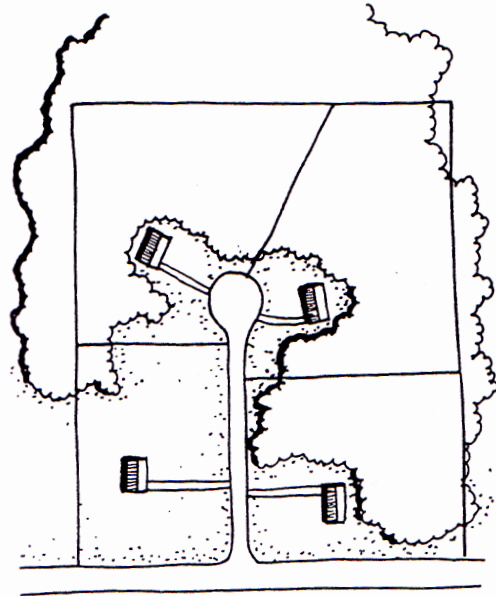
entail a “parkway” concept with the following elements:

- A parkway with a heavily landscaped median
- The width of the entire boulevard cross section would be limited to a 120 to 150 foot right-of-way
- Maintenance and enhancement of the natural trees and vegetation which line both sides of the existing corridor
- Planting of center median and adjacent roadside with trees and vegetation native to the area
- A limitation on new curb cuts from adjacent property

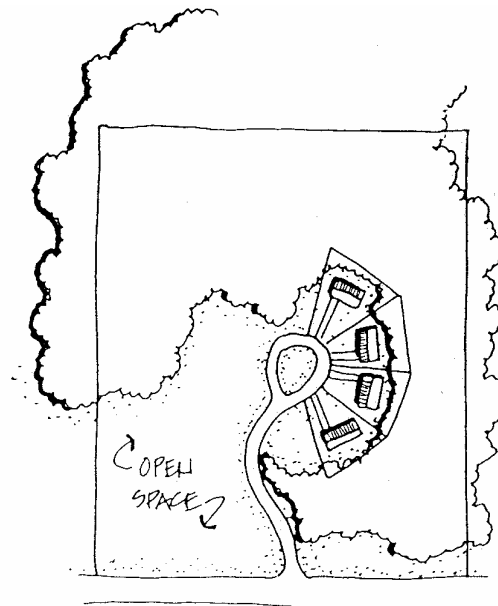
Land Use

The M-15 and Northwest Area is primarily residential, including rural and suburban residential, with a small office-service node surrounding the M-15/I-75 interchange. New development should respect the natural character of the Target Area and provide adequate transitions and buffers between different uses.

- RURAL RESIDENTIAL land uses are predominantly rural residential in nature in the Northwest Area. A priority is to manage growth and development by maintaining overall density. Where residential development occurs, creative development options like the cluster housing option should be pursued.
- ESTATE RESIDENTIAL land uses are predominantly low density residential and serve as a transition zone between Rural Residential and other more dense residential uses. The area east of M-15 near the Elementary School and south of Hubbard to I-75 is planned to Estate Residential.



RECOMMENDED LARGE
LOT ALTERNATIVE



RECOMMENDED OPEN
SPACE ALTERNATIVE

- **SUBURBAN RESIDENTIAL** provides for single family low density development. Suburban Residential is located in areas more capable of supporting development due to fewer natural resource limitations. The area west of Oakland County Independence Oaks Park is planned for Suburban Residential.
- **SINGLE-FAMILY RESIDENTIAL** uses are located on either side of M-15, south of Hubbard Road, and between Allen Road and Perry Lake Road. This area is generally built-out with large homes on 15,000 square foot to half acre lots. The residential developments incorporate some natural features and pedestrian amenities, such as ponds, wetlands, shade trees, and walking paths.
- **OFFICE SERVICE** uses are located on either side of M-15 south of Cranberry Lake Road. Due to the existing residential land use pattern which surrounds this area, properties with frontage along both sides of M-15 are well suited for research and office related uses for several reasons. First, it serves as a transition from residential land uses to the west and east. Proximity to and visibility from I-75 provide opportunities for research and office business development. Office and research uses will generate less traffic and thus have a lessened impact upon M-15 than more intensive commercial patterns.

PROTECTING RURAL CHARACTER AND OPEN SPACE

Other incentives can be applied for preserving the rural and historic character in the Northwest Area. They are as follows:

- Manage growth and development by maintaining overall residential density.
- Encourage more creative development which preserves rural character and open space through the use of tools such as a PUD and cluster developments.
- Develop a program where property owners can donate development rights for their property and enjoy the tax benefits of such donation. This could be particularly beneficial for historic sites.
- Promote an awareness and appreciation of the Township's unique historic and natural characteristics through educational opportunities such as an historic home tour.
- Ensure that the existing tree canopy is preserved when roadways are improved.

MORE SPECIFIC WAYS TO PROTECT OPEN SPACE

- Promote a concept of a rural open space residential option by allowing an average of 1 dwelling unit per 2.5 acres. This, for example, would allow four instead of three building sites on a 10 acre parcel, and significant amounts of open space.
- Encourage significant amounts of open space (30% or more, for example) to be set aside for rural open space developments. The open space can be used for active recreation and for the preservation of the natural features.
- Working with the North Oakland Headwaters Land Conservancy, continue to promote a conservation easement program to preserve natural resources that exist on private property.

SASHABAW CORRIDOR

Target Area Plan



In recent years, Sashabaw Corridor has seen a substantial shift in land use and an emergence of new, high-quality development based on the policies and priorities outlined in the Vision 2020 Strategic Plan, adopted in 1999. Due to the changes in the economic market and demographic composition, and projected population increase, the vision of Sashabaw Corridor needs to be solidified. Sashabaw Corridor is the economic core of Independence Township and serves as a major link to Brandon Township to the north and Waterford Township to the south. The corridor is heavily travelled, serving an average of 20,000 cars per day, and consists of an industrious mix of commercial, industrial, and residential land uses. In terms of productivity and commerce, Sashabaw Corridor is the economic engine of Independence Township. Simultaneously, its compact development, commitment to quality design, and enhanced pedestrian environment signal its position as a major gateway to the township and the region.

The Township should build on recent investment in the corridor and tie the various residential, commercial, and institutional activity nodes together through attractive landscaping and functional site design, as well as consistent pedestrian fixtures. Sashabaw Corridor provides an immediate opportunity to highlight the Township's commitment to safe routes and walkability by investing in non-motorized infrastructure and wayfinding.

Recognizing the need to promote economic vitality, design continuity, and pedestrian connections across Sashabaw Road and over I-75, the Sashabaw Corridor now encompasses the area previously known as the “Pine Knob area” in the 2010 Strategic Plan. The Sashabaw Corridor extends from Maybee Road to the south to the parcels just north of Clarkston Road, and is comprised of the Town Center and Pine Knob subareas.

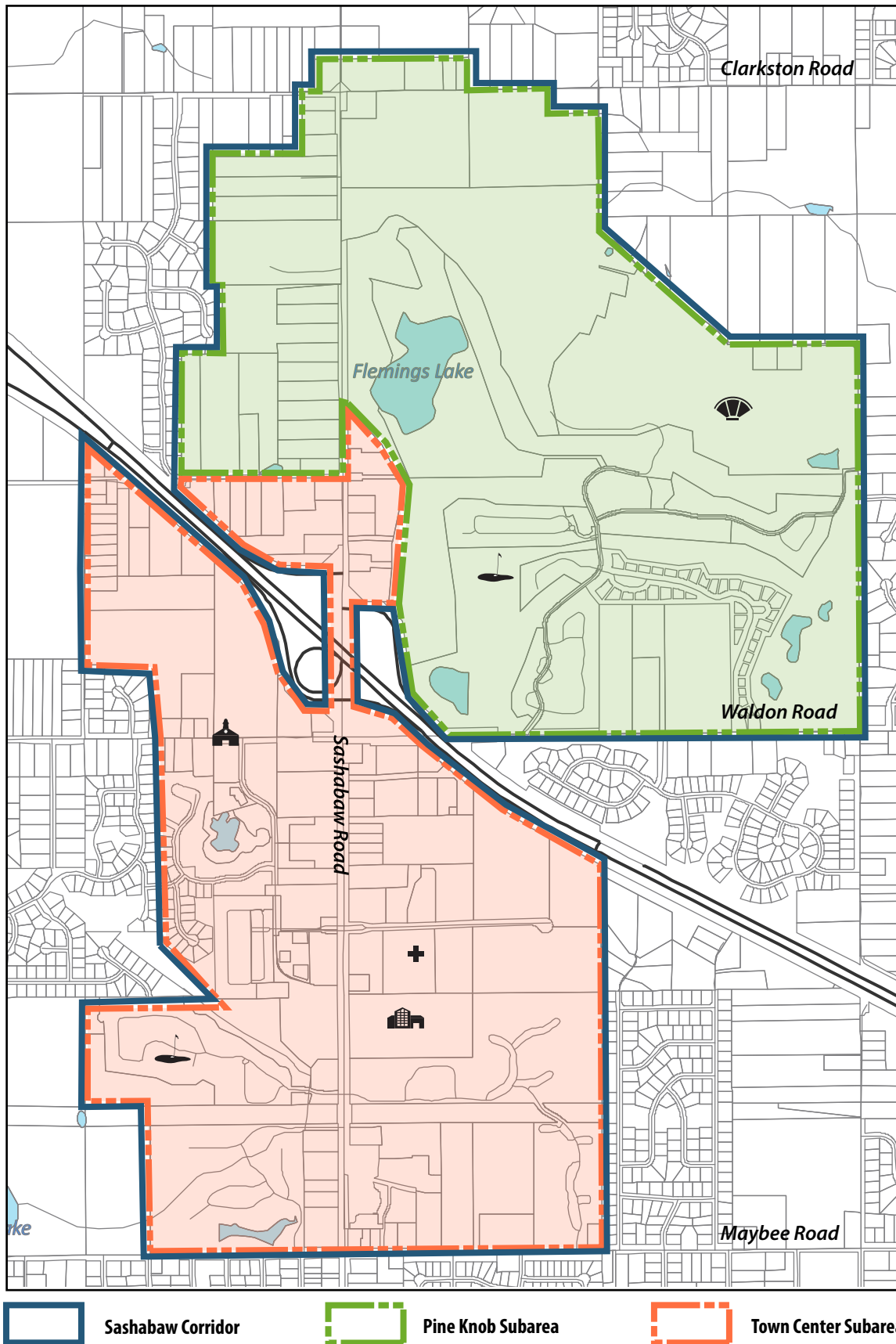


TOWN CENTER subarea is located primarily south of the Sashabaw/I-75 interchange. Based on similar development priorities and land use patterns, and the desire to reconnect the two areas on either side of the highway, the Town Center subarea was extended to include the office/service node just north of I-75. High quality design, walkability, and a complementary mix of uses are priorities for the Town Center subarea.



PINE KNOB subarea is characterized by its ample green space, natural wooded areas, and less dense development pattern. This area functions as a gradual transition between the more developed Town Center to the low density residential uses to the north, while still providing for essential services, recreation and entertainment opportunities, and places of employment.

MAP 13: SASHABAW CORRIDOR



Sashabaw Corridor Pine Knob Subarea Town Center Subarea

Township Hall McLaren Campus Pine Knob Elem. Country Club DTE Energy Theater

Public Participation

Citizen input is an important aspect of any planning effort. Methods to obtain public input included a variety of traditional approaches and innovative technologies. Traditional methods included a joint Planning Commission and Township Board Planning Workshop held on September 19, 2013, and public hearing on April 17, 2014. Use of an online engagement tool allowed a broad spectrum of the Independence community to participate in the planning process. Over 45 geographic specific comments were collected. These public comments have influenced the development of this plan. Lastly, the draft Master Plan was distributed to adjacent Townships and County agencies for review and comment.

Online Engagement

In order to provide alternative and increased opportunities to participate in the master planning process, the City also utilized the Independence Township MiCommunity Remarks geographic information tool that guided users to place geographic specific comments on various community issues, shown on page 87. The tool categorized comments into the following topics:

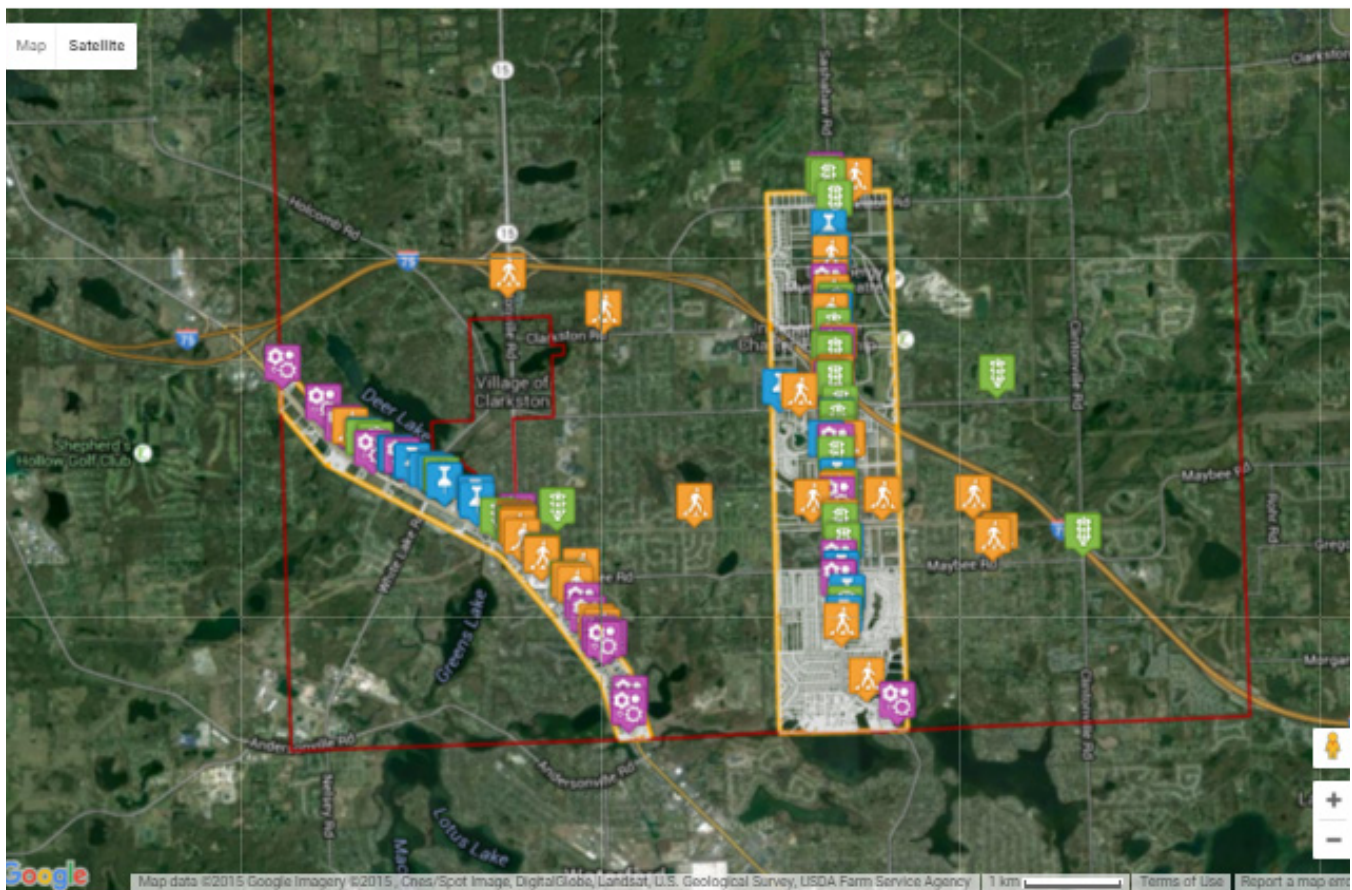
- Traffic movement and safety
- Identity and visual image
- Pedestrian access
- Commercial and residential development

Users could also read the comments left by other users, and were able to engage other stakeholders, discussing issues in the categories listed. Independence Township MiCommunity Remarks collected over 45 unique comments regarding Sashabaw Road on a variety of issues. The comments left by users were incorporated into the Plan.

[Home](#) | [Add Comment to Map](#)

We are collecting citizen feedback about the Dixie Highway and Sashabaw Road corridors in Independence Township for the Master Plan. We have created topics for you to comment on.

[Add your comment to the map](#) or see what your neighbors have said by clicking on the existing comment map below.



[View in Full Screen Mode](#)

Citizen Maps By Topic

-  [Where are the needs and opportunities to improve traffic movement and safety?](#) (28)
-  [What can be done to improve identity and visual image along the corridors?](#) (22)
-  [Where do we need improved pedestrian access?](#) (39)
-  [Where are opportunities for commercial and residential development?](#) (20)

We are collecting citizen feedback about where you live and work. [Add your comment to the map](#) or see what your neighbors have said by clicking on the links to the left.

The latest comment by **Donnie Kluck**

Please continue sidewalk from Hadley road to Deer Ridge Rd to connect it to the town. Instead of having to walk along the shoulder of M15. Also continue to increase the rails to trails network and connect everything together.

1 year 2 months ago

[Where do we need improved pedestrian access?](#)

Joint Meeting

On September 19, 2013, a joint meeting between the Township Board and Planning Commission was held to kick off the Master Planning process. Over 20 community leaders participated in the meeting. The meeting focused on identifying current issues, identifying strategies, and prioritizing actions. Discussion included:

TRAFFIC

- Encouraging better access management and fewer access points
- Introducing a roundabout at Sashabaw and Maybee Road
- Improving traffic management near I-75 including widening bridge
- Increasing the number of lanes north of I-75 to Clarkston Road
- Improving signal management
- Reducing speed
- Improving Waldon and Sashabaw Road intersection

IDENTITY AND VISUAL IMPROVEMENTS

- Maintaining high standards for building and site design
- Creating gateway signage
- Increasing landscaping
- Encouraging useable public plazas and green space
- Bring in cultural elements
- Finding ways to attract people to the corridor

PEDESTRIAN

- Installing a pedestrian bridge across Sashabaw Road
- Creating safe midblock crossing
- Using powerline easements to promote pedestrians use with sidewalks and trails
- Improving pedestrian and bicycle facilities at Sashabaw/Waldon intersection
- Improving pedestrian and bicycle facilities across I-75
- Encouraging other uses and greater density to attract walkability
- Creating more pedestrian amenities such as parks and plazas

COMMERCIAL AND RESIDENTIAL DEVELOPMENT

- Making walkable employment more viable
- Establishing the Town Center as an event destination surrounded by higher density residential
- Promoting and encouraging mixed use
- Considering Sashabaw/Cheshire Park for community center location
- Attracting more restaurants including casual and fine dining
- Expanding PUD north of I-75
- Encouraging apartments and condos to increase density for walkability

Vision

The main goal of the Sashabaw Corridor is to create a unified district for commercial, residential, civic, and institutional uses that provides a buffer from immediate adjacent residential and provides a gradual transition into the more pastoral landscape and rural residential areas in the northern portion of the Township. These two subareas have different characters and land use recommendations, but to pedestrians, cyclists, and motorists traveling along the corridor, they should read as a gradual change in development priorities, rather than a blunt line.

The corridor has greatly benefited from recent public and private investment and it is important for Independence Township to unite these individual uses and development sites in order to protect these investments, and ultimately knit together a place-based narrative of community identity. The township's installation of a boulevard median from Maybee Road to Waldon Road has improved traffic circulation and access, in addition to providing an attractive visual aesthetic. The township has shown long-term investment in the Sashabaw Corridor by purchasing a new township building just off the corridor. There has also been considerable private investment coinciding with the public projects, including McLaren Health Care Village and the Town Center retail and office development.





Due to the timing of public and private investment, the stage for transformation has been set. Continued investment can be made to transform the corridor from an auto-centric corridor to a mixed use, visually cohesive place where multiple modes of transportation coexist.

One key element is to prioritize Township investment in connecting the Independence Township Safety Path network within the Town Center and Pine Knob subareas. As “your connection to walkable communities,” the Township Safety Path program has been working towards a comprehensive non-motorized trail system to provide recreational opportunities as well as safe pedestrian access to points of interest and local business centers in Independence Township, since 1978.

On the west side of Sashabaw Road, the Township should provide a continuous safety path from Maybee Road to Clarkston Road. Given the large development sites along the east side of Sashabaw, the Township has the opportunity to provide a multi-use trail on this side of the road. Other opportunities exist to integrate site development with non-motorized paths. For example, a potential bicycle loop could be provided around the medical campus to promote preventative wellness and exercise.

Safety Paths are particularly important in tackling the three pedestrian “challenge areas” along Sashabaw Road. These areas include the utility corridor and I-75 overpass in the

Town Center subarea, and the area adjacent to the Pine Knob development in the northern subarea. In addition to continuous pedestrian paths, the Township should also look at providing more safe crossings along Sashabaw Road.

The Township should implement a comprehensive wayfinding system to help promote commerce and walkability in the Town Center and encourage use of the Township wide Safety Paths, both of which significantly contribute to the creation of place and community identity. Figure 10 illustrates a possible design strategy for the Sashabaw Corridor wayfinding system. The new wayfinding should provide both vehicular and pedestrian oriented signage. Wherever possible, signage should be integrated with existing lighting and incorporate the natural stone and metal fencing specific to the overlay district.

A lack of a safe pedestrian crossing on Sashabaw Road has been identified as a major issue. A particular area of concern is the area of Sashabaw in the vicinity of Bow Pointe Drive. As McLaren builds out the Health Care Village campus, a large increase in pedestrian traffic is anticipated. One option that should be considered is improved signalization for pedestrians crossing at Bow Pointe Drive.

Another option would be the construction of a pedestrian bridge across Sashabaw Road integrated into the new office service and commercial development along the corridor south of the intersection. As the Township focuses on improved walkability, and both the Town Center and Health Care Village near completion, a high degree of emphasis needs to be placed on safe pedestrian crossing. The students and parents of Pine Knob Elementary as well as near by residents will also benefit from targeted pedestrian safety improvements and greater connectivity.



MAP 14: SASHABAW OPPORTUNITY NODES & CHALLENGE AREAS

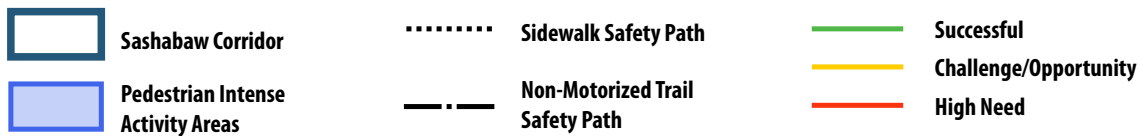
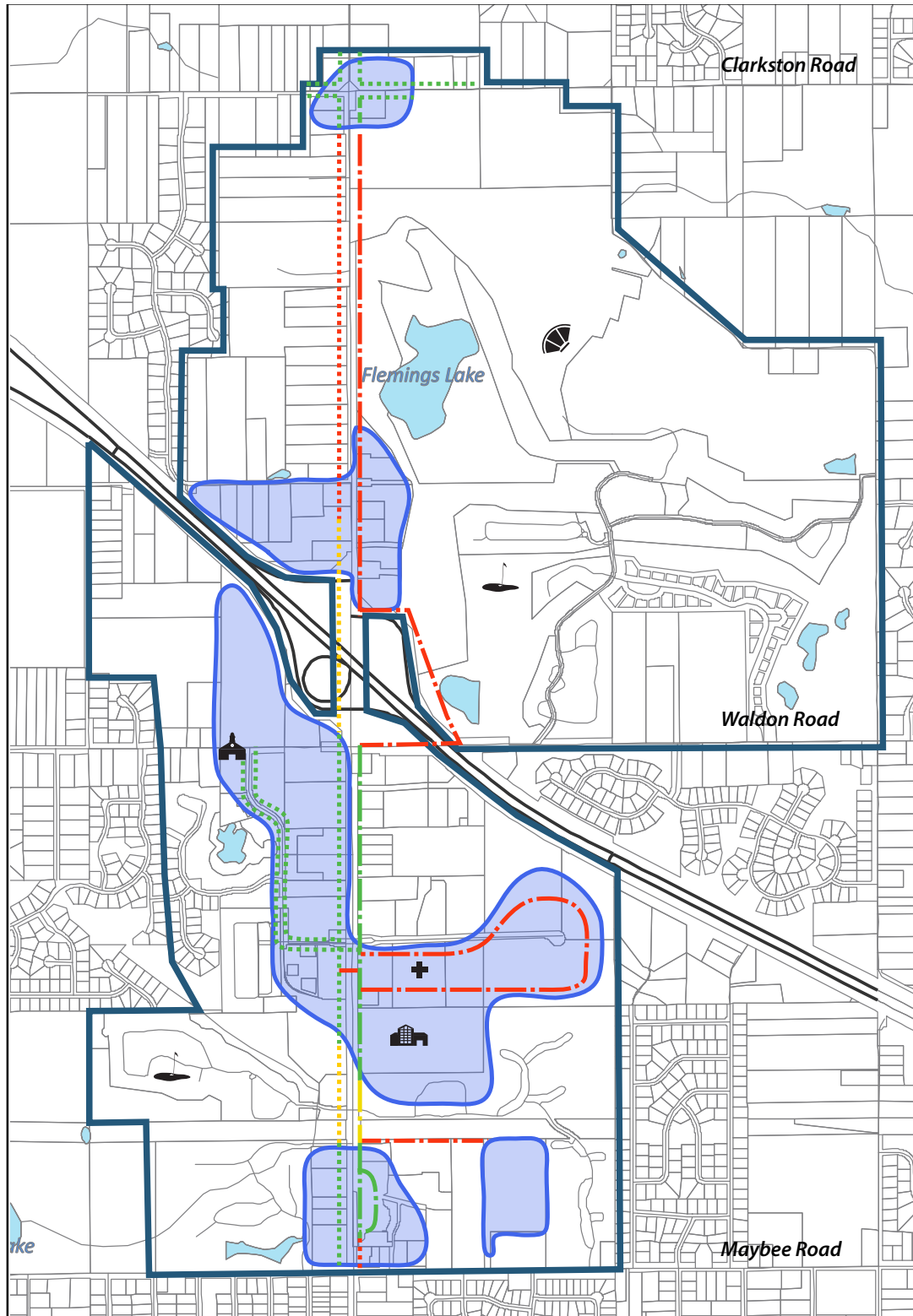
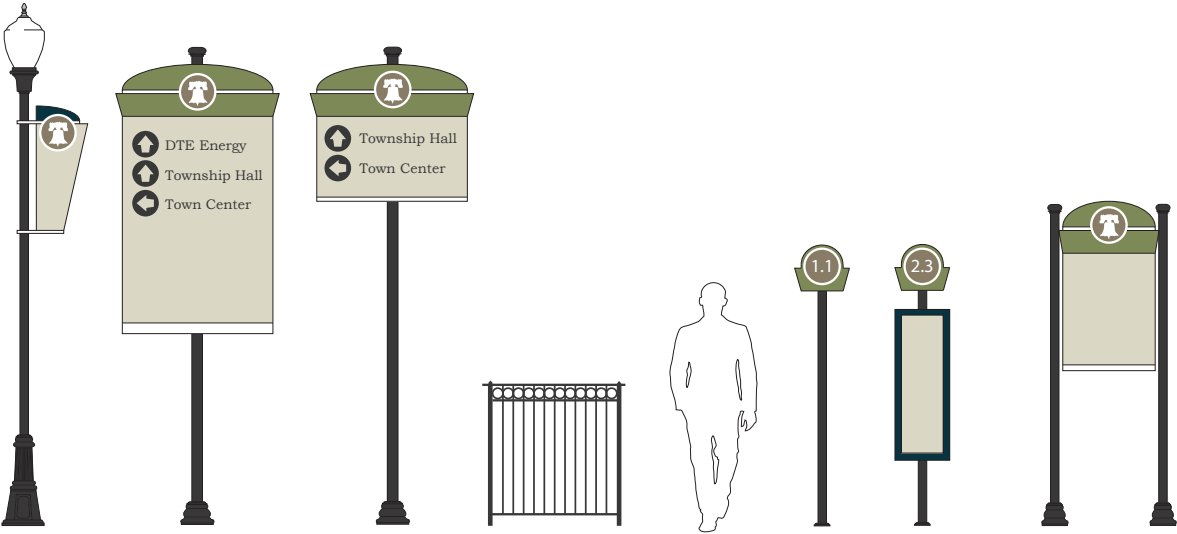


FIGURE 10: SASHABAW CORRIDOR WAYFINDING SIGNAGE



Vehicle Oriented Lighting and Signage



Pedestrian Oriented Lighting and Signage

Safety Path Signage



Town Center

The long term goal for the corridor is to create a Town Center concept along Sashabaw Road between Maybee Road and Flemings Lake Road. The Town Center is to serve as a safe, lively, walkable, and economically vibrant environment for residents of all ages. The desired development pattern has been initiated but can be enhanced through site design, with special attention paid to circulation paths, community amenities, and parking.

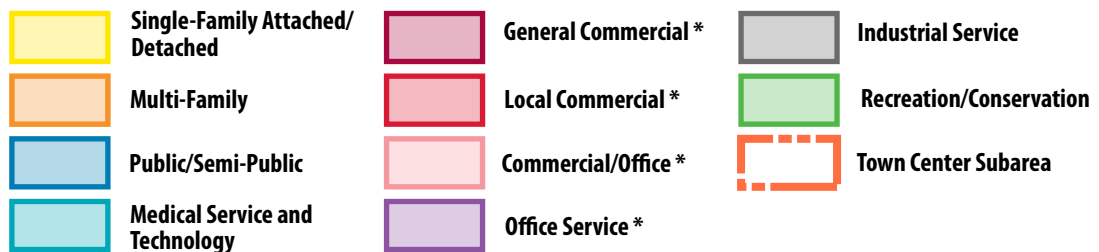
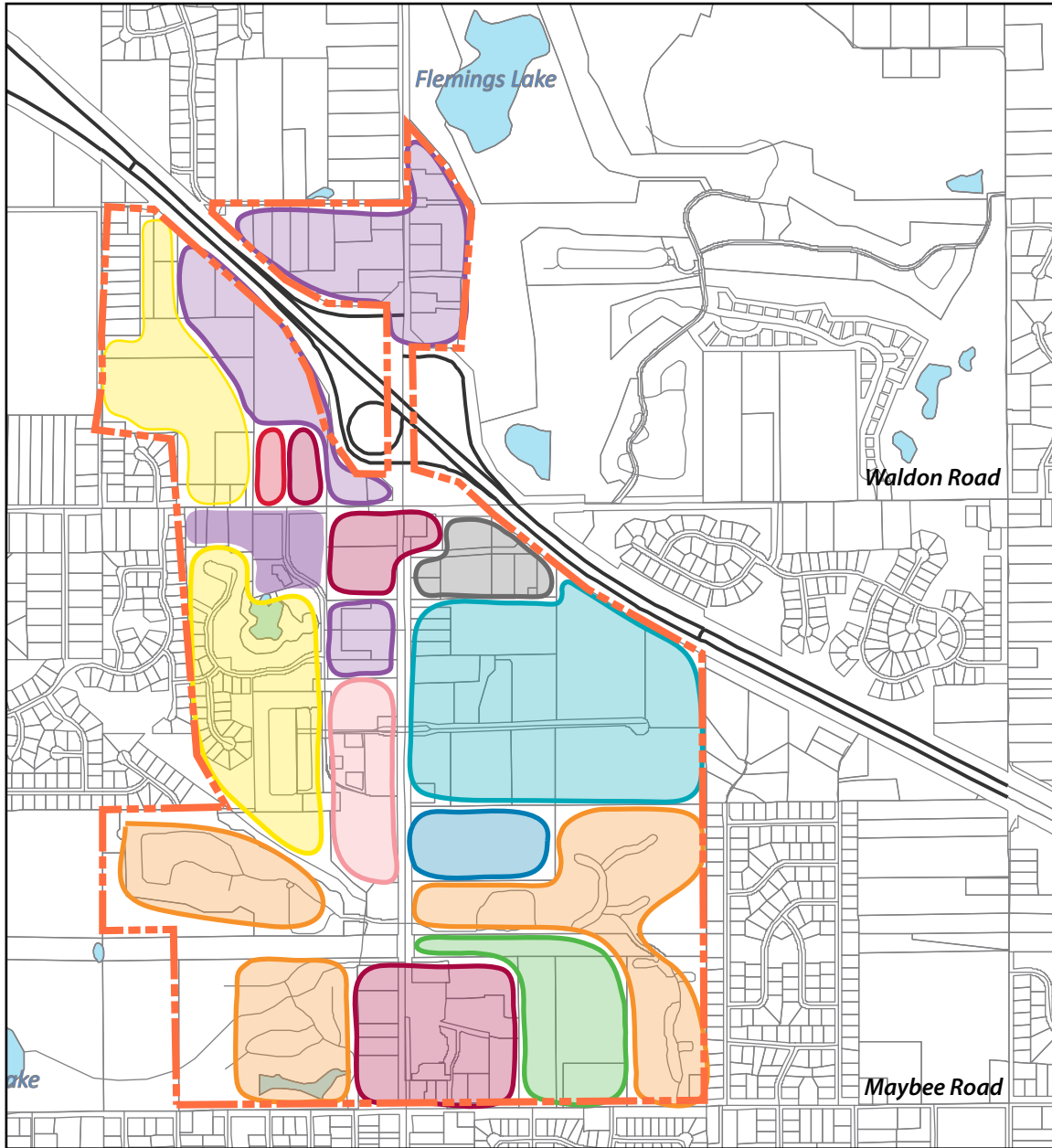


In order to capitalize on the proximity to and visibility from I-75, as well as the potential for future development, the Town Center concept is now being extended to the area between the I-75 expressway and Flemings Lake Road.

Some of the central sites in this area include the Independence Township Hall building, the Town Center development, the growing McLaren medical campus, and Pine Knob Elementary. The area includes a healthy mix of institutional, office, and commercial uses with medium density residential along the periphery. Given the important public functions that these facilities serve, Sashabaw Corridor offers an ideal place to enhance civic, community, and commercial identity through proper planning and implementation.



MAP 15: SASHABAW TOWN CENTER SUBAREA FUTURE LAND USE



* These categories may also include mixed use.

Land Use

Since a “Town Center” type development is desired, mixing uses is an essential component. Uses such as office, commercial, and residential co-exist by mixing uses vertically (for example, residential above commercial) or horizontally (residential adjacent to commercial). New development should complement the existing single-family and multi-family residential area.

The following additional elements are critical to create a mixed use environment along Sashabaw Road:

- HIGH DENSITY RESIDENTIAL within and all along the periphery of the corridor. High density residential use such as single family attached and multiple family is often needed in commercial areas to provide a market and promote a vibrant area. Mixing uses encourages pedestrian use of the area. Multiple family may include elderly housing and rowhouses. New development should encourage walkability and provide safe pedestrian connections to community and recreational facilities, such as McLaren Health Care Village, Township Hall, Pine Knob Elementary, and the Goldfish Swim School.
- COMMERCIAL USES in this subarea include local commercial development and general commercial. New developments should have shared access management as well as safe and attractive pedestrian connections. Retention ponds should buffer residential developments rather than the street, and provide a natural amenity for residents and safety path users. Buildings should uphold the same quality in design and materials, including brick, stone, and metal overhangs, plenty of transparency, and appropriately scaled soffit and cornice details.
- MEDICAL SERVICE AND TECHNOLOGY is a new designation within the Sashabaw Corridor reflecting the McLaren Health Care Village at Clarkston on the east side of Sashabaw at Bow Point Road. A variety of medical offices, specialty medical centers, a hospital and support services are planned in a campus setting.



MEDICAL CAMPUS DEVELOPMENT SITE



NEW COMMERCIAL DEVELOPMENT



TOWNHOMES ON
WALDON CENTER DRIVE



ATTACHED SINGLE FAMILY ON
HERON PARK WAY

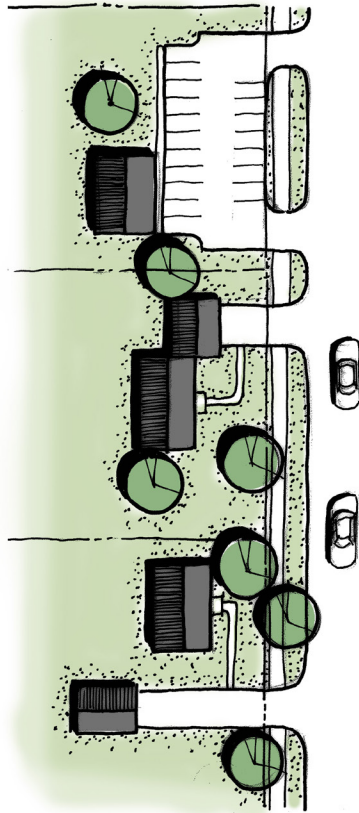
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- INSTITUTIONAL AND RECREATIONAL USES such as the Independence Township Hall building should be regarded as an anchor for the Town Center. Additional new civic uses will promote the image of the community and Town Center. Incorporating cultural facilities with civic use was a concept introduced when the Vision 2020 Plan was originally adopted in 1999. Civic uses often have generous numbers of employees which can support adjacent business during the lunch hour and utilize open space and path networks for short breaks and employee wellness programs. Civic uses also draw in users to the corridor; supplementing the commercial market.
 - INDUSTRIAL USES in the area are very limited, however these uses should not limit pedestrian and vehicular connectivity. Generous landscaping and appropriate pedestrian realm elements should be incorporated into properties fronting Sashabaw Road or adjacent to less intense uses. The utility corridor has been identified as a “challenge area” and should be held to the same design standards as the rest of the corridor. There is also a potential opportunity to provide a pedestrian connection to Sashabaw Plains Park, situated behind Oakland Woods Baptist Church off of Maybee Road.
 - HOTEL AND CONFERENCE CENTER is another aspect of commercial use that could support the Town Center concept. The parcel south of the intersection of Flemings Lake Road, east of Sashabaw, and north of I-75 is a prime location for the development of a hotel or conference center. This location is further enhanced by its proximity to the I-75, Town Center amenities, and the recreational opportunities within the Pine Knob subarea. The prioritization of safe and attractive, non-motorized connections across I-75 is an integral piece of this development opportunity, which would be the first facility of its kind in Independence Township.

Overlay District

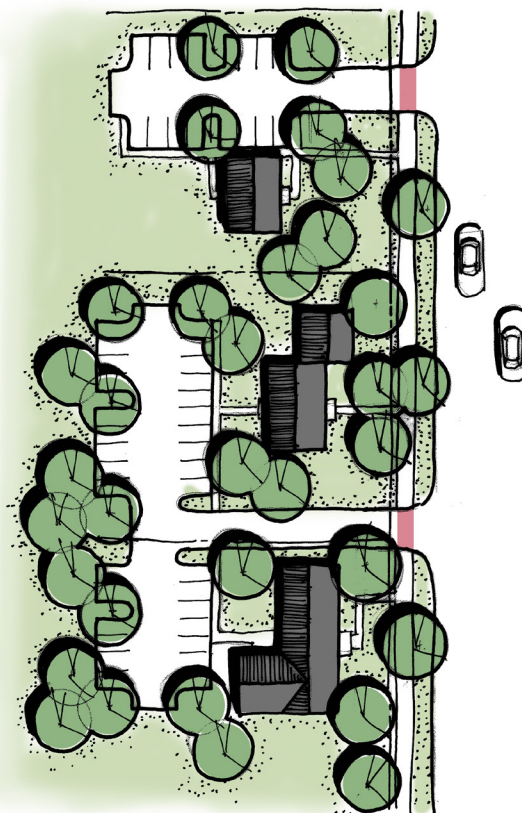
In order to implement the planning and design concepts set forth herein, an overlay district was created in 2001 and revised in 2003. An overlay district is a special zoning district superimposed over conventional established districts. Extending the Town Center Overlay District north of I-75 to incorporate commercial property would connect this area to the existing Town Center. In addition, a new Overlay District for the area between Flemings Lake Road and Clarkston Road would provide continuity between this area and the Town Center.

Based on the goals and policies outlined in the Vision 2020 Plan, the Sashabaw Road Town Center Overlay District and corresponding Town Center Design Guidelines document were created. While the plan recognizes the need for different land uses, site strategies, and setback requirements for each area, the entire Sashabaw Corridor should adopt a cohesive set of design guidelines.

District Design Guidelines have been implemented in the Corridor and need to be carried forward in future planning:



TYPICAL SITE STRATEGY



RECOMMENDED SITE STRATEGY

Design and Layout

Design and layout considerations have promoted a positive image of the corridor. They are as follows:

- Locate all buildings at or within close proximity of front setback line.
- Retention ponds provide soft edges and should be used as a landscape buffer between the development and residential uses, not between the parking lot and street. Pedestrian connections should be maintained through natural areas and parking facilities.
- Create a standard front setback which would apply for all possible uses.
- Develop design guidelines in order to ensure architectural compatibility and consistency but not monotony.
- Locate all buildings so that they face Sashabaw Road and have a pedestrian entrance at the front of the building.
- Enhance pedestrian connections between buildings with small plazas or benches and encourage pedestrian amenities such as covered walkways or awnings.
- Cluster buildings with complementary uses around a small plaza or “town green” in order to provide for public open space which is pedestrian oriented.
- Discourage or prohibit large “big box” commercial retail design.



RECOMMENDED PLAZA ENHANCEMENTS



PEDESTRIAN ORIENTED CONNECTIONS



LANDSCAPE AND STREETScape TREATMENTS TO THE PEDESTRIAN REALM

Landscape and Streetscape Elements

The enhanced landscaping and lighting requirements of the Overlay District have contributed to the positive image of the corridor. A streetscape plan was designed for the Corridor and plantings have now been installed in the median and along the roadway. As part of the streetscape, decorative lights were installed for beautification and to improve pedestrian walkability. Additionally, a fence and stone column detail is being used on new developments in order to provide consistency and compatibility with the pedestrian environment.

Circulation

In 2003, the Township, in cooperation with the Road Commission for Oakland County, widened Sashabaw Road to a four lane boulevard with a landscaped median. The result has been a safer roadway, with limited access and a pedestrian-friendly corridor. The roadway is also more functional and has a higher capacity of traffic. It is important to continue to support these circulation enhancements as new developments come forward.

Additional roadway improvements are in the process of being implemented. A relief ramp for northbound I-75 traffic to southbound Sashabaw Road is under design. In conjunction with the ramp project, capacity improvements will also be made to the Waldon and Sashabaw Road intersection.

In order to facilitate the smooth and safe flow of traffic, improve pedestrian safety and improve the image of the corridor, it was recommended that the following pedestrian and access management measures continue to be implemented:

- Limit individual access drives.
- Require shared access drives and rear shared service drives.
- Require pedestrian access at the front of buildings which connects to the sidewalk/pathway along the entire corridor.
- Provide brick pavers or some other distinction at pedestrian crossings to improve safety.

Parking

Development within the corridor needs to provide adequate parking for commercial, institutional, and residential uses, but parking should not dominate the visual landscape of the corridor. Ways to alleviate the negative visual impact of vast amounts of parking are:

- Locate parking lots at the rear or side of buildings only.
- Require shared parking areas accessed off of service drives.
- Allow for shared parking requirements to be relaxed.
- Break up large expanses of pavement with landscaping.
- Require a standard fence detail and/or landscape screening when the parking lot abuts pedestrian routes.
- As with the landscaping design elements, the Overlay District addresses these items. The result has been well designed developments along the corridor with a minimized impact on pedestrian and bicycle traffic.



Pine Knob Subarea

Compared to the compact, mixed use Town Center, the Pine Knob subarea is characterized by a campus style development pattern with a more organic approach to landscaping and site design, and generally a stronger connection to nature. The Pine Knob development, now DTE Energy Theater, has a long history within Independence Township as a regional destination and economic draw for the community.



The development was designed to respect the rural character of Independence Township north of I-75, with parking and facilities conscientiously carved out of the woodland setting. As the corridor develops, the existing residential lots along the west side of Sashabaw Corridor should develop in a manner consistent with the office service use. The architecture and site arrangement of this development should be designed to fold into the landscape; preserving mature trees and respecting natural features whenever possible.

Today, DTE Energy Music Theatre and Pine Knob Country Club continue to provide significant local and regional recreational opportunities; however, these independent recreation facilities do not readily support mixed-use, commercial development.

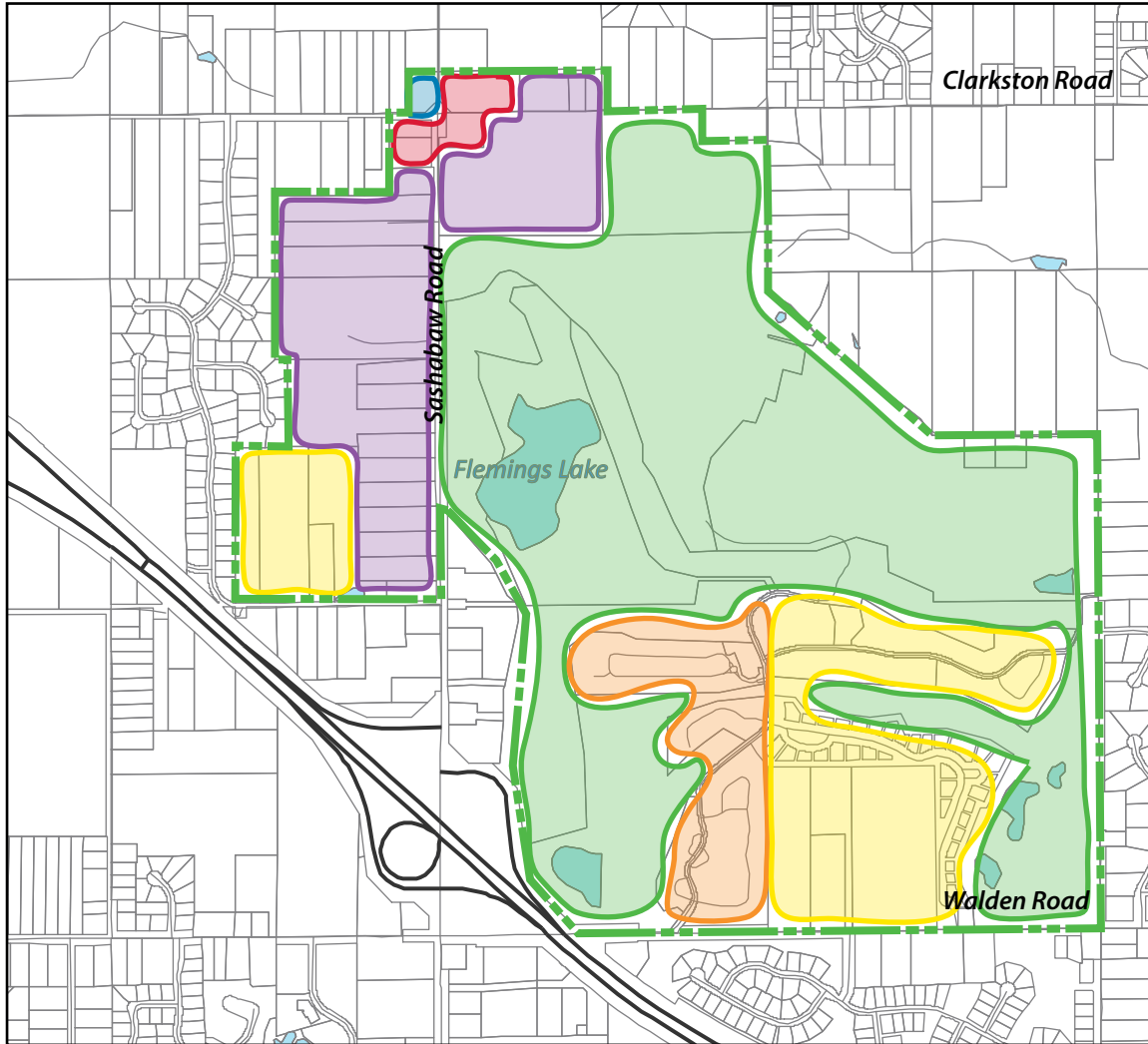


DTE ENERGY THEATER CAMPUS PLAN

This area should maintain a high commitment to pedestrian and bike safety through safety paths, lighting, designated crossings, greenbelt landscaping, and wayfinding. The idea is to establish uses, particularly office service and local commercial, which are compatible with and provide a transition between the Town Center, Pine Knob, and surrounding residential uses.

While office service uses should enhance employee workplace satisfaction by providing on site amenities such as landscaped stormwater features, walking paths, and outdoor break areas, the local commercial uses are intended to support short trips with appropriate signage, attractive landscaping, and sufficient lighting, particularly around parking facilities. Ultimately, the goal of Pine Knob subarea is to provide a transitional area between the higher density Town Center and the more rural area to the north that meets the needs of Independence Township workers and residents.

MAP 16: SASHABAW PINE KNOB SUBAREA FUTURE LAND USE



Land Use

Land Use and Circulation for the Pine Knob Area focus on the less dense office service and residential uses.

- RESIDENTIAL USES in the subarea include a scattering of single family homes with deep narrow lots along the west side of Sashabaw. A more appropriate use for this section of the corridor would be office service or other residential types such as elder housing or convalescence care facilities. These types of uses would provide a buffer between the busy corridor and the adjacent residential neighborhood.
- OFFICE SERVICE is intended for office, research, and related uses. This use is essential given Sashabaw Corridor's growing economic role in the community. Areas appropriate for office and related uses would be primarily the parcels on the west side of Sashabaw, north of Flemings Lake Road. Furthermore, residential uses are no longer appropriate due to traffic increases, and office users will be less impacted by the Pine Knob activities than homeowners.
- COMMERCIAL USES are located at Clarkston and Sashabaw. This use is characterized as a small neighborhood shopping center. The local commercial use is intended to support the local residents and office service employees who commute from the northern part of the township. These commercial uses include basic needs such as grocery, pharmacy, banking, medical services, and personal care.
- RECREATION/CONSERVATION uses are located east of Sashabaw Road. This use provides for local and regional recreation opportunities as well as the protection of natural features. Wetlands areas in particular should be preserved and protected by Township Ordinance.

Design Continuity

Though the land uses and intensity will vary between the Town Center section and the Pine Knob section of the Sashabaw Corridor it is important to maintain design continuity. Design continuity includes lighting, landscape, pedestrian amenities, and high quality design and architecture. As indicated, a new overlay district would contribute to bringing continuity between the Pine Knob area and the Town Center.

Circulation

The following is a listing of the different improvements that can unify the Pine Knob area and increase the efficiency of the existing roadways.

- Create a signalized intersection at Flemings Lake Road to serve the proposed office uses. This will serve to align roadways across Sashabaw which increases safety and efficiency.
- Allow office, research and related uses on the west side of Sashabaw to share drives. This will limit the number of curb cuts and allow for connections between related uses.
- Continue safety path development along Sashabaw Road. This is in keeping with the current Safety Path Master Plan and will allow and encourage other means of transportation such as walking and biking.

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White Lake Area *Target Area Plan*



The White Lake Road Corridor from Dixie Highway to Andersonville Road has exhibited a variety of uses ranging from residential to commercial, warehousing and industrial uses. Some of the older industrial uses remain, but in the last decade, the corridor has seen several redevelopment projects that have resulted in considerable improvement of both the visual appearance and the types of desired land uses.

Background

White Lake Road serves as one of the major entry points to Independence Township from areas to the south. Therefore, the manner in which the corridor develops is important to the Township's image. Substantial improvements were made through the efforts of the DDA within the White Lake Road corridor, with realignment, surface widening, and installation of curb and gutters as well as safety paths. Sewer and water utility extensions were also made. These improvements resulted in new development opportunities which have improved the visual appearance of the area and provided the economic base desired by the Township.



Vision

As industrial use has declined, the Township needs to consider more flexible zoning strategies to encourage additional investment and improvement of the area. This target plan describes potential actions and policies to achieve the following goals:

- To set a tone for new land use development
- To mitigate the negative visual impact of existing uses
- To create a positive image for the community and an attractive doorway to the Township

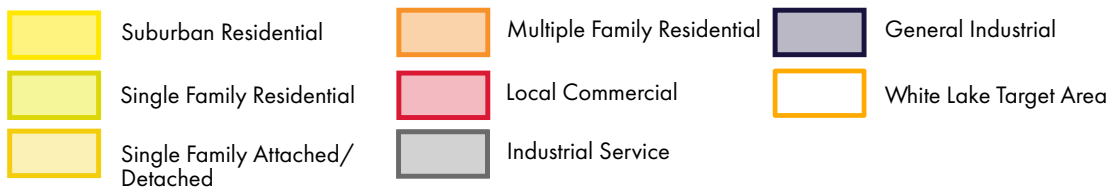
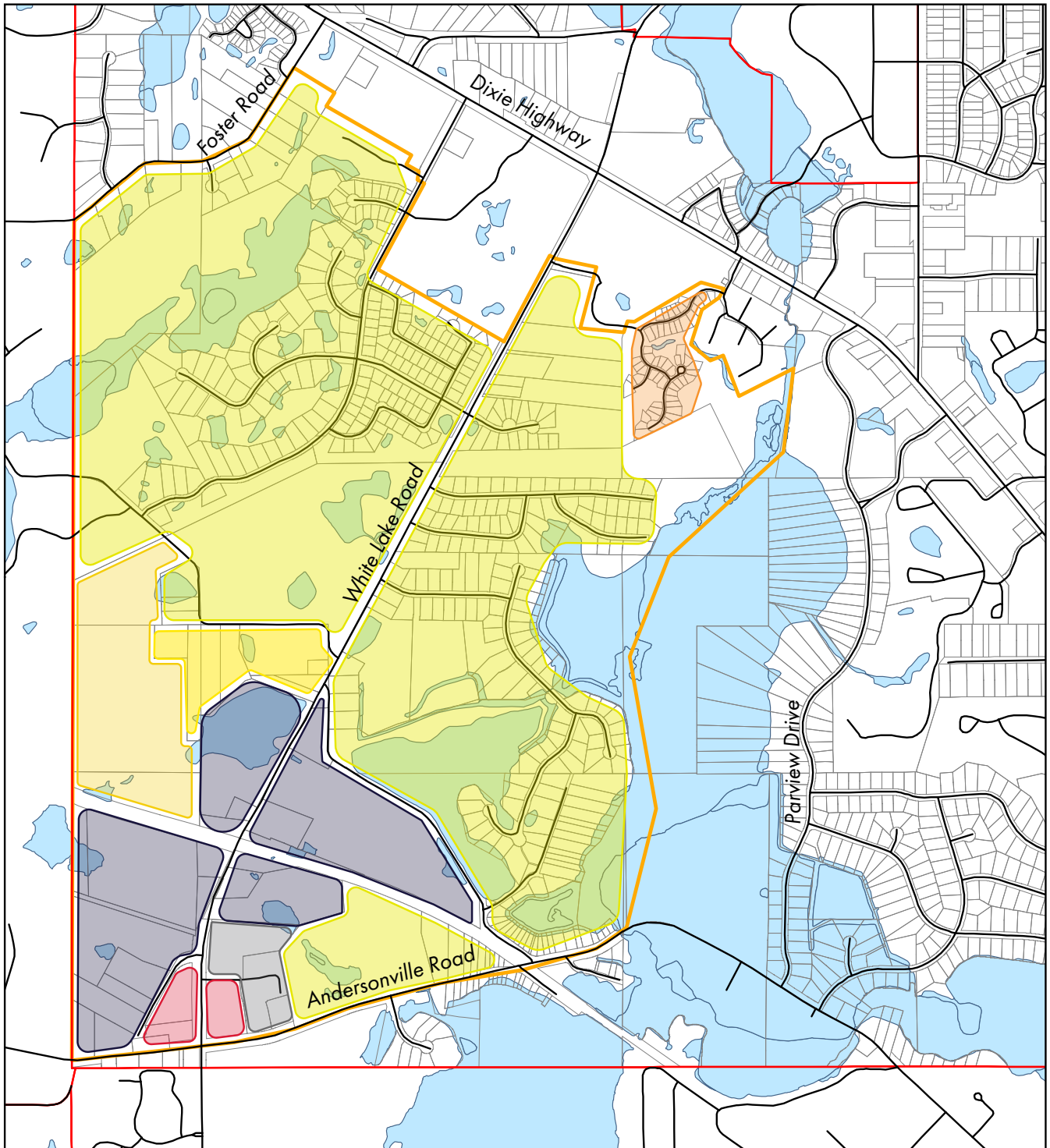
Design and Layout

An essential element of this Target Area Plan is to create an attractive entry into the White Lake Industrial District. This will be accomplished through the use of high quality building materials, ample landscaping, and considerable screening between land uses.

Circulation

Due to the nature of uses in the White Lake Area, driving is the primary means of transportation. There is a sidewalk along the east of White Lake Road. Any new development or redevelopment should limit vehicular access to the main road and create a visible and physical separation between cars and pedestrians.

MAP 17: WHITE LAKE FUTURE LAND USE



Land Use

As depicted on the White Lake Road Target Area map, there are four major areas, recommended to consolidate the different types of activities along the White Lake Road Corridor. They include commercial, industrial, residential, and medical technology zones.

- **SINGLE FAMILY RESIDENTIAL** Within the middle portion of the corridor from Clement Road north, the area east of White Lake Road is largely residential with small lot subdivisions. The property on the west side of White Lake Road is almost entirely developed and exhibits interesting natural features including extensive wetlands, varied topography and a diversified tree cover. The area is also traversed by both underground pipeline and overhead utility corridors. The Parks of Stonewood PUD is complete and the development was well conceived by preserving the natural features while at the same time providing a development with amenities such as a tot lot, pool and clubhouse, as well as nature trails. New road access into the property from White Lake Road has been tied in with the entry road from Dixie Highway. In addition, the improvement and possible relocation of Clement Road is planned well into the future.
- **LOCAL COMMERCIAL** The intersection of White Lake Road and Andersonville Road is designated commercial. Local commercial as opposed to general commercial are the uses which are encouraged to serve the residents living in the vicinity and future employees from nearby businesses. The Gateway Plaza was constructed on the northeast corner of the intersection. This development is typical of what is desired for this area.
- **GENERAL INDUSTRIAL** This zone encompasses the remaining area south of Clement Road to Andersonville Road. Existing uses include manufacturing, storage, recreational vehicle sales and service, a salvage yard and asphalt plant. The intent of this area is to permit a more general type of industrial land use. A key component of this plan is to upgrade and improve the appearance of the more unattractive existing uses in the area. Warehousing and contractor's facilities are the new uses that are encouraged and should be promoted for the Corridor.
- **INDUSTRIAL SERVICE** use surrounds the commercial node at the northeast corner of White Lake and Andersonville Road. This area is designed to accommodate development that is compatible and desirable but does not fit strictly within the current general industrial zoning.

INFRASTRUCTURE PLAN

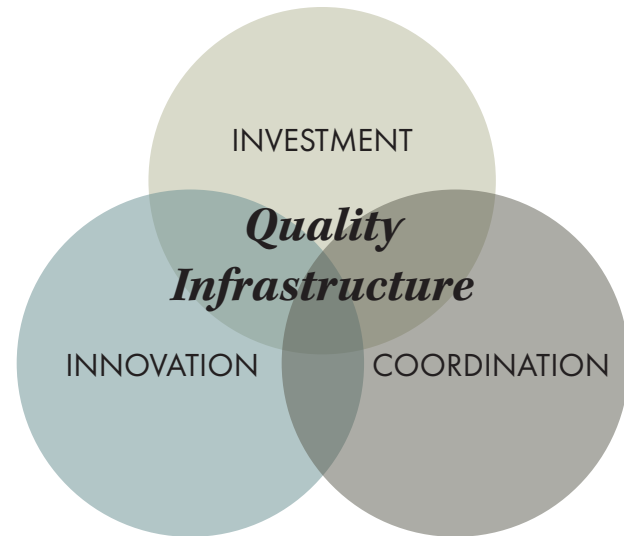
Investing in a Quality Community

A critical component to the Township's quality of life is the quality of its infrastructure and municipal services. Independence Township has long recognized that infrastructure, including roadways, safety paths, sewer and water services, play a critical role in long range planning efforts dating back to the Vision 2020 Strategic Plan.

Utilities and services were a significant focus of the plan. Without adequate utilities, the Township cannot plan for future growth. The Vision 2020 Plan updated in 2008 continued many of the same policies derived in the Vision 2020 Strategic Plan. This plan advances the goal of providing quality infrastructure by identifying specific measures that need to be pursued.

Evaluating the adequacy of infrastructure is critical to identifying future growth areas of the Township. The relationship between land use and infrastructure is a critical consideration. The first obligation is to maintain and improve infrastructure in areas of the Township where there is existing or planned higher density development. This would generally include most areas south of Clarkston Road. This is not to say the improvements are not needed in the lower density area north of Clarkston Road. However, limited resources need to be devoted to areas where they can achieve the greatest good.

As a Township, the options to finance infrastructure comes with challenges. Integral to a successful program are adherence to three key principles: investment, coordination and innovation. Regarding investment, it is unrealistic to assume that infrastructure will be improved without the expenditure of Township funds. However, such investment can be used



most efficiently if there is strong coordination between agencies and departments both within and outside the Township. Finally, dollars can be stretched through innovation and employment of the “best practices” available.

This chapter is separated into transportation, sewer and water and storm water components. Transportation reviews the existing and future road network and new policies related to Complete Streets. Sewer and Water reviews current utility information in the Township and potential future need. Storm water Management looks at the existing Township facilities and storm water practices and future need.

Motorized & Non-Motorized Transportation

The Township is traversed in a northwest to southeast direction by I-75. Two interchanges of I-75 are located within the Township at Sashabaw Road and M-15. A third interchange with Dixie Hwy is at the western boundary of the Township. The only U.S. trunk line passing through the Township is Dixie Highway (U.S.-10). Both I-75 and Dixie Highway convey large volumes of traffic through the Township. Dixie Highway also serves as a major artery within the Township, along with Ortonville Road (M-15), and Sashabaw Road. The only State route within the Township is M-15. Since the Vision 2020 Plan, there has been an increase in the amount of paved local roads in the Township as a result of development.

With the exception of roads under MDOT jurisdiction, all other roads are under the jurisdiction of the Road Commission for Oakland County. Most primary roads are paved while most local roads remain gravel.

However, not only are roadways important, but also pedestrian and bicycle system maintenance and improvements have been very important to the Township. Safety paths in Independence Township have been constructed in accordance with the Safety Path Plan either by the Township or by private developers. The Township has used special millage and grant funds to construct priority paths. Dixie Highway, Andersonville Road, Clarkston Road, Sashabaw Road, and Oak Hill Road encompass some of the major priority paths.

ROAD JURISDICTION

Primary roads are established by, and the responsibility of, the Road Commission for Oakland County upon approval of the Michigan Department of Transportation. There are 26.3 miles of primary roads; 24.9 miles have a hard top surface and 1.4 miles have a gravel surface. The incidence of unpaved local roads is overwhelmingly higher than primary roads. There are 48.8 miles of local roads; 39 miles have a gravel surface and 9.8 miles have a hard top surface. Combining both local and primary roads, there are a total of 75.1 miles of road in the Township with 40.4 miles (53%) of gravel surface and 35.7 miles (47%) of paved surface.



In addition, Township development regulations require safety paths on designated routes to be constructed when property is redeveloped. In addition to the local safety path system, Oakland County has been promoting a regional trails and pathways system.

Having effective transportation routes to move residents through the Township has long been a top priority. The relationship between land use and roads is a critical element of land use planning. Roads provide the access necessary to land uses and are an important determinant of community character. Residential streets need to provide safety and interest, and preclude through-traffic movements. Major thoroughfares, however, must be able to transport vehicles through an area with as little interference as possible.

While Independence Township roads fall under the jurisdiction of the ROAD COMMISSION FOR OAKLAND COUNTY, the community recognizes that it faces a number of challenges related to planning for and investing in both the motorized and non-motorized transportation network.

Complete Streets

The MICHIGAN COMPLETE STREETS legislation was signed into law in 2010 through two public acts, Public Act 134 and Public Act 135. The Michigan Planning Act was also amended to require the consideration of complete streets in the Master Plan. The legislation defines Complete Streets as “roadways planned, designed, and constructed to provide appropriate access to all legal users...whether by car, truck, transit, assistive device, foot or bicycle.” It gives new responsibilities to local government and county and state transportation agencies to address transportation needs of all legal users (including pedestrians and bicyclists) in their community Master Plans.

Communities with Complete Streets policies help to ensure that roadways are designed to accommodate all users, not just motorists. Facilities that make a street “complete” depend on existing conditions and the intended users. It’s never a “one-size-fits-all” scenario. Examples include curb ramps, audible or tactile signals for blind pedestrians, longer crossing times, smooth sidewalks and bike lanes that are free of obstacles.

The Road Commission for Oakland County (RCOC) developed Complete Streets guidelines for use when designing future road improvements and considering the transportation needs of all legal users. The guidelines evaluate issues such as liability, funding, maintenance, connectivity, local involvement, environmental concerns and specific user needs.

There are many consistencies between current Township plans for alternative transportation plans and the RCOC's Complete Streets Guidelines. They are as follows:

- **CONSIDER ALL USERS** - Both are working to take the needs of all users into consideration in regard to transportation. The Township continues to pursue opportunities to expand the safety path network and connect corridors with neighboring community's safety path systems.
- **COORDINATE IMPROVEMENTS** - Both are willing to achieve the goals and objectives of Complete Streets in the Township. The Township and RCOC have a long standing relationship on coordinating road improvements in the Township. Even before the Complete Streets legislation was passed, the Township has been successful in building safety paths into the design of roadway improvements.
- **REVIEW SITE PLANS** - Both use the Site Plan Review process to stress connectivity between neighborhoods and communities. The Township has for many years worked during review of developments on the extension of safety paths and consideration for future roadway improvements.

To that end, Transportation Goals and Objectives have been modified to reflect the recognition of Complete Streets by the Township. While Township roads fall under the jurisdiction of the Road Commission for Oakland County, the community recognizes that it faces a number of challenges related to planning for and investing in a non-motorized transportation network. Encouraging the development of complete streets, specifically pedestrian and bicycle facilities, is a priority for the community.

COMPLETE STREETS

Complete Streets provide a number of benefits including, but not limited to:

- Improved safety for all users, including pedestrians, bicyclists, transit riders and drivers;
- Improved human health by encouraging walking and bicycling;
- Decreased car traffic, reducing dependence on gasoline and petroleum products, and improved air quality;
- More transportation options; and
- Fosters livable communities and improved quality of life.



NATIONAL FUNCTIONAL CLASSIFICATION SYSTEM

PRINCIPAL ARTERIALS

These roadways are at the top of the classification hierarchy. The primary function of such roadways is to carry relatively long distance, through-travel movements. Examples include interstates and other freeways as well as state routes between larger cities. Principal Arterials within Independence Township include I-75, M-15, US-24 and White Lake Road.

MINOR ARTERIALS

Minor arterials include roads connecting intra-urban land uses. These roads tend to accommodate slightly shorter trips than principal arterials. Minor arterials within Independence Township include Sashabaw, Clintonville and Clarkston Roads as well as a portion of Waldon and Maybee Roads.

MAJOR COLLECTORS

Major collectors provide access and mobility within residential, commercial, or industrial uses and connect local roads to arterials. Major collectors generally carry more traffic than minor collectors. Major collectors in Independence Township include Holcomb and Oakhill Roads and portions of Waldon and Maybee Roads.

Functional Classification

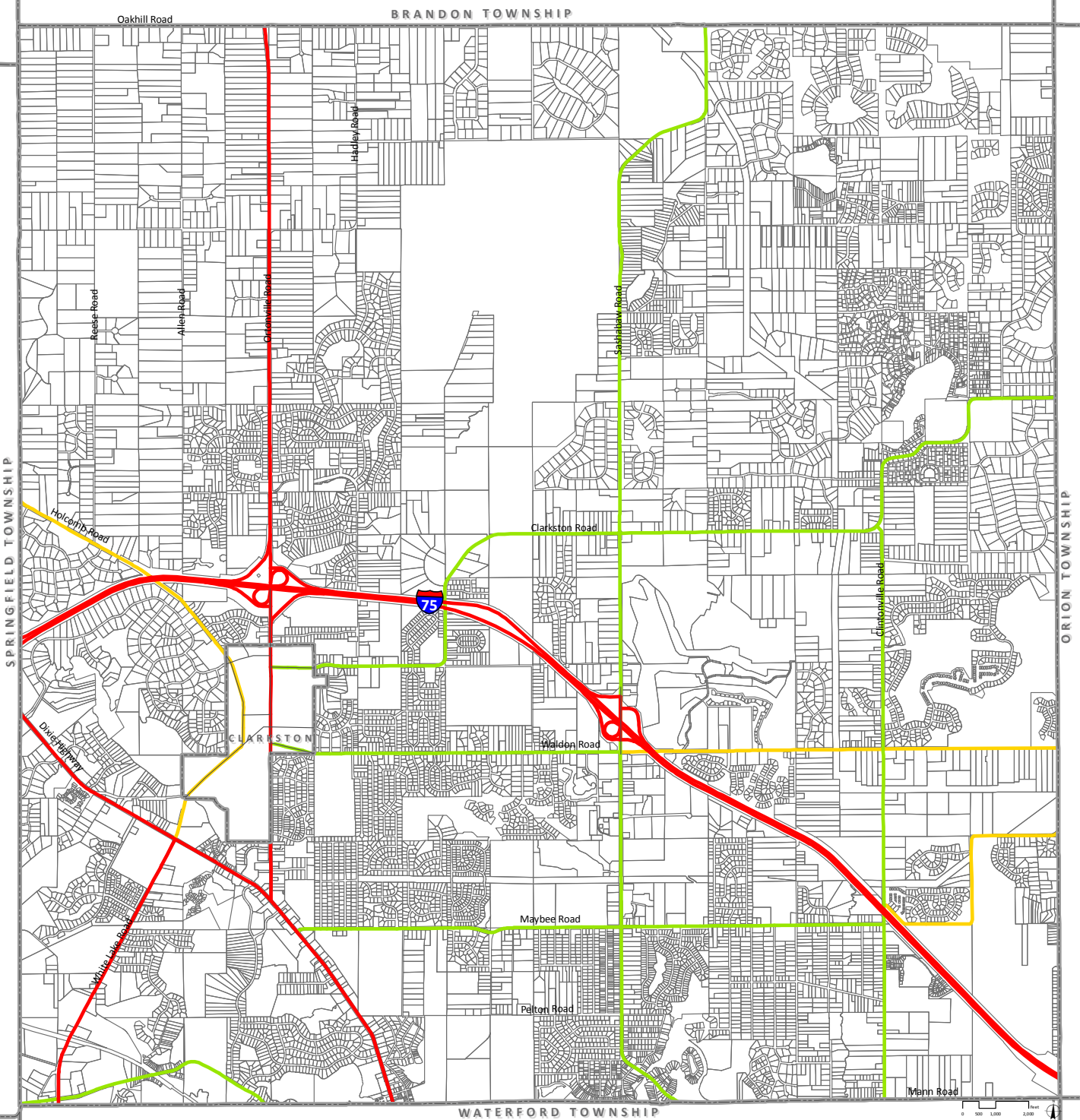
Roadway classifications are often confusing because planning agencies use the classifications for different purposes. Administrative jurisdictions identify roads in terms of governmental responsibility for construction and maintenance. However, it is important to note that roadway classifications are also used to determine eligibility for state funding and federal aid. The National Functional Classification System is used to group streets and highways into classes, or systems, according to the character of traffic service they are intended to provide.

MINOR COLLECTORS

Minor collectors also provide access amongst varying land uses, but generally have less traffic than Major Collectors. There are no roadways classified as minor collectors within Independence Township.

LOCAL ROADS

Local Roads provide access to individual properties and typically have moderate to low speeds. The improvement of local roads typically rates the lowest priority. The remainder of Township roads are classified as local roads, and are often located in subdivisions.



MAP 18: FUNCTIONAL CLASSIFICATIONS

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors

ACCESS MANAGEMENT

Key access management design principles:

Limit direct access to major roadways – Access control is needed to preserve the traffic function of higher volume roads serving regional thru traffic. Local and collector roadways require more frequent and direct property access.

Local signals to favor through movements – Proper placement of signals allows for better coordination of signals, continuous movement of traffic at the desired speed and reduces delays.

Preserve the functional areas of intersections and interchanges – The “functional area” refers to the area where motorists respond to the intersection or interchange, decelerate, accelerate, or complete turns. This area is required for safety and efficiency.

Access points too close to intersections or interchange ramps should be avoided since they can result in increased congestion and safety issues.

Limit the number of conflict points – More collisions and mistakes occur when the driving environment is complex. Simplifying the driving environment by limiting the number of conflict points among vehicles, pedestrians, bicyclists and transit helps improve safety.

Access Management

Access management is the process or development of a program intended to ensure that the major arterials, intersections and freeway systems serving a community or region will operate safely and efficiently while adequately meeting the access needs of the abutting land uses along the roadway. Implementing access management techniques can help increase roadway capacity, manage congestion and reduce crashes. Examples of less obvious benefits, in the case of businesses, include: reduction in maintenance and other costs by utilizing shared driveways or eliminating entrance/exit points and increased road frontage and improved aesthetics as a result of eliminating driveways.

Separate conflict areas – Traffic conflicts can also be reduced by separating conflict areas. Effective ways include minimum distances between intersections and driveways, corner clearance standards that separate driveways from critical approach areas of intersections and encouraging shared driveways. These types of techniques permit less cluttered sign distance for the motorist, thus allowing longer reaction time and improving safety.

Remove turning vehicles from through traffic lanes – Vehicles typically slow prior to turning. When turning vehicles are removed from through traffic lanes, better traffic flow is maintained, roadway capacity is better preserved and safety is improved.

Recent Improvements

Many of the principles of Complete Streets have already been utilized by the Township prior to the legislation being adopted going back to the Vision 2020 Strategic Plan. Those projects that have been accomplished to date are as follows:

1. Reconstruction and expansion of Sashabaw Road to a limited boulevard, 4 lane roadway has increased capacity and helped relieve congestion, and advance the Town Center.
2. The paving and subsequent repaving occurring in 2014 of Holcomb Road to the Springfield Township boundary has accommodated residential growth in neighboring Springfield Township, as well as the Bridge Valley Subdivision.
3. The paving of Waldon Road and Clintonville Road to accommodate residential growth within the Pine Knob area and Oakhurst.
4. The paving of Maybee Road to the Orion Township boundary has allowed the completion of residential development at Morgan Lake and growth of the Mt. Zion Church.
5. Roadway improvements to M-15 from the City of the Village of Clarkston to Deerwood have helped relieve congestion during rush hour times by providing more capacity.
6. The Township has completed safety paths and bridge improvements on M-15 to connect the neighborhoods north of I-75 with downtown Clarkston.
7. A safety path along the north side of I-75 was constructed connecting the neighborhoods north of I-75 with Clarkston Road in order to have better access to Clintonwood Park.
8. Safety paths have been constructed on Waldon Road, Clintonville Road and Maybee Road providing greater recreational access to residents in those areas.



Road Improvement Priorities

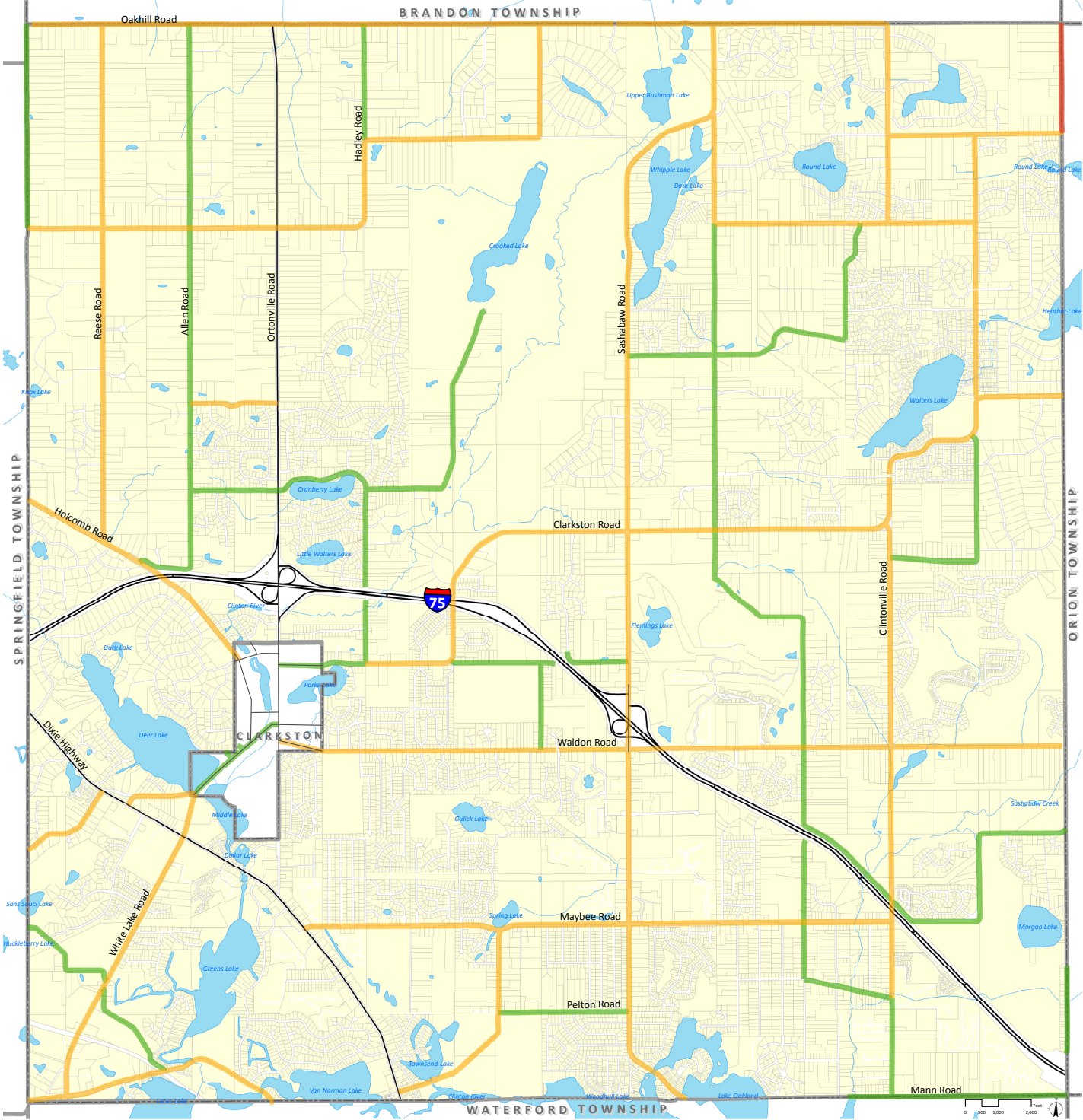
The Township's need for road improvements can be grouped into three major categories:

- **CAPACITY IMPROVEMENTS** - The need for additional capacity arises from existing and new developments that generate increased traffic volume. In the case of Independence Township, roads such as Sashabaw, Dixie Hwy, and M-15 experience a great deal of traffic coming from outside the Township's boundaries.
- **GRAVEL ROAD PAVING AND IMPROVEMENT** - Gravel roads are in continued need of maintenance, which includes, at a minimum, grading and resurfacing with gravel. In some cases, however, the volume of traffic makes it difficult to effectively maintain a gravel surface and paving is needed. An example of this is Oakhill Road from Sashabaw Road to the Independence/Springfield boundary.
- **ROAD SURFACE IMPROVEMENTS** - There are existing paved roads that need periodic maintenance and improvement. The need for reconstruction and resurfacing becomes most evident on heavily travelled roads. Within the Township, the majority of paved roads are noted in fair condition meaning that within a 5-10 year period surface improvements will be needed.



More specifically, the following actions should be pursued:

1. Establish a priority system of road improvements which improve traffic flow, relieve congestion, and facilitate economic development in targeted areas of the Township.
2. Through creation of the Corridor Improvement Authority on Sashabaw Road, the Township has identified future infrastructure needs on the corridor due to the future McLaren Health Complex on Bow Pointe Drive, south of I-75 and continued growth and traffic mitigation for DTE Energy Music Theater. In 2015, the Township, in conjunction with the Michigan Department of Transportation and the Road Commission, will construct interchange improvements at the Sashabaw Road interchange to help relieve congestion and prepare for the construction of the McLaren Hospital Complex in the future. Also included in this project will be the expanded capacity of the Waldon/Sashabaw intersection.



MAP 19: RIGHT OF WAY PLAN

- 150' Right-of-Way
- 120' Right-of-Way
- 86' Right-of-Way

Source: Road Commission for Oakland County

-
3. The paving of Maybee Road to the Orion Township boundary has allowed the completion of residential development at Morgan Lake and growth of the Mt. Zion Church.
 4. With the development of Oakhurst on Clintonville Road and the future Eagle Ridge at Morgan Lake, there will be continued pressure to pursue a limited interchange at Clintonville Road. The Township has identified this interchange as a need since 1999. The Township must continue to work with the Michigan Department of Transportation on developing plans for a future interchange. This will help alleviate traffic from DTE Energy Music Theater as well as decrease the burden on the Sashabaw Road interchange during rush hour.
 5. The widening of Maybee Road between Sashabaw and Clintonville would increase safety and relieve congestion.
 6. With the additional growth in the eastern portion of the Township, paving of Waldon Road to the Independence/Orion boundary will relieve pressure on other east/west arteries such as Clarkston and Maybee Roads.
 7. Oakhill Road is currently being paved in Springfield Township west of Dixie Highway. Independence Township has identified the need for paving of Oakhill from Springfield Township to Sashabaw Road to relieve east-west traffic flow. Neighboring Brandon Township to the north has identified the paving of Oak Hill Road from Ellis Road to M-15 as part of their long range transportation priorities.
 8. The realignment of Big Lake Road with Deerhill will alleviate a long-standing traffic safety and congestion issue on Dixie Highway at the boundary with Springfield Township.
 9. The Township has assisted many neighborhoods with road resurfacing projects through Special Assessment Districts. In 2014, the Township created the Neighborhood Road Improvement Program as a pilot project. It was designed to assist neighborhoods with the cost of repaving existing roads that have deteriorated over the years. The ultimate goal of the program is to improve the overall marketability and overall value of the homes in these communities by way of road improvements. The Township is using ticket revenue from the Oakland County Sheriff Weigh Master as the source of funds.
 10. Continue to evaluate options to increase local funding to accelerate priority road improvement.

Safety Path/Non-Motorized Improvements

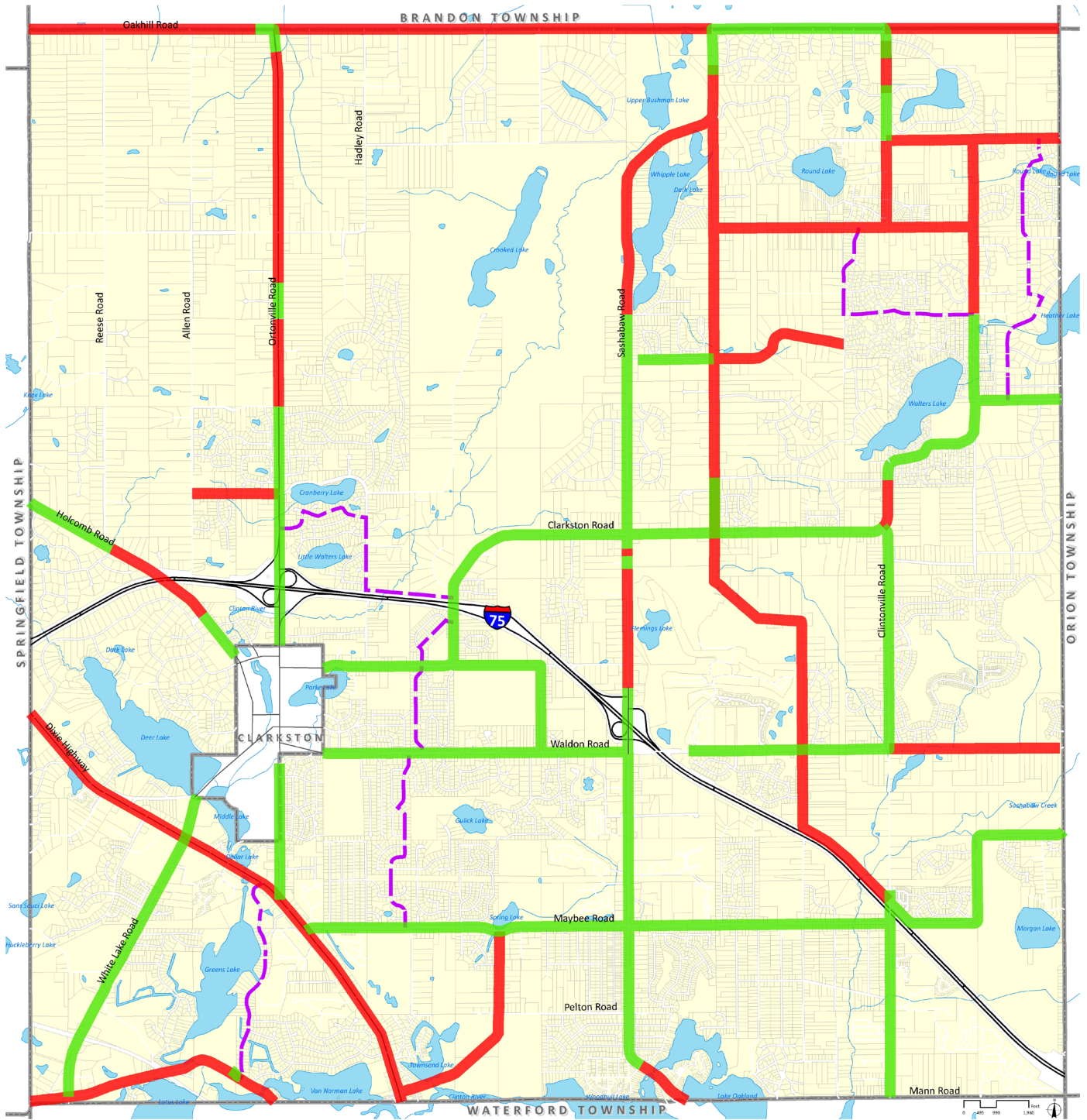
The Township has done an excellent job of building a quality safety path system for over 30 years. Safety paths have been constructed with the use of a voted millage and grants and as a requirement of new development projects. The pathway system has evolved from being a transportation asset to a recreation asset as more people are walking and/or bicycling for exercise. Therefore, there is a significant opportunity to provide a more integrated pedestrian system consisting of safety paths, sidewalks and pathways.

The pedestrian system could be enhanced by providing more identifiable loops which provide connections to key community and commercial facilities. For example, existing paths on Waldon, Sashabaw, Maybee, and M-15 form one continuous loop connecting the Sashabaw Town Center with Clarkston.

In addition, the Township has an opportunity to provide greater benefit by using ITC utility corridors for connecting both within the Township and to the regional trail system being promoted and developed by Oakland County. The Oakland County Regional Trails Plan incorporates the use of both the east-west and north-south ITC corridors into the regional system. Once connected, these pathways will provide access to the Polly Ann and Paint Creek Trails.

Finally, pedestrian crossings are becoming more critical. Attempts at providing safe crossings at Sashabaw and Bow Point have been challenging but are essential. The same holds true for Dixie Highway and almost every other heavily travelled roadway and key intersection. To truly have an enhanced pedestrian system in the Township, both intersection and mid-block crossings need to be evaluated and improved. Improved pavement markings can be done at a relatively low cost. A variety of other measures are also available to improve intersection crossings (see explanation at end of chapter).

Mid-block crossings are more complicated, especially on heavily travelled roadways. However, the absence of a formal mid-block crossing does not mean that pedestrians are not crossing the street. Mid-block crossing solutions generally come at a higher cost than intersection solutions.



MAP 20: PATHWAY PLAN

- Existing Paths
- Future Priority Path Routes
- Designated Bike Routes

More specifically, the following actions should be pursued:

1. Improve non-motorized access and the safety path system linking destination points with residential and commercial areas.
2. Extend a safety path on the west side of Sashabaw Road from Flemings Lake to Clarkston Road.
3. Remove paved shoulders along Dixie Hwy and replace with safety paths.
4. Create improved pedestrian crossings along Sashabaw and Dixie Hwy (see Target Plans).
5. Improve pedestrian connections from safety paths to development sites.
6. Make use of utility corridors to improve connectivity within the Township and to the regional pathway system.
7. Improve pathway identification and direction by naming of loops, “adopt a pathway” program and wayfinding.
8. Initiate study of pedestrian crossings along major corridors and at key intersections.



UTILITY CORRIDORS

- ITC - Clarkston Corridor
- ITC - Brandon - Independence
- ITC - Clarkston to Orion

MAP 21: OAKLAND COUNTY PATHWAY CONCEPT



Township Water & Sewer

The Township's water system dates back to the 1950s and the sewer system dates back to the 1970s. Utilities play a critical role in meeting the basic needs of Township residents. The Vision 2020 Strategic Plan envisioned that appropriate sewer, water and storm water services are maintained as necessary to accommodate existing areas as well as new development. The Township has always carefully evaluated land use decisions based on the effect on public water and sewer systems.

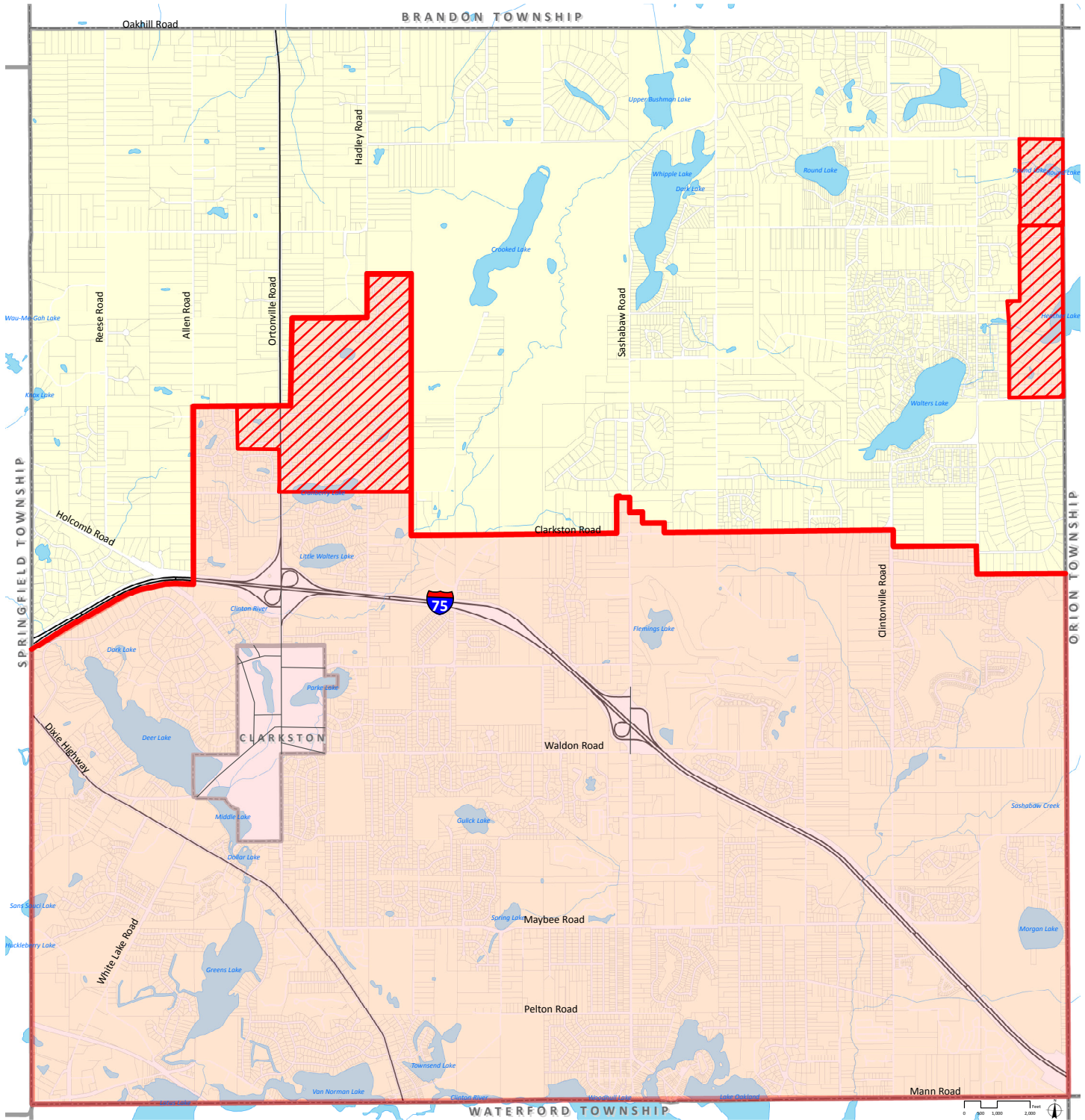
The Township has long had a Sewer and Water Master Plan which identified the boundary for water and sewer service in the Township. The Township adopted a policy in 1995 that establishes a process to allow consideration of district boundary changes. In 2014, the Township Board approved a resolution to create a process for determining whether an individual adjacent property owner to the District has the ability to connect to the Township water and/or sewer system through an application process. So the Township is providing more flexibility to residents in the community when a need to connect to public facilities is demonstrated.

Water System



Independence Township is served by a well water supply system which contains sixteen (16) operational production wells at eleven (11) well sites. There are three (3) above ground water towers and approximately 118 miles of water main. Water mains range from 6-inch to 16-inch pipes of varying types, such as iron, cement and polyethylene. The Township also provides iron and arsenic removal with disinfectant treatment to the water supplied to its customers. There are three (3) separate water service areas within the Water District; the Southern Main Loop System, Deerwood/Deer Valley System and Hillview.

The State of Michigan requires that the Township prepare a Water Reliability Study every five (5) years. The purpose of this study is to determine if the adequacy of the system meets water demands of the service area. The last study was conducted in 2010. In order to complete this Study, the Township must conduct hydraulic modeling in order to determine if current supply and peak demands are met. The report concluded in 2010 that the Township met the demands required by the users of the system. A new Study will be completed in 2015.

For many years, the Department of Public Works (DPW) has been heavily invested in Capital Improvements Projects. The Department has projected improvements to be completed by 2023. The main projects are investments in technology, water modeling, and improvements/replacements of piping in the older, established subdivisions off Waldon Road near the City of Clarkston. The Pine Knob well is currently not



MAP 22: SEWER AND WATER SERVICE

-  Sewer & Water Service District
-  Sewer & Water Service Subdistricts

in operation due to high arsenic concentrations. This plant is identified as a 2015-2016 upgrade on the DPW's Capital Improvement Plan (CIP). To date, no water system expansions are proposed. The only expansions that will occur to the system will be developer driven.

Sewer System

The Township's sewer system is provided through purchased capacity from Oakland County Water Resources Department (WRC). On a quarterly basis, the Township receives reports from WRC on the level of use in relation to the capacity of the system. Since the City of Pontiac was brought into the same system as the Township, WRC has increased the allotted capacity of sewer provided.

The DPW has identified many capital projects that must be done in order to better assess the age and efficiency of the sewer system. A Sewer Asset Management Plan will also help the DPW to better plan for future improvements to the system. Many of the sewer mains must also be analyzed using a camera which will help assist in discovering possible leakages or areas that need maintenance.

As for sewer capacity, the latest information provided by the Water Resources Commission indicates that only forty-three percent (43%) of the purchased capacity of the system is being used by the Township. Therefore, there is ability for the Township to continue to develop in the future. The Department of Public Works has no planned sewer extension projects in the future. The only expansions that would occur would be as a result of private development.



Storm Water Management System

The Township, as part of the Sashabaw Road improvements in 2003-2004, developed a significant storm water management system that tied into the Fountains Golf and Banquet Facility located on Maybee Road. The system gathered storm water from the corridor and through a system of wetlands, water discharges into Spring Lake located on the golf course.

As part of the State of Michigan and United States Government efforts to reduce pollutant discharge into surface waters, the Township must participate in the Municipal Separate Storm Sewer System (MS4) Permit program. An MS4 is a system of drainage (including roads, storm drains, pipes, and ditches, etc.) that is not a combined sewer or part of a sewage treatment plant. During wet weather, pollutants are transported through MS4s to local waterbodies. The Township must provide documentation to the Michigan Department of Environmental Quality (MDEQ) such as what Best Management Practices are used, and the Enforcement Response Procedure, which is the procedure set forth when discharges of pollutants occur. The Township must also describe its Public Participation Program, such as working with local watershed or regional partners.

Among the techniques that can be used to address both the quantity and quality of runoff is Low Impact Development (LID). The primary concept behind LID is to treat storm water as a resource rather than a waste product. LID techniques generally stress infiltration rather than disposal. By allowing storm water to infiltrate on site, there are many environmental benefits and often cost savings.

LOW IMPACT DEVELOPMENT

Low Impact Development is an approach to land development or redevelopment that manages storm water as close to its source as possible. LID developments use concepts such as maintaining existing natural features, minimizing the amount of impervious surface and using storm water as a resource on the site rather than a waste product. On a Township-wide scale, applying LID standards to development projects can help restore a watershed's ecological functions. As the headwaters of the Clinton River Watershed, this is of utmost importance to the Township.

There are many types of LID Best Management Practices such as rain gardens as opposed to conventional detention basins, rooftop gardens to capture rain water instead of conventional flat roofs with rain water runoff, and rain barrels to capture roof drainage to use for watering on the site. By implementing some of these practices, the Township can alleviate pressure on the storm water management systems in the Township and allow for more creative site design when detention basins are required on sites.

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GREEN INFRASTRUCTURE PLAN

Practicing Stewardship for Future Generations

Green Infrastructure

The concept of “green infrastructure” is a contemporary approach to the issue of community open space. It looks at open space as more than a mere amenity, but as a system that is every bit as necessary to the community’s health and success as conventional, or “grey” infrastructure systems. By repositioning the issue of open space in this way, emphasis is placed on creating healthy and functional networks of open space that are based on ecological or other rational and scientific principles. This approach results in a system of open space that exhibits connectivity, rather than isolated parcels and preserves.

Purpose of the Green Infrastructure Plan

Green Infrastructure serves an important environmental and aesthetic purpose. With increased development and urbanization, the Township’s landscape has become progressively more fragmented. Large tracts of open space have been significantly reduced, as have connections between them. The repercussions of fragmentation are two fold: 1) humans do not have the visual access to large tracts of land, often referred to as viewsheds, and 2) size of wildlife habitats has been significantly reduced, resulting in less diversity, an important component of environmental health.

The Green Infrastructure Plan is designed to reduce this visual and habitat fragmentation within the landscape by encouraging connections between distinct tracts of open space so as to form a network. Green Infrastructure as conservation corridors of

open space maximize the amount of diversity in a habitat, and allow for a design whose visual quality is optimized. It is also instrumental in preserving vital environmental resources and protecting groundwater and surface water resources.

The Green Infrastructure Plan presented on the following pages identifies the Township’s important natural and cultural resources. These features include the following:

- Waterway/wetland corridors and other natural resources
- Safety Path System
- Established tree canopied streets
- Parks and other preserved areas
- Cluster developments with private open space

By identifying these features, the plan illustrates the existing and potential networks of open space throughout the Township. In this way the Plan communicates how design, development, land use, and acquisition can be directed in a way which encourages those links.

Oakland County’s Green Infrastructure Visioning Project

Oakland County recently initiated a Green Infrastructure Visioning Project that “focuses on identifying an interconnected network of green space that conserves natural ecosystem values and functions, guides sustainable development, and provides associated economic and quality-of-life benefits to our communities”. As part of this project, communities within Oakland County

(through four community representatives) have been asked to participate in a four phase process that involves mapping green infrastructure, determining best land management practices and community planning tools, establishing community conservation goals and tracking mechanisms and identifying funding for green infrastructure. This county-wide effort will help Independence Township build upon the Green Infrastructure Plan provided in this Master Plan and can help refine priority areas within the Township and identify additional funding opportunities.

Opportunities for Linkage: Central Components of the Green Infrastructure Plan

The Green Infrastructure Plan is composed of several separate components which work together to form the greenway network. Each component requires distinct management techniques in order to optimize their respective contribution to the overall plan.

Below is a more detailed description of each component and the specific management techniques which can be used to build a system of visual and habitat open space.

Water/Wetland Corridors

Central to the Green Infrastructure Plan are the five major waterway/wetland corridors which run through the Township. Large tracts of undeveloped land, relatively intact riparian corridors, and woodlands still exist in many of these areas. Given these characteristics, special consideration for the preservation of open space
LOWER CLINTON/DEER LAKE - The Lower

and natural habitat through fee simple purchase and/or conservation easements are particularly important in the management of the waterway/wetland corridors. Below is a description of each of these major waterway/wetland systems.

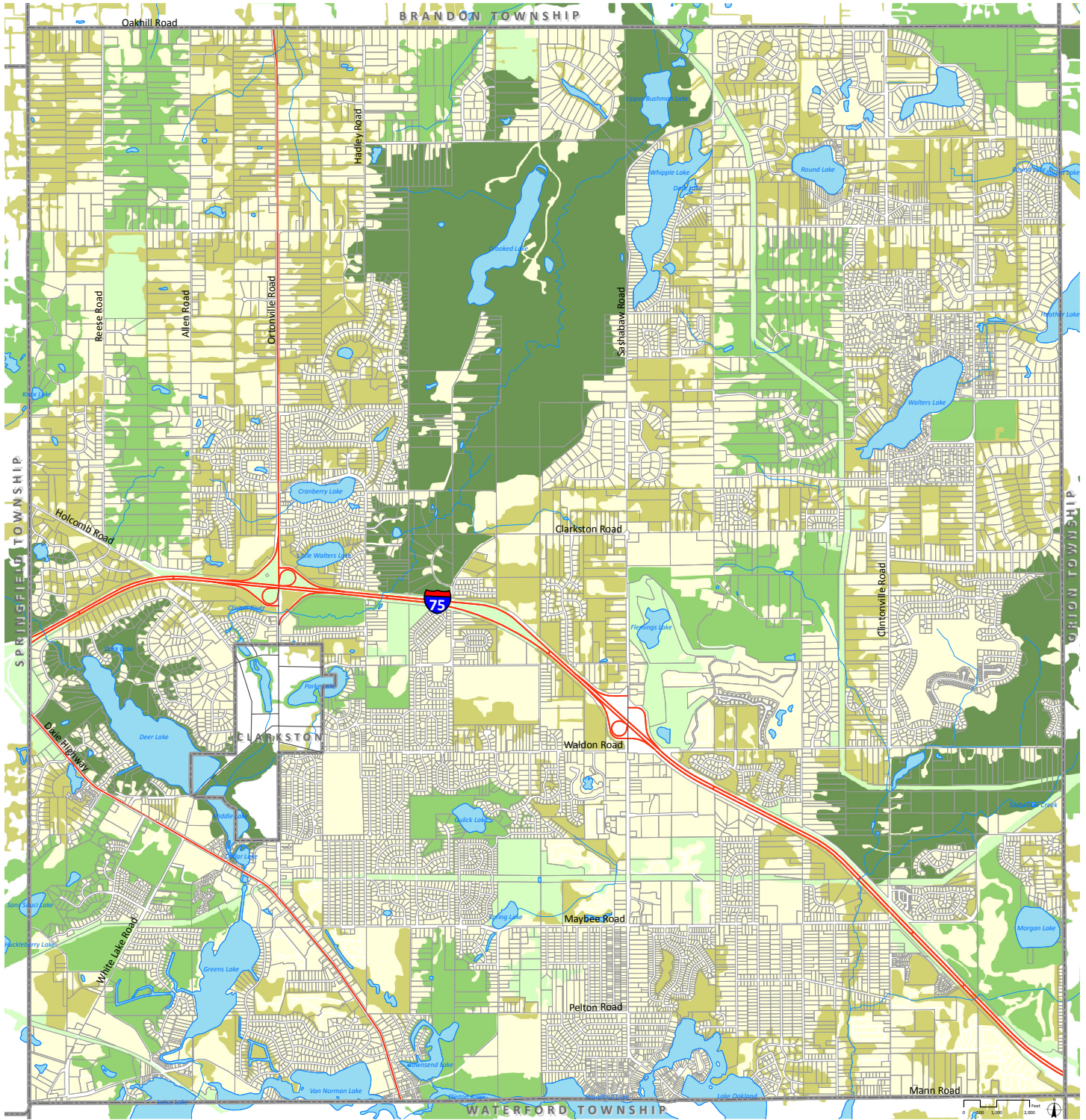
UPPER CLINTON/INDEPENDENCE OAKS - Located in the north central area of the Township, this waterway/wetland corridor contains the headwaters of the Clinton River and connected wetlands and tributaries. Oakland County's Independence Oaks Park is also located in this area preserving large areas of wetlands and natural landscapes. Independence Oaks also provides recreational facilities such as bike paths and nature trails, and is an important facility to be connected for pedestrian usage.

Green infrastructure networks consist of the following components:

HUBS - Hubs anchor the network and provide an origin or destination for wildlife. Hubs range in size from large conservation areas to smaller parks and preserves. Hubs provide habitat for native wildlife and help maintain natural ecological processes.

SITES - Smaller ecological landscape features that can serve as a point of origin or destination or incorporate less extensive ecologically important areas.

LINKS - The connections that hold the network together and enable it to function. Links facilitate movement from one hub to another.



MAP 23: GREEN INFRASTRUCTURE

- Hub
- Site
- Link
- Other

Source: Oakland County Planning & Economic Development, 2009

Clinton/Deer Lake corridor encompasses that portion of the Clinton River which is south of I-75 and Deer Lake, whose water flow is connected to the Clinton River. The area through which this waterway/wetland corridor flows is significantly built-out; however, there are still small areas of open space remaining which offer protection to wildlife resources and recreational opportunities. Restoration of degraded habitat in this area is a central management technique in order to create connections in a fragmented landscape.

SASHABAW CREEK - The Sashabaw Creek waterway/wetland complex is located in the southeastern corner of the Township, and is composed of large tracts of undeveloped land and the significant riparian corridor of the Sashabaw Creek. Acquisition of open space either through direct purchase or conservation easement will protect these large tracts of undeveloped land. New development in this area designed in a cluster layout which minimizes impervious surfaces, protects natural features, and remains out of the floodplain will protect the integrity of the area.

UPPER PAINT CREEK - Located in the northeastern corner of the Township, this wetland complex connects with Round Lake which in turn connects to Paint Creek. Much of this smaller wetland system area is built-out; however, coordination of open space and maintenance of the tree-canopied street with its hedgerow-like wildlife habitat will maintain visual and wildlife connections.

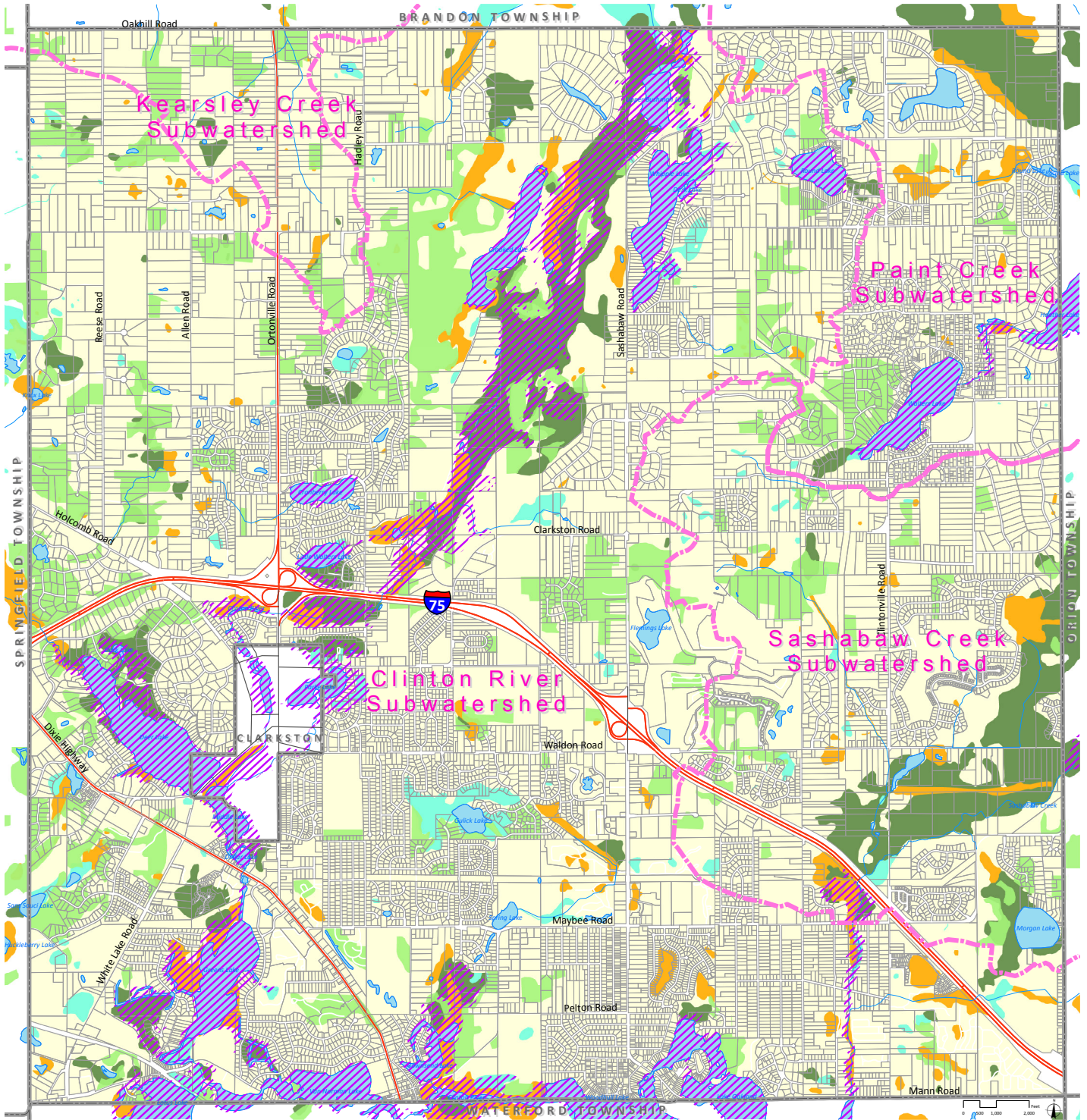
WALDON/SPRING LAKE - While being densely

built-out, the Waldon/Spring Lake waterway/wetland complex has also maintained significant areas of privately and publicly dedicated open space which has been well coordinated. Excellent opportunities for pedestrian linkage exist in this area with the safety path system on the periphery and the ITC Utility Corridor bisecting the area. Additionally, visual coordination of open space in the area has been significant.








Roads with Rural Character

Roads with rural character defined by mature street tree canopies are important aspects of the Plan both for visual and habitat reasons. The buffer at the side of the road provides limited shelter and habitat connection for wildlife. Additionally, these tree-canopied transportation corridors offer visual access to natural, seemingly expansive areas of open space. Roads with rural character are found in the northern portion of the Township as well as in the Pine Knob and Sashabaw Creek areas.

The Oakland County Road Commission has jurisdiction over all local and primary roads within the Township, and almost all tree-canopied streets come under this category. The Road Commission's design policies do not protect these roads with rural character.



MAP 24: NATURAL FEATURES

- | | |
|--|--|
|  Upland Forest |  Floodplain |
|  Forested Wetlands |  Lakes |
|  Scrub-Shrub Wetlands |  Rivers & Streams |
|  Emergent Wetlands | |

Additionally, utility companies have the right to maintain their lines, and again their design policies do not protect street tree-canopies. While the Township has no control over the Road Commission's and utility companies' actions, the following policies can address this issue:

- Encourage private internal roads within new developments which retain a rural character by utilizing a planted buffer immediately adjacent to the paved road.
- Limit the number of individual access drives, the number of frontage splits, and encourage clustered development with shared drives so that the continuity of the tree canopy is maintained.
- Encourage pruning of trees to accommodate utilities in such a way as to maintain tree shape and integrity.

Pedestrian Linkage: Safety Path System and Utility Easements

The Safety Path System is an integral component of the recreational and alternative modes of transportation linkage aspects of the Green Infrastructure Plan. Safety paths serve to connect several residential areas with schools, shopping areas, and other public facilities. The Green Infrastructure Plan illustrates existing and priority safety paths throughout the Township as documented in the Safety Path Master Plan. Additionally, the ITC utility easement, which runs east to west in the southern portion of the Township, and the ITC utility easement, which runs north to south in the eastern end of the Township, are existing, uninterrupted corridors of open space which cross the length

and breadth of the Township and traverse four of the waterway/wetland corridors. By utilizing these corridors, recreational opportunities for Greenways can be expanded, and pedestrian linkage among several of the water/wetland corridors can be established.

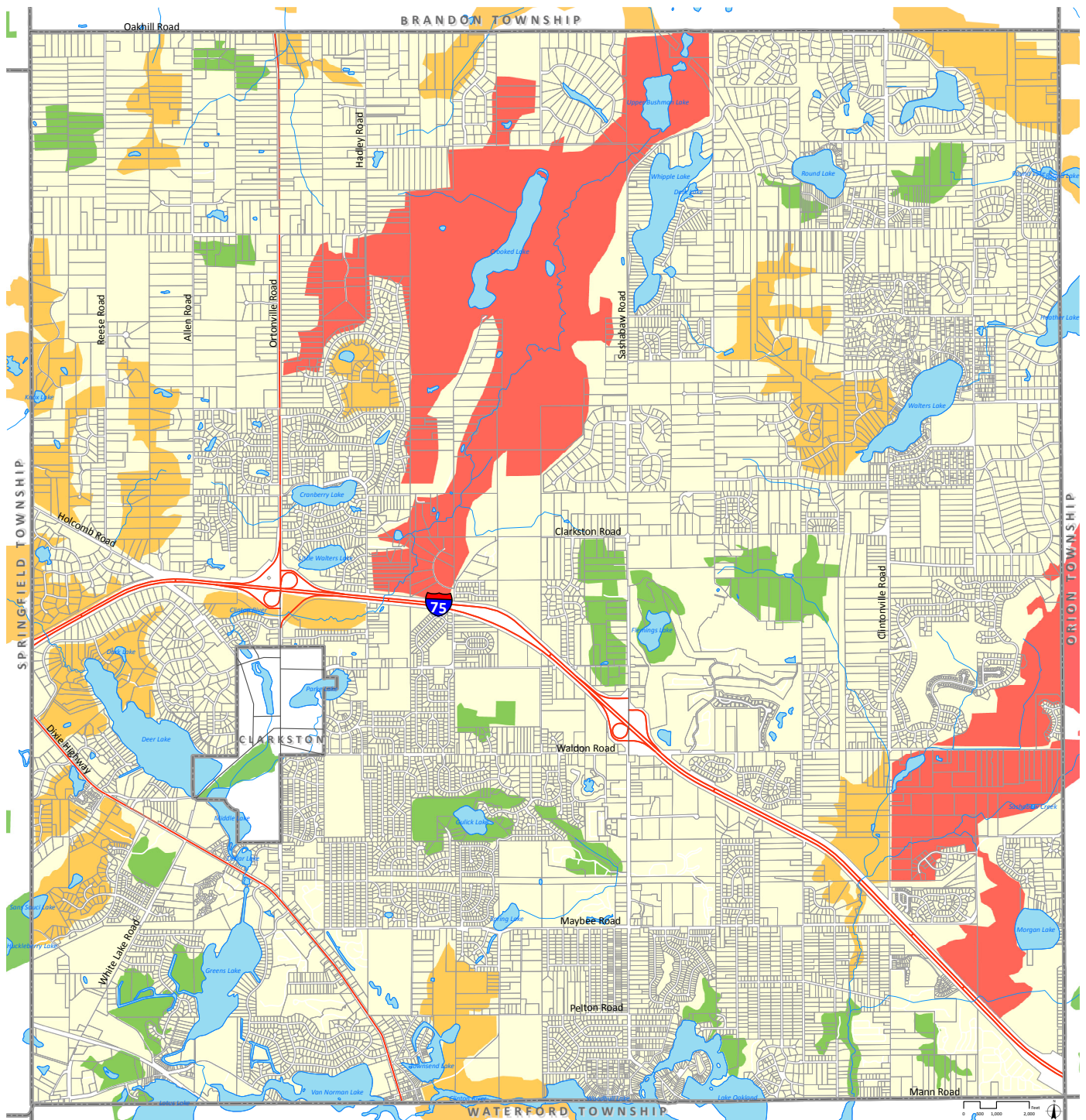
Coordination of Open Space among Developments

New development in the Township deserves special attention in the Green Infrastructure Plan. Independence Township has provisions in its Zoning Ordinance to permit cluster developments. Clustering can be a very useful tool in the preservation of open space at the site specific level; however, a cluster development cannot work on its own. To create a network of open space, coordination must be made among the clustered developments. The Greenways Plan identifies existing cluster developments with preserved open space by identifying the privately dedicated open space. The design of new developments can then be coordinated with the preserved open space design of other developments in order to create larger and better configured areas. Though the same amount of open space may be preserved, developments with coordinated open space design produce a less fragmented landscape, thereby offering a more connected wildlife habitat and providing visual access to larger areas of open space. This aspect of the Green Infrastructure Plan will be especially important in the northwestern and eastern portions of the Township where there are still large areas of undeveloped land and important natural resources.

An example of the benefit of coordination open space occurred when Pine Knob Country Estate and Avington Park were developed. Pine Knob

Country Estates preserved a large area of open space along its north central border and the northern extension of the site. Later, when Avington Park was proposed to be developed, the site's open space design was coordinated with that of Pine Knob Country Estates, thus creating a more rural atmosphere with larger open space views and increased area for wildlife habitat.

The Green Infrastructure Plan can be an important tool for developers, Planning Commissioners, designers, and all others involved with land use planning to guide development in such a way that visual and environmental fragmentation is reduced, and land is used most efficiently and effectively.



MAP 25: MICHIGAN NATURAL FEATURES INVENTORY

- High Priority Areas
- Medium Priority Areas
- Low Priority Areas

Source: MDNR, Michigan Natural Features Inventory

IMPLEMENTATION

Turning the Plan into Action

The Master Plan is essentially a statement of policies, objectives, and goals designed to accommodate future growth and redevelopment. The Plan forms the philosophical basis for the more technical and specific implementation measures. It must be recognized that development and change will occur 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 which will be useful if the plan is to be followed.

A variety of programs or administrative “tools” are available to help the Plan succeed. These include:

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:

1. To promote orderly growth in a manner consistent with land use policies and the Master Plan.
2. To promote high quality design and aesthetic in the Township’s physical environment by providing variation in lot sizes, etc., and appropriate land uses.

3. To accommodate special, complex or unique uses through such mechanisms such as planned unit developments, overlay districts, or special use permits.
4. To guide development away from conflicting land uses (i.e. industrial uses adjacent to residential areas).
5. To preserve and protect existing land uses until such time as they may change in accordance with the Master Plan.
6. To promote the positive redevelopment of underutilized areas of the Township.
7. The Zoning Ordinance and Land Use Plan Map in themselves should not be considered as the major long range planning policy of the Township. Rather, the Master Plan should be regarded as a statement of planning policy, and zoning should be used to assist in implementing that policy.

Zoning Plan

In 2013, the Township adopted a comprehensive revision of the Zoning Ordinance. The Ordinance was reformatted and designed for enhanced online accessibility and usability. A significant number of new graphic illustrations were added to convey key zoning requirements.

Certain areas of the Township have been designated for a land use classification in the Master Plan which may not be consistent with either existing zoning or land uses. These designations were developed in order to guide the desired development of these areas. Certain areas may benefit from a Township-initiated rezoning in order to provide more consistency. Additionally, other areas may continue with an existing zoning designation which, although it

may currently conflict with the Master Plan land use designation, may be rezoned in the future once the existing use terminates or conditions change. It is at this future time that the land use recommendations will provide guidance as to the proper zoning. The Township Planning Commission should further study and make decisions in regards to which areas warrant Township initiated rezoning.

The following table indicates the comparable Zoning District for each Master Plan designation:

FIGURE 11: ZONING FOR RESIDENTIAL CATEGORIES

<i>Master Plan Designation</i>	<i>Comparable Zoning Category</i>
Rural Residential	R-1R Rural Residential
Estate Residential	R-1C Suburban Farm Residential
Suburban Residential	R-1B Suburban Residential
Single Family Residential	R-1A Single Family Residential
Traditional Lakefront	R-1A Single Family Residential
Single Family Attached / Detached	R-4 Single Family Attached Residential R-2 Multiple Family
Multiple Family Residential	R-2 Multiple Family
Mobile Home Park	RMT Mobile Home Park PUD Planned Unit Development
Senior Housing	R-3 Elderly Housing, R-4 Single Family Attached Residential

FIGURE 12: ZONING FOR NON-RESIDENTIAL AND MIXED USE CATEGORIES

<i>Master Plan Designation</i>	<i>Comparable Zoning Category</i>
Office Service	OS-1 Office Service One OS-2 Office Service Two
Target Area Mixed Use Designations	Planned Unit Development Dixie Highway Overlay Sashabaw Overlay
Local Commercial	C-1 Local Business
General Commercial	C-1 Local Business C-3 Highway Commercial C-4 General Business
Commercial/Office	C-1 Local Business
Industrial Service	IOP Industrial Office Park R-O Research Office
General Industrial	ML Limited Industrial MH Heavy Industrial
Recreational/Conservation	REC Recreation
Public, Semi-Public	Most districts
Medical Service and Technology	R-O Research Office OS-2 Office Service Two

Capital Improvements Program

Capital improvements programs consider the funding and timing of all municipally related capital needs including such items as roadways, utilities, parks and recreation, Township Hall expansions/development, etc. The Township Board has adopted a capital improvement program, which outlines prioritization of capital projects for the future. Yearly review of a capital improvement program will provide the opportunity to keep the plan up to date and add new projects. The Land Use Plan and Strategic Plan should be used as key reference documents in the preparation of the capital improvement program plan. This ensures that public dollars are spent where the most benefit will be received.

Plan Education

Citizen involvement and support will be necessary as the Plan is implemented. Local officials should constantly strive to develop procedures which make citizens more aware of the planning process and the day-to-day decision making which affects implementation of the Plan. Dedicated information on the Township webpage on planning issues in the Township is a way of providing citizens quick access to information. 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 Michigan Planning Act requires the Planning Commission to review and, if needed, amend the Master Plan or adopt a new plan at least every five years. However, the Township Planning Commission should review the plan at least on an annual basis to determine if changes are needed. The Master Plan should also be coordinated with the Township's Parks, Recreation, and Open Space Master Plan, Capital Improvement Plan, Safety Path Plan, and other special purpose plans.

APPENDIX

Glossary

- *A* -

ACCESS. A way of approaching or entering a property. In zoning and subdivision regulations, lots usually are required to have direct access to a public street or to a private street meeting public standards. This is done not only to permit entry of residents and other uses but also to permit emergency vehicles to reach buildings.

AESTHETICS. A subjective assessment of beauty.

AESTHETIC RESOURCE. Natural resources such as open vistas, woods and scenic view sheds, whose appearance is an important ingredient in the quality of life in a community.

AMENITIES. Anything that makes life more attractive. Outdoor amenities include open spaces, green belts, sites for recreation and play, areas of scenic beauty, etc.

AQUIFER. A distinct band or layer of gravel, sand, or porous, fractured, or cavernous and vesicular rock capable of holding and/or conducting water. When fully charged, an aquifer is saturated with water.

AQUIFER RECHARGE. The addition of water to an aquifer that occurs naturally from infiltration of rainfall and from water flowing over earth materials that allow water to infiltrate below the land surface.

- *B* -

BASE MAP. A map showing the essential natural or man-determined features of an area (e.g., lot lines). It is used as the starting point for many planning operations.

BIODIVERSITY. The variety of life on earth and the ecosystems they form.

BLIGHT. Physical and economic conditions within an area that cause a reduction of or lack of proper utilization of that area. A blighted area is one that has deteriorated or has been arrested in its development by physical, economic, or social forces.

BROWNFIELD. Abandoned industrial site likely to have ground pollution that is a deterrent to redevelopment.

BUFFER ZONE. A strip of land designated to protect one type of land use from another with which it is incompatible. Where a commercial district abuts a residential district, for example, additional landscaping, use, yard, or height restrictions may be imposed to protect residential properties. The term may also be used to describe any zone that separates two unlike zones such as a multi-family housing zone between single-family housing and commercial uses.

- *C* -

CARRYING CAPACITY. The estimated maximum number of persons or dwelling units that can be served by existing and planned infrastructure systems and natural capabilities of the land.

CARRYING CAPACITY (transportation). The number of vehicles that can be accommodated on a roadway (usually a highway, turnpike or freeway).

CENSUS. An official count each ten (10) years of the number of people in the nation, identifying and recording their conditions, their resources, and other data.

CIRCULATION SYSTEM. An organized system of transportation facilities to provide for the safe and efficient movement of goods and people.

CITIZEN PARTICIPATION. The formal and informal means by which persons not in official positions can take part in or influence governmental decision-making.

CLUSTERED OR OPEN SPACE DEVELOPMENT. Clustered development provides for closer grouping of homes through reduction of lot size on the most buildable portions of a site while, at the same time, preserving a large portion of the parcel (including environmentally sensitive areas) as undeveloped open space.

COMMUNITY FACILITIES. Public or privately owned facilities used by the public, such as streets, schools, libraries, parks, and playgrounds; also facilities owned and operated by non-profit private agencies such as churches, settlement houses, and neighborhood associations.

COMMUNITY WATER AND SEWER SYSTEM. Water treatment and distribution systems and sewer collection, treatment, and disposal systems that serve multiple residential, commercial, industrial, and/or other uses, are usually operated by public agencies, where property owners served usually pay fees for the service.

COMPATIBILITY. Compatibility refers to the characteristics of different uses or activities or design which allow them to be located near or adjacent to each other in harmony. Some elements affecting compatibility including height, scale, mass, and bulk of structures. Other characteristics include pedestrian or vehicular traffic, and parking impacts. Other important characteristics that affect compatibility are landscaping and architecture. "Compatibility" does not mean "the same as". Rather, compatibility refers to development proposals being sensitive to, and maintaining the character of, existing development.

CONDOMINIUM. The legal arrangement in which a dwelling unit in an apartment building, residential development, commercial or industrial space is individually owned but in which the common areas are owned, controlled and maintained through an organization consisting of all the individual owners.

CONSERVATION. The management or control of human use of resources and activities on the planet, in an attempt to restore, enhance, protect, and sustain the quality and quantity of a desired mix of species, and ecosystem conditions and processes for present and future generations.

CONSERVATION EASEMENT. A conservation easement is a voluntary agreement between a private landowner and a municipal agency or qualified not-for-profit corporation to restrict the development, management, or use of the land. That agency holds the interest and is empowered to enforce its restrictions against the current landowner and all subsequent owners of the land.

CONTOUR LINES. Lines on a topographical map that indicate slope.

CUL-DE-SAC. A street that terminates in a permanent turn around and which by design is not intended to continue beyond its terminal point.

CURVILINEAR STREET PATTERN. A street system that discourages through traffic in a subdivision by the use of a number of curved streets.

- D -

DEDICATION. A turning over of private land for a public use by a property owner, and its acceptance for such use by the governmental agency in charge of the public function for which it will be used. Dedications for streets, parks, school sites, or other public uses are often made conditions for the approval of a development by a planning commission.

DEMOGRAPHICS. The descriptive statistics of a population (income, age, sex, etc.).

DENSITY. The average number of families, persons, or housing units per unit of land; usually density is expressed “per acre”. Gross density includes the area necessary for streets, and other supportive facilities. Net density typically does not include land area for streets and facilities.

DENSITY, CONTROL OF. A limitation on the occupancy of land. Density can be controlled through zoning by one or a combination of the following methods: use restrictions, e.g., single or multiple family dwellings; minimum lot size requirements; floor area ratios; land use intensity zoning; setback and yard requirements; minimum house-size requirements; establishing ratios between the number and types of housing units and land area; direct limitations on units per acre; requirements for lot area per dwelling unit; and other means. The major distinction between different residential districts typically is in their allowable density.

DENSITY TRANSFER. Permitting unused allowable densities in one area to be used in another area. Where density transfer is permitted, the average density over an area would remain constant, but would allow internal variations. Within a single development, the result would normally be a clustering of buildings on smaller lots while retaining some land in open space.

DEVELOPMENT. The physical alteration of land by humans. Development includes: subdivision of land; construction or alteration of structures, roads, utilities, and other facilities; installation of septic systems; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetative cover (with the exception of agricultural activities).

DISTRICT. A district is a portion of a community identified on the locality’s zoning map within which one (1) or more principal land uses are permitted along with their accessory uses and any special land uses permitted by the zoning provisions for the district.

DRAINAGE. (1) Surface water runoff; (2) The removal of surface water or groundwater from land by drains, grading or other means which include runoff controls to minimize erosion and sedimentation during the construction or development, the means for preserving the water supply and the prevention or alleviation of flooding.

DRAINAGE SYSTEM. Pipes, swales, natural features and man-made improvements designed to carry drainage.

DRAINAGE WAY. Any natural or artificial watercourse, trench, ditch, swale or similar depression into which surface water flows.

DUPLEX. A building designed or used exclusively for the occupancy of two (2) families living independently of each other and having separate kitchen and toilet facilities for each family.

DWELLING UNIT. A house's room or apartment used as living quarters for a family or individual. A dwelling unit is a unit of housing with full housekeeping facilities for a family.

DWELLING UNIT (multiple). A building composed of three (3) or more dwelling units, usually having common access, service systems, and use of land.

- E -

EASEMENT. A right given by the owner of land to another party for specific limited use of that land. For example, a property owner may give or sell an easement on his property to allow utility facilities like power lines or pipelines. An easement may be acquired by government through (requiring) dedication (as a condition of approval) when the purchase of an entire interest in the property may be too expensive or unnecessary.

ECOSYSTEM. A community of plants and animals interacting with each other and their physical/chemical environment.

ENABLING ACT. An enabling act is legislation passed by the state legislature authorizing cities, towns, and villages to carry out functions in the public interest. The power to adopt comprehensive plans, zoning ordinances, and land use regulations is delegated to towns, villages, and cities.

ENVIRONMENT. The environment is defined broadly under the State Environmental Quality Review Act to include the physical conditions that will be affected by a proposed action, including land, air, water, minerals, flora, fauna, noise, resources of agricultural, archeological, historic or aesthetic significance, existing patterns of population concentration, distribution, or growth, existing community or neighborhood character, and human health.

- F -

FACADE. The face or elevation of a building.

FACADE EASEMENT. An acquired right of use interest, or privilege a building(s) fronts owned by another; usually guards against incompatible alteration or destruction.

FLOODPLAIN. A floodplain is the area on the sides of a stream, river, or watercourse that is subject to periodic flooding. The extent of the floodplain is dependent on soil type, topography, and water flow characteristics.

FOREST. In the narrow technical sense, a vegetation community dominated by trees and other woody shrubs, growing close enough together that the tree tops touch or overlap, creating various degrees of shade on the forest floor.

FORESTED UPLAND. Areas consisting of mesic forests dominated by beech and sugar maples as well as dry mesic oak hardwood forests on dryer sandy loams.

FORESTED WETLANDS. Areas consisting of relict conifer swamps, and/or southern floodplain forests.

FRONTAGE. Zoning laws typically require that developable lots front on a dedicated street, a private road of record, or a newly approved private road.

- G -

GIS. Geographic Information System – Computer mapping systems that produces multiple “layers” of graphic information about a community or region.

GOALS. Goals are broad statements of ideal future conditions that are desired by the community and contained in the comprehensive plan. For example, a community may have a goal of “increasing the supply of affordable housing.”

GPS. “Global Positioning System”. A term which encompasses the entire field of computerized mapping. The system consists of a constellation of twenty-four (24) satellites orbiting the earth at a very high altitude. GPS satellites transmit signals that allow one (1) to determine, with great accuracy, the locations of GPS receivers. The receivers can be fixed on the Earth, in moving vehicles, aircraft, or in low-Earth orbiting satellites. GPS is used in air, land and sea navigation, mapping, surveying and other applications where precise positioning is necessary.

GRADE. The rate of incline or decline in the land’s surface. (Expressed as a percent).

GRADE CROSSING. A crossing at grade, the point of crossing of a railroad with another railroad or highway at a given grade level.

GRADE SEPARATION. The separation at different levels of intersecting highways or railroads, by bridge, tunnel, or under-pass, so as to permit the roads to cross without obstructing free traffic movement.

GRIDIRON STREET PATTERN. A pattern of streets that from the air looks like a gridiron -- that is, based on right-angle intersections and parallel sets of roadways.

GROUNDWATER. The supply of freshwater under the surface in an aquifer or soil that forms the natural reservoir for potable water.

GROWTH MANAGEMENT. The use by a community of a wide range of techniques in combination to permit it to determine its own amount, type, and rate of growth and to channel it into designated areas. Comprehensive plans often form the backbone of the system; devices used to execute growth management policy may include zoning, emphasizing flexibility, capital improvements, programming, adequate public facilities ordinances, urban limit lines, population caps or ceilings, moratoriums, transfer of development rights, and many others. Conceptually, growth management differs from conventional approaches in that it does not accept likely population growth and its rate as inevitable; these are open to question and are subject to determination by public policy and action.

- H -

HABITAT FRAGMENTATION. The alteration or breaking up of habitat into discrete or tenuously connected islands as a result of modification or conversion of the landscape by management activities.

HIGHEST AND BEST USE. The most advantageous and profitable use to which the property is adaptable, considering the present and future business conditions and the uses authorized by applicable zoning and planning.

- I -

HISTORIC DISTRICT. An area or group of areas designated by a local unit as having aesthetic, architectural, historical, cultural or archeological significance that is worthy of protection and enhancement. Alterations and improvements of historic structures must be made with minimum interference with the historic features of the building. The local legislature establishes standards that a historic preservation commission or other designated review body, uses to permit, condition, or deny projects proposed in historic districts.

HISTORIC LANDMARK. An individual site or structure that has met local, state and national criteria as having aesthetic, architectural, historic, cultural or archaeological significance and worthy of preservation.

HISTORIC PRESERVATION. The designation of historic districts allows for local control over development within these areas. For example, regulations may control where and in what style a new building may be constructed. Also includes maintenance or restoration of structures and districts of historic significance.

HISTORIC REGISTRATION. An individual site or structure, or district that has met National Register of Historic Places criteria and is deemed worthy of preservation by its association with an event, person, architectural value or its potential to yield information important to history or prehistory.

HOLDING CAPACITY. The maximum number of people or dwelling units that a planning area would hold if fully developed.

HYDROLOGY. The science of water, its properties, and movement (cycling) over and under land surfaces.

IMPACT FEES. This is a fee or tax imposed on developers to pay for the costs to the community of providing services to a new development. It is a means of providing a fund for financing new improvements without resorting to deficit financing.

IMPLEMENTATION PROGRAM. An action, procedure, program, or technique that carries out general plan policy. Implementation programs also specify primary responsibility for carrying out the action, a time frame for its accomplishment, and funding source(s), if applicable.

IMPROVED LAND. Raw land that has been provided with sidewalks, water, sewer, and other basic facilities in preparation for residential or industrial development.

INDUSTRIAL PARK. An area zoned and planned for varied industrial uses and developed and managed as a unit, usually with provision for common services for the users, and common requirements for landscaping and design.

INFRASTRUCTURE. The basic installations and facilities, such as water and sewer lines, roads, utilities, transportation and, communication systems, etc. which are necessary.

INTENSITY. The degree to which land is used. While frequently used synonymously with density, intensity has a somewhat broader, though less clear meaning, referring to levels of concentration or activity in uses such as residential, commercial, industrial, recreation, or parking.

INTERCHANGE. A junction of two (2) or more highways by a system of separate levels that permit traffic to pass from one (1) to another without crossing of traffic streams.

INTER GOVERNMENTAL AGREEMENTS. Inter-governmental agreements are compacts among municipalities to perform functions together that they are authorized to perform independently.

INTERMITTENT WETLAND. An herb or herb-shrub wetland along lakeshores or in depressions, experiencing fluctuating water levels seasonally and from year to year.

- L -

LAND ASSEMBLY. The process of acquiring various parcels of real estate to create a contiguous parcel of sufficient size to accommodate a real estate development project.

LAND BANK. A stockpile of publicly owned land. The result of a program under which a government buys land and holds it for future use as needed.

LAND TRUST. Non-profit group that obtains land or development rights for preservation as open space, parks, farms, and other uses.

LAND USE CONTROLS. A term generally referring to the use of police power techniques to control and guide land use and development. In actual use, the term normally refers to zoning, subdivision regulations, and official maps.

LAND DEVELOPMENT. The improvement of land with utilities and services, making the land more suitable for resale and developable plots for housing or other purposes.

LAND FRAGMENTATION. The division of landholdings into parcels too small for economical or efficient use.

LAND USE. A description of how land is occupied or utilized.

LAND USE PLAN. A basic element of the Master Plan, it designates the future use or reuse of the land within the community, and the policies and reasoning used in arriving at the decisions in the plan. The land use plan serves as a guide to official decisions in regard to the proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes or combination of purposes.

LAND USE REGULATION. Local land use regulations are laws enacted by the local legislature for the regulation of any aspect of land use and community resource protection, including zoning, subdivision, special use permit or site plan regulation, or any other regulation that prescribes the appropriate use of property or the scale, location, or intensity of development.

LAND-USE SURVEY. A survey of the uses to which land is put in a particular area, usually summarized both in map form and statistically, that shows developed and vacant land, streets, parkland, public buildings, etc.

LAND TRUST. A land trust is a not-for-profit organization, private in nature, organized to preserve and protect the natural and man-made environment by, among other techniques, creating conservation easements that restrict the use of real property.

LANDSCAPING. Changing, rearranging, or adding to the original vegetation or scenery of a piece of land to produce an aesthetic effect appropriate for the use to which the land is put. It may include reshaping the land by moving the earth, as well as preserving the original vegetation or adding vegetation. Landscaping requirements are included in ordinances for a number of reasons. They preserve natural features of a site for ecological and environmental reasons. They make land more attractive for residential and other uses. They can screen from view unattractive uses and they can act as buffers, visually separating different types of uses and screen undesirable features.

LEAPFROG DEVELOPMENT. The development of relatively cheap land on the urban fringe by jumping over the more expensive land located immediately adjacent to existing development. The result may be serious problems for both the new residents and the public. Not only may there be inadequate access to transportation and utilities, but also other public services, shopping, and other support services may be lacking, and they may cost much more to provide.

LOT. The basic development unit, an area with fixed boundaries, used or intended to be used by one (1) building and its accessory building(s) and not divided by any public highway or alley. A “zoning lot” must meet the requirements of the zoning district in which it is located and must front on a public street or an approved private street.

LOT AREA. Lot area is the total square footage of horizontal area included within the property lines. Zoning ordinances typically set a minimum required lot area for building in each zoning district.

- M -

MARKET VALUE. A hypothetical figure, used in appraisal, condemnation proceedings, and assessment for taxes, which a willing buyer presumably would pay to a willing seller in a free market.

MASTER PLAN. A document or series of documents prepared by a planning commission or department setting forth policies for the future of a community. It is normally the result of considerable citizen participation, study and analysis of existing physical, economic, and social conditions, and a projection of future conditions. It serves as a guide for many public decisions, especially land-use changes and preparation of capital improvements programs, and the enactment of zoning and related growth management legislation.

MEDIAN ISLAND. A strip running down the center of an arterial street which consists of a raised curb and may also include landscaping.

MIXED USE ZONING. Zoning which permits a combination of uses within a single development.

MORATORIUM. In planning, a freeze by a local government on all new development pending the completion and adoption of certain planning and/or zoning ordinance requirements, e.g., general plan, zoning ordinance amendment, sewer line installations, or growth management programs. They have also been voted into being by residents of communities whose schools and other public facilities have been overwhelmed by rapid growth.

MULTI-FAMILY HOUSING. Buildings with three (3) or more dwelling units are permitted to be constructed, such as garden apartments or multiple story apartment buildings.

- N -

NATURAL AREA. A tract of land or water which has the following characteristics: has retained or reestablished its natural character, or has unusual flora and fauna or biotic, geologic, scenic, or other similar features of educational or scientific value, but it need not be undisturbed; has been identified and verified through research and study by qualified observers; may be coextensive with or part of a wilderness area or wild area; does not have any minimum or maximum area requirement.

NEIGHBORHOOD. Residential area within a governmental unit that has some distinct identity to its inhabitants and observers; may be designated by law for citizen participation purposes.

NEIGHBORHOOD DEVELOPMENT. Development of an area of a community with characteristics that distinguish it from other community areas and which may include distinct ethnic or economic characteristics, schools or social clubs, or boundaries defined by physical barriers such as major highways and railroads or natural features such as rivers.

NEW URBANISM (or Traditional Neighborhood Development). Design philosophy intended to create a strong sense of community by incorporating features of traditional small towns.

- O -

OBJECTIVES. Objectives are statements of attainable, quantifiable, intermediate-term achievements that help accomplish goals contained in the comprehensive plan. For example, an objective would be to achieve “the construction of fifty (50) units of affordable housing annually until the year

ONE HUNDRED (100) YEAR FLOODPLAIN. Area that has a one (1%) percent chance of being flooded in any given year. Over the long term, the area will be covered with floodwaters on an average of once every one hundred (100) years.

OPEN MEETINGS ACT. The Open Meetings Act is a state statute that requires local legislative, administrative, and quasi-judicial bodies to open all of their meetings to members of the public. This law applies to all meetings where a majority of the commission, council or board members are present, except those meetings that are held as executive sessions.

OPEN SPACE. That part of the community which has not been developed and which is desirable for preservation in its natural state for ecological, historical, or recreational purposes, or in its cultivated state to preserve agricultural, forest, or urban greenbelt areas.

ORDINANCE. An ordinance is an act of a local legislature taken pursuant to authority specifically delegated to local governments by the state legislature.

OVERLAY ZONES. A set of zoning requirements in addition to those of the underlying district. Developments within the overlay zone must conform to the requirements of both zones or the more restrictive of the two (2). It usually is employed to deal with special physical characteristics such as flood plains or historical areas.

- P -

PARCEL. A lot, or contiguous group of lots in single ownership or under single control, and usually considered a unit for purposes of development.

PERFORMANCE STANDARDS. A minimum requirement or maximum allowable limit on the effects or characteristics of a use, usually written in the form of regulatory language. A building code, for example, might specify a performance standard referring to the fire resistance of a wall, rather than specifying its construction materials. Performance standards in zoning might describe allowable uses with respect to smoke, odor, noise, heat, vibration, glare, traffic generation, visual impact, and so on, instead of the more traditional classifications of “light” or “heavy” lists of uses. It is a more precise way of defining compatibility and at the same time is intended to expand developer’s options. The performance standard approach is based on the technical ability to identify activities numerically (e.g., how much traffic) and to measure them to see if they meet ordinance requirements.

PERMITTED USE. A use by right that is specifically authorized in a particular zoning district. It is contrasted with conditional uses that are authorized only if certain requirements are met and after review and approval by the decision-making entity. Any use authorized in a particular zoning district, whether a permitted use, an as of right or conditional use, or special permit or special exception use.

PLANNED UNIT DEVELOPMENT (PUD). A form of development usually characterized by a unified site design for a number of housing units, clustering buildings and providing common open space, density increases, and a mix of building types and land uses. It permits the planning of a project and the calculation of densities over the entire development, rather than on an individual lot-by-lot basis. It also refers to a process, mainly revolving around site-plan review, in which public officials have considerable involvement in determining the nature of the development. It includes aspects of both subdivision and zoning regulation and usually is administered either through a special permit or a rezoning process. While PUD’s have most commonly been used for housing developments, they are also frequently applied to other forms of development such as shopping centers, industrial and office parks, and to mixed-use developments which may be any combination, depending on local ordinance. Planned unit development allows the unified, and hence potentially more desirable and attractive, development of an area, based on a comprehensive site plan. PUD can have a number of advantages over conventional lot-by-lot development including: mixing building types and uses to create more heterogeneous and “alive” communities; combining often unusable yard space on individual lots into larger common open spaces; offering greater opportunities for incentives to building lower-cost housing; lower street and utility costs resulting from reduced frontage; and the possibility of increasing the density of a development while keeping desired amenities.

PLANNING COMMISSION. The administrative body, appointed by the legislative body, charged with the administration of the Master Plan, the Zoning Map and Ordinance, and review of other related plan applications. Planning Commission consists of seven (7) members. Planning Commission may perform delegated reviewing board functions and a variety of advisory functions, including the preparation of the comprehensive plan, drafting zoning provisions, or suggesting site plan and subdivision regulations, in addition to other functions. One (1) important purpose of the Planning Commission's advisory role is to provide an impartial and professional perspective on land use issues based on the long range needs of the community contained in the comprehensive plan or other local policy documents. Commissioners are composed of non-specialist citizens and/or elected officials who study the planning choices to be made by their local government and advise lawmakers on them.

PLAT. A map, generally of a subdivision, showing the location, boundaries, and ownership of individual properties. A plat (sometimes called tracts) may simply be the device for officially recording ownership changes or lot divisions; in communities that have subdivision regulations, submission and approval of a plat is a prerequisite to building. Approval of a preliminary plat, usually by the Planning Commission, involves a determination that the subdivision conforms to the regulations and to the lot-size requirements of the zoning ordinance. To plat means to subdivide; where subdivision regulations are in effect this in turn may mean to obtain the necessary approvals without necessarily intending to improve or build, or, where they are not, to record. Property

is frequently platted as a speculative venture; platted, but undeveloped property, may require public purchase or other action to bring it up to current regulatory standards.

PLOT. An indefinite term usually referring to a piece of usable property, often used synonymously with parcel or site, and, mistakenly, to mean plat.

POINT AND NON POINT POLLUTANTS. Point source pollutants are those coming out of a pipe into a body of water. Non-point sources are those relating to overland run-off of rainwater which enters the body of water at multiple, natural drainage points. Thus, these include both urban and agricultural run-off.

POLICE POWER. The authority of government to exercise controls to protect the public's health, safety, morals, and general welfare. As distinct from eminent domain powers, in which government takes property, no compensation need be paid for the imposition of police power controls. The degree, to which such exercise becomes, in effect, a taking of property, is a question of long standing and has arisen in recent years in connection with the restrictive growth management controls and the requirement for development fees and exactions being imposed by many communities.

POLICY. A statement of a public body that forms the basis for enacting legislation or making decisions. The policies under which zoning ordinances are enacted and administered should be found in a community's general plan.

POPULATION PROJECTIONS. Estimates of current population are actually a projection from the last census data to the current year, but the term "projection" is generally used for estimates of population in future years. In view

of this similarity, it is not surprising that many projection methods are similar to those used for estimating current population.

PRESERVATION. A land use designation that signifies little or no human activity or use within the designated area.

PRIME SOILS. High yield soils most suitable for agricultural production.

PRINCIPAL USE. A principal use is the primary use of a lot that is permitted under the district regulations in a zoning law. These regulations may allow one (1) or more principal uses in any given district. Unless the district regulations allow mixed uses, only one (1) principal use may be made of a single lot, along with uses that are accessory to that principal use. The main use of land or structures as distinguished from a secondary or accessory use. A house is a principal use in a residential area; a garage or pool is an accessory use.

PUBLIC FACILITIES. Land designated for the location of public services and facilities that are necessary to the community. Typical uses include liquid and solid waste disposal sites, ponding basins, parks, civic centers, schools, airports, hospitals, and cemeteries.

PUBLIC HEARING. A properly legally announced meeting of an official or official body where the public is allowed to give opinions concerning the issue being considered. Public hearings afford citizens affected by a reviewing board's decision an opportunity to have their views heard before decisions are made.

PUBLIC SERVICES. Public services are those services provided by the municipal government for the benefit of the community, such as fire and police protection, education, solid waste

disposal, street cleaning, and snow removal.

- Q -

QUALITY OF LIFE. Those aspects of the environment that make a community a desirable place in which to live or do business. Quality of life factors include those such as climate and natural features, schools, housing, medical facilities, cultural and recreational amenities, and public services.

- R -

RESOLUTION. A resolution is not ordinarily a legislative act but a means by which a local legislature or other board expresses its policy or position on a subject.

RESTORATION. A process of returning ecosystems or habitats to their original structure and species composition.

REZONING. An amendment to or a change in the zoning ordinance. Typically, rezoning can take two (2) forms: (1) a comprehensive revision or modification of the zoning text and map; and (2) a change in the map; i.e., the zoning designation of a particular parcel or parcels. Re-zonings, like enactment of the original ordinance, are legislative acts that cannot be delegated to administrative officials.

RIGHT-OF-WAY. The right of passage over the property of another. More commonly, it refers to the land on which a road or railroad is located. The pathways over which utilities and drainage ways run are usually referred to as easements.

RIPARIAN. Pertaining to anything connected with or immediately adjacent to the banks of a

stream or other body of water.

RIPARIAN HABITAT. Riparian lands are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

RURAL. Areas generally characterized by agricultural, timberland, open space, and very low-density residential development (e.g., less than one (1) dwelling unit per acre). A rural community is a community which is not served by community water or sewer service or other urban services.

- S -

SEPTIC TANK. A tank plus a leaching field or trenches in which the sewage is purified by bacterial action.

SETBACK REGULATIONS. The requirements of building laws that a building be set back a certain distance from the street or lot line either on the street level or at a prescribed height. The planning goal is to allow more room for pedestrians or to reduce the obstruction to sunlight reaching the streets and lower stories of adjoining buildings (basic light, air, and space). Setbacks also have a direct relationship to building and fire codes.

SIGN REGULATION. Local laws that regulate the erection and maintenance of signs and outdoor advertising with respect to their size, color, appearance, movement, illumination, and placement on structures or location on its ground.

SITE. A plot of land intended or suitable for development; also the ground or area on which

a building or town has been built.

SITE PLAN. A plan, to scale, showing uses and structures proposed for a parcel of land. It includes lot lines, streets, building-sites, public open space, buildings, major landscape features -- both natural and man-made -- and, depending on requirements, the locations of proposed utility lines.

SITE PLAN REVIEW. The process whereby local officials usually the planning commission and staff, review the site plans and maps of a developer to assure that they meet the stated purposes and standards of the zone, provide for the necessary public facilities such as roads and schools, and protect and preserve topographical features and adjacent properties through appropriate siting of structures and landscaping. The process often allows considerable discretion to be exercised by local officials since it may deal with hard-to-define aesthetic and design considerations.

SMART GROWTH. A contemporary catch phrase related to encouraging development that better serves the economic, environmental and social needs of communities. Typically the principals of Smart Growth include:

- Mix of land uses.
- Taking advantage of compact building design.
- Creating housing opportunities and choices.
- Creating walk-able (pedestrian oriented) communities.
- Fostering distinctive, attractive communities with a strong sense of place.
- Preserving open space, farmland, natural beauty, and critical environmental areas.
- Strengthening and direct development toward existing communities.
- Providing a variety of transportation choices.

- Making development decisions predictable, fair, and cost-effective.
- Encouraging community and stakeholder collaboration in development decisions.

SPRAWL. The awkward spreading out of a community. Sprawl is partially the by-product of the highway and automobile, which enabled spread of development in all directions.

STANDARDS. A specific, often-quantified guideline incorporated in a policy or implementation program. Standards often translate directly into regulatory controls. While often used loosely to refer to all requirements in a zoning ordinance, the term usually is used to mean site design regulations such as lot area, height limits, frontage, landscaping, yards, and floor area ratio—as distinguished from use restrictions.

STRATEGIC PLANNING. Strategic planning is a systematic way to manage change and create the best future. It is a creative process for identifying and accomplishing the most important actions in view of strengths and weaknesses, threats and opportunities (SWOT).

STREET SYSTEM. The classification of streets and highways by their diverse functions and design. The following is the commonly used hierarchy of streets and highways for planning purposes: local, collector, major, expressway, arterial, parkway, and freeway. (See below.)

EXPRESSWAY OR FREEWAY. Highway for through traffic with full or partial control of access and generally with grade separations at intersections.

ARTERIAL. Street that provides through traffic movement on a continuous route joining major traffic generators, other arterials, expressways

and freeways. The access to abutting properties may be controlled.

COLLECTOR. Street that provides service for internal traffic movement within an area and connects local streets to arterial streets. Direct access to adjoining properties generally permitted.

LOCAL. Street that provides for traffic movement within an area. Primarily for the provision of direct access to abutting properties.

STRIP DEVELOPMENT. A mélange of development, usually commercial, extending along both sides of a major road. Usually a strip development is a mixture of auto-oriented enterprises (e.g., gas, motels, and food stands), truck-dependent wholesaling and light industrial enterprises, along with the once rural homes and farms overtaken by the haphazard leapfrogging of unplanned sprawl.

SUBDIVISION. The process (and the result) of dividing a parcel of raw land into smaller buildable sites, blocks, streets, open space, and public areas, and the designation of the location of utilities and other improvements. Typically the subdivision of land involves the legal division of a parcel into a number of lots for the purpose of development and sale. The subdivision and development of individual parcels must conform to the provisions of local zoning which contain use and dimensional requirements for land development.

SUBURBAN. Areas generally characterized by low-density residential development (e.g., one (1) to five (5) dwelling units per acre) and limited commercial uses.

SURFACE RUNOFF. The part of precipitation

and snowmelt that reaches streams by flowing over the ground without penetrating the soils.

SURFACE WATER. Water on the earth's surface, as distinguished from subterranean water; typically found flowing in natural or man-made water courses such as rivers, streams, or canals, or contained in lakes or storage reservoirs.

SUSTAINABILITY. Sustainability, or sustainable development, is often defined as providing for current needs without jeopardizing the ability of future generations to provide for their needs.

- T -

TELECOMMUNICATIONS. Any of a number of electronic communications innovations including internet, fiber optics, wireless phones, etc.

TRAFFIC CALMING MEASURES. The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Examples include speed bumps and cul-de-sacs.

TRANSFER OF DEVELOPMENT RIGHT (TDR). A method by which the development rights are separated from the land in an area in which a community (or state) wishes to limit development, and permits them to be sold for use in an area desirable for high-density development. It has been promoted as a way to retain farm land, preserve endangered natural environments, protect historic areas, stage development, promote low- and moderate-income housing, and achieve other land-use objectives.

TRIP. The journey from a point of origin to a destination.

- U -

USE. The purpose or activity for which a piece of land or its buildings is designed, arranged, or intended, or for which it is occupied or maintained. Land-use planning and control through zoning and other devices is a primary concern of planners; with depletion of natural resources, degrading of environmental quality, shortages of energy, and widespread poverty, land use is increasingly being recognized as a major national issue.

- W -

WATER COURSE. Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine or wash in which water flows in a definite direction or course, either continuously or intermittently, and has a definite channel, bed and banks, and includes any area adjacent thereto subject to inundation by reason of overflow or flood water.

WATERSHED. The area drained by a given stream, or other body of water.

WETLANDS. Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. Under a "unified" methodology now used by all federal agencies, wetlands are defined as "those areas meeting certain criteria for hydrology, vegetation, and soils." Wetlands may be either freshwater or tidal. They are typically marked by waterlogged or submerged soils or support a range of vegetation particular to wetlands. They provide numerous benefits for human health and property as well as critical habitat for wildlife and are generally regulated by either federal, state, or local laws.

WETLAND COMPLEX. Two (2) or more individual wetlands in close proximity that are connected spatially and/or hydrologically.

- Z -

ZONING. An exercise of the police power, zoning is a widely used form of land use control. Zoning ordinances consist of a map indicating the various land use zones in the community, and text that sets down the rules (development standards and allowable uses) for development of land. Zoning ordinances must satisfy the fundamental prohibition of the Fifth and Fourteenth Amendments to the U.S. Constitution against deprivation of property without due process of law and taking of private property for public use without just compensation, as well as similar state constitutional provisions. To satisfy constitutional scrutiny, the terms of a zoning law must be reasonably related to the governmental interest in protecting public health, safety, morals, and general welfare. In its simplest form, zoning is defined as the regulation by zone districts of the height, use, and area of structures, the use of land, and the density of population and intensity of allowable uses.

ZONING DISTRICTS. A zoning district is a portion of the community designated by the local zoning ordinance for certain kinds of land uses, such as single-family homes on lots no smaller than one (1) acre in size or neighborhood commercial uses. Only these primary permitted land uses, their accessory uses, and any special uses permitted in the zoning district may be placed on the land in that portion of the community.

ZONING MAP. The officially adopted zoning map of the city specifying the uses permitted within certain areas of the city or county. This map is approved at the time that the local legislature adopts a zoning ordinance. On this map, the zoning district lines are overlaid on a street map of the community. This map divides the community into districts. Each district will carry a designation that refers to the zoning code regulations for that district. By referring to this map, it is possible to identify the use district within which any parcel of land is located.

Then, by referring to the text of the zoning code, it is possible to discover the uses that are permitted within that district and the dimensional restrictions that apply to building on that land. The zoning map, implemented through the text of the ordinance, constitutes a blueprint for the development of the community over time.