COMMERCE TOWNSHIP

MASTER PLAN 2015

MASTER PLAN 2015

Commerce Charter Township, Oakland County, Michigan

Prepared for:
Commerce Township Planning Commission

Adopted December 7, 2015

Planning Commission
Commerce Charter Township, Oakland County, Michigan
2015 Master Plan Update

RESOLUTION of ADOPTION

WHEREAS the Michigan Planning Enabling Act (Public Act 33 of 2008), as amended, provides for a Township planning commission to prepare and adopt a Master Plan for physical development of the community; and

WHEREAS the Commerce Township Planning Commission adopted such master plan in 2004 for the Township's physical development in compliance with the Michigan Planning Enabling Act, including relevant charts, maps and text; and

WHEREAS the Commerce Township Planning Commission updated amended said master plan in 2006 in compliance with the Michigan Planning Enabling Act, including relevant charts, maps and text; and

WHEREAS the Commerce Township Planning Commission has determined that the 2004 and 2006 master plans are still consistent with goals and objectives of the Township, except as modified in this 2015 update;

WHEREAS the Commerce Planning Commission has provided multiple opportunities for public participation in the planning process; and

WHEREAS the Township Board of Trustees approved the draft Plan for distribution, and subsequently the Master Plan was so distributed for review by surrounding communities and other public agencies as required by the Michigan Planning Enabling Act; and

WHEREAS the Commerce Planning Commission held a formal public hearing on the draft Master Plan on December 7, 2015 in order to provide additional opportunity for public comment; and

WHEREAS all comments received during the planning process have been carefully considered and the Planning Commission is satisfied that the Master Plan is ready for adoption.

NOW THEREFORE BE IT RESOLVED that the Commerce Township Planning Commission hereby adopts the 2015 Master Plan Update, as presented at the public hearing held on December 7, 2015.

BE IT FURTHER RESOLVED that the Planning Commission directs the Commission Chairperson, Vice-Chairperson and Secretary to sign this Resolution signifying the adoption of 2015 Master Plan Update, to file an attested copy with the Township Clerk, and transmit copies consistent with the Michigan Planning Enabling Act.

Motion by Jay Czarnecki and seconded by Brian Winkler.

AYES: Tom Jones, Brian Winkler, Bill McKeever, Jay Czarnecki, John Hindo, Russ Schinzing

NAYS: None

ABSENT: Larry Haber

Larry Haber

Larry Haber, Chairperson
Commerce Township Planning Commission

Tom Jones

Tom Jones, Vice-Chairperson
Commerce Township Planning Commission

Brian Winkler, Secretary
Commerce Township Planning Commission

EXECUTIVE SUMMARY OF 2015 MASTER PLAN UPDATE

In 2013, the Commerce Township Planning Commission began review of the Township's Master Plan, in order to update the Plan to reflect new data, goals and objectives as well as to review where the Commission thought the existing Master Plan needed to be revised to reflect this new information. In that same year, the Commerce Township Board directed the Commission to review the Master Plan with respect to residential land use, specifically, multiple family residential land uses. An influx of new multiple family developments, in conjunction with existing and proposed developments in surrounding communities, gave the Board cause for concern that an influx of multiple family developments would result in a development pattern that would be contrary to the Township's desire (as stated in the 2011 Master Plan) to preserve the overall character of the Township.

Additionally, as the Township started to see an economic upswing in 2013, the Planning Commission, wanted to ensure that the master plan document provided a clear road map for developers looking to build in the Township. These issues, coupled with new census information, made clear that the Township needed to review and update the Master Plan to ensure the continued development of the Township mirrored those objectives that the Board of Trustees and Planning Commission have identified.

The 2003 Township Master Plan (adopted in 2004) has served the community well and still provides the framework necessary to guide future development in a manner that balances new investment in the community and preservation of the character Commerce Township residents, business owners, and visitors enjoy. The 2003 Township Master Plan received minor updates in 2006. The 2015 update includes only those targeted amendments deemed necessary to implement current Township objectives.

Purpose of the Master Plan Amendment

The Master Plan is a document that is used by a community to guide land use decisions. The Michigan Planning Enabling Act provides communities the authority to adopt, amend and implement a Master Plan. A Master Plan, "considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development." In this instance, the Township specifically chose to review multiple family development and the future of such developments, given the new census information and recent development of such uses. The amended Master Plan also updated obsolete information given new statistical data, made grammatical edits throughout, updated goals that have been achieved since the last update, and development trends within the Township and the surrounding communities.

Acknowledgments

The participation and cooperation of community leaders, residents and members of civic organization in the preparation of the 2015 Charter Township Commerce Master Plan is greatly appreciated. In particular, we acknowledge the efforts of the following individuals:

Planning Commission

Lawrence Haber, Chairperson
Thomas Jones, Vice-Chairperson
William McKeever
John Hindo
Brian Winkler
James Czarnecki
Russ Schinzing

Township Parks and Recreation Committee

Tim Wichert, Chairperson
Peter Pace, Vice-Chairperson
Michelle Holmes, Secretary
William Petsch
David Schultz
Jennifer Hansen
Bob Berkheiser
Barb Garbutt

Township Board

Thomas K. Zoner, Supervisor
Vanessa Magner, Clerk
Molly Phillips, Treasurer
Rick Sovel, Trustee
Robert J. Long, Trustee
Bob Berkheiser, Trustee

Zoning Board of Appeals

Barbara Rosman, Chairperson
Jorge Pacheco, Secretary
Clarence Mills
William McKeever
Rick Sovel

Downtown Development Authority

James Gotts, Chairperson
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Thomas K. Zoner, Supervisor
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Kathleen Jackson, Former DDA Director

Township Consultants

Kathleen Jackson, Former Township Planner
Jay James, KER Engineering
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Amy Neary, McKenna Associates

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1. INTRODUCTION

Never underestimate the power of a small group of individuals to change the world. In fact, it is the only thing that ever has!
- Margaret Mead

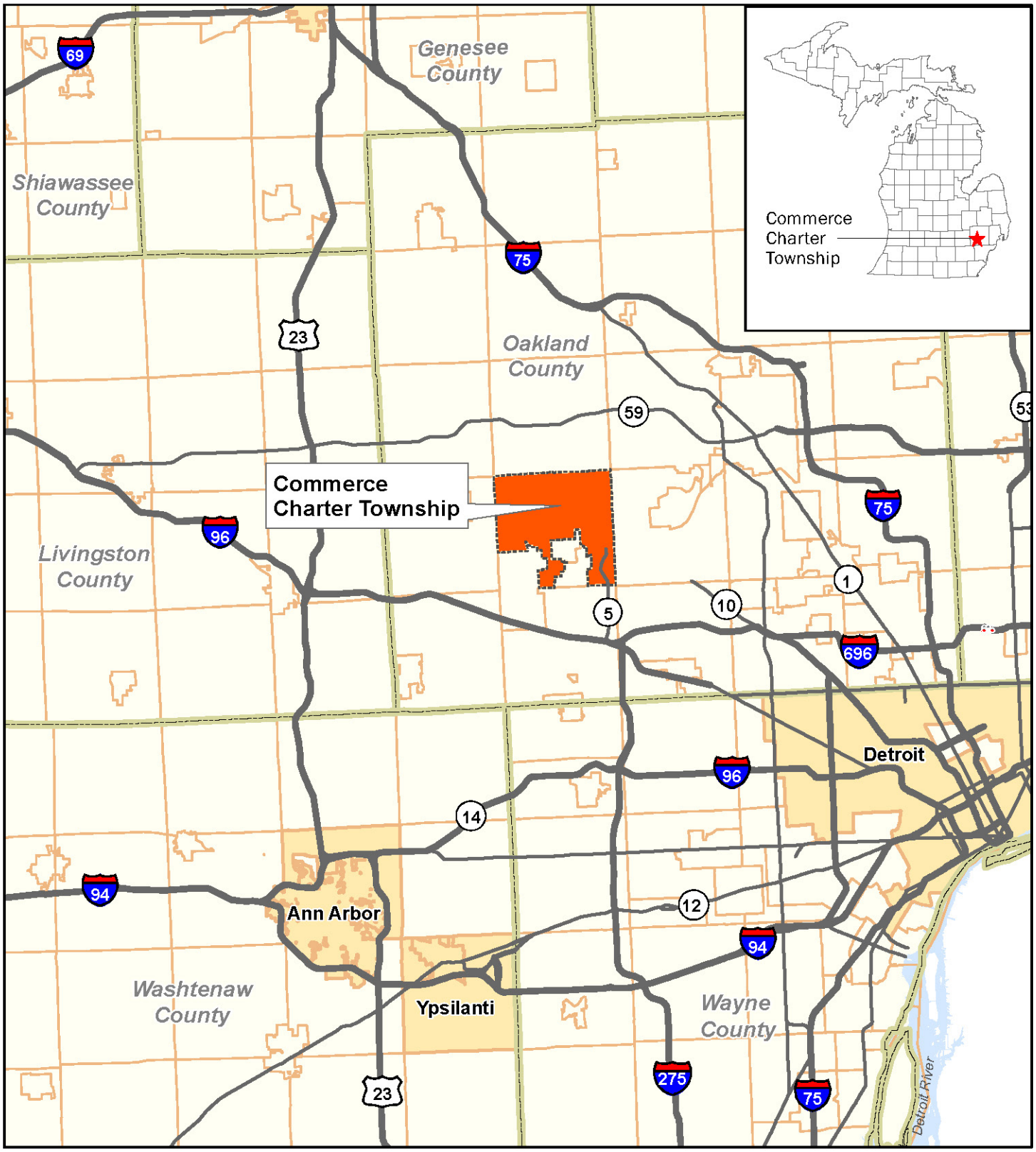
The Commerce Charter Township Master Plan will guide the growth and development for the Township over the next 20 years. In addition, this plan will provide ways in which the community can direct and enhance both residential and non-residential development that will complement the existing development within Commerce Township.

Purpose of the Master Plan

The Master Plan will first define those issues most important to the community. An in-depth analysis of the existing features of the community illustrates some of the defining characteristics within Commerce Township. The analysis includes:

- a survey of the existing land uses and how they have changed in the last decade in Chapter 3;
- population characteristics, trends and projections in Chapter 4;
- an economic analysis of commercial, industrial and office land uses;
- housing statistics in Chapter 4;
- an environmental analysis including watersheds and lakes in Chapter 5;
- traffic circulation patterns in Chapter 6; and
- an inventory of community facilities and infrastructure in Chapter 7.

Based on all information gathered and input from citizens, goals and objectives have been created which outline the growth and development patterns for the community over the next 20 years. These goals and objectives, in Chapter 2, will help to create the future land use plan (Chapter 8), future transportation plan (Chapter 9), community and public facilities plan (Chapter 10), and environmental protection plan (Chapter 11) for Commerce Township. Finally, the implementation section, in Chapter 12, of the plan will present some key strategies the Township can use to achieve the community's goals and objectives.



Regional Location

Commerce Charter Township,
Oakland County, Michigan

Miles 0 5 10

McKenna ASSOCIATES

Data Source: Michigan Geographic Framework, Michigan Center for Geographic Information, Version 8a.

Legal Basis for the Master Plan

The Michigan Planning Enabling Act of the State of Michigan (P. A. 33 of 2008) expressly authorizes counties, townships, cities and villages to engage in planning and zoning. The Michigan Planning Enabling Act states that the general purpose of a master plan is to

". . . guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

a) Is coordinated, adjusted, harmonious, efficient, and economical
b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development
c) Will, in accordance with the present and future needs, best promote public health, safety, morals, order convenience, prosperity and general welfare
d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:
    i. A system of transportation to lessen congestion on streets and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users.
    ii. Safety from fire and other dangers.
    iii. Light and air.
    iv. Healthful and convenient distribution of population.
    v. Good civic design and arrangement and wise and efficient expenditure of public funds.
    vi. Public utilities such as sewage disposal and water supply and other public improvements.
    vii. Recreation.
    viii. The use of resources in accordance with their character and adaptability

The act is very specific about what the plans must contain. The required elements include maps, plats, charts, and descriptive matter showing the Planning Commission's recommendations for the development of the municipality, including, among other things, a land use plan and program, the general location, character, and extent of streets, bridges, waterways, floodplains, water fronts, boulevards, parkways, playgrounds and open spaces, the general location of public buildings and other public property, the general location and extent of public utilities and terminals for water, light, sanitation, transportation, communication, power, and other purposes; proposed changes for infrastructure and utilities; the general location, character, and layout and extent of community centers and neighborhoods; and the general character, extent and layout of the planning and redevelopment of blighted districts.

Development History

Commerce Township is located in southeastern Michigan in western Oakland County. The Regional Location Map illustrates the location of the Township in the state of Michigan and in the Detroit Metropolitan area. Now primarily a residential community, Commerce Township began as farming village. Some of the major events in the Township's development history are detailed below.

The boundaries of Commerce Township were drawn as part of the Grayson Land Ordinance of 1775 but were not surveyed until 1815. The first European settler was Abram Walrod, who established a homestead on the Huron River in 1825. Several other families settled in Commerce Township in the next decade, mostly along the Huron River. The first road, now known as Pontiac Trail, was built in 1833 or 1834, connecting the residents to the railroad and marketing opportunities in Milford and the educational and political resources in Pontiac. A grist mill was built on the Huron River in 1837. The mill operated until 1926. The site of the mill is now Mill Race Park, a passive recreation park owned by the Township.

At the turn of the twentieth century, Commerce Township had all of the attributes of a typical farming community - a mill, tavern, hotel and colorful characters that have been well documented by the Commerce Historical Society. In 1918, the population was approximately 1,000 people. According to the U.S. Census, the population of Commerce Township continued to grow steadily in the first half of the twentieth century - 1,789 people in 1930, 2,957 residents in 1940 and 7,421 people in 1950.

The 1950s marked a turning point in the development of Commerce Township. Interstate 96 was constructed and replaced Grand River Avenue as the main link between Lansing and Detroit. As a result, Commerce Township became easily accessible to the entire region. Also, Ford Motor Company opened a 1.6 million square foot plant at the I-96 and Wixom Road interchange, prompting a change from agriculture to manufacturing as the economic base of the community. In 1957, Wixom incorporated as a village, taking territory from Commerce Township and Novi Township to the south. Wixom became a city in 1970. Walled Lake incorporated as a city in 1959. By 1960, the size of the Township had decreased from its original thirty-six square miles to twenty-eight.

Meanwhile, higher scale residential developments came to Commerce Township in the late 1950s. In 1956 and 1957, a developer created Lake Sherwood subdivision, which featured a man-made lake. The Township hailed this as the type of development they hoped to see. Agriculture faded as the primary economic activity, replaced by tourism and manufacturing. By 1990, the population of the Township had grown to 22,156 people and 7,670 households. In the 1990's, the population would increase by over 30 percent. By the late 1990's, the Township was no longer seen in the region as a summer vacation area but as prime residential real estate. Almost four thousand housing units were built between 1991 and 2000. Due to the Great Recession and the limited availability of buildable land, residential growth has slowed but the Township now faces the challenge of balancing the needs of new residents with the rural character and history of the Township. In 2013 new housing permits began increasing again. Abandoned subdivisions, several of which had reverted to lenders were purchased from the banks and developed. At the same time, the Commerce D.D.A. was marketing 330 acres in the D.D.A. "Project Area", north of Pontiac Trail between Haggerty and Welch Roads. As interest increased in this area for multiple family uses, two other developments were approved in the Township for multiple developments with over 300 units. Commercial development also increased putting further pressure on the Township to renew their dedication to "bedroom community" status with a strong emphasis on quality architecture and site development. These ideals dovetailed with a new Zoning Ordinance, which was adopted in June 2010 and specified more development standards to ensure that new projects adhered to these high standards.

2. GOALS AND OBJECTIVES

A plan includes a list of actions arranged in a sequence most likely to achieve an objective!
- John Argenti

A series of discussions with Township officials and residents were held in order to develop the goals and objectives of the Master Plan. The goals and objectives are the cornerstone of the Master Plan and should guide all Future Land policy decisions.

Strategic Issue Identification

On March 20, 2002, McKenna Associates staff conducted a strategic issues investigation during a joint meeting of the Township Board, Planning Commission, Downtown Development Authority, Zoning Board of Appeals, and Parks and Recreation Committee. At this session, Township officials were asked to discuss and come to a consensus on what major land use issues are facing the Township. Table 2.1 summarizes the issues identified during this session.

Table 2.1: Strategic Issue Identification Results
Commerce Township

Land Use	Parks & Recreation	Environmental
Maintain good relations with neighbors	Walkability	Storm water management
Protection of public health and safety	Concern whether parks and recreation opportunities have grown with population	Zebra mussels
Development of the Haggerty Road Corridor	Most recreation opportunities are passive	Geese
Access management in commercial corridors	Maintenance	Grub management
Preservation of historic village areas	Year around use and management of athletic fields	Natural screening along major thoroughfares
Appropriate development of big box retail	Neighborhood parks and open space	Sidewalks
Decrease of parking spaces for commercial development	Playground equipment	
ADA compliance	Connecting land uses	
Expansion of Huron Valley-Sinai Hospital		
Future development of gravel extraction operation		
Need for senior housing		
Appropriateness of mid-rise residential		

2004 Master Plan Public Input

To gather public input, a Master Plan visioning workshop was held on June 19, 2002. Approximately 50 Township officials, residents and other interested parties attended the session held in the Township Hall.

Following the introductions, the attendees were asked to identify what they felt most proud of in Commerce Township (Table 2.2). The list was extensive, but there were some themes including; natural open space quality throughout the Township, the overall sense of community pride, and progressive attitude regarding the promotion of smart/managed development.

Table 2.2: Prouds and Sorries
Commerce Township

Prouds	Sorries
Open space from road	Civic Center
Bike paths	Boarded Houses and property maintenance
Park Volunteers	Not enough public transportation
Larger parking space size (10' X 20')	Excess parking at big box commercial sites
Proximity of residential to recreational land	Work with Road Commission for Oakland County to plan road improvements.
Natural resources	No park staff
Baseball / soccer	Excess signage
Straightforward staff and procedures	
Dodge Park No. 5	Loss of golf courses
Historic homes	Regular or non-conforming uses
Open Space	Woodlands / Wetlands
Purchase of Byers Homestead	Traffic
3rd lowest millage rate	Lack of clustering and increased vehicular trips
Trash collection	No Post Office
Huron Valley-Sinai Hospital	Not doing more to redevelop brownfields
Planning Commission Master Plan to create open space	
Flexibility	
Wonderful relationship between Commerce Board and Officials with developers to extend utilities	
Senior center growth	
Working towards purchase of Michigan Airline Trail with Wixom and Walled Lake for Trailway purposes	

Along with the many items the group was proud of came a series of issues they felt could be improved (Table 2.2). This collection of "sorries" also had a number of themes including; lack of community amenities such as bike paths and recreational equipment and activities, lack of community facilities such as library, civic center,

traffic congestion, and a lack of tools to preserve natural features and to ensure quality development and redevelopment.

The June 22, 2002 meeting concluded with a land use exercise that required each participant to list the most appropriate uses within five distinct districts of the Township. The results indicated that the eastern portion of the Township has developed and will likely develop with non-residential uses including light industrial and larger scale commercial uses, while the rest of the Township should be primarily residential.

A follow-up visioning session was conducted on July 22, 2002 to gather input from Township officials and residents on the future land use and circulation plan for the Community. Participants were divided into small groups and instructed to identify the following on base maps for five districts of the Township:

- New roads, improvements to existing roads or roads to remain as they currently exist;
- Appropriate future land uses for residential, commercial, office and Industrial/ Research, as well as areas ripe for redevelopment;
- Locations for public uses, including schools and parks; and
- Non-motorized connections, including sidewalks, bicycle paths, nature trails, and multi-purposed pathways.

In addition, the groups listed areas of interest, areas of disagreement, and concepts for these areas.

Public Presentation of Land Use Alternatives

Based on the visioning sessions held in the summer of 2002, three land use alternatives were developed. After an initial review of these alternatives, the Planning Commission hosted a public meeting on October 3, 2002 to gather input as to which plan or parts of each plan best reflected the values of the community.

Each land use alternative was based on a different approach. The philosophy behind each of the alternatives was as follows:

- **Alternative #1 – July 22, 2002 Visioning Session Concepts.** This alternative developed out of July 2002 visioning exercise demonstrated a significant expansion of existing road network and increased residential densities with the expansion of existing commercial areas.

- **Alternative #2 - Preservation of Existing Patterns, Character and Natural Features.** This alternative aimed to preserve existing residential patterns and character, and protect natural features. Specific single family residential categories were created to reflect the character of residential areas - rural residential, cottage residential, lakefront/open space and designed to preserve natural features.

- **Alternative #3 - Mixed Use Neighborhoods and Districts.** This alternative was based on Traditional Neighborhood Design principles with the creation of a series of neighborhoods containing an average density of approximately 3 to 4 dwelling units per acre. Each neighborhood would contain a mix of housing types, neighborhood commercial uses, and public/ semi-public uses that would anchor the neighborhood such as a school, park, or, in some neighborhoods, a lake. Non-residential “districts” which contain a mix of commercial, office, and light industrial/ research technology uses would be more regionally oriented.

The Planning Commission determined that the option #2 which aimed to preserve existing patterns, character, and natural features most accurately reflected the attitudes and desires of the community. This alternative became the basis for the finalization of the goals and objectives component of the Commerce Charter Township Master Plan.

2006 Incompatible Land Use Analysis

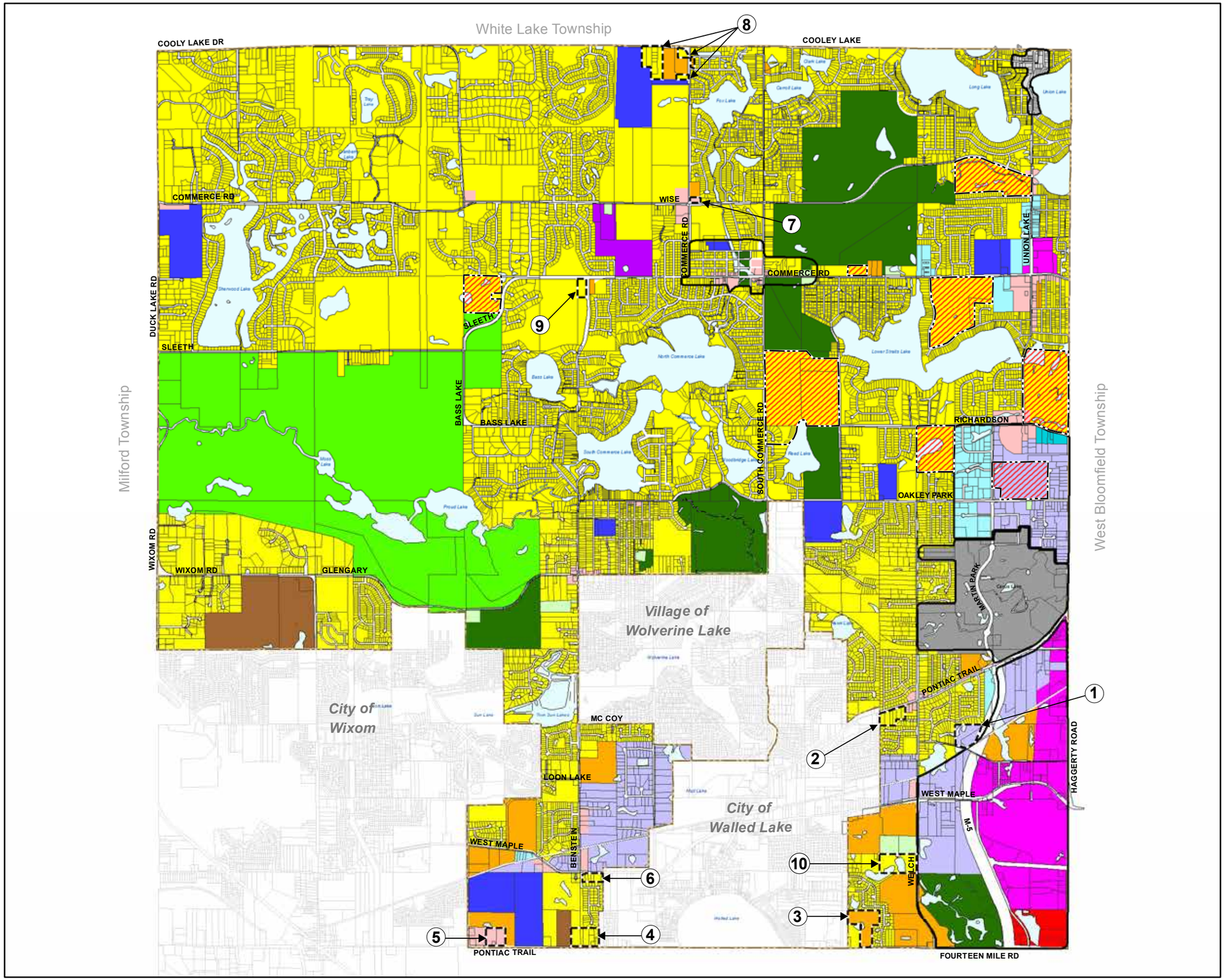
Based on working with the master plan during the course of day-to-day planning activities, the Planning Commission identified a number of areas in the Township that were designated for densities that would create potentially negative impacts on surrounding land uses, natural features, and the Township's road, water, and sewer infrastructure. An analysis was conducted (Appendix A) evaluating these areas and refining the goals and objectives to clarify the Township's desire for lower densities in the western portion of the Township.

Revisions to the Residential Future Land Use Map were made based on the Incompatible Land Use Analysis and refined goals and objectives and a public hearing was held. There was no community opposition expressed regarding the change in the goals and objectives or the Residential Future Land Use Map.

2014 Incompatible Land Use Analysis

In 2014, the Planning Commission studied the existing Future Land Use Map and Zoning Map for inconsistencies with respect to Multiple Family developments and zoning. The following Land Use Inconsistences map illustrates those irregularities. The proposed Future Land Use map is designed to correct those inconsistencies.

One parcel of land in the Township was planned for multiple family and vacant. The Township is proposing to change the Future Land Use Map to reflect a higher density single family residential designation on this parcel. Given the new multiple family developments within the Township as well as adjacent community multiple family offerings, it is the desire of the Township to encourage more single family development rather than multiple family construction. The proposed change is consistent with the goals and objectives as identified by the Township's Planning Commission and Board of Trustees.



Land Use Inconsistencies

Commerce Charter Township,
Oakland County, Michigan

December 7, 2015

FUTURE LAND USE

- Single Family Residential
- Multiple Family Residential
- Manufactured Home Community
- Neighborhood Commercial
- Community Commercial
- General Commercial
- Hospital
- Industrial
- Office Service
- Office Research
- Four Corners Village
- Commerce Town Center
- Private Recreation Area
- Special Area Plans

PUBLIC FACILITIES

- School
- Township Park
- State Land
- Community Facilities

Description of Changes to the 2003 Future Land Use Plan

1. Multiple Family Residential to Industrial
2. Multiple Family Residential to Single Family Residential
3. Single Family Residential to Multiple Family Residential
4. Multiple Family Residential to Single Family Residential
5. Multiple Family Residential to Neighborhood Commercial
6. Multiple Family Residential to Single Family Residential
7. Multiple Family Residential to Neighborhood Commercial
8. Multiple Family Residential to Single Family Residential
9. Multiple Family Residential to Single Family Residential
10. Multiple Family Residential to Single Family Residential

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FEET
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McKenna ASSOCIATES

Base Map Source: Oakland County, Michigan. Data Source: McKenna Associates, Inc. 1/03

Goals & Objectives

The goals and objectives were developed based on existing characteristics of the community and opportunities and constraints presented in Chapter 3 of the Master Plan, input received during the strategic issues session, the visioning sessions, the presentation of the land use alternatives and the Community Planning Principles from the Michigan Association of Planning.

Goals are general in nature and, as related to planning, are a statement of ideals toward which the Township will strive. Objectives are more specific and are intended to present a means to attain the stated goal.

Residential

Township residents are generally satisfied with the existing quality of new single-family residential development within the Township. There is also a definitive interest in creating neighborhoods that contain a range of quality single family residential densities mixed with the non-residential services to support the neighborhood residents.

Goal: **To achieve well planned, safe, balanced, and pleasant high quality residential neighborhoods for all income levels within the Township.**

Objectives:

1. Require site improvement and design standards for all residential development/redevelopment. Provide standards within the zoning ordinance for tree preservation, clustering options, single-family architectural variety design standards, and property maintenance.
2. Maintain and improve the quality of existing historic neighborhoods.
3. Consider planned neighborhoods in designated areas, which would promote the preservation of the Township's existing natural features and provide recreational opportunities for residents.
4. Maintain low densities in the least dense areas of the Township, generally in its western half, in order to preserve the semi-rural character of such areas.
5. Encourage links between neighborhoods and recreational and commercial areas with design guidelines for bike paths and sidewalks.
6. Encourage neighborhood parks in open space areas within single family residential developments.
7. Encourage high quality residential developments in appropriate locations that cater to all age groups, particularly young families and senior citizens, to permit residents to remain in the community.
8. Allow for medium and high density multiple family residential land uses in appropriate locations such as transitional areas between single-family residential and non-residential uses or major roads and near the surrounding cities. Multiple family densities should be compatible with the surrounding area throughout the Township and properly served with public and /or private utilities.
9. Require continued code enforcement to ensure the aesthetic and physical character of the Township is preserved.

Commercial and Office

Township residents are satisfied with the variety of commercial uses within the Township. Appropriate commercial uses within the Township should occur to provide for resident needs and to contribute toward the Township tax base. In particular, there is a need for neighborhood commercial areas located within close proximity to residential developments to minimize extended trips for convenience goods.

Goal:

To maintain and improve existing commercial areas while encouraging further high quality commercial growth within appropriate areas of the Township.

Objectives:

10. Encourage the concentration of high quality neighborhood commercial uses in appropriate locations, as opposed to strip commercial development, which service the surrounding neighborhoods and, pedestrian and non-motorized traffic.
11. Ensure that large-scale commercial uses are isolated in appropriate locations relative to access to the regional transportation network and are compatible with the surrounding existing and proposed land uses. In addition, ensure that neighborhood commercial uses are designed specifically to be compatible with the surrounding residential uses including; appropriate scale, pedestrian access, and orientation to the neighborhood.
12. Continue to enforce the zoning ordinance code to ensure the aesthetic and physical character of commercial areas within the Township remains viable.
13. Require site improvement standards for all commercial growth.
14. Link commercial uses to existing and new residential neighborhoods via sidewalks and pathways.
15. Encourage reuse of and aesthetic improvements to existing structures and sites.
16. Update existing retail establishments to avoid visual blight.

Industrial

Industrial development within the Township creates a more diversified tax base and employment. The Township intends to promote the continued growth of light manufacturing use with well-located, attractive and diverse industrial uses along with technology, research, and office uses, while protecting the relationship with residential and other non-industrial land uses.

Goal:

Promote well-located and diverse industrial development while protecting the relationship between industrial and non-industrial land uses.

Objectives:

1. Continue to encourage the concentration of industrial uses within the Township at appropriate locations.
2. Ensure that new industrial development follows the adopted design standards.
3. Phase out gradually industrial areas that may have an adverse impact on existing and future land uses.
4. Encourage concentration of new, high quality, technology and light manufacturing uses that have regional access, high visibility, and complementary uses.
5. Develop new tools and techniques to regulate and update land development relative to the physical appearance, landscaping, and performance standards.
6. Develop creative and specialized zoning tools directly aimed at attracting high quality industrial development.
7. Require or provide service and infrastructure improvements to encourage high quality industrial growth within designated areas of the Township.
8. Continue to require code enforcement to ensure the aesthetic and physical character of the Township is preserved.
9. Create new Master Plan district TLM – Technology and Light Manufacturing district to encourage redevelopment of existing properties in the area immediately north of the Commerce Town Center and eliminate the OR – Office Research districts that hindered site redevelopment.
10. Continue to promote strict enforcement of codes and regulations applicable to industrial uses, particularly for industries that create substantial sound and visual impacts and those that store or use hazardous chemicals.

Recreation

Township residents are very pleased with the variety and proximity of recreational uses within the Township. Residents also want to maintain and preserve existing recreational uses. There is also a desire to expand recreational equipment and programs.

Goal:

Maintain safe and clean parks, while providing recreation uses for Township residents with a wide variety of recreational opportunities.

Objectives:

1. Encourage pedestrian linkages via sidewalks and bike paths between commercial, residential, and recreation/open space areas of the Township, including the development of the Commerce/Walled Lake/Wixom trailway.
2. Encourage neighborhood recreation opportunities.
3. Develop plan to encourage the implementation of additional active recreational uses (i.e., soccer, football, baseball). The plan should include methods of financing and managing the recreational uses.
4. Require code enforcement to ensure the aesthetic and physical character of recreation areas within the Township is preserved.
5. Maintain neighborhood parks and bring playground equipment into compliance with State and Federal standards.
6. Develop plan to preserve existing golf courses in the Township for future generations.
7. Continue to create non-motorized connections within the community via shared use paths and other paths to encourage recreation and reduction in vehicular trips.
8. Seek out collaborative recreation opportunities with local school districts.

Transportation

Managing the Township's growth patterns and providing an interconnected road system is important to the residents of Commerce. The Township intends to promote well-balanced growth by coordinating land use patterns and the transportation systems to maintain a sustainable community.

Goal:

Encourage a process that provides or manages access to land development, while simultaneously preserving the safety, capacity, speed, and the flow of traffic on the surrounding road system. Work with various community groups, including the 4-Towns Group, the Road Commission for Oakland County and neighboring communities.

Objectives:

1. Develop viable alternative routes for north/south and east/west circulation. Ensure that these corridors are consistent in character with existing and planned land uses along the corridors.
2. Develop an access management plan for improvement, maintenance, and expansion of the transportation system to meet increasing traffic demands and provide for the safe movement of traffic.
3. Minimize the number and frequency of automobile access driveways along road corridors.
4. Develop traffic calming solutions for the historic area of Commerce Village and for the area near Huron Valley-Sinai Hospital.
5. Develop a plan to encourage more public transportation within the Township. More public transportation should be encouraged near the Huron Valley-Sinai Hospital in anticipation of its expansion.
6. Require pedestrian linkages via sidewalks and shared use paths between commercial, residential, and green space areas of the Township and adjacent communities.
7. Encourage communication with the Michigan Department of Transportation (MDOT) to coordinate needed road improvements and avoid massive negative impacts on existing land use patterns.
8. Encourage a working relationship with the Road Commission for Oakland County for planned road improvements.
9. Foster the clustering of mixed, compatible land uses to decrease vehicular trips.
10. Develop Complete Streets road construction and design standards that are compatible with the character of the surrounding land uses.

Environmental Issues

Township residents want development to be guided away from natural features. The Township should encourage the preservation of open space by clustering, density limitations, setback and site plan design standards.

Goal:

To protect, preserve, and enhance whenever possible the unique and desirable existing natural amenities of Commerce Township and to provide additional recreational facilities or sites.

Objectives:

1. Preserve the natural features of the Township wherever possible.
2. Improve the quality of development adjacent to watercourses and wetlands within the Township by requiring buffer areas, suitable landscaping, and restoration of natural conditions.
3. Promote pedestrian linkages between greenspaces within the Township.
4. Encourage the preservation and replacement of woodland areas within the Township.
5. Require code enforcement to ensure the aesthetic and physical character of the Township is preserved, particularly near wetland areas and other sensitive natural features.
6. Encourage the redevelopment of brownfields located in the Township.
7. Foster the preservation and aesthetic appearance of natural areas, golf courses, and recreational areas within the Township.

Community and Public Facilities

Preserving and enhancing the Township's image is important to the residents of Commerce as well as maintaining a low tax rate. The Township should ensure the coordination and compatibility of developments with the surrounding area. Signage, landscaping, public transportation, natural features, recreational uses, and open space should be utilized to enhance existing and proposed developments in the Township.

Goal:

To create a sustainable community that provides a wide variety of services for residents and visitors alike.

Objectives:

1. Encourage the preservation and maintenance of emergency services in the Township.
2. Implement standards and /or strategies to improve public facilities through partnership with the Downtown Development Authority and those involved in the Master Plan process.
3. Develop plans to implement senior citizen housing for the growing elderly population that resides within the Township.
4. Continued code enforcement to ensure the aesthetic and physical character of the Township is preserved.
5. Maintain and improve services to match Township growth.

Infrastructure

Managing the Township's infrastructure is very important to the residents of Commerce. The Township intends to maintain and improve the existing infrastructure. Appropriate infrastructure improvements within the Township should occur to cater to development pressures due to the Township's population growth.

Goal:

Maintain and improve the Township's existing infrastructure. Township residents also want to establish high-tech infrastructure in the community to make Commerce an attractive place for high-tech business.

Objectives:

1. Extend water and sewer service gradually and logically throughout the Township. Place priority on those areas with environmental constraints (around the lakes) and those areas where there is existing or planned development such as around the existing neighborhoods, Commerce Village and Union Lake Village. Place lower priority on those areas in the northwest to prevent premature development of this, more rural, part of the Township.
2. Continue to develop stormwater management design guidelines to ensure a more natural appearance of the required basins.
3. Work with adjacent communities that share watersheds to develop a stormwater management plan to ensure water quality of the Township's several lakes and rivers is maintained.
4. Continue to improve on the existing electrical utilities to accommodate future growth and expansion pressures.

3. LAND USE ANALYSIS

The following is a breakdown of existing land uses, for the Township and surrounding municipalities, per the Oakland County Economic Development and Community Affairs Department:

OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

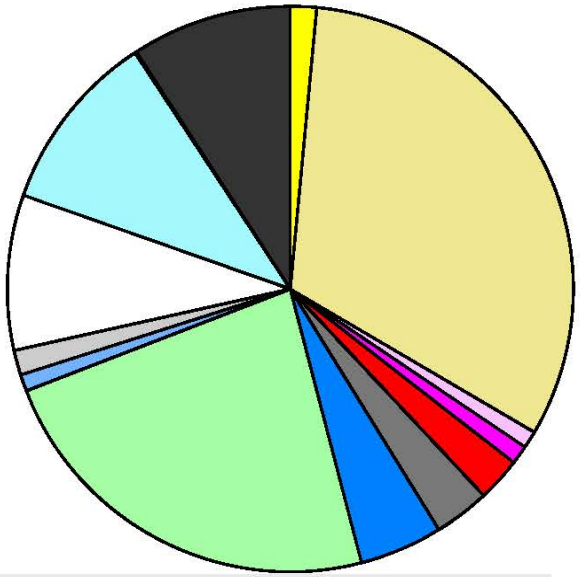
Township of Commerce

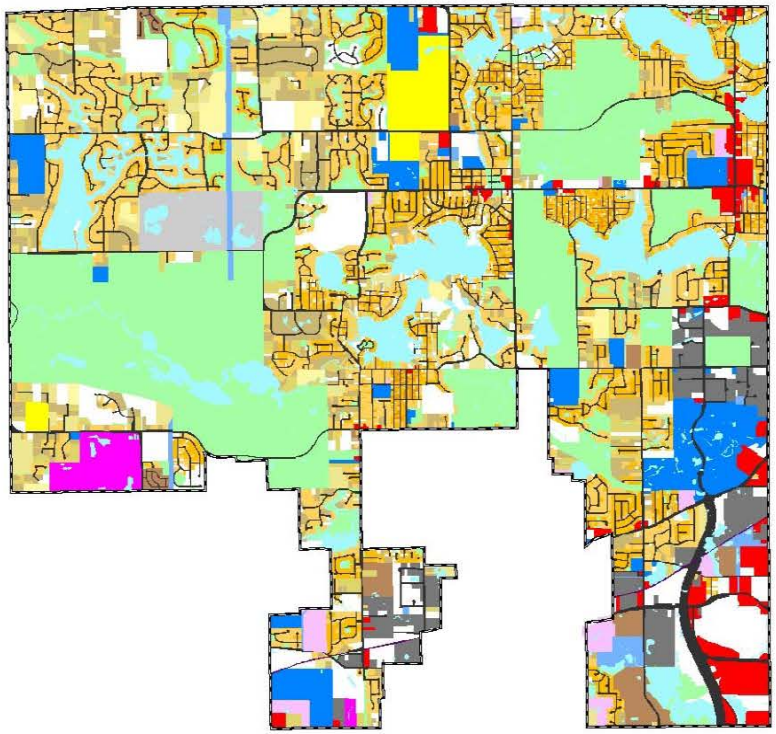
2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural	268.9	1.5%	9	0.1%
Single Family Residential	5,776.8	32.0%	11,014	83.3%
Multiple Family	177.5	1.0%	15	0.1%
Mobile Home Park	194.1	1.1%	5	0.0%
Commercial/Office	454.2	2.5%	243	1.8%
Industrial	573.9	3.2%	225	1.7%
Public/Institutional	858.0	4.7%	66	0.5%
Recreation/Conservation	4,189.9	23.2%	431	3.3%
Transp./Utility/Comm.	171.6	0.9%	35	0.3%
Extractive	257.3	1.4%	4	0.0%
Vacant	1,602.4	8.9%	1,182	8.9%
Water	1,874.3	10.4%		
Railroad Right-of-Way	16.0	0.1%		
Road Right-of-Way	1,655.1	9.2%		
Total	**18,069.9**	**100.0%**	**13,229**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	267.8	4.6%	17	0.2%
5 to 9.9 acres	278.7	4.8%	38	0.3%
2.5 to 4.9 acres	370.8	6.4%	108	1.0%
1 to 2.4 acres	907.7	15.7%	612	5.6%
14,000 to 43,559 sq. ft.	2,437.6	42.2%	5,083	46.2%
8,000 to 13,999 sq. ft.	1,156.3	20.0%	4,325	39.3%
Less than 8,000 sq. ft.	116.1	2.0%	815	7.4%
More than one unit per parcel	241.9	4.2%	16	0.1%
Single Family Sub-total	**5,776.8**	**100.0%**	**11,014**	**100.0%**

Land Use by Area





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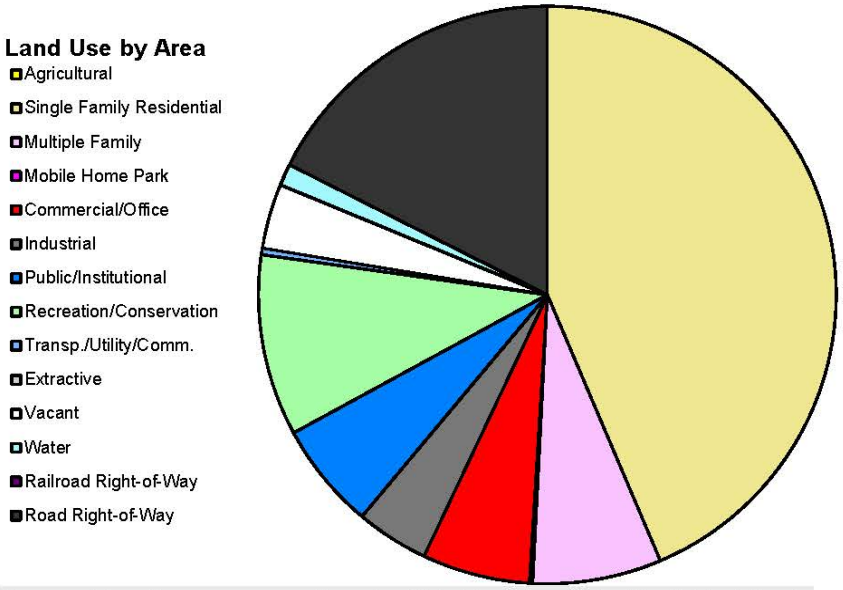
OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

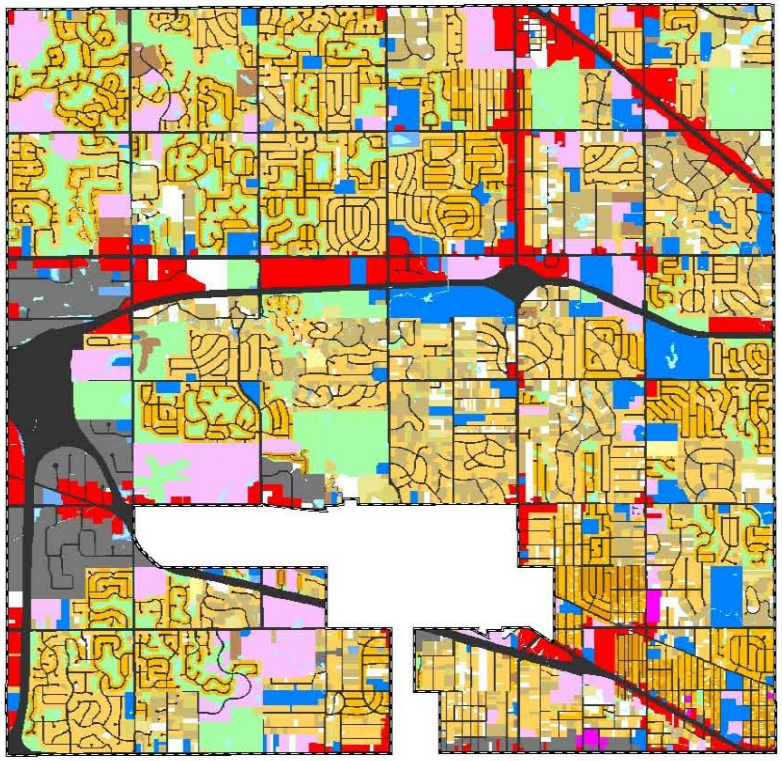
City of Farmington Hills

2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural				
Single Family Residential	9,291.2	43.6%	20,332	88.1%
Multiple Family	1,537.7	7.2%	153	0.7%
Mobile Home Park	37.1	0.2%	7	0.0%
Commercial/Office	1,283.9	6.0%	641	2.8%
Industrial	869.1	4.1%	370	1.6%
Public/Institutional	1,273.6	6.0%	180	0.8%
Recreation/Conservation	2,164.6	10.2%	354	1.5%
Transp./Utility/Comm.	76.8	0.4%	39	0.2%
Extractive				
Vacant	774.5	3.6%	994	4.3%
Water	257.2	1.2%		
Railroad Right-of-Way				
Road Right-of-Way	3,742.9	17.6%		
Total	**21,308.7**	**100.0%**	**23,070**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	42.4	0.5%	3	0.0%
5 to 9.9 acres	156.4	1.7%	25	0.1%
2.5 to 4.9 acres	360.9	3.9%	106	0.5%
1 to 2.4 acres	1,508.8	16.2%	1,042	5.1%
14,000 to 43,559 sq. ft.	4,562.2	49.1%	8,965	44.1%
8,000 to 13,999 sq. ft.	2,285.5	24.6%	8,735	43.0%
Less than 8,000 sq. ft.	206.4	2.2%	1,370	6.7%
More than one unit per parcel	168.6	1.8%	86	0.4%
Single Family Sub-total	**9,291.2**	**100.0%**	**20,332**	**100.0%**





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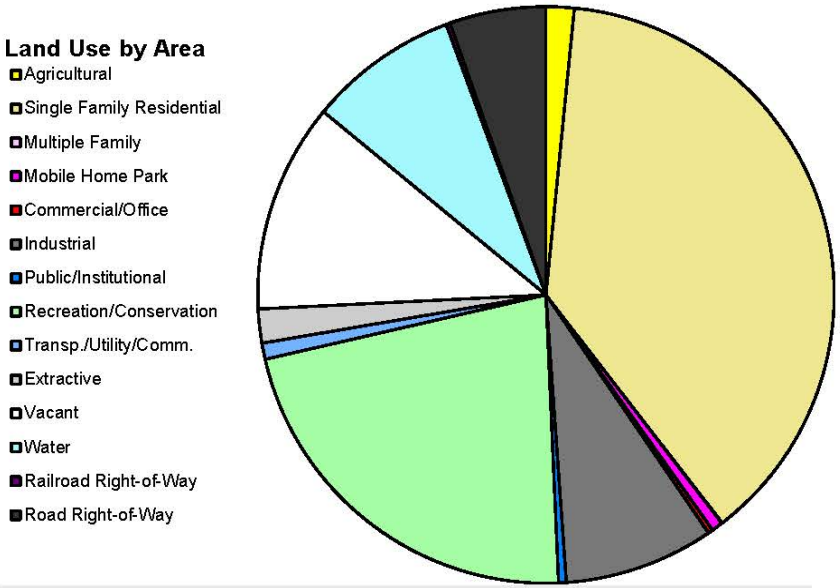
OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

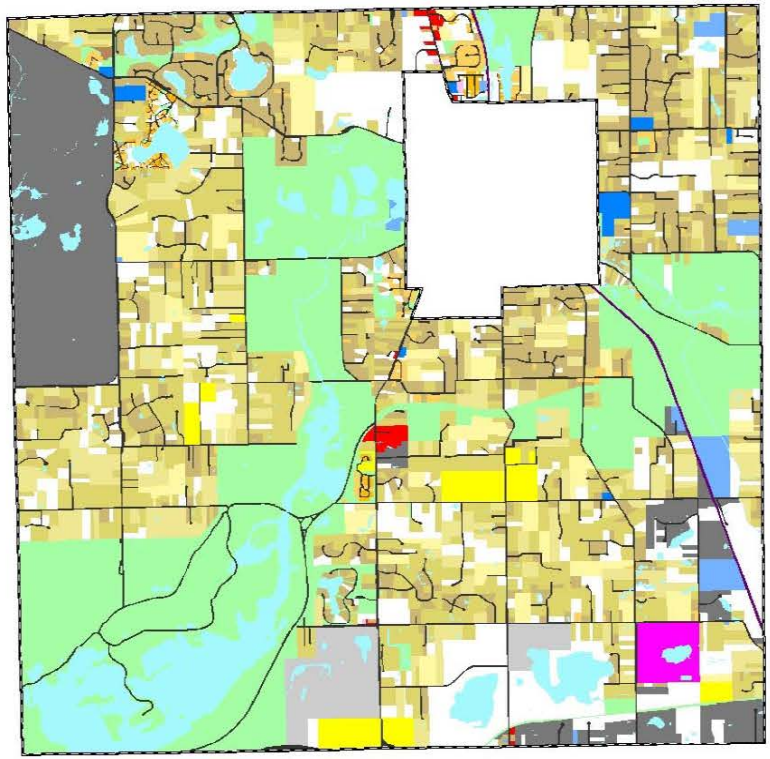
Township of Milford

2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural	327.4	1.6%	11	0.3%
Single Family Residential	7,928.9	38.0%	3,105	78.8%
Multiple Family	4.8	0.0%	3	0.1%
Mobile Home Park	134.5	0.6%	2	0.1%
Commercial/Office	55.2	0.3%	17	0.4%
Industrial	1,758.5	8.4%	97	2.5%
Public/Institutional	88.7	0.4%	9	0.2%
Recreation/Conservation	4,617.8	22.1%	123	3.1%
Transp./Utility/Comm.	190.3	0.9%	15	0.4%
Extractive	398.7	1.9%	8	0.2%
Vacant	2,450.9	11.7%	550	14.0%
Water	1,756.2	8.4%		
Railroad Right-of-Way	47.4	0.2%		
Road Right-of-Way	1,129.0	5.4%		
Total	**20,888.2**	**100.0%**	**3,940**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	819.1	10.3%	56	1.8%
5 to 9.9 acres	1,561.3	19.7%	209	6.7%
2.5 to 4.9 acres	3,035.4	38.3%	902	29.0%
1 to 2.4 acres	2,242.6	28.3%	1,380	44.4%
14,000 to 43,559 sq. ft.	215.9	2.7%	333	10.7%
8,000 to 13,999 sq. ft.	41.1	0.5%	165	5.3%
Less than 8,000 sq. ft.	7.3	0.1%	59	1.9%
More than one unit per parcel	6.2	0.1%	1	0.0%
Single Family Sub-total	**7,928.9**	**100.0%**	**3,105**	**100.0%**





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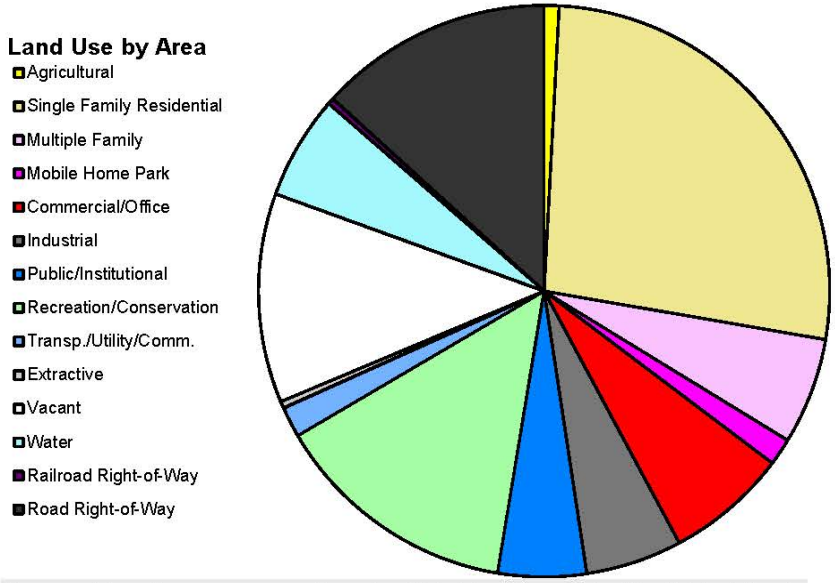
OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

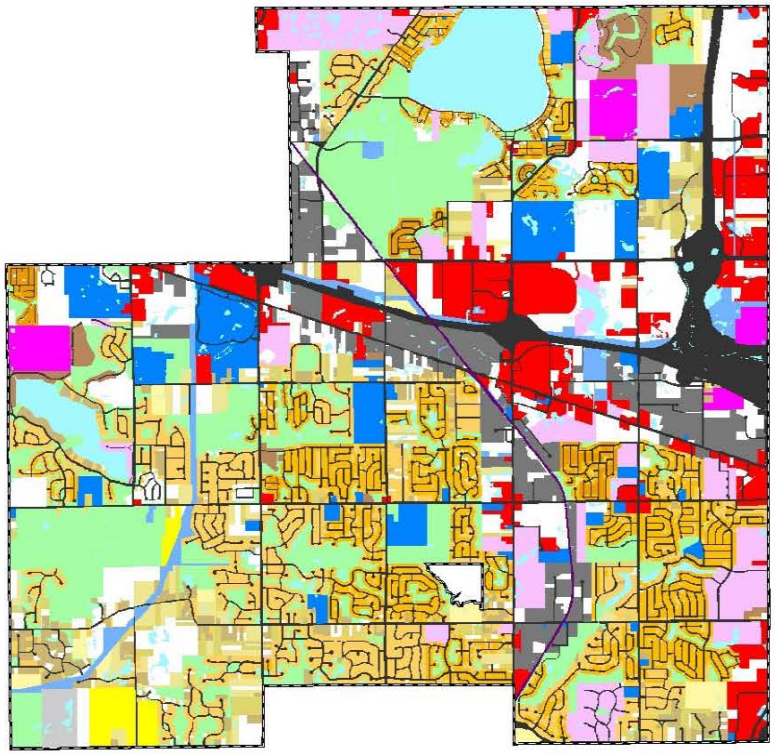
City of Novi

2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural	169.3	0.8%	5	0.0%
Single Family Residential	5,377.6	26.9%	12,035	83.6%
Multiple Family	1,208.8	6.0%	57	0.4%
Mobile Home Park	305.9	1.5%	6	0.0%
Commercial/Office	1,376.6	6.9%	372	2.6%
Industrial	1,094.2	5.5%	311	2.2%
Public/Institutional	1,000.2	5.0%	53	0.4%
Recreation/Conservation	2,791.4	13.9%	446	3.1%
Transp./Utility/Comm.	346.8	1.7%	36	0.3%
Extractive	79.0	0.4%	1	0.0%
Vacant	2,371.4	11.8%	1,073	7.5%
Water	1,175.5	5.9%		
Railroad Right-of-Way	69.4	0.3%		
Road Right-of-Way	2,653.0	13.3%		
Total	**20,019.1**	**100.0%**	**14,395**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	194.4	3.6%	12	0.1%
5 to 9.9 acres	356.7	6.6%	49	0.4%
2.5 to 4.9 acres	366.3	6.8%	101	0.8%
1 to 2.4 acres	517.0	9.6%	381	3.2%
14,000 to 43,559 sq. ft.	1,996.4	37.1%	4,243	35.3%
8,000 to 13,999 sq. ft.	1,471.4	27.4%	5,823	48.4%
Less than 8,000 sq. ft.	201.5	3.7%	1,415	11.8%
More than one unit per parcel	274.0	5.1%	11	0.1%
Single Family Sub-total	**5,377.6**	**100.0%**	**12,035**	**100.0%**





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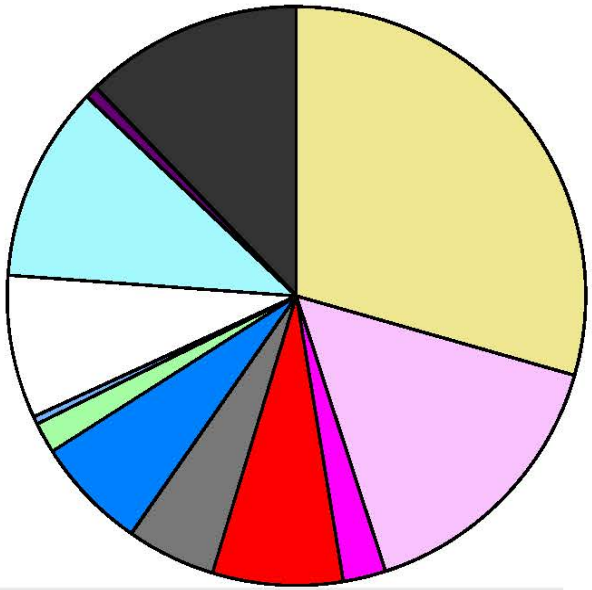
City of Walled Lake

2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural				
Single Family Residential	443.7	29.4%	1,244	70.1%
Multiple Family	234.9	15.6%	40	2.3%
Mobile Home Park	36.1	2.4%	1	0.1%
Commercial/Office	109.7	7.3%	159	9.0%
Industrial	75.1	5.0%	37	2.1%
Public/Institutional	95.1	6.3%	43	2.4%
Recreation/Conservation	26.0	1.7%	33	1.9%
Transp./Utility/Comm.	6.6	0.4%	7	0.4%
Extractive				
Vacant	120.6	8.0%	210	11.8%
Water	165.2	11.0%		
Railroad Right-of-Way	10.6	0.7%		
Road Right-of-Way	183.9	12.2%		
Total	**1,507.6**	**100.0%**	**1,774**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater				
5 to 9.9 acres				
2.5 to 4.9 acres	21.4	4.8%	6	0.5%
1 to 2.4 acres	45.5	10.3%	32	2.6%
14,000 to 43,559 sq. ft.	165.7	37.3%	328	26.4%
8,000 to 13,999 sq. ft.	185.7	41.9%	711	57.2%
Less than 8,000 sq. ft.	23.8	5.4%	165	13.3%
More than one unit per parcel	1.6	0.4%	2	0.2%
Single Family Sub-total	**443.7**	**100.0%**	**1,244**	**100.0%**

Land Use by Area



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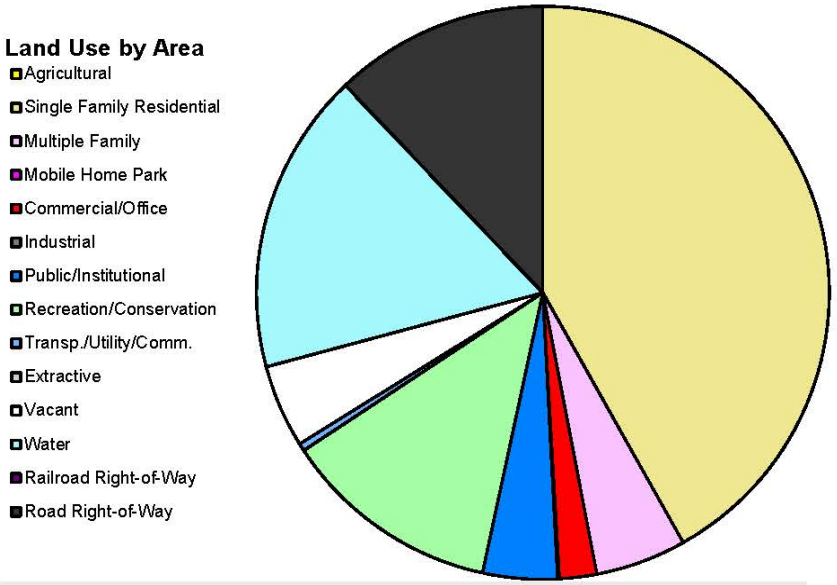
OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

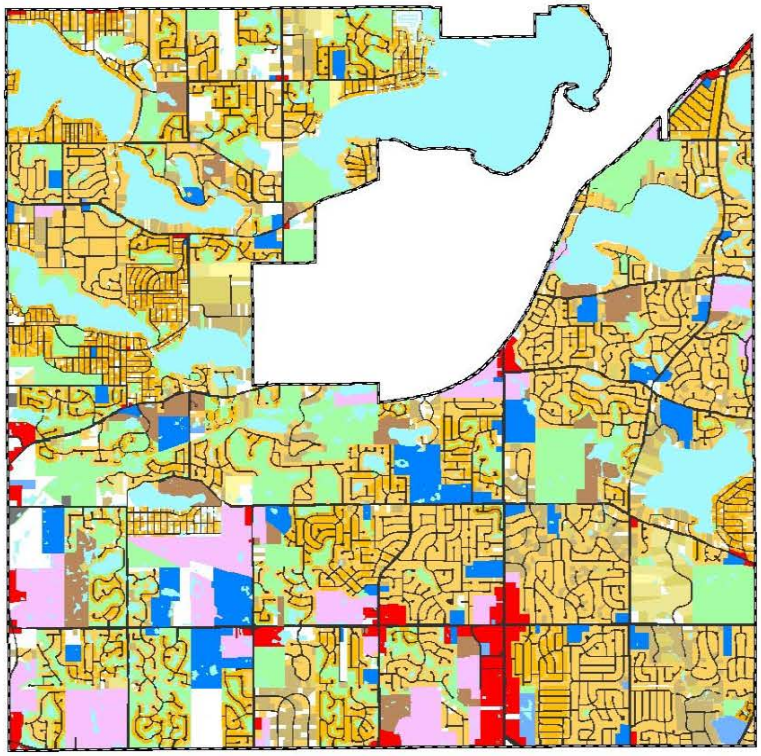
Township of West Bloomfield

2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural				
Single Family Residential	8,398.0	41.8%	18,588	89.6%
Multiple Family	1,029.4	5.1%	75	0.4%
Mobile Home Park				
Commercial/Office	424.0	2.1%	194	0.9%
Industrial	18.2	0.1%	4	0.0%
Public/Institutional	843.9	4.2%	75	0.4%
Recreation/Conservation	2,475.6	12.3%	467	2.3%
Transp./Utility/Comm.	87.4	0.4%	21	0.1%
Extractive				
Vacant	939.8	4.7%	1,316	6.3%
Water	3,421.8	17.1%		
Railroad Right-of-Way				
Road Right-of-Way	2,430.0	12.1%		
Total	**20,068.2**	**100.0%**	**20,740**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	80.5	1.0%	6	0.0%
5 to 9.9 acres	191.7	2.3%	30	0.2%
2.5 to 4.9 acres	268.1	3.2%	73	0.4%
1 to 2.4 acres	844.5	10.1%	621	3.3%
14,000 to 43,559 sq. ft.	4,610.3	54.9%	10,123	54.5%
8,000 to 13,999 sq. ft.	1,772.0	21.1%	6,676	35.9%
Less than 8,000 sq. ft.	145.6	1.7%	1,012	5.4%
More than one unit per parcel	485.4	5.8%	47	0.3%
Single Family Sub-total	**8,398.0**	**100.0%**	**18,588**	**100.0%**





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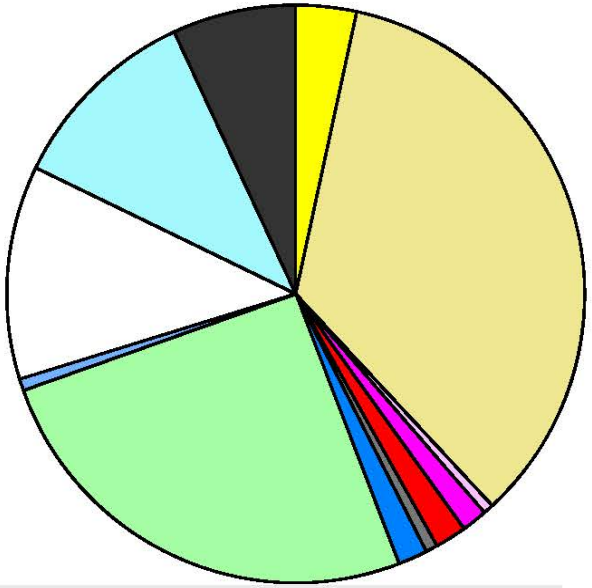
Township of White Lake

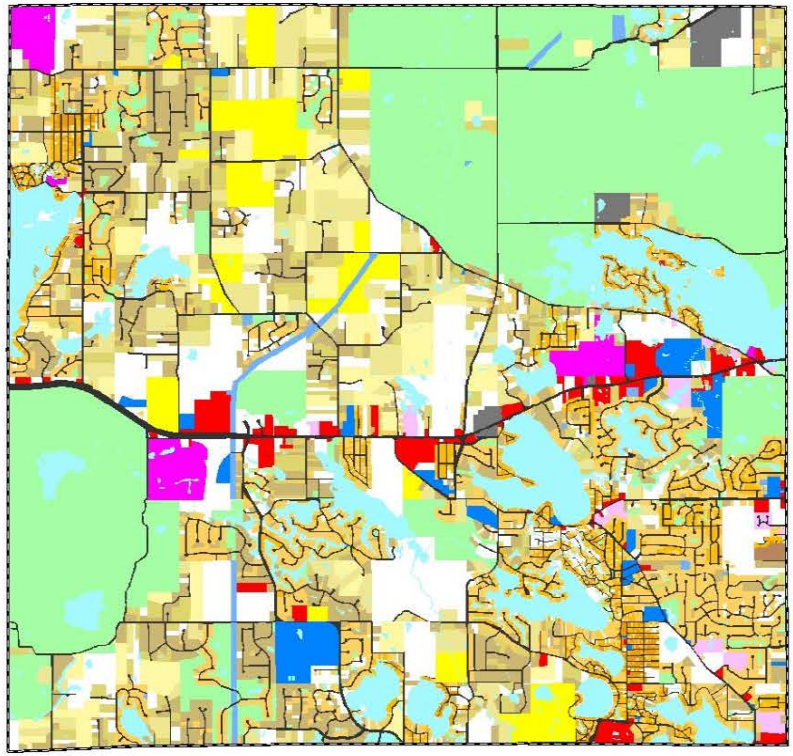
2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural	802.0	3.4%	31	0.3%
Single Family Residential	8,232.9	34.7%	9,745	83.8%
Multiple Family	133.9	0.6%	45	0.4%
Mobile Home Park	340.4	1.4%	10	0.1%
Commercial/Office	418.5	1.8%	154	1.3%
Industrial	158.7	0.7%	21	0.2%
Public/Institutional	389.9	1.6%	41	0.4%
Recreation/Conservation	6,022.7	25.4%	269	2.3%
Transp./Utility/Comm.	157.9	0.7%	24	0.2%
Extractive				
Vacant	2,835.2	12.0%	1,292	11.1%
Water	2,582.4	10.9%		
Railroad Right-of-Way				
Road Right-of-Way	1,640.6	6.9%		
Total	**23,715.1**	**100.0%**	**11,632**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	1,022.3	12.4%	66	0.7%
5 to 9.9 acres	1,154.6	14.0%	144	1.5%
2.5 to 4.9 acres	948.3	11.5%	259	2.7%
1 to 2.4 acres	2,008.1	24.4%	1,418	14.6%
14,000 to 43,559 sq. ft.	2,314.7	28.1%	4,444	45.6%
8,000 to 13,999 sq. ft.	606.3	7.4%	2,331	23.9%
Less than 8,000 sq. ft.	158.8	1.9%	1,081	11.1%
More than one unit per parcel	19.7	0.2%	2	0.0%
Single Family Sub-total	**8,232.9**	**100.0%**	**9,745**	**100.0%**

Land Use by Area





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OAKLAND COUNTY MICHIGAN ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS
2.0
PUBLISHED, 2015

OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

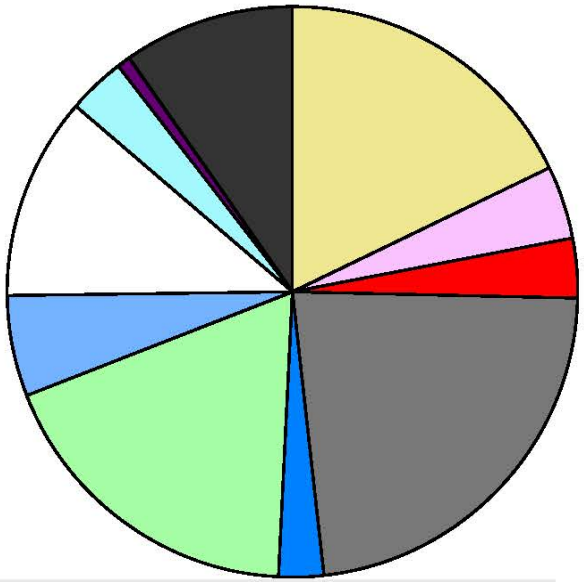
City of Wixom

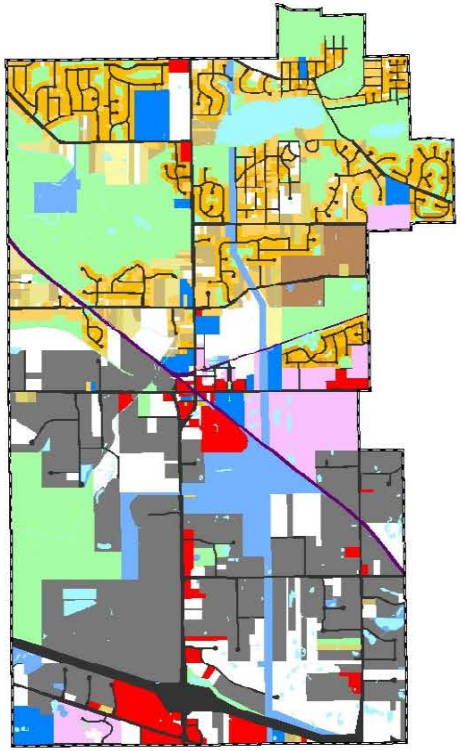
2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural				
Single Family Residential	1,068.4	17.8%	2,571	76.4%
Multiple Family	247.6	4.1%	23	0.7%
Mobile Home Park				
Commercial/Office	202.0	3.4%	73	2.2%
Industrial	1,370.3	22.9%	338	10.1%
Public/Institutional	151.9	2.5%	18	0.5%
Recreation/Conservation	1,095.8	18.3%	99	2.9%
Transp./Utility/Comm.	342.6	5.7%	42	1.2%
Extractive				
Vacant	687.4	11.5%	199	5.9%
Water	195.2	3.3%		
Railroad Right-of-Way	45.0	0.8%		
Road Right-of-Way	581.1	9.7%		
Total	**5,987.4**	**100.0%**	**3,363**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater	31.0	2.9%	2	0.1%
5 to 9.9 acres	58.3	5.5%	8	0.3%
2.5 to 4.9 acres	41.2	3.9%	12	0.5%
1 to 2.4 acres	107.3	10.0%	68	2.6%
14,000 to 43,559 sq. ft.	307.2	28.8%	668	26.0%
8,000 to 13,999 sq. ft.	394.7	36.9%	1,559	60.6%
Less than 8,000 sq. ft.	41.5	3.9%	250	9.7%
More than one unit per parcel	87.2	8.2%	4	0.2%
Single Family Sub-total	**1,068.4**	**100.0%**	**2,571**	**100.0%**

Land Use by Area





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OAKLAND COUNTY MICHIGAN
ECONOMIC DEVELOPMENT & COMMUNITY AFFAIRS

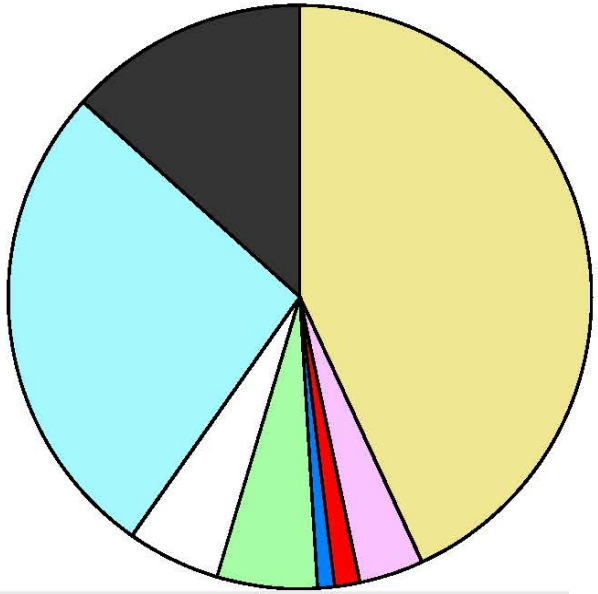
Village of Wolverine Lake

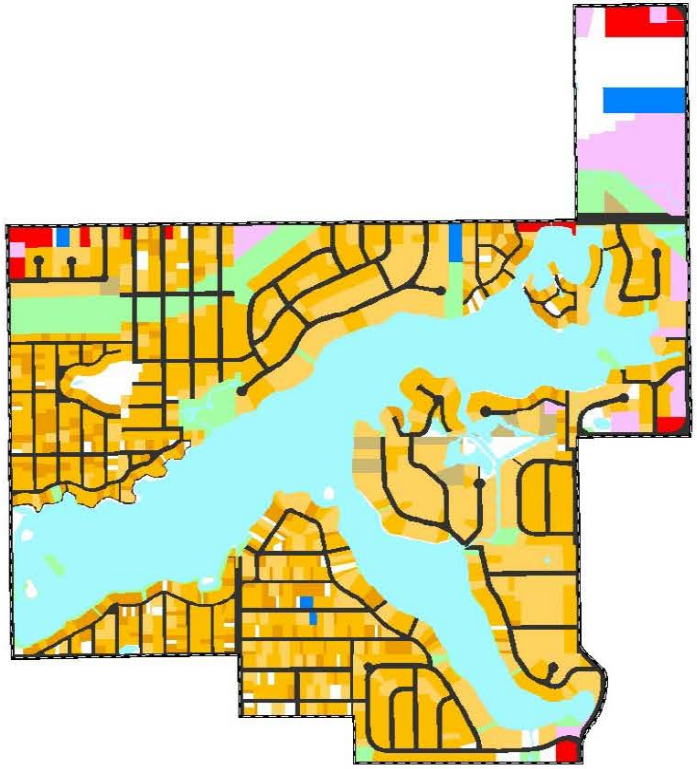
2014 Land Use Statistics

Land Use	Area (ac.)	Area (%)	Parcels	Parcels (%)
Agricultural				
Single Family Residential	464.2	43.1%	1,621	89.9%
Multiple Family	38.5	3.6%	16	0.9%
Mobile Home Park				
Commercial/Office	15.1	1.4%	15	0.8%
Industrial				
Public/Institutional	10.2	0.9%	7	0.4%
Recreation/Conservation	59.8	5.6%	47	2.6%
Transp./Utility/Comm.				
Extractive				
Vacant	55.7	5.2%	98	5.4%
Water	289.6	26.9%		
Railroad Right-of-Way				
Road Right-of-Way	143.6	13.3%		
Total	**1,076.5**	**100.0%**	**1,804**	**100.0%**

Single Family By Lot Size	Area (ac.)	Area (%)	Parcels	Parcels (%)
10 acres or greater				
5 to 9.9 acres				
2.5 to 4.9 acres				
1 to 2.4 acres	9.8	2.1%	8	0.5%
14,000 to 43,559 sq. ft.	177.8	38.3%	401	24.7%
8,000 to 13,999 sq. ft.	234.1	50.4%	917	56.6%
Less than 8,000 sq. ft.	42.5	9.2%	295	18.2%
More than one unit per parcel				
Single Family Sub-total	**464.2**	**100.0%**	**1,621**	**100.0%**

Land Use by Area





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Multiple family housing continues to expand within the township as land that is Master Planned for multiple family is rezoned to RM Multiple Family Residential for development. In 2013, Commerce Township had 2,101 multiple family units, which represented 158.9 acres or .9% of the land area in the Township. Over 602 multiple family units have been approved since then in several different projects, and the township's multiple family acreage has increased to 177.5 acres of land in 2014.

Table 3.1: Multiple Family Land Use in Surrounding Communities, 2014

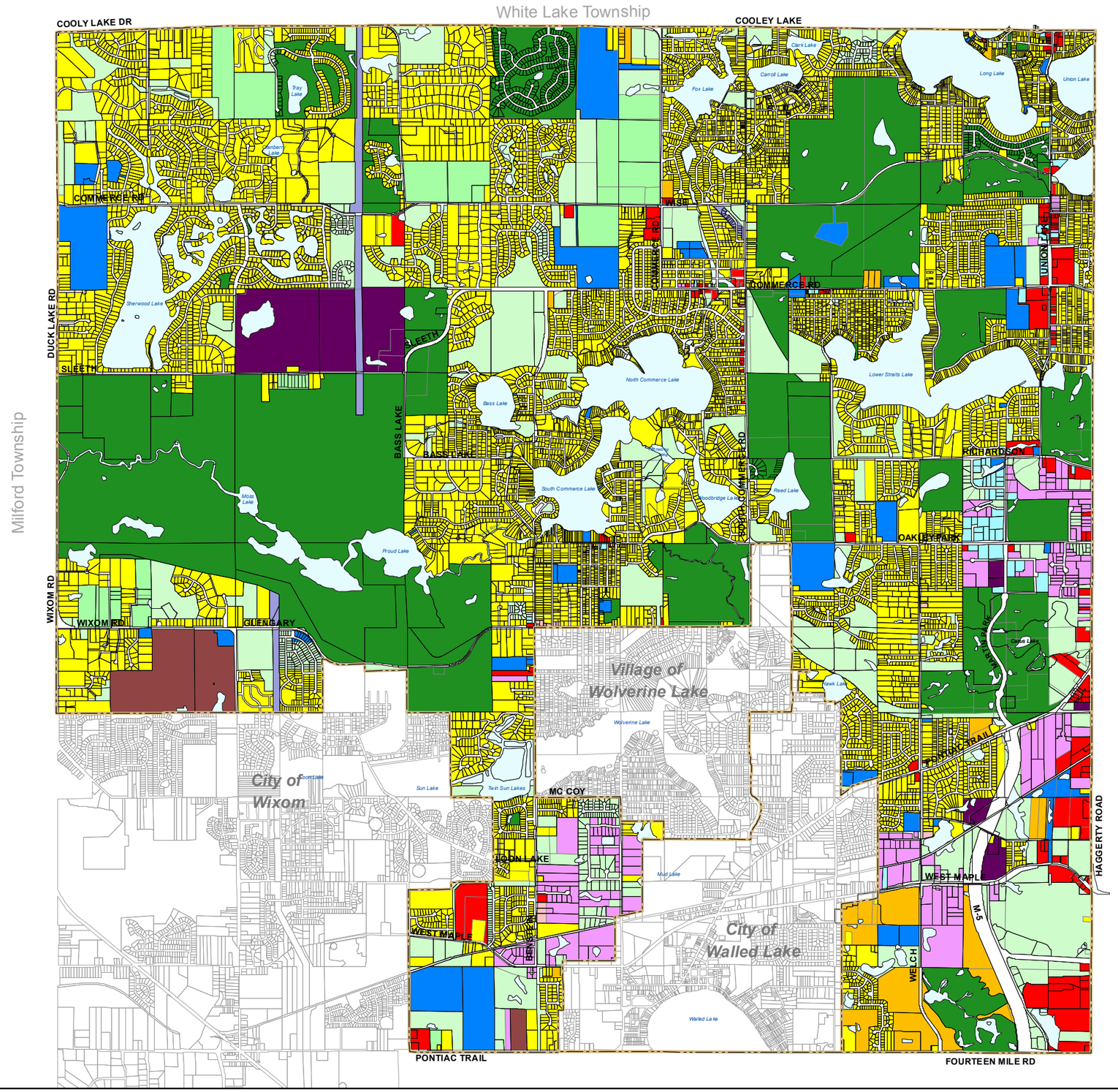
Community	Area (acres)	Area (%)
Commerce Township	177.5	1.0%
Farmington Hills	1,537.7	7.2%
Milford Township	4.8	0.1%
Novi	1,208.8	6.0%
Walled Lake	234.9	15.6%
West Bloomfield Township	1,029.4	5.1%
White Lake Township	133.9	0.6%
Wixom	247.6	4.1%
Wolverine Lake	38.5	3.6%

Source: Oakland County, 2014 Land Use Statistics

Inconsistent Master Plan Analysis

The Planning Commission also studied the existing Future Land Use Map and Zoning Map for inconsistencies with respect to Multiple Family developments and zoning. The following chart and map identify those irregularities. The proposed Future Land Use map is designed to correct those inconsistencies.

One parcel of land in the Township is future planned for multiple family and vacant. The Township is proposing to change the Future Land Use Map to reflect a higher density single family residential designation on this parcel. Given the new multiple family developments within the Township as well as adjacent community multiple family offerings, it is the desire of the Township to encourage more single family development rather than multiple family construction. The proposed change is consistent with the goals and objectives as identified by the Township's Planning Commission and Board of Trustees.



Existing Land Use

Commerce Charter Township,
Oakland County, Michigan

December 7, 2015

EXISTING LAND USE

- Agricultural
- Single Family Residential
- Multiple Family Residential
- Manufactured Home Park
- Neighborhood Commercial
- General Commercial
- Office
- Light Industrial
- Heavy Industrial
- Public/Semi-Public
- Parks/Recreation
- Utilities
- Vacant
- Lake
- Municipal Boundaries

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McKenna ASSOCIATES

Base Map Source: Oakland County GIS Data Source: McKenna Associates Inc., 5/02

4. SOCIO-ECONOMIC AND HOUSING TRENDS

You can't plan for where you want to go, if you don't know from where you came!

Overview

The purpose of this section is to highlight the past, present, and future population and housing needs of Commerce Township. Through this effort, Commerce Township's decision-makers will be able to make better-informed decisions on its growth management scheme. Growth management encompasses public efforts to resolve problems stemming from the continuously changing character of cities, townships, and villages. An analysis of the past, present, and future trends are pivotal in attempts to improve the quality of life where people can live, work, and play.

Population Analysis

In this section, different aspects of Commerce Township's population are analyzed such as: population estimates, occupational characteristics, income, and educational attainment. Persons per household and total housing units are also examined to find unique characteristic trends in Commerce Township.

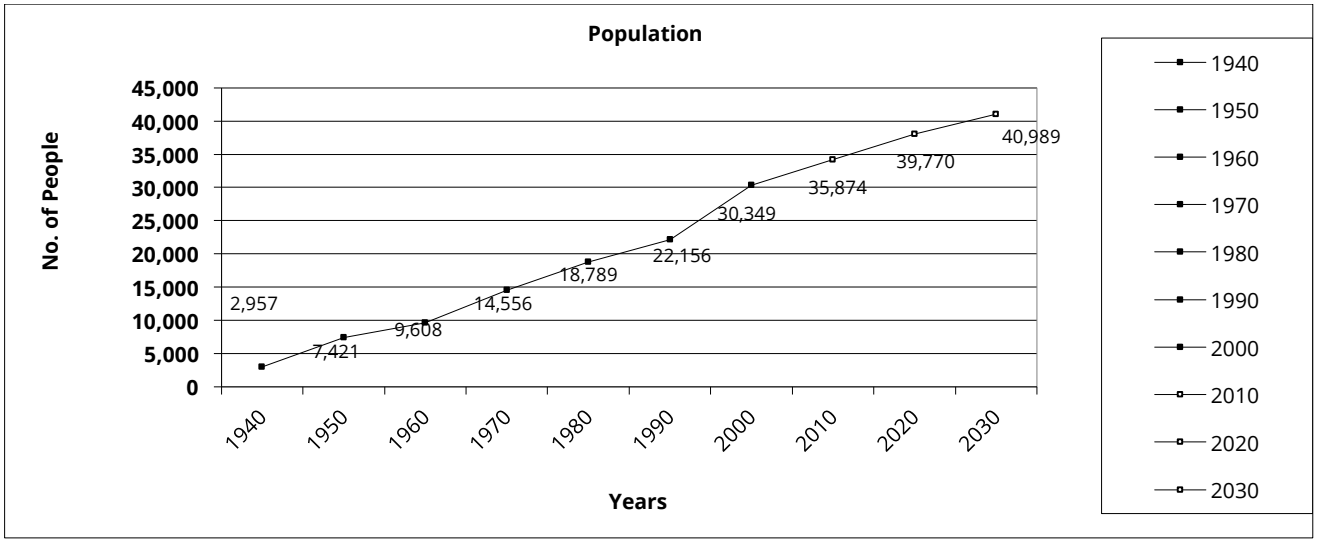
Total Population

According to the U.S. Bureau of the Census, Commerce Township's population in 1980 was 18,789 residents. This figure increased by 18.3% or 3,439 persons by the year 1990 and reached 30,349 by the year 2000 as shown in Table 4.1. The 2010 Census set the population at 35,874, an 18.2% increase over a 10-year period. Figure 4.1 shows the Township's population growth from 1940 through 2035.

The Township experienced its largest population percent increase (151%) in 1950. A steady increase of about 3,000 to 4,000 people occurred thereafter, with the exception of a considerable increase in the Township's population between 1990 and 2000.

Although Commerce Township comprised 2.5% of the county's total population, the Township experienced a sizeable 36.5% increase in its population from 1990 to 2000, ranking third among neighboring Oakland County municipalities (See Table 4.1). SEMCOG's (Southeast Michigan Council of Governments) 2040 Regional Development Forecast projects a 16% population increase for Commerce Township between the years 2010 and 2040, resulting in an additional 5,754 people, averaging 1,918 more people each decade.

Figure 4.1: Population Trend
Commerce Township



Source: U.S. Census 1990, 2000, 2010 and 2012 SEMCOG

Table 4.1: Population
Commerce Township and Surrounding Communities

	1990	2000	2010	1990–2010	SEMCOG Forecast 2040
Commerce Township	22,228	30,349	35,874	61.3%	41,628
White Lake Township	22,608	28,219	30,019	32.7%	30,329
West Bloomfield Township	54,507	64,860	64,690	18.7%	66,056
Milford Township	6,610	8,999	9,561	44.6%	9,807
City of Walled Lake	6,278	6,992	6,999	11.5%	7,678
City of Wixom	8,550	13,263	13,498	57.9%	14,942
Village of Wolverine Lake	4,727	4,415	4,312	-8.9%	4,312
City of Novi	33,148	47,579	55,224	66.6%	57,897
Oakland County	1,083,592	1,194,156	1,202,362	10.9%	1,246,863

Source: U.S. Census Data 1980, 1990, and 2000, 2010 , and 2012 SEMCOG

The City of Novi had the largest increase in population between 1990 and 2010 (66.6%). Commerce followed closely with a 61.3% increase. The Village of Wolverine Lake continues to decrease in population. Commerce Township's growth will most likely slow over the next decade due to economics and limits on available developable land. The Township is nearly built out although several large tracks of land still exist in the DDA area and the gravel pit.

Age Structure

As Commerce Township has grown, the composition of the population has changed. In 1980, the median age in the Township was 28.3 years. The median age was 32.2 in 1990 and was approximately 36.0 in 2000. The 2010 Census stated that the median age was 40.

In 1990, the largest age group was from 20 to 44, which was comprised of 44.7% of the combined male and female population in the Township (See Table 4.2). The second and third largest age groups were 45 to 64 and 5 to 14, which made up 19.2% and 14.7%, respectively.

By the year 2000, the 45 to 64 age group was the largest with percentage change of +59.2%. The age group of 5 to 14 years was the segment with second largest percent change (50.6%). However, the number of residents between the ages of 20 to 44 remained the largest segment of the population, accounting for 37.8% of Commerce Township residents in 2000.

Per the 2010 Census, the 35 to 64 age group was still the largest group although it actually declined approximately 2%. The largest increase was found in the 65+ age group with a 74.3% increase. This age group is projected to increase 169.4% over the next 25 years, per SEMCOG's 2040 projection. The second fastest growing age group is the under 5 group, with a projected increase of 11% through 2040. In 2010, the 35 to 64 age group comprised 46.3% of the population and the 5 to17 age group was the second largest segment at 20.5%. The 2040 projections estimate the 35 to 64 age group at 36% of the population with the 65+ age group coming in second at 21.4%. Both of these figures, as they relate to future senior housing needs and academic needs are important from a physical and economic planning perspective. In 2009, an assisted living facility was constructed with 120 beds. An aging structure was vacated and residents moved to this new facility. Commerce Township has not seen any school closings, as have nearby communities. Given the new information about the under 5 age group, this is a positive position to be in.

Table 4.2: Age Structure
Commerce Township, 2010

Age Bracket (in years)	2000	%	2010	%	Numeric Change 2000-2010	% Change 2000-2010
Under 5	2,812	8.0%	2,159	8.0%	(653)	24.5%
5 to 14	5,995	17.2%	5,520	17.2%	(475)	50.6%
15 to 19	2,083	5.9%	2,658	5.9%	575	14.3%
20 to 44	13,140	37.8%	10,548	37.8%	(2,592)	9.0%
45 to 64	8,249	23.7%	11,234	23.7%	2,985	59.2%
65 & Over	2,488	7.1%	3,755	7.1%	1,267	49.2%
Totals	34,764	100%	35,874	100%	7,812	28.9%
Median Age	36.0	-	40.0	-	4	11.1%

Sources: U.S. Census 1990, 2000, 2010

These figures indicate that it is critical for the community to plan for the needs of people of all ages, with particular emphasis on the need for programs and facilities for older adults and the new "baby boomer" generation.

Household Income

Table 4.3 reflects the household income for Commerce Township compared to that of Oakland County in 2010. As shown, the median household income was approximately $16,000 more in the Township than in the County. Approximately 17.5% of the Township's household income fell in the $25,000 through $49,000 category; this percent was slightly below the County's 20.7% figure. Overall, Commerce Township fared higher in most income categories compared to Oakland County as a whole.

Employment

According to the 2000 U.S. Census, 40% of the Township's employed persons worked in the managerial, professional and related occupations (See Table 4.4). This figure, though slightly lower than the County's average, indicates that Commerce Township's work force is increasingly white-collar workers. Conversely, the farming, fishing, and forestry occupations have dramatically decreased in numbers. In addition, the table also shows similar occupational distributions between Commerce Township and Oakland County. This similarity is attributed to the higher levels of educational attainment in the Township and the County in the last ten (10) years.

The 2010 U.S. Census figures indicated that Oakland County's total employed workforce was approximately 642,171, while that of Commerce was approximately 15,403. Commerce Township's employed persons comprised roughly 2.4% of the County's workforce.

Table 4.3: Household Income
Commerce Township and Oakland County, 2010

	Commerce Township	%	Oakland County	%
Less than $25,000	1,147	8.9%	81,949	17%
$25,000-$49,000	2,236	17.5%	99,363	20.7%
$50,000-$74,999	2,177	17.1%	85,826	17.8%
$75,000-$99,999	2,320	18.2%	65,533	13.6%
$100,000-$149,000	2,707	21.2%	79,096	16.4%
$150,000 or more	2,173	17%	69,273	14.4%
Median Household Income	82,691	99.9%	$66,390	99.9%

Source: U.S. Census 2010

Percentages may not total to 100% due to rounding

Table 4.4: Employment by Occupation 16 Years and Older
Commerce Township and Oakland County, 2000

	Commerce Township	%	Oakland County	%
Managerial, professional, and related occupations	7,411	40.0%	273,909	44.6%
Service occupations	1,816	9.8%	65,499	10.7%
Sales and office occupations	5,501	29.7%	164,531	26.8%
Farming, fishing, and forestry occupations	16	0.1%	664	0.1%
Construction, extraction, and maintenance occupations	1,563	8.4%	42,648	6.9%
Production, transportation, and material moving occupations	2,227	12.0%	67,126	10.9%
TOTAL	18,534	100%	614,377	100%

Source: U.S. Census 2000

Educational Attainment

Table 4.5 shows the educational attainment levels for Commerce Township and Oakland County. By and large, the Township is relatively close to the County percentages in most of these areas. The Township has 5.8% of persons not graduating from high school, whereas the County has a 7.8% rate. The Township has 72.4% of people 25 years and older with at least some college, whereas the County has 70.9% of people 25 and older with some college. From 2000 through 2010 the percentage of persons with a Bachelor's degree increased 3% and 2.5% for those with an Associate's degree.

Table 4.5: Educational Attainment, Population 25 Years and Over
Commerce Township and Oakland County, 2010

	Commerce Township		Oakland County	
	2010	**% Change 2000-2010**	**2010**	**% Change 2000-2010**
Graduate/Professional	12.4%	0.8%	17.6%	2.6%
Bachelors	26.8%	3.0%	24.6%	1.4%
Associate	9.9%	2.5%	7.4%	0.7%
Some College, no degree	23.3%	-3.1%	21.3%	-1.0%
High School Graduate	21.8%	-1.8%	21.4%	-0.7%
Did not graduate HS	5.8%	1.3%	7.8%	-3.0%

Source: U.S. Census 2010

Household Composition

In 2010 the total number of households increased from 10,708 to 13,200 or 23.5%. The households consisting or two or more persons without children increased from 4,102 to 5,477 or 33.5% while the largest percentage increase in households was for those consisting of 65 years of age and older living alone. That segment increased from 443 households to 822, or an 85.6% increase.

The vacancy rate for houses remained relatively stable, increasing from 4.3% in 2000 to 5.3%. As compared to the County, which had an 8.3% vacancy rate and the southeast Michigan district, which had a 10.3% vacancy rate, the Township's stability is a positive measure of the overall economic "well-being" of the Township. Our overall migration was positive also. We had a net increase of 361 persons that moved in, versus moved out, of the Township. The County had a net loss of 5,365 persons; southeast Michigan lost over 25,000 persons.

As shown in Table 4.6, the Township has also experienced a decline in the number of persons per household. This is reflective of a trend seen at the national level. In 1990, there were 2.83 persons per household. This figure decreased to 2.71 persons per household in the year 2010.

Table 4.6: Persons per Household
Commerce Township, 2000-2010

	1990	2000	2010
Commerce Township	2.88	2.83	2.71
Numeric Change	—	-0.05	0.12

Source: U.S. Census 1980, 1990, & 2000 &2010

In 2000, households with seniors (65+) made up 14.5% of all households; in 2010 that percentage jumped to 20.2%. The SEMCOG projection for 2035 indicates that at that time, 36.2% of all households will have seniors in them. The percentage of elderly living alone was 6.2% in 2010. The SEMCOG projection for 2035 indicates that 13.8% of households will consist of elderly living alone, and the 2040 projection indicates a 169.45% increase in this population group from 2010-2040. This points to an aging population, aging housing stock and increased need for senior housing, recreational opportunities, and services to help this group. This provides an opportunity for the Township to market itself to this demographic thus opening up a myriad of potential uses that can cater to the needs of this group.

Population Projections

The projection or forecasting of population for a community over an extended period of time is subject to many variables, such as national trends, migration and the regional economy. The most significant factor affecting local population growth or decline is the availability of employment.

Assuming local employment trends, the employment centers serving Commerce Township will at best remain similar to the employment patterns of the last ten (10) years. Without any major increases in employment, population growth will be limited to a natural increase and there most likely will not be a rapid increase in the number of persons. Natural increases in Commerce Township have seen a significant amount of growth as the Township is experiencing a second wave of "baby boomers". Although the unemployment rate has declined to 5.4% in the last three years from the 10% range for Michigan, and the rate for Oakland County has trended slightly below the state average for the recent past. SEMCOG projections estimate that Commerce Township's employment will increase 6% between 2010 and 2020. This is the number of jobs created, not the

employment/unemployment rate. From 2010 to 2020, County wide, the largest increase in jobs is expected in the professional, tech and scientific services sectors. Retail trade jobs are expected to decrease during this same time.

All methods of population projections make certain assumptions and based upon assumptions, different projections are derived. Table 4.7 reflects the results of three (3) methods used to project Commerce Township's population in ten (10) year intervals through the year 2020.

Table 4.7: Population Projections 2000-2030
Commerce Township, 2000-2030

Method of Projection	2000	2010	2020	2030
1990-2000 Straight Line (a)	30,349	38,542	46,735	54,928
SEMCOG Projection (b)	30,349	34,146	38,053	41,019
Geometric Projection (c)	30,349	41,548	56,879	77,867

(a) Based on population growth, which occurred between 1990-2000
(b) Based on SEMCOG's population forecast, 2002.
(c) Based on percentage rate (36.9%) of population change from 1990-2000
Source: McKenna Associates

The straight-line projection is based upon an average annual increase in the population of 8,193 per decade as was experienced during the ten (10) year period from 1990-2000. SEMCOG's forecast is based upon the housing unit methodology. To arrive at the estimated total population for Commerce Township, group quarters data from the 2000 Census were added to the total household population. The geometric projection is based upon the percentage rate of population change from 1990-2000.

The above projections were calculated to illustrate possible future population patterns in Commerce Township. However, the future population of Commerce Township will be determined by the goals and objectives of the Master Plan, the resources and constraints of the Township and the areas of Commerce Township that are suitable for development. The decisions made by Commerce Township regarding sewer and water, transportation improvements, zoning controls and subdivision regulations, will ultimately restrict or promote and regulate the intensity of growth in Commerce Township and therefore the population.

Summary

The population trends and social characteristics of Commerce Township have implications for the development of the master plan. A number of points stand out:

The population of Commerce Township has grown by 90.9% from 1980 thru 2010 and is expected to continue to increase in the next 20 years.

The population of Commerce Township increased from 22,156 in 1990 to 30,349 in 2000 to 35,874 in 2010, according to the U.S. Census. The three population projections analyzed in this section predict continued population growth. The continued population growth will lead to development pressure for more residential properties, causing some of the scenic areas in the Township to be vulnerable to development.

The population of Commerce Township is better educated than in 2000.

According to the U.S. Census, the percentage of Commerce Township residents obtaining a "Bachelor's Degree or Greater" increased to 39.2% (of the population 25 years and older) in 2010. In the same period of time, the percentage of Oakland County residents with a Bachelor's degree or greater was 42.2%. Statewide, the percentage is 25% and for the nation it is 27.9%. The high percentage of college educated talent by residents will make the Township a more attractive area for businesses that employ a highly educated workforce.

Commerce Township has a high median household income.

According to the 2010 U.S. Census, Commerce Township had a median household income of $ 82,961, which was higher than the median household income of $ 66,390 for Oakland County. The high median income makes Commerce Township a potentially lucrative retail market, attracting the interest of larger commercial land uses in the community.

Older and younger age groups are growing as a percentage of population.

According to the U.S. Census, the number of Commerce Township residents from the ages 45 to 64 increased by 60% between 2000 and 2010, while ages 65 and over increased by 74.3%. The growth in the number of empty nesters and senior citizens will change the housing and service needs of the Township population. During 1990s, the number of children, ages 5 to 14, increased by 50.6%; however, between 2000 and 2010 that age group only increased by 3.1%, but is expected to keep increasing as the 5 year olds and under get older. The Township has not closed any schools in either of its school districts (Huron Valley Schools and Walled Lake School District) which should serve the anticipated population of school age children for at least the next twenty years. However, the Township will see an increased need for senior services and auxiliary uses and businesses to serve that demographic. This will provide both challenges and opportunities for new businesses and residential options.

Economic Analysis

The following section examines the economy of the Township as it relates to land use. A commercial leakage analysis was conducted to determine if additional commercial land uses could be supported by the population of the Township. An analysis of the employment of the Township was completed to assess whether additional land will be needed to accommodate future employment. Finally, the Township's tax base was also analyzed.

Commercial Analysis

Commercial land uses are found throughout the Township, while community shopping centers have developed along the eastern border of the Township as planned. Limited neighborhood shopping exists in other portions of the Township, which could develop into commercial nodes to service nearby residential neighborhoods or job centers, decreasing the number of automobile trips and impact on the roads.

The 1988 Master Plan for Commerce Township determined that the Township should be concerned with providing its own residents with appropriate amounts of commercial uses to serve their needs. Due to the competing regional centers in Novi, West Bloomfield and along M-59, the plan concluded that any type of regional commercial was not appropriate. These regional shopping centers have continued to grow since 1988. South of the Township, Twelve Oaks Mall in Novi has been flanked by regional commercial development: the Novi Towne Center, which opened in the 1990's, and recently built Twelve Mile Crossing at Fountain Walk. The commercial development in West Bloomfield along Orchard Lake Road has continued to grow, with new and redeveloped stores along the busy retail strip to the east of the Township. M-59 or Highland Road, to the north, has not grown to the same degree areas in Novi or West Bloomfield but is experiencing commercial growth. The Township will need to determine what type of commercial development it wishes to attract, if any. The Township will also have to determine where the commercial development should be placed within the Township and what role it will play in the commercial market of western Oakland County.

Methodology and Assumptions

A retail "leakage study" was conducted to determine the rough market potential of different types of commercial land uses. Leakage is the approximate amount of retail dollars leaving the community. Leakage is determined by comparing the amount of retail dollars spent by Commerce Township residents and the amount of retail dollars taken in by Commerce Township businesses.

If the study shows that the amount of retail dollars spent by residents is higher than the amount of dollars taken in by Township businesses, it is an indication that Township residents are leaving the Township to purchase those goods. The reasons for this could include a lack of commercial facilities in the Township, commercial facilities in the Township that do not offer the quality or selection desired by Township residents or commercial facilities in other municipalities that are more convenient. If the amount of dollars spent and dollars generated is fairly close, the study indicates that enough shopping opportunities in terms of quantity, quality and convenience are available. If the amount of retail dollars spent by residents is significantly less than the retail dollars taken in, it is a fair assumption that residents from other municipalities are purchasing goods or services in the Township rather than in their own communities.

The gap between spending and revenues must be large in order to have any significance because the study makes several assumptions. First, the study assumes that Commerce Township residents will shop in Commerce Township, if given the opportunity. Second, the study also assumes that the amount of retail dollars spent in Commerce Township by residents of other communities is negligible. Third, the study does not take

into account the diversity of retail uses within a single establishment in today's commercial establishments. For instance, the amount of dollars spent on food at home by Commerce Township residents is compared to the amount of dollars taken in by Commerce Township food and liquor stores. The candy bar purchased at a gas station or the bottle of milk at a chain drug store are left out of the equation. Therefore, only large gaps can be seen as indicators.

Data Analysis

Claritas, Inc., a nationally recognized data provider, supplied the dollar amount spent on certain retail items by the average Commerce Township household in 2001. This figure was then multiplied by the number of households (12,379) in Commerce Township according to the 2000 U.S. Census. The resulting number is the approximate amount of retail dollars spent in those categories by Commerce Township households as a group. Claritas also provided an estimate of the amount of retail dollars taken in by Commerce Township retail businesses. These figures were compared to determine the leakage, as seen in Table 4.8.

Table 4.8: Retail Leakage $
Commerce Township, 2001

Retail Category		2001 Total Commerce Household Expenditures	2001 Total Commerce Estimated Retail Sales	Difference
Type of Expenditure	**Type of Store**			
Food at Home	Food & Liquor Stores	$85,942,940.56	$49,000,000.00	$36,942,940.56
Food away from home	Restaurants, bars, etc.	$94,927,494.97	$28,100,000.00	$66,827,494.97
Prescriptions, medical supplies, over the counter drugs, smoking products and personal care products	Drug stores and pharmacies	$52,632,289.46	$7,300,000.00	$45,332,289.46
Reading materials	Used book stores, book stores, stationery stores and news stands	$12,663,717.00	$300,000.00	$12,363,717.00
Household repairs	Lumber & Building Materials, Paint, glass and wallpaper store, hardware stores	$20,945,268.00	$40,000,000.00	($19,054,732.00)
Household textiles, furniture, floor coverings, miscellaneous household equipment	Furniture and furnishing stores, floor covering stores	$43,252,226.00	$47,500,000.00	($4,247,774.00)
Appliances and home computers	Appliance and computers stores	$67,923,573.00	$33,400,000.00	$34,523,573.00
Apparel and footwear	Clothing and shoe stores	$92,978,669.00	$4,600,000.00	$88,378,669.00
Sports and recreation	Sporting good shops, bicycle shops, toys and hobby stores	$28,484,079.00	$1,600,000.00	$26,884,079.00
Photographic Equipment	Camera and photography supply stores	$4,741,157.00	$0.00	$4,741,157.00
New & used cars	New and used car dealers	$103,030,417.00	$113,000.00	$91,730,417.00
Gas, oil, car maintenance and repair	Automobile supply stores and gasoline service stations	$56,188,281.00	$7,500,000.00	$48,688,281.00

Source: Claritas Inc., U.S. Census 2000

This simple analysis shows that in every category, with the exception of home repair and furnishings, it is probable that Commerce Township residents are spending retail dollars outside of the Township. Due to the number of large retail centers within a 10-mile radius of the Township, the Township can depend on those centers to provide comparison goods for its residents and has chosen to do so since the 1980's. Those categories would include:

- Shoes and apparel
- New and used cars
- Appliances and computers

A regional retail analysis should be conducted, if the Township wants to attract clothing and apparel stores, new or used car dealerships or appliance or computer stores.

Other retail stores are very specialized and enthusiasts are willing to travel further to access those goods. Those categories listed in Table 4.8 which fall into this classification are:

- Sporting goods and hobby shops
- Photographic equipment
- Book stores

The Township may want to encourage these uses in any commercial area where the Township wants to attract a limited amount of people from outside the Township to that area. For instance, these uses would be appropriate in a historic village area or a mixed-use development.

The remaining categories are food stores (large grocery stores to a small bakery), restaurants and other food away from home (sit-down restaurants to ice cream stands), drug stores, gas stations and automobile repair and supply shops. These retail uses provide everyday goods and services. It is not unusual for leakage for gasoline service stations and automobile repair. These uses are in demand at all times and people do not necessarily purchase gas near where they live. However, the leakage for the food stores, restaurants and pharmacies points to a potential need for more neighborhood commercial uses to serve the day to day needs of the residents.

In terms of land use, the dollar figures above can be translated into square footage in order to provide some guidelines for the development of the master plan as demonstrated in the table below. The following categories listed in Table 4.8 are not listed in Table 4.9 since the median sales per square foot is not available for those broad retail categories: clothing and shoe stores; sporting goods shops, bicycle shops, toys and hobby stores; and automobile dealerships and automobile supply stores and service stations.

Table 4.9: Retail Leakage Potential Square Footage Analysis
Commerce Township, 2001

Retail Use	Leakage ($)	Median Sales per Square Foot [1]	Potential Square Footage
Food Store	$36,942,940.56	$339.55 [2]	108,800 sq. ft.
Restaurant	$66,827,494.97	$186.00 [3]	359,288 sq. ft.
Drug Store	$45,332,289.46	$305.46	148,407 sq. ft.
Appliance Store [4]	$34,091,766.00	$237.49 [5]	111,608 sq. ft.
Audio/Visual Store [4]	$24,484,820.00	$241.66	80,157 sq. ft.
Camera Store	$4,741,157.00	$339.04 [5]	13,984 sq. ft.
Book Stores	$12,363,717.00	$179.13 [5]	69,020 sq. ft.

Source: ULI Dollars and Cents of Shopping Centers 2000, Claritas, Inc.

[1] *Based on ULI Dollar and Cents of Shopping Centers 2000*

[2] *Median sales per square foot for supermarket in a neighborhood shopping center. The median sales per square foot for other food stores would vary.*

[3] *Median sales per square foot for restaurant without liquor. The median sales for other restaurants or fast food shops would vary.*

[4] *Categorized as part of "Appliance and Computer Stores" in Table 4.9*

[5] *Median sales per square foot for an establishment of this nature in a community shopping center.*

In conclusion, the commercial leakage study indicates that Commerce Township residents spend much of their retail dollars outside of the Township. Many of the retail categories explored are comparison shopping and draw from a regional basis. Regional shopping exists directly to the south, east and north of the Township. A regional market study would be necessary if the Township decides to plan for a regional shopping area. The study also indicated leakage in community commercial retail and neighborhood commercial retail. The Township may want to consider developing commercial nodes in the areas of the Township where some commercial establishments exist, namely the Village area.

Employment Analysis

Table 4.10 and Table 4.11 show specific employment patterns for Commerce Township from data and projections provided by SEMCOG. According to Table 4.10, employment between 1990 and 2000 grew at a rate of 65.5%. SEMCOG projects the total number of jobs will continue to increase between 2000 and 2030 at a more moderate rate of 37.1%. Professional, Scientific and Technical Services are the industrial classes with the most anticipated growth while manufacturing, TCU (transportation, communication and utilities) and agriculture and natural resources employment will level out. The plateauing of agricultural/natural resources and manufacturing is due to the changing face of the area. Decrease of the former is due to the lack of land for such uses within the Township, while a decrease of the latter reflects the decrease of industrial, "blue collar" jobs throughout the state.

Table 4.10: Employment by Industrial Class
Commerce Township

Industrial Class	1990	2000	2005	2010	2015	2020	2030
Agr and Nat Res	337	176	172	182	189	197	237
Manufacturing	1,232	1,051	1,223	1,217	1,271	1,298	1,209
TCU[1]	188	276	330	365	404	433	506
Wholesale Trade	288	698	717	793	848	867	906
Retail Trade	1,622	2,572	2,538	2,827	3,079	3,206	3,389
FIRE[2]	347	619	706	771	850	918	1,085
Services	2,374	5,114	5,411	6,063	6,413	6,588	7,054
Public Admin	105	239	268	290	311	322	345
Total Jobs	6,493	10,745	11,365	12,508	13,365	13,829	14,731

Source: U.S. Census 2000, SEMCOG (2005 - 2030 figures are projections)

[1] *Technology, Communications, and Utilities*

[2] *Finance, Insurance, and Real Estate*

The projected employment will require a certain amount of land. As shown in Table 4.11, employment figures can be used to determine the amount of acreage needed in the future for industrial, office and retail uses. According to this analysis, an additional 1,606.08 acres will be needed to accommodate the anticipated employment growth for Commerce Township in 2020. The acreage planned for these uses would need to be increased, if the Township decides to attract additional office, commercial or industrial users to the Township.

Table 4.11: Acreage Needed to Support Employment Growth
Commerce Township

	2000 Employment	Existing Land Use Acreage	Existing Acreage per Employee	2020 Projected Employment	2020 Projected Necessary Acreage
Manufacturing	1,051	841.29	0.80	1,298	1,039.01
Wholesale Trade	698	354.38 (a)	0.51	867	440.18
Retail Trade	2,572	(a)	(a)	3,206	(a)
FIR	619	85.56 (b)	.14 (b)	918	126.89 (b)
Services	5,114	(a)	(a)	6,588	(a)
Total		1,281.23	--		1,606.08

Source: SEMCOG, 2002

(a): The 354.38 acreage figure is based on combination of neighborhood commercial and general commercial designation acreage.

(b): The 85.56 acreage figure is based on buildings dedicated solely for office uses

Tax Base Analysis

A discussion of property values will provide an indication of economic growth. As shown in Table 4.12, Commerce Township experienced a large increase in growth between 2001 and 2006 and then an equally large decrease in growth between 2006 and 2011. This growth and decrease was mirrored by the County. Overall, between 2001 and 2011, Commerce Township saw a 2.3% increase in real and personal property equalized value while the County realized an 8.7% decrease in the same time period. Economic forecasts indicate that property values will remain fairly flat for the next 1-2 years, with a gradual increase being realized after that time.

As indicated inTable 4.13, over three-quarters of the total SEV for the Township comes from residential real property. A 1997 study which was jointly conducted by nearby Livingston County's Equalization Department and Economic Development Council revealed the effects of different land uses on the tax base of a community. It showed that for every dollar of taxes that a residential property generates, it costs a community $1.50 to provide police, fire, school, and road services. Commercial properties require 58 cents in services for every dollar of taxes generated and industrial properties require 43 cents. The conclusion is that residential properties create a drain on a community's budget, while commercial and industrial properties add value to a community's tax base. A community must assess its tax base needs and resident preferences when considering additional income necessary to provide public services and implement capital improvement programs. A similar study was conducted in 2001 for Calhoun County, yielding similar results. The Township may want to consider planning for a diversification of the Township tax base since it is heavily dependent on residential property.

Table 4.12: State Equalized Value
Commerce Township

Year	Commerce Township	% Change	Oakland County	% Change
2001	$1,736,345,120	—	$57,469,711,595	—
2006	$2,566,893,410	47.8%	$76,439,725,583	33%
2011	$1,776,825,880	(30.8)%	$52,453,460,343	(31.4)%
2015	$2,069,334,910	16.5%	$60,806,103,774	15.9%
Total % Change	—	19.2%	—	5.8%

Source: Oakland County, Apportionment of Local Tax Rates, 2001, 2006, 2011 and 2015

Table 4.13: 2002 State Equalized Value by Land Use
Commerce Township

Real Property	SEV	% of Total
Residential	$1,481,585,720	77.8%
Commercial/Office	$183,408,070	9.6%
Industrial	$123,372,710	6.5%
Agricultural	$16,952,870	0.9%
Personal Property	$99,324,280	5.2%
Total	$1,904,643,650	100.0%

Source: Oakland County, Apportionment of Local Tax Rates, 2001 & 2002

Summary

The economic base of the Township will continue to grow with the population. The following items are especially relevant to the development of the master plan:

Residents are spending much of their retail dollars outside the Township.

The simple leakage analysis conducted indicates that except for home repairs and home furnishings Township residents are spending retail dollars outside of the community. Commerce Township has the opportunity to plan for additional neighborhood and community commercial uses, if that matches the goals and objectives of the Community.

The tax base of the Township is heavily reliant on residential real property.

Over three-quarters of the SEV for the Township comes from residential real property. Studies have shown that residential property is a net fiscal loss for a community whereas industrial, office and commercial land uses produce a net gain.

Housing Analysis

Table 4.14: Housing Units
Commerce Township and Oakland County, 2000 and 2010 Census

Year Structure Built	Commerce Township	Oakland County
2000-2010	1,966	22,773
1991-2000	3,994	71,798
1989-1990	640	11,320
1980-1988	1,865	66,362
1970-1979	2,486	102,146
1960-1969	1,774	80,054
1950-1959	1,670	89,084
1940-1949	725	40,069
1939 or earlier	687	43,649

Source: U.S. Census 2000, 2012

Commerce Township and Oakland County experienced a steady increase in the number of housing units built prior to the 1980s. In the early to late 1980s, the number of units built dwindled in the Township and the County. However, from 1991 to 2002, both the Township and the County observed a dramatic shift in the number of housing units built. As Table 4.14 shows, 3,994 new housing units were added to the Township and 71,798 to the County between 1991 and 2000. This significant housing unit increase correlates with the total population, which also experienced a significant increase during that time period. In 2005 there were 257 new houses built, this number declined to 63 new houses in 2006; 57 in 2007; 8 in 2008; 27 in 2009; 62 in 2010 and 95 in 2011. This gradual increase is expected to continue for the next several years as abandoned and/or bank owned subdivisions are taken over by new developers and the D.D.A. property is developed. As mentioned earlier, our vacancy rates have remained relatively low at 5.3% per the 2010 Census.

Owner occupied housing consists of 86% of the Township's housing stock; down from 89% per the 2000 Census. Renter occupied units make up 9% of the stock; up from 6.6% in 2000. The median housing value is $229,300 per the ASCS 2010 information; down 10.2% from 2000. At the same time, median gross rents increased 6.1% up to $1,205. For Oakland County, owner occupied housing units decreased from 71.6% in 2000 to 67% in 2010. Renter occupied units make up 25% of the housing stock in 2010, a marginal increase over the 2000 figure of 24.2%. The greatest increase in Oakland County's housing segment is vacant homes, which now number 8% or 43,557 units currently vacant. In 2000 there were 20,891 homes vacant or 4.3%. Given this information, it is fair to conclude that Commerce Township's housing stock is relatively stable.

Table 4.15: Housing Occupancy
Commerce Township and Oakland County, 2010

	Commerce Township	%	Oakland County	%
Total Housing Units	13,967	100%	527,255	100%
Owner-Occupied	11,974	86%	350,988	67%
Renter Occupied	1,246	9%	132,710	25%
Vacant Units	747	5%	43,557	8%

Source: U.S. Census 2010

An important element in a Master Plan is how the land use policies and regulations address the needs of the community, particularly housing. In order to formulate this analysis, the community needs to be aware of its demographic profile and the associated land use needs. The following market demographic profile exists for Commerce Township (based on 2010 U.S. Census data):

Total Population:	**35,874**
Average Household Size:	**2.71**
Median Age:	**40 Years**
Home Owner Occupancy:	**86%**
White Collar Workers:	**Over 70%**

Different age categories indicate the types of housing that will be needed. For example, the 20 to 44 year old age category is usually composed of younger populations that are first time homebuyers. The 45 to 64 age category have typically established careers and usually create a strong demand for high end, single family detached dwellings. In general, a high proportion of the 65 and over age category demands more housing that is aligned with the needs of senior citizens. In this age group, retirees begin to appear, who are usually still homeowners that may desire senior housing options including rentals, condos, assisted living situations, etc.

Commerce Township has two different housing type demands. The 45 to 64 and the 65 and over age categories experienced a large increase, which points toward the need for more senior housing as many from the "baby boomer" generation begin to retire. The decrease in the 5-14 year old and 20-44 year old categories further the projections that point to an aging population and the need for increased housing and services to cater to this large segment of the population. Additionally, the Township will need to continue to attract first time homebuyers in order to maintain the stability of older neighborhoods with smaller homes.

As discussed in the population analysis section of this chapter, the population of Commerce Township is well educated, primarily employed in white-collar jobs and has a higher than average income. Typically, people within this demographic profile are interested in more high-end single-family detached dwellings. New construction may be more attractive to this demographic than older residential areas. However, with the economy as it is and the projected slow (but steady) recovery, multiple family or rental income properties may continue to increase as a percentage of the housing stock to serve those younger people experiencing difficulty with financing and older, displaced persons that have lost their home or are hesitant to purchase new homes. The Township should be cognizant of this fact when reviewing possible rental or multiple family developments and maintain a high level of standards for such units that may eventually be converted to owner occupied housing.

Summary

The housing stock and housing demands in Commerce Township will affect land use in Commerce Township. The following points should be considered during the formulation of the plan:

The housing stock is very stable.

Commerce Township has a high-level of homeowner occupancy and the majority of housing units were built in the last decade. The Township can expect stable residential neighborhoods and a continued demand for additional housing, albeit a more modest number of new units than was seen in the first part of the last decade.

Demand for senior housing may increase in the next twenty years.

As discussed previously in this chapter, the proportion of the population over 65 years old has grown over the last decade and is expected to continue. Senior housing of all types will be needed if these residents are to stay in the Township. Additionally, businesses that serve this population should be encouraged to locate within the Township.

High-end, single-family detached housing units will continue to be in demand.

The high education level and incomes of Commerce Township residents indicates that the type of housing desired will be larger, single-family homes. The Township will want to balance the demand for this type of housing with the needs of all residents and protection of the historic character and natural features which personify Commerce Township.

Older neighborhoods may not be as attractive as new construction.

The changing demographics (education level, income and age) indicate a potential for current residents to leave older, starter homes for higher-end single-family housing. If not maintained, older neighborhoods could lose their value. The Township can continue to attract new residents to older starter homes by offering services, such as recreation programs.

5. ENVIRONMENTAL ANALYSIS

"Land use that is at cross-purposes with environmental capabilities cannot be sustained"

Overview

Natural features are abundant in Commerce Township. Residents of the Township have been lured to live in this area due to the numerous lakes, the bountiful forestland and the serenity of living away from the hustle and bustle of urban areas. It is imperative that every effort be taken to preserve and plan around the delicate natural features of Commerce Township.

Topography

The topography of the Township is generally flat with low lake areas and higher upland elevations. The higher ridged areas are in the northwest of the Township with an approximate maximum elevation of 1,017 feet above sea level. The rolling topography in the northwest portion of the Township is concentrated near the former Bogie Lake golf course and the surrounding residential developments. Lower elevations are found throughout the Township with an approximate minimum of 918 feet above sea level. The minimal change in elevation contributes to optimal conditions historically for farming, development and the numerous well and septic systems throughout the Township.

Vegetation and Woodlands

Although the Township has experienced significant land development over the years, woodlands and natural areas are abundant, thanks in part to the Proud Lake State Recreation Area which is located along the Huron River in the western portion of the Township. The park boasts more than 4,000 acres for a variety of recreational activities and natural preserved areas. In 2011, the Township purchased the eastern section of the Proud Lake State Recreation Area from the State of Michigan, and it is currently planning for how to best develop its approximately 500 acres in the northeastern section of the Township. In June of 2014, the township's Parks and Recreation Committee held a special meeting to consider how to best develop the Wise Road property for outdoor recreational uses. The planning and fund development for the site continues.

In addition to the Proud Lake Recreation Area, Multi-Lakes Conservation Club owns and preserves approximately 159 acres of land within the Township. The majority of the land is woodland and is used for a variety of sportsman activities.

Agricultural land has virtually vanished from the Township. The majority of the agricultural land remaining is located in the northwest section of the Township and is primarily owned by a single farming family.

Soils

Commerce Township contains five different general soil associations, according to the Soil Survey of Oakland County provided by the United States Department of Agriculture and the Soil Conservation Service.

1. **Riddles-Marlette-Houghton:** The soils in this association are used mainly as woodland, wildlife habitat and pasture or are idle land. In some areas they are used as building sites and farming. These soils are found in the northwest region of the Township.
2. **Oshtemo-Spinks-Houghton:** Soils of this association are used for woodland, pasture, wildlife habitat or parks. These soils are found in the western half of the Township.
3. **Fox-Oshtemo-Houghton:** These soils are limited to a small section in the northwest corner of the Township. The general characteristics describe these soils as used mainly for pasture or hay land, woodland and wildlife habitat.
4. **Urban land-Spinks-Oshtemo:** A significant area of the eastern portion of the Township contains this general soil association which is categorized for residential and commercial development with gardens, woodlands, playgrounds, parks and wildlife habitat.
5. **Urban land-Marlette-Capac:** This general soil association is limited to the southeast corner of the Township. The soil survey describes this association as mainly used for residential and commercial developments with gardens, woodlands, playgrounds, parks and wildlife habitat. However, these soils can be swampy and undrained areas, as demonstrated by Long Park which is located in the area of this soil association.

Soil characteristics are important to Commerce Township because many of the residents rely on well and septic systems. The Township must be aware of the soil suitability for septic systems when considering lot splits and development of small parcels not connected to the Township sanitary sewer system.

Wetlands

Significant wetland areas are located throughout Commerce Township. The National Wetlands Inventory (NWI) of the U.S. Fish & Wildlife Service produces information on the characteristics, extent, and status of the nation's wetlands and deepwater habitats. The National Wetland Inventory describes the majority of the wetlands found within the Township as emergent, scrub-shrub and forested wetlands. All of these wetland types are of the Palustrine System, which includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per ton (ppt). Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics:

- Are less than 20 acres;
- Do not have an active wave-formed or bedrock shoreline feature;
- Have at low water a depth less than 6.6 feet in the deepest part of the basin;
- Have a salinity due to ocean-derived salts of less than 0.5 parts per ton (ppt).

Emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. In most years this vegetation is present for the majority of the growing season. These wetlands are usually dominated by perennial plants. Scrub-shrub wetlands contain areas dominated by woody vegetation less than 20 feet tall. The species include true shrubs, young trees (saplings), and trees or shrubs that are small or

stunted because of environmental conditions. Forested wetlands are characterized by woody vegetation that is 20 feet tall or taller. (See Natural Features Map)

Commerce Township has been fortunate in that most of the wetland areas are within the Proud Lake Recreation Area and other public or private recreational areas. Special care and consideration should be taken if golf courses or other protected areas are sold for redevelopment. The existing wetlands should be protected to the greatest extent possible. Since the Township is located within the sensitive Rouge River and Huron River Watershed areas, alteration, development or contamination of wetlands could be significant, not only for the Township but for the region.

Lakes and Rivers

Residents of Commerce Township and visitors alike, enjoy an abundance of inland lakes. There are 20 lakes that are 5 acres or more in size in the Township. Parts of Commerce Township were originally developed as seasonal cottages. Therefore, the majority of the lakes have been surrounded by residential housing and subdivisions. Housing types have changed over the years from seasonal cottages to year-round homes that vary in size near the lake areas. The majority of the lakes are heavily used for recreation of motorized personal watercraft in the summer months and ice fishing, skating and snowmobiling in the winter months.

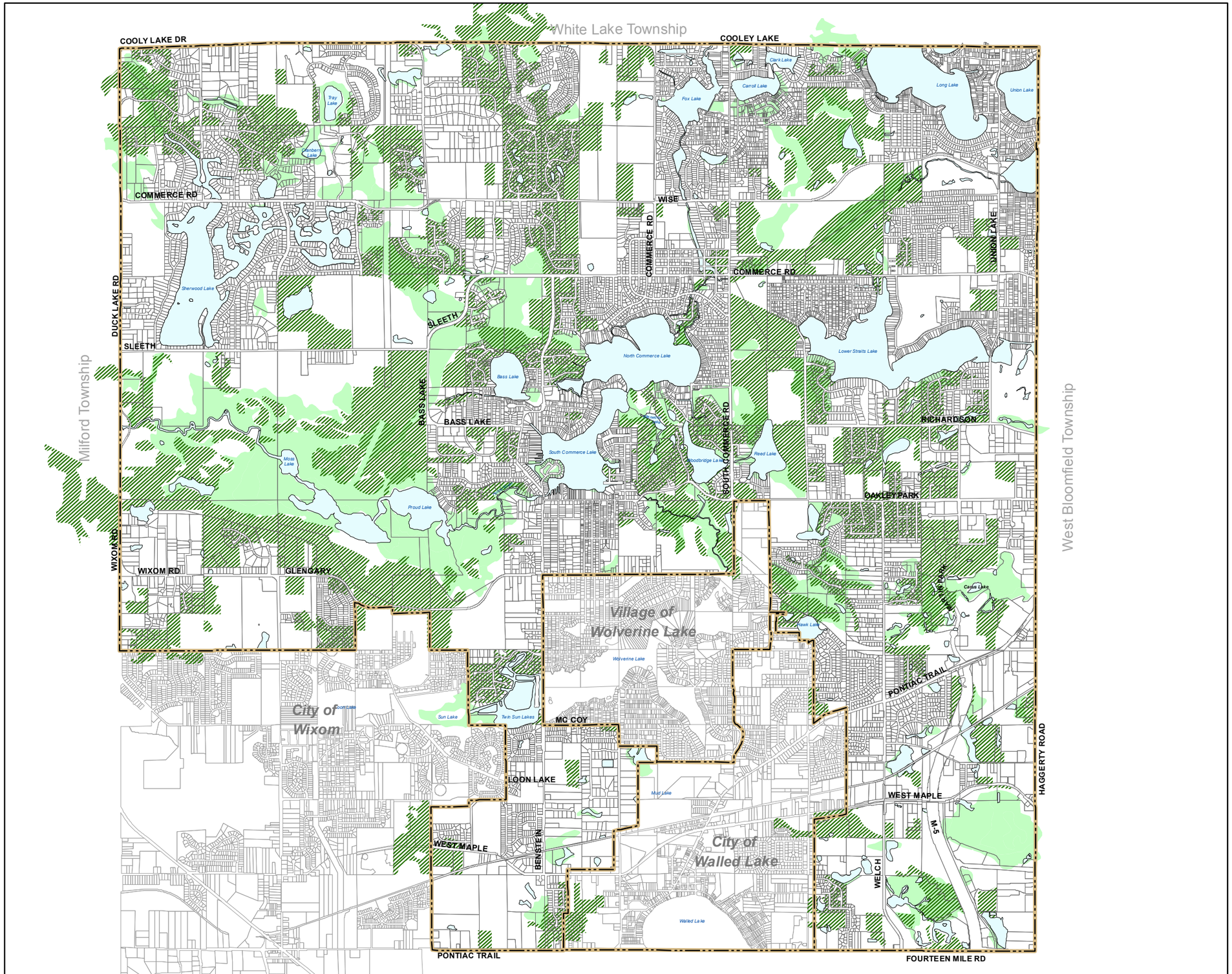
Lake water quality is influenced by many factors, such as the amount of recreational use it receives, shoreline development, and aging septic systems. The water quality measures addressed in the Water Management section of this chapter apply to lakes in the Township as well.

The Huron River flows through the western portion of the Township to Proud Lake Recreation Area. There are numerous stream networks that connect the various lakes throughout the Township in addition to the northwest most tributaries of the Rouge River.

Water Management

The Rouge River Watershed

The Rouge Watershed is 467 square miles, including parts of three counties, 48 municipalities and 1.5 million people. The River itself is 127 miles long, has four main branches, and many tributaries. Located in southeastern Michigan, the watershed contains the most densely populated and urbanized land area in the state, including major portions of Detroit. The river empties into the Detroit River, which connects Lakes St. Clair and Erie. Much of the main branches of the river is surrounded by parkland, making it highly accessible to the public. The Township has begun the process of creating a Storm Water Pollution Prevention Initiative (SWPPI) with the help of the Michigan Department of Natural Resources and Giffels-Webster Engineering, the Township engineering consultants. The purpose of a SWPPI is to bring together the goals and actions of the Watershed Council and the Township into a single document containing Commerce Township's commitments to reduce the discharge of pollutants to the maximum extent practical. These commitments should be reviewed and considered when reviewing site plans, approving development projects and any amendments or revisions to the zoning ordinance.



Natural Features

Commerce Charter Township,
Oakland County, Michigan

December 7, 2015

NATURAL FEATURES CATEGORIES

- Regulated Wetlands
- Woodlands
- Rivers, Lakes and Streams
- Municipal Boundaries

FEET
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McKenna ASSOCIATES

Basemap Source: Oakland County GIS
Data Source: Michigan Department of Natural Resources Spatial Data Library, NWI

The Huron River Watershed

The vast majority of the Township is located within the Huron River Watershed. The Huron River Watershed is comprised of 908 square miles in southeast Michigan, including seven counties and 53 municipalities. The main tributary is Lake Erie. However, there are 24 major tributaries and approximately 300 lakes. The Huron River is approximately 125 miles long with 27.5 miles of the river mainstream. Under Michigan's Natural Rivers Act, 10.5 miles of three tributaries are designated "County Scenic River." It is the only state-designated river in southeast Michigan. Some of the watershed management issues are the rapid urbanization/sub-urbanization process, wastewater treatment, agricultural and urban storm water runoff, extreme flow fluctuation, habitat fragmentation, loss of native bio-diversity and invasive exotic species.

Contaminated Sites

The Environmental Protection Agency monitors contaminated sites throughout the United States. The EPA supports a website called Envirofacts (http://www.epa.gov/enviro/), which provides information about environmental activities that may affect air, water, and land anywhere in the United States. According to Envirofacts, there are 36 facilities such as electric power plants, steel mills, factories, or refineries that produce and release air pollutants within the communities of Commerce Township, Walled Lake, Wolverine Lake and Wixom, specifically within zip codes 48382, 48390 and 48393. There are 10 facilities that have reported toxic releases. The Toxic Release Inventory keeps information about 650 chemicals that are being used, manufactured, treated, transported or released into the environment. Producers of these chemicals are required to report to the EPA locations and quantities of chemicals stored on-site to state and local governments. Further, there are three reporting systems to determine waste sites: Biennial Reporting System, Resource Conservation and Recovery Act Information, and Superfund. Within Commerce Township there are 207 facilities that report one of the following: have reported hazardous waste activities or have been issued permits to discharge wastewater into rivers. These may be small or large quantity generators.

The EPA houses four databases regarding water information: the Permit Compliance System, the Safe Drinking Water System, the National Contaminate Occurrence Database, and the Information Collection Rule. Envirofacts has broken these databases into three categories:

1. Community Water Systems that serve the same people year round: 141 occurrences;
2. Transient Non-Community Water Systems that do not consistently serve the same people (campgrounds, gas stations): 630 occurrences; and
3. Non-Transient Non-Community Water Systems that serve the same people but not year round (schools): 250 occurrences.

As stated above, this information encompasses the communities of Commerce Township, Walled Lake, Wolverine Lake and Wixom. A listing of contaminated sites is attached to this document as an appendix.

Underground Storage Tanks (UST)

Under Michigan's Underground Storage Tank Program, all Underground Storage Tanks (USTs) must be registered. Guidelines have been established governing design, construction, installation and operation of regulated underground storage tanks, rules designed to prevent the release of petroleum and other hazardous substances and must be followed to insure the protection of human health and Michigan's natural resources. In addition, leaking tanks must be reported and tank closure reports and tank closure site assessment reports

must be filed. Tanks containing heating oils for use on the premises where the tank is located, septic tanks, and tanks of 1,100 gallons or less capacity which are used for storing motor fuels for homes or farms are not regulated USTs. The aim of the UST program is to:

1. Register all tanks that are regulated;
2. Inspect tanks for proper design, installation, and operation;
3. Identify tanks that are leaking;
4. Provide for the safe removal of USTs and clean-up of any sites contaminated by leaking tanks; and,
5. Enforce State and Federal laws governing underground storage tanks.

USTs are governed by Part 211, Underground Storage Tank Regulations, of Michigan's Natural Resources and Environmental Protection Act (Act 451 of 1994) and Act 207 of 1941, Michigan's Fire Prevention Code. A search of the Michigan Department of Environmental Quality (MDEQ) Underground Storage Tank database (http://www.deq.state.mi.us/sid-web/UST_search.aspx) showed Commerce Township has 6 active UST facilities and 12 closed UST facilities. An active facility is one which there is at least one tank at the facility that is active and is regulated under Part 211 Underground Storage Tank Regulations, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). A closed facility is one which all tanks at the facility that are regulated under Part 211 of Act 451 are closed. A listing of underground storage tanks is attached as an appendix to this document.

Leaking Underground Storage Tanks (LUST)

Leaking Underground Storage Tanks (LUST) are governed by Part 213 of the Natural Resources and Environmental Protection Act. Under LUST rules, if a leaking underground storage tank is discovered, the owner or operator must report the leak within 24 hours. Once reported, a Qualified Underground Storage Tank Consultant (QC) must be retained by the owner or operator to correct the problem and perform cleanup at the site. Clean up criteria have been established for a number of exposure pathways, including the following:

- Ingestion of groundwater as drinking water;
- Inhalation of contaminants that volatilize from this water;
- Skin contact with groundwater that has flowed into surface water;
- Inhalation of contaminants that volatilize from the soil;
- Inhalation of soil particulates which contain absorbed contaminants; and,
- Direct contact with the soil.

A search of the Michigan Department of Environmental Quality (MDEQ) Underground Storage Tank database (www.deq.state.mi.us/sid-web/LUST_search.aspx) showed Commerce Township has six open LUST sites and twp closed LUST sites. A listing of the LUST Sites in Commerce Township is attached to this document as an appendix. An open LUST site is one in which corrective actions have not been completed to meet the appropriate land use criteria after a leak has occurred. A closed LUST site is one in which corrective actions have been completed to meet the appropriate land use criteria.

Sand and Gravel Resources

Holloway Sand and Gravel Company owns and operates approximately 277 acres on Sleeth Road in the western portion of the Township. In the current market, Holloway Sand and Gravel Company expects to continue

operation for the next 8 to 10 years. The company has indicated a willingness to work with Commerce Township to plan for the future development potential of this property.

Scenic Areas

Commerce Township is fortunate to have a wealth of scenic areas. There are five golf courses within the Township. Most of these golf clubs are open to the public and can be enjoyed by all residents of the community. Although all are privately owned and could be sold for redevelopment of other uses.

In addition, the Multi-Lakes Conservation Club preserves 159 acres of mostly woodlands. Many of the recently developed residential subdivisions near Multi-Lakes Conservation Club and throughout the Township have preserved substantial tree stands in an effort to maintain the rural character of the Township.

Proud Lake Recreation Area, located in Commerce and Milford Townships, provides the most scenic areas in Commerce. The 4,000 acres of Proud Lake Recreation Area includes a 130 site campground, fishing areas in Proud Lake and the Huron River, boat launches into Proud Lake, canoeing on the Huron River, Powers Beach on the Huron River, and more than 20 miles of hiking/ski/snowmobile trails. The Proud Lake Recreation Area serves local residents and attracts tourists from all over the state and the country.

Commerce Township has approximately 26 public and private parks. These parks provide beautiful tree stands, hiking trails, play equipment and scenic backdrop for local roads. The roads in Commerce Township are naturally scenic particularly near the Proud Lake Recreation Area. The Multi-Lakes Conservation Club and the high quality design of residential developments provides preserved woodlands, lake views and other natural feature backdrops. The multitude of lakes provides scenic views for not only the residents who live along the shorelines, but public access areas allow all residents the ability to enjoy the water and many lakes are viewable from public roads. However, not all lakes within the Township provide public access. Many lakes are governed by homeowner associations who maintain and protect lake areas.

While traveling through the Township, one will notice a unique variation in habitats. Travelers of Benstein Road (north-south) enjoy the wetlands to the west and Wolverine Lake to the east as well as the various residential developments that have preserved the rural character of the community. The Proud Lake Recreation Area provides travelers with views of beautiful meadows and woodlands on Glengary Road, Wixom Road, Sleeth Road and Bass Lake Road in addition to the eastern property along Wise Road.

Summary

The environmental features in Commerce Township will affect the future development of the community. The following points should be taken into account as the Master Plan is developed:

Tree Preservation.

Remaining privately held woodland areas should be preserved through high quality, environmentally sensitive development. Residential and commercial developments should be required to preserve quality tree stands to the greatest extent possible.

Soil Preservation.

Since much of the Township relies on well and septic systems, when considering lot splits and development of smaller parcels, consideration should be given to soil characteristics and suitability. Soil characteristics of the Township provide a strong base for development. Care should be taken when considering development in the more fragile soil areas.

Wetland Protection.

Commerce Township has been fortunate in that most of its wetland areas are within the Proud Lake Recreation Area and other public or private recreational areas. Care should be taken if golf courses or other protected areas are sold for redevelopment. Existing wetlands should be protected to the greatest extent possible. Since the Township is located within the sensitive Rouge River and Huron River Watershed areas, alteration, development or contamination of wetlands could have significantly negative consequences.

Watershed Management.

The commitments set forth in the SWPPI for the delicate watershed areas should be reviewed and considered when reviewing site plans, approving development, and amending or revising the zoning ordinance.

6. TRANSPORTATION ANALYSIS

If you don't care where you're going, it doesn't matter what direction you take!

Regional Position and Plans

Commerce Township is situated approximately two miles south of M-59 and one to three miles north of I-96. M-5 is located in the southeast quarter of the community. Within the Community, the major road network consists of a disjointed grid interrupted by the many lakes, state recreation area, and other natural features. The benefit of this broken network is that it's hard to get to Commerce Township. The downside is that it's hard to get through or out of Commerce Township.

Public roads in Commerce Township are under the jurisdiction of two agencies, the Michigan Department of Transportation (MDOT) and the Road Commission for Oakland County (RCOC). MDOT has jurisdiction over Interstate 96 (I-96) and M-5. All other public roads are under the jurisdiction of the RCOC.

According to officials at the Road Commission for Oakland County, there are 158.05 miles of roadway in the Township under their jurisdiction, of which 52.59 are primary roads, 4.17 are local roads, and 101.29 miles of sublocal roads. Local roads consist of mile-type roads and subdivision roads are sublocal roads. There are a total of 14.14 unpaved roads under RCOC jurisdiction within the township (1.06 miles of local roads and 13.08 miles of sublocal roads.)

There are currently no continuous north-south or east-west through routes in the Township due to the existing lakes and other natural features.

The existing road system can be described as an irregular grid network of roads that are located on section and quarter section lines. The exception to this pattern is Pontiac Trail which runs diagonally through the Township.

The north-south routes provide access to and from I-96 for the many daily commuters. M-5, Martin Parkway, Haggerty, Welch, Decker, Benstein, and South Commerce, all paved roads, are the primary north-south routes. Because of the many lakes and other natural features, none of these routes are continuous.

There are two major east-west routes in the Township, Maple Road and Commerce Road. Each of these routes are paved roads, but only Maple Road is continuous.

Many of the local roads in the Township are in fair to poor physical condition, especially unpaved roads near the older neighborhood areas, and are in need of repair. Many roads are narrow, with soft or no shoulders.

Over the past several years, funding for maintenance and upgrading has not kept pace with the increased wear caused by development and redevelopment.

With development of the Township, the road system that was originally designed to serve an agricultural community now must serve a different function, providing access to developed subdivisions and commercial areas. As development has occurred, volumes and through traffic has increased, and the road function now provides principal access to subdivisions and commercial areas. There are a number of notable road improvements within the Township that have affected circulation patterns.

Notable Michigan Department of Transportation (MDOT) Projects

- Extension of M-5 to Pontiac Trail was completed in fall 2002.
- Extension of Martin Parkway south from P.G.A. Drive to Pontiac Trail was completed in 2011.
- Maple Road between Decker and Laura Lane has been widened by MDOT to a boulevard as part of the M-5 project.

Local Circulation Description

Commerce Township is characterized by lakes and relatively flat topography. Many of the natural features make Commerce Township a desirable place for homebuyers that are seeking a rural atmosphere. Residential development in the last two decades has generated increased traffic levels on the community's roadways; however, 2012 traffic counts indicate that this trend may have peaked and traffic counts have declined on many Township roadways.

While the Township's many natural features enhance the desirable quality of the community, they present limitations for roadways. The sharp curves and limited sight distances contribute to difficult driving conditions, especially during adverse weather. Complicating these conditions are roadways which are constrained by relatively narrow right-of-ways and natural features. Adjacent land uses and numerous road intersections at curves and areas with poor sight distance cause traffic flow restrictions and potential safety hazards.

Traffic is influenced by trip generation, route selection and street capacity. Trip generation varies by land use. Trips will originate from households. The type and amount of traffic originating from a household will vary based upon the demographic makeup such as household size, age of residents, and number of vehicles owned. Since many of the residents of Commerce Township work outside of the community, many of the trips generated within the Township are to destinations outside of the Township.

Additionally, because there is no continuous north-south through road through Commerce Township, many people who live and work in surrounding communities and beyond travel north-south through the Township on the few available routes which leads to congestion during peak hours.

Among the roads in Commerce Township, M-5 is a State route under the jurisdiction of the Michigan Department of Transportation. Primary and local roads are maintained by the Road Commission for Oakland County.

Accident Rates and Traffic Counts

According to Township sources, the number of traffic accidents in Commerce has risen by 24% from 1995 to 2000. Most recently, the Oakland County Sheriff Department Commerce Township substation reports that accident numbers have steadily increased since 2010. In that year, 595 accidents were reported to the Sheriff's department. By 2014, this number had increased to 1,222 reported accidents. As of November 30, 2015, the

2015 number has already increased by 20% to 1,522 reported accidents. As traffic volumes have remained relatively steady over this period, the drastic increase in traffic accidents may be attributed to more drivers being distracted by navigation/entertainment systems and/or cellular phones while operating their motor vehicles.

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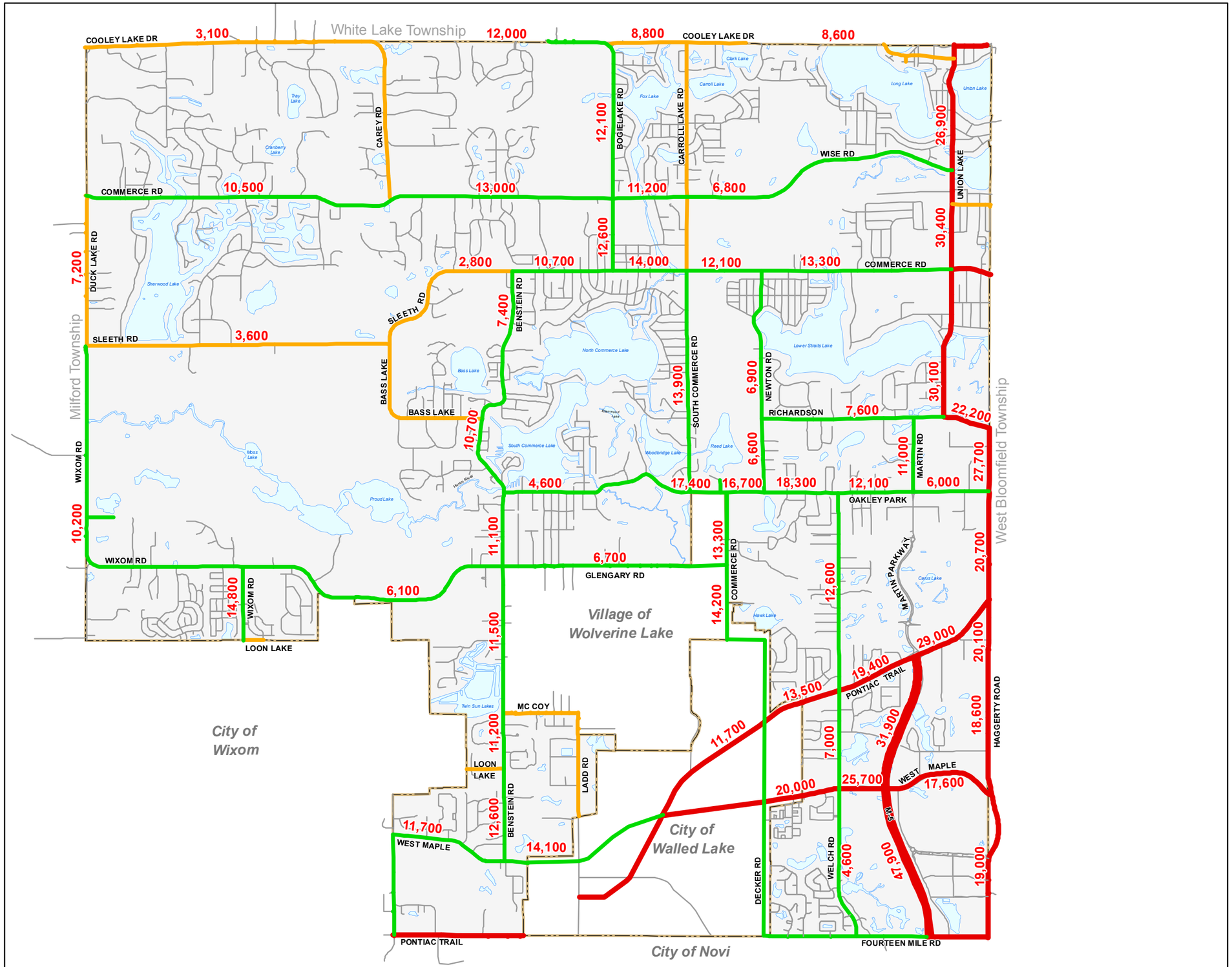
Table 6.1 details traffic counts by roadway segment within Commerce Township including a comparison with the data found in the 2006 Master Plan. Many of the roads have experienced declines in total traffic since 2006, and this may be attributed to the opening of M-5 and the lingering affects of the Great Recession.

Road Classification Traffic Counts

Commerce Charter Township,
Oakland County, Michigan

December 7, 2015



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McKenna ASSOCIATES

Base Map Source: Oakland County GIS
Data Source: McKenna Associates, Inc. & Southeast Michigan Council of Governments

NATIONAL FUNCTIONAL CLASSIFICATION

- Local
- Major Collector
- Minor Arterial
- Principal Arterial
- 12456 Traffic Counts - observed AADT, 2012
- Municipal Boundaries

Table 6.1: Vehicular Traffic Counts
Commerce Township, 2012

Road	Direction	From	To	Increase / Decrease Since the 2006 Plan (+/-)	Count
M-5	2-way	14 Mile	Maple	+	47,900
M-5	2-way	Maple	Pontiac Trail	+	31,900
Pontiac Trail	2-way	Commerce	Decker	-	11,700
Pontiac Trail	2-way	Decker	Welch	-	13,500
Pontiac Trail	2-way	Welch	M-5	+	19,400
Pontiac Trail	2-way	M-5	Haggerty	+	29,000
Haggerty	2-way	Fourteen Mile	Maple	-	19,000
Haggerty	2-way	Maple	Walnut Lake	-	18,600
Haggerty	2-way	Oakley Park	Richardson	+	27,700
Haggerty	2-way	Pontiac Trail	Oakley Park	-	20,700
Haggerty	2-way	Walnut Lake	Pontiac Trail	-	20,100
Maple	2-way	Beck	Benstein	+	11,700
Maple	2-way	Benstein	Maple	-	14,100
Maple	2-way	Decker	Welch	-	20,000
Maple	2-way	Welch	M-5	+	25,700
Maple	2-way	M-5	Haggerty	-	17,600
Commerce	2-way	Bogie Lake	Sleeth	+	12,600
Commerce	2-way	Carey	Bogie Lake	+	13,000
Commerce	2-way	S. Commerce	Newton	-	12,100
Commerce	2-way	Duck Lake	Carey	+	10,500
Commerce	2-way	Glengary	Decker	-	14,200
Commerce	2-way	Oakley Park	Commerce	-	13,900
Commerce	2-way	Newton	Union Lake	-	13,300
Commerce	2-way	Oakley Park W.	Oakley Park E	+	17,400
Commerce	2-way	Oakley Park	Glengary	-	13,300
Commerce	2-way	Sleeth	S. Commerce	+	14,000
Oakley Park	2-way	Benstein	Commerce	-	4,600
Oakley Park	2-way	Commerce	Newton	-	16,700
Oakley Park	2-way	Martin	Haggerty	-	6,000
Oakley Park	2-way	Newton	Welch	+	18,300
Oakley Park	2-way	Welch	Martin	-	12,100
Union Lake	2-way	Wise	Cooley Lake	-	26,900
Union Lake	2-way	Commerce	Wise	+	30,400
Union Lake	2-way	Richardson	Commerce	+	30,100

Road	Direction	From	To	Increase / Decrease Since the 2006 Plan (+/-)	Count
Benstein	2-way	Maple	Loon Lake	-	12,600
Benstein	2-way	Loon Lake	McCay	-	11,200
Benstein	2-way	McCay	Glengary	-	11,500
Benstein	2-way	Glengary	Oakley Park	-	11,100
Benstein	2-way	Oakley Park	Bass Lake	-	10,700
Benstein	2-way	Bass Lake	Sleeth	-	7,400
Bogie Lake	2-way	Commerce	Cooley Lake	+	12,100
Cooley Lake	2-way	Carey	Bogie Lake	+	12,000
Cooley Lake	2-way	Bogie Lake	Carroll Lake	+	8,800
Cooley Lake	2-way	Carroll Lake	Round Lake	-	8,600
Cooley Lake	2-way	Duck Lake	Carey	+	3,100
Duck Lake	2-way	Sleeth	Commerce	+	7,200
Glengary	2-way	Wixom	Benstein	-	6,100
Glengary	2-way	Benstein	Commerce	+	6,700
Martin	2-way	Richardson	Oakley Park	+	11,000
Newton	2-way	Commerce	Richardson	-	6,900
Newton	2-way	Richardson	Oakley Park	-	6,600
Richardson	2-way	Newton	Union Lake	+	7,600
Richardson	2-way	Union Lake	Haggerty	-	22,200
Sleeth	2-way	Duck Lake	Bass Lake	-	3,600
Sleeth	2-way	Bass Lake	Benstein	-	2,800
Sleeth	2-way	Benstein	Commerce	-	10,700
Welch	2-way	Maple	Pontiac Trail	-	7,000
Welch	2-way	Fourteen Mile	Maple	-	4,600
Welch	2-way	Pontiac Trail	Oakley Park	-	12,600
Wixom	2-way	Loon Lake	Glengary	-	14,800
Wixom	2-way	Glengary	Sleeth	-	10,200

Source: Southeast Michigan Council of Governments

Road Classifications

The purpose served by each road or highway in the circulation system is best described through classification of the roads. Road classifications identify the type and volume of traffic that are appropriate for each segment of the road network (Map 5). To ensure safe and efficient circulation, it is necessary to establish a hierarchy of roads that are designed to carry the volume and speed of traffic based on the function they serve. The classifications establish expectations among residents, other users, Township officials, and transportation engineers concerning the operational characteristics of each road. Table 6.2 and Figure 6.1 illustrate this hierarchy and outline the specifications for each road classification.

Road classifications identify the appropriate type and level of traffic. Classifications also establish eligibility of roads for Federal funding.

Road classifications also establish the eligibility of roads for various funding programs. For example, federal funds may only be used on road improvements in urban areas for roads that are classified as collector or arterial roads on the Road Classification map.

The Highway Functional Classification Reference Manual published by the United States Department of Transportation Federal Highway Administration (FHWA), in March 1989, originally set forth criteria for classification of all roads that function within the guidelines of the Federal-Aid Highway Act of 1973 and the Moving Ahead for Progress in the 21st Century Act (MAP-21) The four functional classifications for urbanized areas are urban principal arterials, minor arterial roads, collector roads, and local roads.

The criteria for classifying roads are related to trips serviced, areas served, and characteristics of the roads. The criteria include service to activity centers, system continuity, land use considerations, route spacing, trip length, traffic volume, and control of access. The Southeast Michigan Council of Governments (SEMCOG), as the Metropolitan Planning Organization for the Detroit urbanized area, is responsible for using these criteria to classify roads and to program federally funded transportation improvements.

The following descriptions of the four road classifications that apply to Commerce Township are based on recommendations of the Road Commission for Oakland County and SEMCOG. Design classifications are also included for each, further described in Table 6.2.

- **Principal Arterial roads** are intended to serve the major centers of activity in a metropolitan area, the highest traffic volume corridors, and the longest trips. Principal arterials serve major traffic movements within the Township. There are three categories of principal arterials: interstate highways, other freeways and expressways, and non-freeway principal arterials.
  Design Classifications: Rural Highway / Urban Boulevard.
- **Minor Arterial roads** interconnect with the principal arterial system and provide trips of moderate length with a lower level of traffic mobility. Minor arterial roads place more emphasis on land access than principal arterials. Minor arterial roads are generally no more than a mile apart in fully developed areas, but may be 2 to 3 miles apart in suburban fringe areas.
  Design Classifications: Rural Drive / Urban Avenue
- **Collector roads** provide access to abutting properties and traffic circulation within residential, commercial, industrial, and agricultural areas. The purpose of a collector road is to collect traffic throughout the Township and channel it to the arterial system. Generally, in the design of new road systems, efforts are made to discourage direct residential access onto collector or arterial roads, since

the added curb cuts increase traffic conflicts and congestion. However, in communities like Commerce Township, direct residential access is not uncommon because many roads serve a dual purpose. *Design Classifications: Rural Road / Urban Street*

- **Local roads** primarily provide direct access to abutting land and to collector and arterial streets. Movement of through traffic is usually discouraged on local roads. Examples of local roads in Commerce Township include local subdivision streets and county roads that carry low levels of traffic. *Design Classifications: Local Road / Local Street.*

Another road classification system is used by the Road Commission to establish funding priorities in accordance with Michigan Public Act 51 of 1951. The Act requires county road commissions to classify roads as either Primary or Local roads. Improvements to County Primary roads are financed chiefly through fuel and weight taxes that have been deposited in the state transportation fund and through various federal funding programs.

A second classification system is used to establish funding priorities, pursuant to Michigan Public Act 51 of 1951. This system classifies roads as either Primary or Local.

In comparing the two classification systems, principal and minor arterials are generally classified as County Primary roads, and collector and local roads are generally classified as County Local roads. The following roads are classified as County Primary roads:

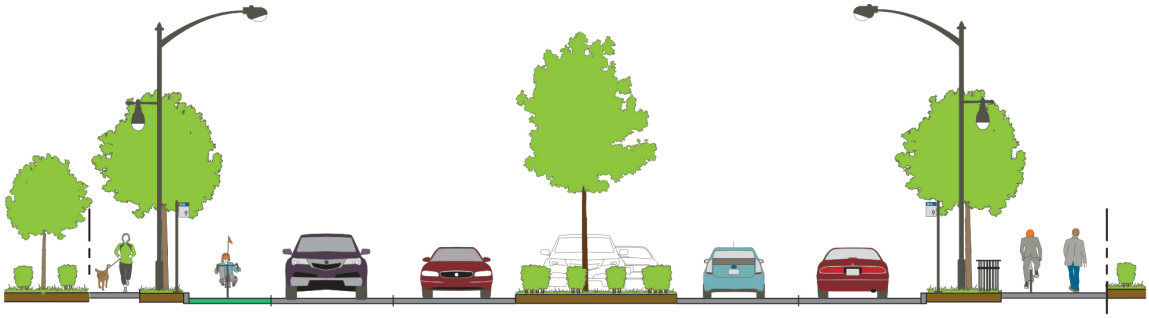
- Pontiac Trail
- South Commerce Road
- Haggerty Road
- Sleeth Road
- Benstein Road
- Cooley Lake Road
- Commerce Road
- Union Lake Road
- Maple Road
- Welch Road
- Bogie Lake Road
- Oakley Park Road

Table 6.2: Transportation System Design Guidelines

Conventional Classification	Principal Arterial		Minor Arterial		Collector		Local		Driveway and Alleys
Design Classification	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN	URBAN:
	Highway	Boulevard	Drive	Avenue	Road	Street	Lane	Court	Rear Lane
Desired Route Spacing	3 – 6 Miles		1 - 3 Miles		¼ Mile to 1 Mile		Block		Block
Traffic Volumes	15,000 minimum ADT		6,000 minimum ADT		1,000 minimum ADT		No Minimum ADT		No minimum ADT
R.O.W. Width	120′ – 200′		86′ – 120′		66′ – 86′		50′ – 66′		20′
Pavement Width	40′ – 60′ feet		20′ – 48′ (no parking) 34′ – 54′ (parking both sides)		27′ (parking one side) 34′ (parking both sides)		27′ (parking one side) 34′ (parking both sides)		18′
Street Cross Section	Four to six lane divided; Major intersection channelization		Two to four lane divided; Major intersection channelization		Two through lanes with or without parking		Two through lanes with parking		Two through lanes
Access Control	Access limited to crossroads		Occasional driveways and combined driveway access		Direct land access		Direct land access		Direct land access
Traffic Controls	Signals at major crossroads		Signals at major crossroads Signals or stop controls at equal or greater crossroads		Stop controls or occasional signals at arterial roadways and other collectors		Stop controls at arterial roadways and collectors		Stop controls at all streets and roads or greater
Speed Limit	35 – 55 MPH		30 – 40 MPH		25 – 35 MPH		20 – 25 MPH		5 – 10 MPH
On-Street Parking	No parking		Neighborhood / village parking		Neighborhood / village parking		Parking		Parking
Landscaping	Natural Cluster	Regular Spacing	Natural Cluster	Regular Spacing	Natural Cluster	Regular Spacing	Varies	Regular Spacing	Varies
Bikeway Type	Path	Path or On-Street	Path or On-Street	Path or On-Street	Path or On-Street	On-Street	On-Street	On-Street	- -
Curb Type	Open Swale	Open Swale	Open Swale	Raised Curb	Open Swale	Raised Curb	Open Swale	Raised Curb	Varies

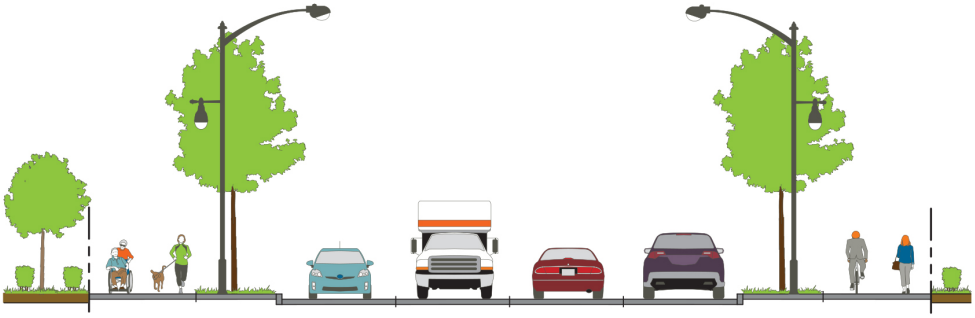
Figure 6.1: Transportation System Design Guideline Illustrations

PRINCIPAL ARTERIAL



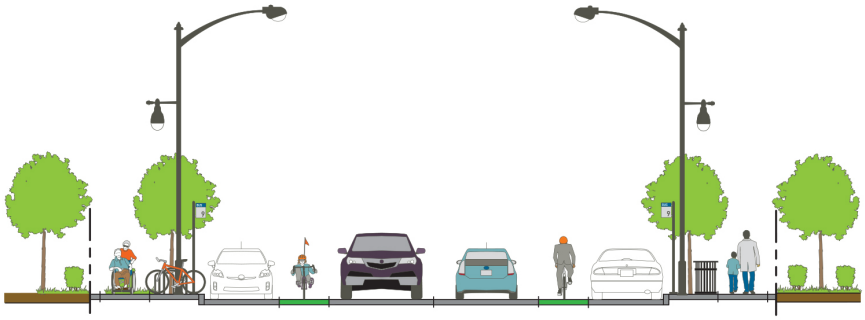
Rural Highway / Urban Boulevard

MINOR ARTERIAL



Rural Drive / Urban Avenue

COLLECTOR



Rural Road / Urban Street

LOCAL

Rural Lane / Urban Court

Other Modes of Transportation

Rail

Commerce Township has only one former railroad right-of-way. The Commerce Walled Lake Wixom Trail Council is working to purchase the right-of-way with support of the MDNR to develop it as a regional trail.

Pedestrian/Bicycle Pathways

A greenway system, including biking and walking trails, has been devised throughout Oakland County. The Township recommendations for non-motorized transportation and complete streets are discussed in the Future Transportation Plan.

The Township has expressed an interest in greater pedestrian and bicycling opportunities, but will need to investigate sources of funding and go forward with proper planning and community input. It would be important to work with Oakland County Planning and Economic Development Services and others in the interest of the region's greenway systems.

Airports

There are no airfields in Commerce Township. The nearest airport to Commerce Township is the Oakland County International Airport, two miles northeast of the Township. Detroit Metropolitan Airport is in the City of Romulus, approximately 20 miles southeast of Commerce Township. Willow Run Airport is in Van Buren Township, approximately 15 miles southwest of Commerce Township. Willow Run Airport is primarily a freight airport.

7. COMMUNITY FACILITIES AND UTILITIES

"...after we are gone and forgotten, those who never heard of us will be living with the results of our actions."
- Oliver Wendell Homes

Overview

The esteem, identity, and desirability of a community are related in part to the level and quality of public services offered, including education, parks and recreation, police and fire services, and public utilities. The responsibility for providing public services to residents of Commerce Township is shared by several public entities, including the Township government, the Township Parks and Recreation Committee, several Oakland County departments, various state offices, the Walled Lake Community Schools, and Huron Valley School District.

Key determinants of future demand for public services include population, number of households, and types of land uses. With population and land use pressures projected to increase over the next ten years, it is anticipated that public services in Commerce Township will have to be expanded.

Public School Facilities and Other Educational Facilities

Commerce Township is currently serviced by two school districts: Walled Lake Consolidated and Huron Valley Schools. Lakes Area Montessori is currently the only private school in the Township. The majority of public school students in the Township attend Walled Lake Consolidated Schools, which spans fifty-five square miles and serves students in Farmington Hills, Novi, Orchard Lake, Walled Lake, Wixom, Wolverine Lake Village, White Lake Township, and West Bloomfield Township, as well as Commerce Township. The following Walled Lake Consolidated Schools facilities are located in Commerce Township: the Outdoor Education Center (also known as Crossroads for Youth), Commerce Elementary School, Oakley Park Elementary, Glengary Elementary, Clifford H. Smart Middle School, James Geisler Middle School, Walled Lake Central High School, Walled Lake Western High School and Walled Lake Northern High School. Students in the northwestern corner of the Township attend Huron Valley schools, which encompasses 102 square miles and serves the Village of Milford and portions of Highland Township and White Lake Township, as well as Commerce Township. Country Oaks Elementary School and Oak Valley Middle School are Huron Valley schools located in Commerce Township.

The following table illustrates that both school districts experienced enrollment growth up to 1999 when Huron Valley Schools began to experience student enrollment declines. Since 2007, Walled Lake Community Schools

has also been experiencing slow yet steady enrollment declines as well. These declines may be attributed to smaller family sizes, district population loss, and/or schools of choice or charter school competition. Due to the stagnation of enrollment, no new school facilities are anticipated at this time.

Table 7.1: School Enrollment, K-12
School Districts in Commerce Township, 1997-2000 & 2003-2015

School Year	Walled Lake Consolidated Schools	Huron Valley Schools
1997	12,705	10,549
1998	13,073	10,730
1999	13,495	10,894
2000	13,965	10,843
2003	14,861	10,754
2004	15,095	10,664
2005	15,056	10,734
2006	15,597	10,683
2007	15,654	10,569
2008	15,456	10,479
2009	15,556	10,325
2010	15,604	10,371
2011	15,518	10,196
2012	15,582	9,995
2013	15,283	9,975
2014	15,051	9,802
2015	14,807	9,705

Source: Standard and Poors Report – Demographics; MISchoolData.org (State of Michigan)

Standard and Poor's, which provided the State of Michigan with school evaluation services, gave Walled Lake Consolidated Schools above-average ratings in several key categories. Walled Lake Consolidated Schools had well above-average advanced placement test participation, a moderately above average graduation rate and an average dropout rate compared to other schools districts in Michigan. The district spends significantly more per pupil drawing from both state and local funds, has higher teacher salaries and a well-below average of economically disadvantaged students.

According to Standard and Poor's, Huron Valley Schools had moderately above average ACT test participation, but did not rank as well in other categories as Walled Lake Consolidated Schools. Huron Valley Schools had graduation and dropout rates which were well below average and below average administrative costs per student. Teacher salaries in Huron Valley Schools were on par with the state average but below the teacher salaries for "peer" districts, which included Walled Lake Consolidated Schools. The district had average operating expenditures per student and above average transportation costs per student. The percentage of

economically disadvantaged students attending Huron Valley Schools was well below the state average, similar to Walled Lake Consolidated Schools.

Both school districts have anticipated ongoing needs for improving their existing facilities. In 2013, Walled Lake Consolidated Schools passed a $67 million construction and technology bond, which funded safety and security upgrades, new technology equipment, and certain building improvements. In 2009, Huron Valley Schools passed a multimillion dollar ten-year bond millage for building maintenance and site sinking fund; however, proposed new bond millage proposals in 2014 and 2015 for facilities improvements failed.

Due to the above average performance of the two school districts and their efforts for continued updates of facilities, Commerce Township will continue to have good schools which may draw additional families to the Township.

Community Services

Post Office

The U.S. Post Office located at 995 North Pontiac Trail in Walled Lake handles the mail for the majority of Commerce Township residents. However, a portion of the Township is serviced by the U.S. Post Office in Highland Township, to the north of the Township.

Library Facilities

The current Commerce Township Library opened in 2004 in the Commerce Town Center district in a repurposed building. Planning for a new purpose-built facility is currently proceeding. The new library is to be sited at the northwestern corner of Dodge Park #5, southeast of the Commerce and S. Commerce Roads intersection. This location is just east of the Commerce Village special area district. This site is more centrally located within the library service area than the existing 2004 facility. Completion of the new facility is anticipated in 2017. During the scoping of the library project, every effort should be made to ensure that the project includes the completion of a shared use pathway connecting the new library to the center of the Commerce Village district. Once the new building is operational, it is expected that the existing Commerce Town Center library building will be sold.

Library facilities receive a 0.3 mill funding stream that allows the Library to maintain its operation and service to the community.

Fire Protection

The Commerce Township Fire Department responds to medical and fire emergencies in both Commerce Township and Wolverine Lake Village. The department is a combined department of full-time personnel and part-time or paid-on-call firefighters and a fire marshal. The township is serviced by four fire stations that are staffed 24 hours per day: Wixom Road in the southwest corner of the Township; Commerce Road between Union Lake and Carroll Lake Roads; Commerce Road adjacent to the Huron Valley-Sinai Hospital; and Welch Road north of Pontiac Trail. In 2013, the department responded to 2,477 calls for service.

Police

The Township contracts the Oakland County Sheriff's Department for police protection. The current contract is for thirty-two deputies. The sheriff's deputies operate from the Oakland County Sheriff's Department Substation, which is incorporated into the Commerce Township Fire Station #4 at 2401 Glengary Road.

Health Care Facilities

Huron Valley-Sinai Hospital is located off of Commerce Road past its intersection with Bogie Lake and Wise Roads. It was built in 1986, and it has been expanded multiple times since its opening. Surgical services, a birthing center, a cancer institute, and a joint and bone center are among the services offered at Huron Valley-Sinai Hospital. The facility offers a variety of health classes and is affiliated with the Detroit Medical Center and Wayne State University. As western Oakland County continues to develop, the demand for services from Huron Valley-Sinai Hospital will increase. The facility, most likely, will expand in the next ten to twenty years and as medical facilities evolve, the uses and nature of the complex change.

Township Hall

In 2009 the Township opened the new Township Hall in the previous Lakes of Pinewood Golf Course Club House structure. The architecture of the building, a neo-traditional design, encompasses the high quality standards that the Township requires of new development. The building is located in the heart of the Downtown Development Authority Commerce Town Center Project Area, just north of the Library.

Cemeteries

The Township maintains four cemeteries in Commerce: Commerce Memorial, Richardson Cemetery, the original Commerce cemetery and the Curtis addition to the original cemetery. The original cemetery is located on the north side of Commerce Road at the eastern boundary of the Commerce Village area. The Curtis addition to that cemetery is located directly across Commerce Road to the south. Commerce Memorial is located on Benstein Road, south of Glengary, and Richardson Cemetery is located on Oakley Park Boulevard, just west of its intersection with Haggerty Road. The Township contracts Huron Cemetery Maintenance to maintain the Township cemeteries. There are no private cemeteries in Commerce Township.

Millage Name	Homestead	Non-Homestead
Township Operating	1.4100	1.4100
Charter Library	0.3000	0.3000
Charter Deputies	0.3000	0.3000
Voted Police 1	0.0000	0.0000
Voted Library	0.6895	0.6895
Voted Open Space	0.3939	0.3939
Voted County Parks & Rec.	0.2415	0.2415
Voted Fire Special Assm't	1.8045	1.8045
Voted Police Special Assm't	2.5600	2.5600
Voted County HCMA	0.2146	0.2146
Zoo Authority	0.1000	0.1000
Art Institute	0.2000	0.2000
Total	8.2140	8.2140

Source: 2014 Winter Millage Report – Charter Township of Commerce Treasurer Department

Utilities

Water

Commerce Township receives its water from the City of Detroit Water and Sewerage Department (DWSD) and has three metered connections to the DWSD transmission lines. The distribution system has been extended to most parts of the Township and currently services over 5,500 residential connections and 350 non-residential connections. The system is maintained by the Oakland County Water Resources Commission (OCWRC).

Commerce Township has a total of nine inter-community connections with bordering municipalities. There are three connections with West Bloomfield, three with Walled Lake and three with Wixom. These connections provide additional reliability of the water system in case of a water main break or repair within the Township's system or DWSD's system.

Commerce Township has a moderately well looped water distribution system which inherently makes it a reasonably reliable system when it comes to water main breaks. If a water main breaks, the OCWRC can shut down the water main without disrupting a large number of customers. There are some places where additional loops would significantly increase the reliability of service in the event of a water main break and are included in the capital improvement plan, these include:

- Commerce Road from Dodge #5 to Carroll Lake Road
- Benstein Road from McCoy to Glengary
- Benstein Road from Glengary to Sleeth

Commerce Township will be adding a 2 million gallon water storage reservoir to the system in 2015-16 which will provide a means to reduce the peak usage and also improve the reliability of the system.

Sanitary Sewer

Commerce Township's sanitary sewer collection system includes the following major components: trunk/lateral gravity sewers, trunk force main system, low pressure sewers and sewer pump stations. This system relies heavily on force mains and low pressure sewers and was selected after a 1989 sewer master plan listed the benefits of this system for a lake community like Commerce Township.

The sanitary sewer system consists of over 70 miles of gravity sewer ranging in size from 8" to 36", over 26 miles of trunk force main ranging in size from 6" to 24" diameter and over 33 miles of low pressure sewer ranging from 2" to 6" diameter. The sewers are sized for the ultimate build out of the Township. The capital improvement plan includes a redundant loop along Newton Road. The Commerce Township sanitary sewer system also includes 27 pump stations.

In 2010, Commerce Township started operation on a new Wastewater Treatment Plant (WWTP) expansion that brings the plant treatment capacity to 8.5 million gallons per day. Commerce Township's sanitary sewer system is a modern separated system with low inflow and infiltration. The WWTP is operated by the OCWRC.

In 2014, Commerce Township completed two projects: the installation of new pump station SCADA that will reduce maintenance costs and facilitate analysis of pump station flows, and a Heat Recovery System at the WWTP that is expected to drastically reduce energy costs to heat a building at the site.

Electric

Electric utilities are provided by DTE Energy. Two new circuits were added in 2002 to the Commerce Township substation, which provides power to most of the Township. Sub-stations in Wixom and Walled Lake also provide power to portions of the Township. The new circuits have increased the capacity of the Commerce Township substation by thirty percent, from 17 million volt amperes (mva) to 22 mva. During the installation of the circuits, the Township did experience a power failure. The circuits were added since the system was at capacity at peak hours. The increased capacity can accommodate additional growth. The Township has met with DTE Energy to coordinate resources and guarantee power to essential services in the Township, such as Huron Valley-Sinai Hospital. Additional electrical distribution system improvements may be required in the future to meet the needs of the Township.

Natural Gas

Most properties within the Township have access to natural gas provided by Consumer's Power.

Telecommunications

AT&T provides telephone service to most of the Township and Comcast provides cable television. Comcast has a high-speed internet system in Southeastern Michigan and this service is available to most of Commerce Township residents. General Telephone provides telephone service to part of the western portion of Commerce Township.

Summary and Analysis

Commerce Township has excellent schools, a library as well as access to the surrounding library network and is home to the largest hospital in western Oakland County. As the Township has grown in the past decade, emergency services remained at the same level of funding and personnel. The Township owns and contracts the maintenance of four cemeteries and has its own water and sanitary sewer systems. Water and sewer either exists or is planned for all parts of the Township. Other utilities, such as electricity and gas, are available throughout the Township and the infrastructure has been recently expanded.

As the Commerce Township Master Plan is developed, the following issues should be taken into consideration:

- **Good schools may attract new families to Commerce Township, which could lead to development pressure;**
- **Postal delivery is provided by facilities in neighboring communities;**
- **Emergency services, police and fire, have not grown at the same pace as the population in the 1990's and additional tax dollars are needed to fund coverage;**
- **Huron Valley-Sinai Hospital is the largest hospital in western Oakland County and is likely to expand in the next ten to twenty years;**
- **Access to utilities will not constrain development since the entire Township has access or is planned to have access to Township water and sanitary sewer; and**
- **The electricity infrastructure was recently updated.**

8. FUTURE LAND USE

The future land use plan reflects the input of the community it serves!

Overview

The development of the Future Land Use Plan is one of the most important elements of a comprehensive plan. The Future Land Use Plan is the result of a process of reviewing historical and current development patterns within the community, together with the constraints posed by natural resources and features on the land and influences from outside the community, to develop and establish a vision for the future growth of the community.

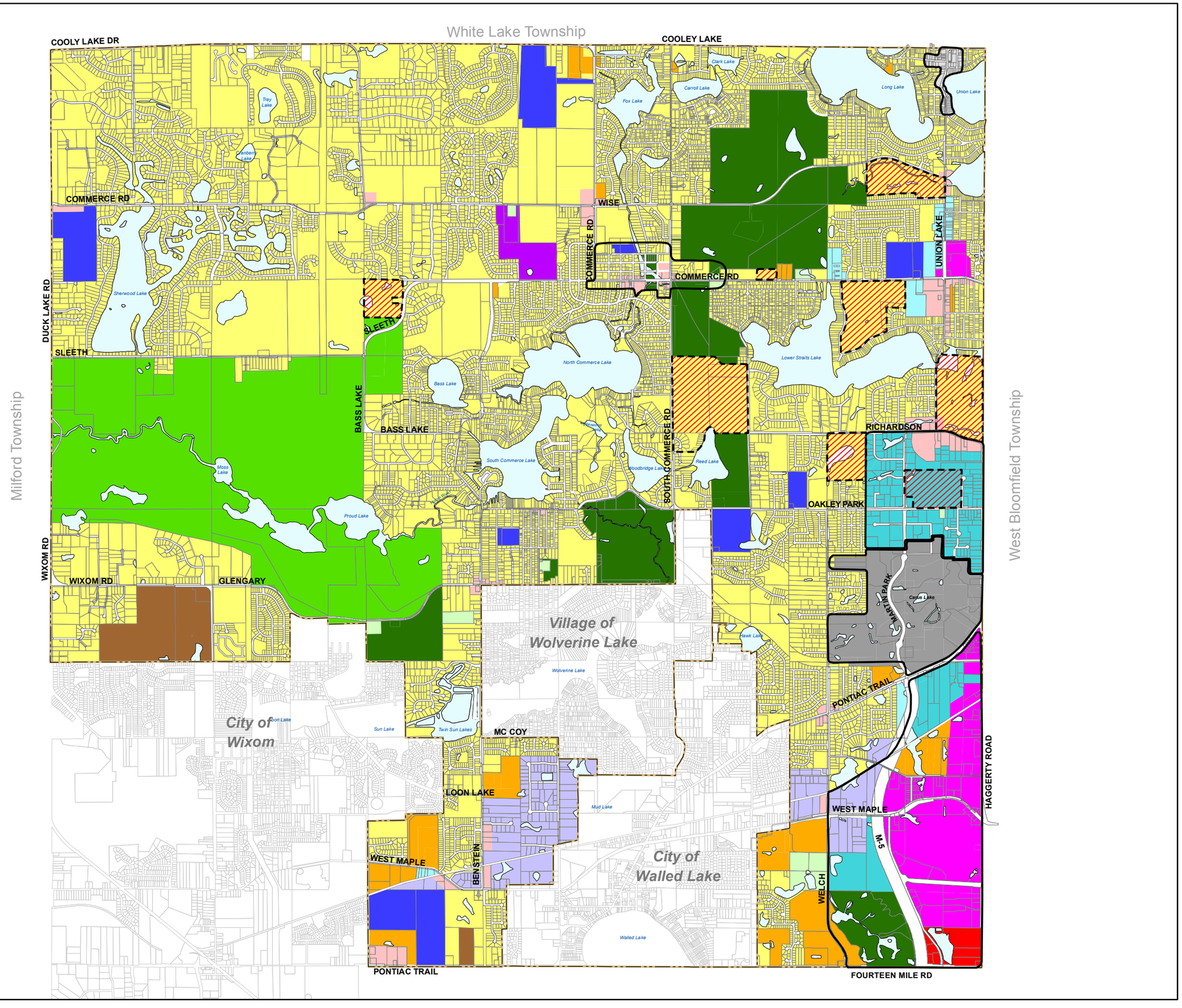
The Commerce Township Future Land Use Plan will provide guidance and direction to assist community officials in the decisions relating to the day-to-day planning, zoning, land subdivision, and public improvement issues over the next ten years. The Future Land Use Plan is supported by the Future Land Use Map that illustrates the location of the various types of land uses proposed for Commerce Township, including residential, commercial, hospital, office, and industrial land use categories. The following are descriptions of the future land use categories shown on the Future Land Use Map.

Residential

Residential land use is divided into three categories; single family residential, multiple family residential and manufactured housing community. In addition to the Future Land Use Map, the Future Single Family Residential District Map illustrates the future single-family residential land use development patterns for Commerce Township.

Single Family Residential

Areas designated for single family residential use include single family detached homes, along with appropriate public and semi-public uses such as schools, community facilities, parks, and places of worship, as well as, neighborhood commercial uses compatible in size and scale with the areas it serves. Any single family uses adjacent to arterials should not have direct access to arterial roads. Commerce Township has determined that future single family residential land use will fall into the following development patterns:



Future Land Use

Commerce Charter Township,
Oakland County, Michigan

December 7, 2015

FUTURE LAND USE

- Single Family Residential
- Multiple Family Residential
- Manufactured Home Community
- Neighborhood Commercial
- Community Commercial
- General Commercial
- Hospital
- Industrial
- Office Service
- Technology Light Manufacturing
- Four Corners Village
- Commerce Town Center
- Private Recreation Area
- Special Area Plans

PUBLIC FACILITIES

- School
- Township Park
- State Land
- Community Facilities

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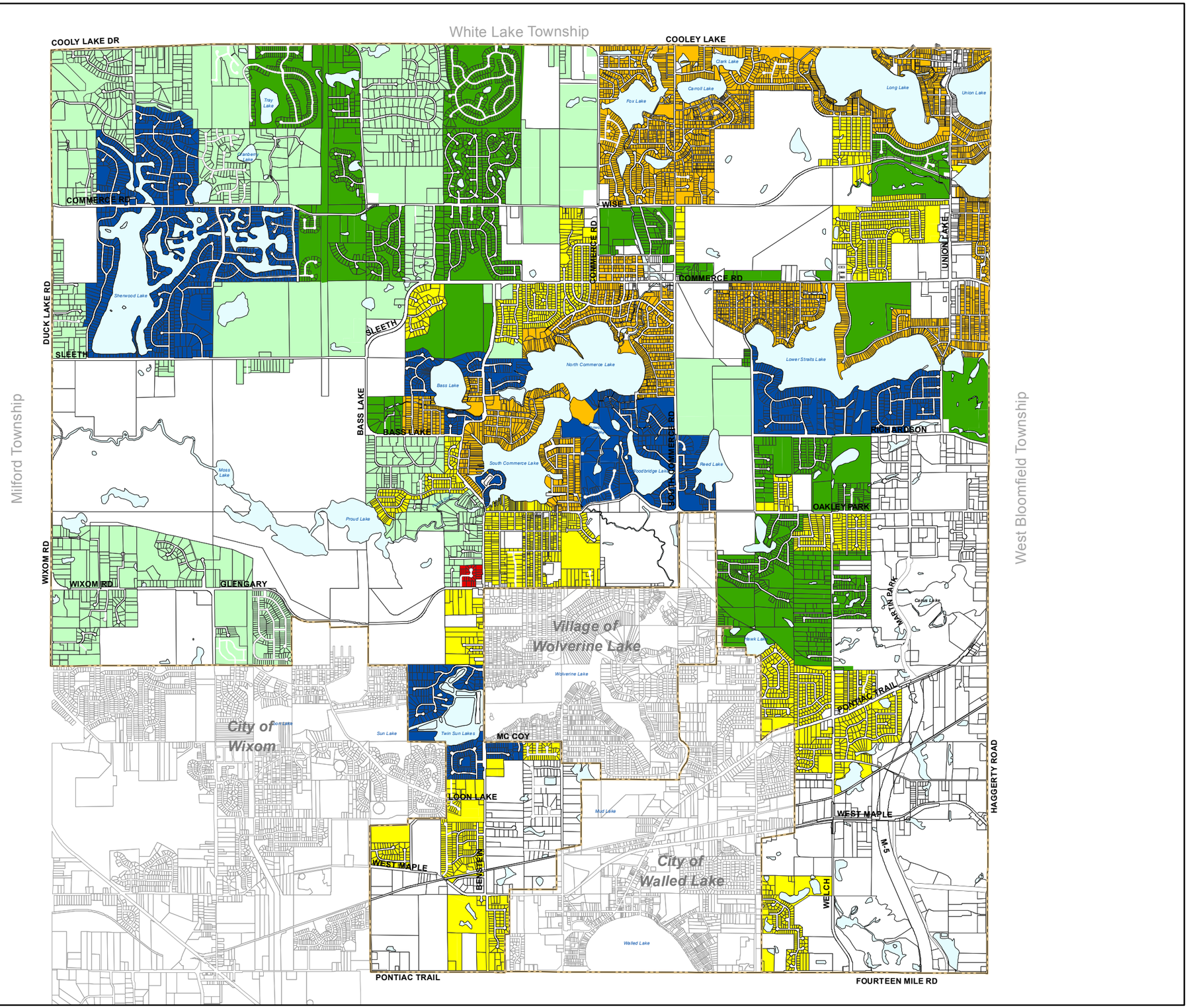
McKenna ASSOCIATES

Base Map Source: Oakland County, Michigan.
Data Source: McKenna Associates, Inc. 1/03



Future Single Family Residential District

Commerce Charter Township, Oakland County, Michigan

December 7, 2015

FUTURE LAND USE

RR	Rural Residential (2 Du/Ac)
SF	Single Family Residential (3.5 Du/Ac)
CR	Cottage Residential (4 Du/Ac)
LFR	Lake Front Residential
CLR	Cluster Residential
NR	Neighborhood Residential

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McKenna ASSOCIATES

Base Map Source: Oakland County, Michigan. Data Source: McKenna Associates, Inc. 1/03

Rural Residential

The rural residential district is designated for single-family homes with an accessory structure. Characteristics include larger homes on lots approximately ½ acre or greater in size.

With a maximum density of 2 dwelling units per acre (du/acre), the rural residential district is planned for low density residential land uses. Rural residential developments are located throughout the central and western portion of the Township. Zoning and development options for areas planned for rural residential include the current R1-A zoning district and the cluster development option in the current Township Zoning Ordinance.

Neighborhood Residential

The Neighborhood residential classification is intended to mirror the more traditional residential neighborhoods currently found throughout the Township. A variety of housing types and densities should be encouraged within this classification. Attached townhouses or duplexes may be appropriate if designed properly and serve as a transitional land use. This land use is planned for 3.5 du/ acre.

Cottage Residential

Cottage residential areas are defined by their relationship to the lakes and natural areas found throughout the Township. These are older neighborhoods developed as cottages in the middle of the twentieth century. Over the past three decades, cottages have been converted to year-round dwellings or replaced with modern homes. Development in the Cottage Residential district should reflect the character of residential development historically associated with the lakes and villages in the Township, while allowing flexibility for redevelopment. The current Zoning Ordinance treats these areas as “Areas of Special Concern” and those standards should be upheld.

The standards associated with this land use are intended to maintain the character and value of the existing housing while recognizing that redevelopment must permit property owners to maximize their development options without adversely affecting neighboring properties. This land use is planned for 3.5 du/acre.

Lake Front Residential

Future planned lake front residential areas are defined by their relationship to the lakes and natural areas found throughout the Township. Development in the lake front residential district should reflect the type of newer, year-round residential development seen in the last twenty years in the Township.

The standards associated with this land use are intended to maintain the character and value of the existing housing. As with Cottage Residential, any redevelopment must permit property owners to maximize their development options without adversely affecting neighboring properties. This land use is planned for 3.5 du/acre.

Cluster Residential

Cluster residential development is designated throughout the Township specifically in undeveloped areas where significant natural features exist and are intended to be preserved. The intent of this land use is to group or cluster new homes on to the most buildable portion of a site so that the remainder of the site can be preserved as open space. The overall density of the parcel is not increased by this type of development. The overall density of these parcels is planned for 3.5 du/acre. Proposed developments planned for this land use should be encouraged to utilize the cluster development option in the current Township Zoning Ordinance.

Multiple Family Residential

The location of multiple family residential uses on the future land use plan have been determined by a number of factors including access to major road networks, surrounding uses, and community facilities. Moreover, multiple family residential has been used as a transitional use between single-family residential uses and high-volume roads or intense land uses such as industrial or general commercial.

Multiple family residential uses should be of a high-quality design that is integrated with the character of the area. Cookie-cutter designs should be avoided. Developments should be small in scale and scattered throughout the Township in pockets, generally serving as "buffer" uses. Assisted or independent living senior facilities can also be incorporated into this district, as can senior facilities that provide a continuum of care. These types of uses can also be transitional, insulating single family residential from more intense uses if they are designed with the same goal of blending into the character of the area as multiple family developments. Such facilities should not exceed two stories in height and should be located on major thoroughfares.

Manufactured Home Community

Three manufactured housing communities exist in Commerce Township. The future land use plan shows these existing communities have additional room for expansion on those parcels. These communities should be retained and maintained as part of the housing mix in the Township.

Commercial

Commercial land use is divided into three districts based on the intensity of the commercial business use.

Neighborhood Commercial

The neighborhood commercial district is planned for smaller retail and service land uses that serve a localized area, generally meeting the day-to-day needs of residents, such as groceries, dry cleaning, small restaurants, etc. Smaller office-service uses are appropriate in areas planned for Neighborhood Commercial. Complementary two-family or small scale multiple-family housing also may be allowed in a neighborhood commercial development as a component of an approved Planned Unit Development. Neighborhood commercial developments should be limited to 3-10 acre sites with less than 100,000 square feet of retail and/or office space. Neighborhood commercial uses are planned with frontage on major roads and serve as transitional land uses between residential land uses and major roads or more intense land uses.

Neighborhood commercial centers are planned within a short drive or walk from most residential areas. Existing pockets of neighborhood commercial uses have been retained in the following areas: Richardson and Union Lake, Welch and Pontiac Trail, Benstein and Glengary, Commerce and South Commerce, and Union Lake and Cooley Lake.

Two new areas of neighborhood commercial are planned in the northern portion of Commerce Township to accommodate anticipated residential growth in that area: on the southeast corner of Duck Lake Road and Commerce, and on the southwest corner of Bogie Lake and Cooley Lake Roads.

Neighborhood commercial centers should be designed to facilitate pedestrian access in addition to accommodating vehicular traffic. The developments should have sidewalks that link to adjacent pathways or sidewalks. The architecture should be on a human scale and reflect the character of the area.

Community Commercial

Community commercial uses serve the needs of the entire township and include uses such as large grocery stores, hardware stores, and general merchandise. These developments should be on larger parcels than traditional neighborhood commercial centers and have no more than 300,000 square feet of gross leasable area. These uses are planned to continue almost exclusively in the eastern half of the Township, fronting major roads such as Union Lake and Haggerty Roads. Existing and future community commercial businesses should be well maintained and have quality design. A small area of community commercial is planned on Pontiac Trail, just west of its intersection with Benstein.

General Commercial

General commercial uses draw from a regional market. Examples of general commercial uses include department stores, "big-box" home improvements centers, and apparel stores. General commercial centers are typically anchored by one or more full-line department stores and range in size from 300,000 to 1 million square feet, with a site area of 30 acres or more. All general commercial uses are planned along Haggerty Road/ M-5 corridor, M-5/ Pontiac Trail, and Union Lake Road due to the easier access to the regional transportation network. The Township would like to encourage destination commercial to be configured in a pedestrian oriented way, similar to the life-style centers recently developed in Rochester Hills and Mackinac City.

Office

Office land uses are often located near commercial developments and may act as a buffer between the more intensive commercial uses and adjacent residential uses.

Office service uses are offices that provide services needed on a day-to-day basis such as medical offices, legal and accounting service offices, veterinary offices, and real estate offices. Many of these uses would be appropriate in a neighborhood commercial center but are also planned for specific areas of the Township.

Office service buildings should be one to two stories in height, reflect the character of the area and have adequate onsite parking.

Industrial

Industrial uses are divided into two categories: Technology Light Manufacturing (TLM) and Industrial.

The TLM land use classification is to provide an environment where high tech uses and functions such as engineering, design, research and development along with light manufacturing activities can locate. Accessory uses for employees of these complexes, such as cafeterias, health clubs and convenience stores may be allowed if incorporated into the overall design and cater mainly to the employees on site.

TLM uses are planned for the area immediately north and east of the Commerce Town Center development area and for a couple areas located east and west of M-5 south of Pontiac Trail. These uses often serve as a transitional land use between industrial and single-family uses.

Traditional industrial land uses are planned for areas with good access to regional transportation and utilities. Technology light manufacturing uses and traditional light industrial uses, such as warehousing, manufacturing, and assembly are appropriate for land planned for Industrial. Most of the industrial is concentrated along M-5 and along Benstein between West Maple and McCoy.

Industrial buildings should be one to two stories in height and blend with the character of the area. All building facades facing a public street, highway, or residential areas should be of a high-quality design and buffered from adjacent non-industrial uses.

Mixed Use Districts

Hospital

Over the next 20 years, Huron Valley-Sinai Hospital is expected to expand, perhaps beyond the property currently owned by the hospital. The Township supports the current design and height restrictions on the hospital buildings. Although the Future Land Use Map limits the hospital use to the area currently owned by the facility, a logical expansion of the complex directly north would be appropriate. Since this area is planned for single-family residential uses, the proposed expansion would have to minimize any conflicts with the existing or planned residential uses.

Due to the dynamic nature of the medical field, each Master Plan update, required once every five years, should consider whether the extent of the area planned for the hospital is appropriate, and whether additional areas should be planned for hospital uses.

Four Corners Village

The Four Corners Village Future Land Use Category is designated for the area known as the Four Corners or Union Lake Village, located in the northeastern corner of Commerce Township. An area plan for this portion of the Township, in this chapter, further describes the nature of and future plans for the Four Corners Village. A mixture of single-family residential uses and commercial and offices uses are allowed here. The commercial and office uses are limited to lower intensity uses that will be compatible with adjacent residential areas. These commercial/office uses should only be allowed along major roads.

Commerce Town Center

The Commerce Town Center Future Land Use Category distinguishes the area as unique to the north of where the M-5 connector ends. This area is currently owned by the Commerce Township Downtown Development Authority and is being marketed for a variety of uses from single family residential to commercial. The Township Hall and Library have already been developed within the district. The property is anticipated to be built out gradually over the next 10-15 years. An area plan (see below) has been developed for this section of the Township. The plan calls for a mixture of single-family, multiple-family, office research, community commercial and civic uses to create a distinctive area with a sense of place. The area plan provides further guidance as to the placement of land uses, design and implementation.

Zoning Plan

Per the requirements of the Michigan Planning Enabling Act of 2008, the below comparison table correlates the Future Land Uses of the Master Plan with the zoning districts on the current township official Zoning Map.

Table 8.1: Master Plan Zoning Ordinance Comparison Table

Future Land Use Zoning Comparison Table	
Future Land Use	**Zoning District**
Single Family Residential	R-1A, R-1-B, R1-C, and R1-D
Multiple Family Residential	R-2 and RM
Manufactured Home Community	Mobile Home Park
Neighborhood Commercial	Local Business
Community Commercial	Community Business
General Commercial	General Business
Hospital	Hospital Facilities
Industrial	Industrial
Office Service	Office
Technology Light Manufacturing	Office Research /Technology Light Manufacturing*
Private Recreation Area	Special Purpose District
Special Area Plans	Overlay Districts
Township Park & State Land	Public Recreation District

**Draft New Zoning District TLM – Pending Adoption early 2016*

Future Land Use Summary

Table 8.2 shows the amount and percentage of acreage planned for each future land use category. The Township is planned to remain a primarily single-family residential area with almost half of the Township devoted to single-family uses.

Table 8.2: Future Land Use Categories

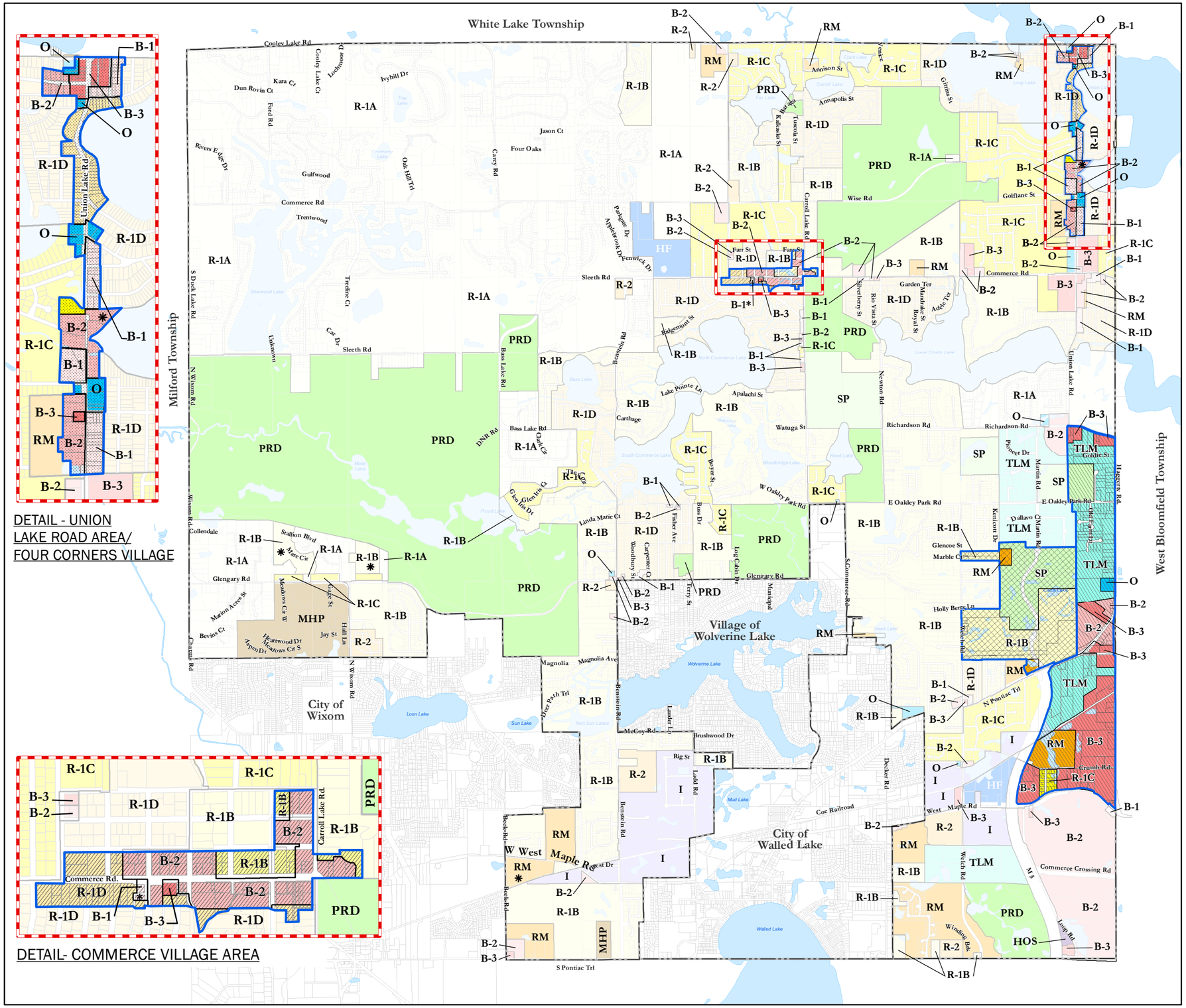
Future Land Use	Acres	% Acres
Rural Residential	2752.13	15.08%
Single Family Residential	1371.62	7.51%
Cottage Residential	1286.08	7.04%
Lake Front Residential	1284.77	7.04%
Cluster Residential	1996.08	10.94%
Neighborhood Residential	12.00	0.07%
Multiple Family Residential	407.31	2.23%
Manufactured Home Community	203.69	1.12%
Neighborhood Commercial	165.60	0.91%
Community Commercial	45.87	0.25%
General Commercial	455.10	2.49%
Hospital	67.41	0.37%
Industrial	381.09	2.09%
Office Service	82.49	0.45%
Technology Light Manufacturing	433.98	2.38%
Four Corners Village	22.52	0.12%
Commerce Town Center	416.23	2.28%
School	381.85	2.09%
Township Park	1151.29	6.31%
State Land	1803.55	9.88%
Community Facilities	66.47	0.36%
Right-of-way	1956.83	10.72%
Open Water/Lake	1507.78	8.26%
TOTAL	**18252.33**	**100.00%**

Source: McKenna Associates, 2015

Special Area Plans

Commerce Charter Township, Oakland County, Michigan

December 7, 2015



HRC Haggerty Road Corridor
TC Commerce Town Center
CV Commerce Village
ULR Union Lake Road / Four Corner Village
Overlay District Outline

R-1A Large Lot One Family Residential
R-1B One Family Residential
R-1C One Family Residential
R-1D One Family Residential
R-2 Attached Residential
RM Multiple Family Residential
MHP Mobile Home Park
B-1 Local Business
B-2 Community Business
B-3 General Business
O Office
TLM Technology Light Manufacturing
I Industrial
HF Hospital Facilities
HOS Hospitality
SPD Special Purpose District
PRD Public Recreation District

SOURCES:
Parcel and ROW Data Source: Oakland County GIS, 2014.
Base Map Data Source: Michigan Center for Geographic Information, Oakland County Geographic Framework, version 14a.
Zoning Data Source: Commerce Charter Township

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McKenna ASSOCIATES

Special Area Plans

A number of areas in Commerce Township warrant planning beyond the Future Land Use Map. These areas are important to the Township due to their unique features, historic buildings and/or development pressure. Special Area Plans have been developed for Commerce Village, Union Lake/ Four Corners, the Golf Courses north of M-5, and the Haggerty Road and M-5 Corridors. The future land use map assigns a mix of future land use categories to properties within each of the area plans. While these should be considered in any land use decision, the area plans should be the primary guide. In addition, two areas have been identified for further study and warrant Special Area Plans, Huron Valley- Sinai Hospital and the Gravel Pits, located north of Proud Lake Recreation Area.

Union Lake/Four Corners Village

Union Lake/Four Corners Village is planned for a mix of neighborhood commercial and community commercial uses to serve the nearby residential areas and the passing traffic. Four municipalities—White Lake Township, Commerce Township, Waterford and West Bloomfield Township—are in the Union Lake/Four Corners Village. These municipalities have in the past coordinated planning and zoning in the Village to maintain the character of the area.

Due to congestion along Union Lake and Cooley Lake Roads, the Road Commission for Oakland County has developed a plan that would change the traffic circulation in this area. The Road Commission has not committed to any changes at this point but roadway improvements in the Union Lake/Four Corners Village could be constructed within the next ten years. Due to the public boat launch for Union Lake and residential neighborhoods near the Union Lake/Four Corners Village, any roadway improvements should provide safe pedestrian walkways and crosswalks. Also, through the use of traffic calming measures and speed limits, traffic should be slowed to protect pedestrians, improve aesthetics and benefit the business in Union Lake/Four Corners Village.

Once roadway improvements in this area are planned, the Township should undertake a corridor plan for this section of Union Lake Road, if possible in conjunction with the other municipalities that have jurisdiction in the Village. In that corridor plan, the Union Lake public boat launch should be treated as a focal point. In the meanwhile, the Township has committed to creating a mix of businesses in this area that serve the nearby residents, continuing the planning and zoning created with the cooperation of its neighbors, capitalize on the activity at the lake and boat launch and are sensitive to the surrounding environmental features of Union Lake and Long Lake. To prevent market saturation, which could negatively impact surrounding commercial corridors and downtowns, a retail market study should be done to determine the amount of commercial retail use that would be viable in this location.

Commerce Village

Commerce Village is the historic center of the Township. The village contains various examples of Greek Revival and Early Victorian architecture. Primarily a residential area, commercial and office uses are scattered along Commerce Road between Carroll Lake Road and Ponderosa Street. Public uses, such as Commerce Elementary, Township parks and cemeteries, and semi-public uses, such as churches, are scattered throughout the Village.

The plan for Commerce Village is based on the following principles:

- Primary consideration for any land use decision in the Village should be the preservation of the historic character of the Village. No change in land use should be considered unless the historic structures could be reused without destroying their historic integrity;
- The unique residential neighborhood in the Village should be protected and strengthened;
- The history of the village is as a center of commerce for an agricultural community in the middle of the 19th century. It would be inappropriate to create a commercial area typical of a "Main Street" downtown built at the turn of the 20th century;
- The Site and Architectural Design Manual for Commerce Township, prepared in 2002, should be heavily referenced in order to facilitate development and redevelopment in the Village and surrounding area;
- The Commerce Village and Mill Site Development Plan, prepared in 1983, remains a relevant document and should be referenced in any land use decision in the Village area;
- The Township should pursue the establishment of a historic district and adopt appropriate ordinances to protect the historic structures in the Village area;
- The Township owned property in the Village - Byer's Farm, Mill Race Park, the Township Cemetery and Dodge Park - should be developed as low-intensity public uses emphasizing the history of the Village;
- Sidewalks and other non-motorized pathways are needed in the Village to connect public facilities, parks, shopping areas and the residential neighborhood;
- A number of contaminated sites exist in the Village area, which may have restricted redevelopment of these sites. Steps should be taken to encourage remediation and redevelopment of contaminated sites;
- The lot sizes and historic development pattern may restrict redevelopment. Flexibility should be built into any land use regulation in the Village area through the use of creative zoning tools, such as an overlay district;
- Commercial uses should be limited to the intersection of Carroll Lake and Commerce Roads, and Commerce Road between Carroll Lake Road and just west of Ponderosa Street;
- A retail market study should be done to determine the amount of commercial retail use that would be viable in this location;
- The commercial areas of the Village would be an appropriate location for medical office buildings associated with the hospital, if designed properly;
- Attached single-family units may be allowed in the commercial areas of the Village if designed properly;
- Land uses surrounding the Village should provide a transition to the Village area.

Commerce Town Center

Commerce Township Downtown Development Authority purchased and assembled 330 acres north of the Pontiac Trail and M-5 intersection and is currently marketing those properties for a variety of uses.

As development proposals are reviewed for this area, the special area plan is a guide for any decisions but should not be viewed as a rigid document. The exact mix of land uses for any developments in this area will depend on market trends and diversity of land uses in the Township at that time.

The plan works on the following principles:

- The integrity and value of the existing nearby single-family residences should be preserved to the greatest extent possible;
- The redevelopment of this area should have connections to the overall street network;
- The direct access to the regional transportation network provided by the M-5 Haggerty Road Connector should be capitalized upon. The street network in this area should provide a link between Pontiac Trail and Martin Road while maintaining the integrity of the natural features and the value of the existing nearby single-family residences. The street network will facilitate the connection of Pontiac Trail to Union Lake Road, but will not be an extension of M-5;
- The development should be sensitive to the unique environmental features of the area;
- Integrating the mix of uses into a unified development plan will result in greater efficiency, economic value, and a greater potential to create a sense of place that all residents of Commerce Township can be proud of;
- Emphasis should be placed on creating developments that accommodate pedestrians as well as automobiles. Residents of the area and its surroundings should be able to walk to the natural amenities of this district as well as to the commercial and civic functions including future school sites;
- To prevent market saturation that could negatively impact surrounding commercial corridors and downtowns, a retail market study should be done to determine the amount of commercial retail use that would be viable in this location;
- The Township should engage surrounding communities including West Bloomfield Township as plans are developed for this area;
- Existing Township facilities including the library and the Township Hall should have prominence as the area is developed and they must be well connected to the Township's non-motorized transportation network;
- Road improvements are holistically considered and concurrently developed so needed improvements are in place to handle increased traffic; and
- The size and mix of the land uses may change to react to market and land use trends as long as the general principles outlined above are recognized.

Haggerty Road Corridor

The Haggerty Road Corridor stretches from Fourteen Mile Road to Richardson and provides most of the industrial and commercial tax base in the Township. Figure 8-1 illustrates the Future Land Use Plan for the Haggerty Road Corridor. The southern half of the corridor is visible from both the M-5 Connector and Haggerty Road. Access along the M-5 Connector is restricted and should be restricted along Haggerty Road. Pontiac Trail and Fourteen Mile and Maple Roads provide and should continue to provide adequate and ample access to the corridor.

Future Commercial, Industrial, and Multiple-family uses should face the M-5 Connector and Haggerty Road and due to the visibility of the area, high-quality design standards should be utilized. Shared parking and loading should be placed in back of buildings, and should not be readily visible from the two major traffic corridors to assure an attractive appearance. The corridor is planned to develop and is characterized by the following development patterns:

14 Mile to Maple

- Commercial Land Uses east of M-5
- Light Industrial west of M-5, north of Long Park

Maple to Pontiac Trail

- Commercial Land Uses along eastside of Haggerty Road north of Maple
- Light Industrial and Multiple-family east of M-5, separated by former railroad
- Light industrial west of M-5, north and south of railroad
- TLM – Technology/Light Manufacturing or Commercial use south of Pontiac Trail and north of Industrial

Pontiac Trail to Oakley Park

- Commerce Town Center north of Pontiac Trail
- TLM uses west of Martin Road and south of Oakley Park

Oakley Park to Richardson

- TLM uses west of Haggerty
- Commercial uses along Richardson west almost to Martin Road

Figure 8.1: Haggerty Road Corridor Future Land Use Plan

9. FUTURE TRANSPORTATION

It is not only the process of going from place to place, it is the experience!

Overview

Residents of Commerce have expressed the desire for more transportation options for vehicles, pedestrians, and bicyclists. The development of a non-motorized system connecting public facilities to residential neighborhoods and neighborhood commercial uses has been identified during the public participation process both for the Master Plan and the Park and Recreation Plan.

Continued residential and commercial growth in Commerce Township and adjacent communities to the north and west will put pressure on the existing road network in Commerce in an east-west direction and upon the Haggerty/ Union Lake/ Williams Lake corridor in a north-south direction, particularly during peak hours. The Township embraces strategies to limit the negative impact of traffic on the community while supporting quality of life improvements and development that benefits its residents.

This section of the Master Plan looks specifically at the circulation systems within the Township. The Future Transportation Plan includes recommendations for pedestrian, non-motorized, and intersection improvements to address pinch-points in the vehicular circulation system.

Network Improvement Strategies

Both the north/south and east/west routes have sections that experience congestion during peak hours. Based on the desirability of Commerce Township as a place to live, and the growth of communities to the north and west, it is reasonable to expect congestion will continue to be an issue during peak hours, especially on the north/south roadways where there is less connectivity in the network.

There are a number of potential solutions to reducing congestion including: 1) congestion mitigation through adding lanes or turn lanes to existing arterials and signal timing, 2) access management 3) providing additional grid connections on local and collector streets, and 4) complete streets and providing biking and walking transportation options for some of the residents' typical daily trips.

Some of these solutions fall under the jurisdiction of the Road Commission for Oakland County or Michigan Department of Transportation. However, all of these require the input of the Township and many of the solutions are under the control of the Township and should be implemented through the process of reviewing new developments within the Township. The following implementation strategies will improve transportation in Commerce.

Congestion Mitigation

Congestion mitigation is a key element to the continued improvement and function of the transportation system in Commerce Township. The primary strategies recommended to achieve congestion mitigation are the addition of right turn lanes and signal timing adjustments. Much of the congestion experienced is during the peak hour periods, or the morning and the evening commute. As mentioned prior, the lack of direct north-south routes, largely due to the Townships natural features create "bottle neck" which could be relieved by assessing the potential for prioritized turn lanes and signal timing adjustments. There is also a potential for exploring additional roundabouts. Road widening projects and reconstruction projects should be pursued only in conjunction with complete streets improvements. Finally, truck traffic should be limited to local deliveries, to the extent possible, and encouraged to operate outside of peak travel hours.

Access Management

Managing the access points to the Arterial and Collector roads is critical to preserving the capacity of these roads and reducing pressure for road widening. This is a function of the local government, which may restrict access and require the construction of a network of local access roads through ordinances and the development review process.

One of the key tools to preserving the capacity of roads and making safe and efficient environments is managing the access points. Access management is a widely accepted means of reducing the points of conflict created by randomly located access driveways serving individual uses. Access management is also an affordable tool. It is applied as development proposals are reviewed during the site plan approval process.

Access management can be broken down into three main design principles: limiting the number of driveways, separating driveways, and improving the configuration of driveways with acceleration and deceleration lanes. The following are more specific recommendations on the implementation of access management:

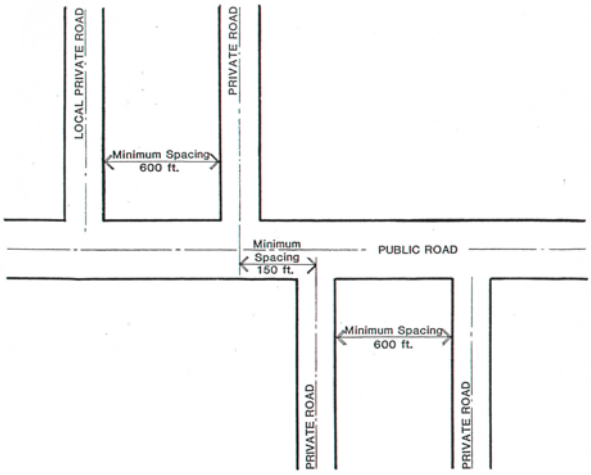
- **Limiting the number of driveways.**
  - Restrict the number of driveways allowed per lot.
  - Restrict the number of lots.
  - Encourage shared access drives.
  - Provide alternative access points from side streets and alleys.
- **Separating Driveways and other Conflict Points.**
  - Provide minimum separation between driveways and intersections.
  - Ensure adequate sight distance for turning movements.
  - Locate driveways away from other driveways.
  - Locate driveways away from controlled access highway entrances.
- **Improving driveway operations through appropriate design.**
  - Provide adequate acceleration and deceleration lanes.
  - Ensure appropriate offset for turning movements.

These principles are recommended by the Michigan Department of Transportation and can be incorporated into the Township Zoning Ordinance.

Grid Connections

The congestion being experienced in Commerce Township is due in large part to the limited number of north/south and east/west routes. The capacity of any transportation system is limited to the number of lane-miles (number of lanes x the length of road) available to carry traffic. Other elements such as access management and intersection improvements can enhance the capacity.

Figure 9.1: Local Street Connections



The construction of new roads is expensive. As a result, new development, especially commercial, will typically attempt to take advantage of the existing, public road network. This often leads to arterials serving a dual function of arterial (carrying traffic) and local road (providing direct access to land uses), thereby adding local demand to the arterial road network.

Creating a secondary network of local streets that provide connections between arterials will preserve capacity of the existing arterial road network for longer trips and provide alternative north/south and east/west routes (Figure. 9.1). Local roads should be designed to be compatible with the character of the community and the uses they serve. In residential areas this might mean that they are narrow, two lanes, with street trees planted close to the road and sidewalks on at least one side of the road.

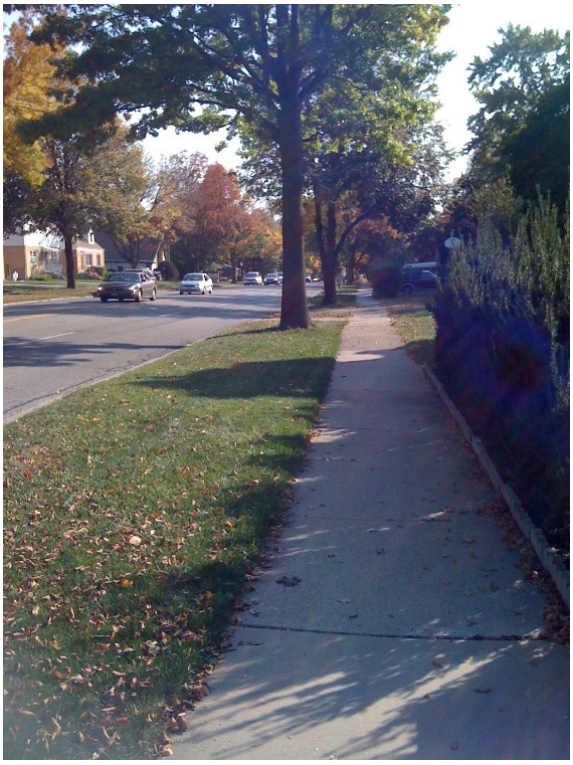
In commercial areas a local road should be two lanes with on-street parking, wide sidewalks on both sides of the street, and street trees planted close to the road.

Many communities have allowed the development of private roads to serve new developments. Private roads offer the advantage of not having to be developed to the County Road Commission's standards. A local road can have a 50-foot right of way rather than a 66 foot required by the Road Commission. The other advantage to private roads is that the day-to-day maintenance such as snowplowing, is also under control of the association that owns the road and therefore the residents or businesses using the private road can be assured that snow will be removed promptly.

However, the negative impacts of private roads outweigh the advantages from a community-wide functional standpoint. Private roads from one development are seldom connected to the private roads of another development, eliminating the potential for a secondary local road network. Long-term maintenance of private roads is also an unknown. Associations that take over the maintenance of a private road network will be faced with the need to maintain a capital improvements budget to pay for large-scale road improvements. As a result, the use of private roads is not a long-term solution to the transportation issues facing the Township. Private roads are discouraged in Commerce Township and must meet strict Township standards, including conformance with all RCOC standards.

Non-Motorized Transportation

Mixed Use Developments and the Pedestrian Network



The current land use pattern in Commerce is very automobile dependent. Few students can walk to school. Very few residents can walk or bike to a park, and even fewer to the neighborhood convenience store. Allowing for the mixture of compatible uses within close range could reduce the number of trips per household by ten to twenty percent. To achieve this reduction, streets must be safe places to walk.

Not all of Commerce Township's streets need sidewalks. Some residential neighborhoods have streets that can be shared in other locations a paved shoulder could serve as a walking area, or a path can be used. When sidewalks are installed they should be a minimum of 5 ft. wide and have a minimum of 5 ft. of landscape separation from the roadway. Where right-of-way permits a 10 ft. landscape separation in residential areas is desired.

Bicycle Network

Improvements to the bicycle network in Commerce Township are intended to support residents' health and access to important local destinations. With bicycle network improvements more Commerce Township residents will be able to make safe, short trips, to parks, schools, or even entertainment and shopping, without getting in the car. Bicycle network improvements are recommended based on the need for separation from vehicle traffic, existing signal locations to cross major roadways, and alignment with desirable community destinations, like schools, parks, public facilities, and commercial areas.

Many of Commerce Township neighborhood streets are comfortable to bike on now, and could be improved with simple signs. Some corridors can serve as more prominent system links with on-street pavement markings like conventional bike lanes, and sharrows. Most people don't feel comfortable biking with heavy traffic; on these corridors complete separation is desirable.

Types of Bike Facilities Recommended:

Shared Use Paths

Shared use paths, also known as side paths, are paved concrete or asphalt paths wide enough to accommodate both pedestrians and bicyclists. They are typically a minimum of 10 ft. wide with 2 ft. of clearance on either side of the path. Shared use paths offer cyclists a safe place to bike off-street when there is no space for a bike lane, or it is unsafe to bike on the street. Off-street paths should be considered for major arterials. Coordination of

pathway connections with adjacent municipalities should occur to ensure feasibility and proper connectivity.

Park Paths or Trails

Park paths and trails accommodate both bicycle and pedestrian traffic and are typically detached from the roadway network. They often run along rail corridors, utility corridors, along waterways, or through parks. For shared use and biking, trails should be minimum of 10 ft. wide with 2 ft. of clearance on either side of the path. Material can vary depending on use. Desirable surfaces include asphalt, crushed limestone, and dirt.

Commerce Township has the beginnings of a trail network built primarily for recreation purposes. The Township recognizes the benefits of non-motorized pathways as a means to reduce congestion on arterials. A regional trail network has been developed throughout the County that will link with pathways in surrounding communities and to regional recreational facilities. There is also a local network of trails proposed to connect local community facilities with neighborhoods.

On-Street - Bike Lanes and Paved Shoulders

Bike lanes create a dedicated space for cyclists on a roadway. They are appropriate on streets with moderate to heavy traffic. Bike lanes are indicated by on-street markings, which can be supplemented with signage. Bike lanes reinforce proper roadway etiquette, raise the visibility of bicyclists, and help both bicyclists and drivers behave predictably when sharing road space. For safe cycling, bike lanes should be 5 ft. to 6 ft. wide. When conventional bike lanes cannot be accommodated, 4 ft. paved shoulders are a good substitute for improving on-street biking conditions. Paved shoulders can also link gaps in the pedestrian network.

On-Street - Sharrows

Sharrows use a double chevron and bicycle marking, or "sharrow," in a lane intended for the joint use of motorized and bicycle traffic. Chevron symbols direct bicyclists to ride in the safest location within the lane, outside of the door zone of parked cars and areas where debris is likely to collect. Generally, sharrows are a low-cost treatment suitable for lightly travelled collector and arterial roads and can be used effectively for short connections between pinch points where bike lanes or paved shoulders cannot be feasibly installed due to right-of-way or other constraints.

On-Street - Signed Bike Routes

Bike route signs raise all users' awareness and acceptance of cycling. They make all residents aware of the most bike-friendly routes in their communities. Bike route signs are appropriate for any roadway that provides an essential link in a bicycle system, and can offer important, affordable motorist education and traffic calming. "Bike Route" signs should be implemented with a system of wayfinding signs that provide directions to specific destinations. These types of bikeway signs provide useful information and directions for cyclists, drivers and pedestrians alike.

Public Transportation

The Township should recognize that its growth may create the need for road improvements, the volume of which is likely to out-pace the ability to finance those improvements. As a result, other measures must be considered that will decrease the demand placed on roads. It is unlikely that the Township will find itself in a position of being able to build itself out of its traffic problems; adequate funds will not be available. Accordingly, other opportunities should be sought, such as increased ride sharing, public transit, and van pool programs or other forms of transit run by employers.

Increased use of transit can have the effect of reducing the overall volume of traffic along major roadways, thus enhancing traffic safety, reducing congestion, lowering maintenance costs, and improving accessibility to land uses within the Township. This need can best be addressed on a regional basis in cooperation with surrounding communities.

Community Character

The character of the community is most often seen from the road. As people travel into and through a community, their impression of the community is shaped by what they see from the road. As a result, attention must be given to the character of each of the roads in Commerce. The desired character must be reflected in the public signage, landscaping, and lighting within the corridor. In addition, the community can use landscaping, lighting, and signage to announce the entrance into the community or a special area of the community such as the Haggerty Road Corridor or the Historic Commerce Village.

Streetscape Design and Entrance Features

Most of the arterials in Commerce are lined with residential uses and open spaces. To preserve this character and promote preservation of natural areas along roadsides, new development should be setback from the road to provide a substantially natural landscape treatment with low lighting levels. Development of sites should also preserve the views from the road into natural features of the site through the clustering of development around the natural features.

In commercial areas, specific attention must be placed on signage, lighting, building orientation, and screening. Streets in commercial areas must be made to accommodate not only safe vehicular movement, but also safe pedestrian movement. Signage in commercial corridors should be low profile so they do not dominate the image of the corridor. Landscaping should be more formalized and should complement and not obscure the commercial businesses. Building design should complement and separate buildings from parking areas. Where possible, on-street parking should be provided to encourage convenient access to businesses. Longer term parking areas should be located to the side or rear of buildings and fully screened from adjacent roads and uses. Figure 9.3 shows a commercial building design with these attributes.

Building orientation should be compatible with the function of the adjacent road. Pontiac Trail, a major arterial, is not likely to be a pedestrian friendly environment. As a result, buildings should be oriented to the service drives that provided access. Figure 9.2 shows a preferred building orientation. Key entrance points into Commerce Township should receive additional landscape, lighting, and signage treatment. The Circulation Map identifies the key entrance points.

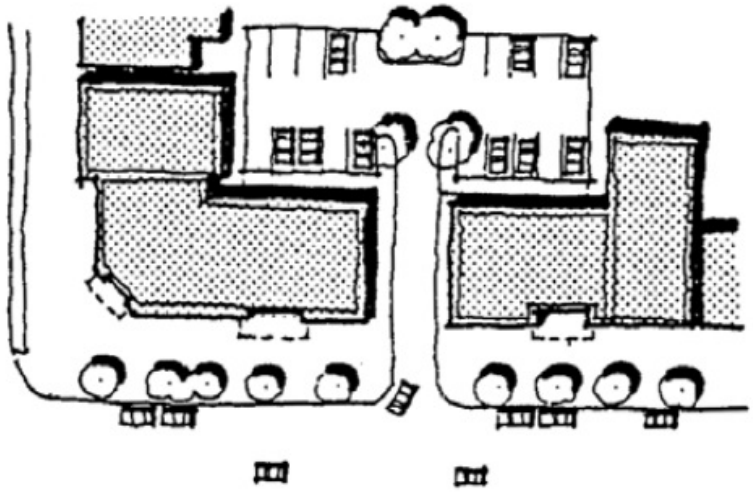


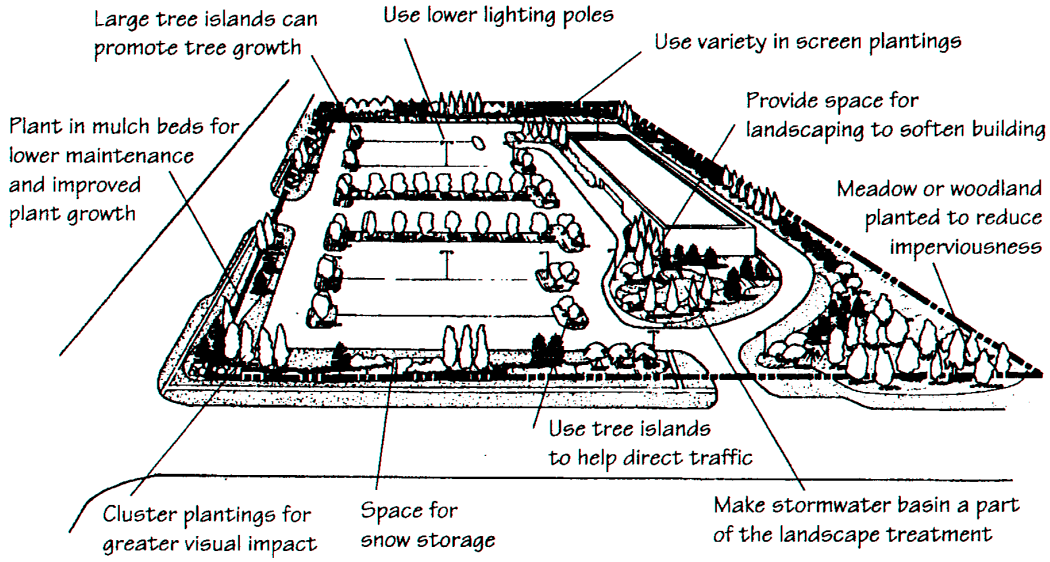
Figure 9.2: Preferred Building Orientation on Arterial

Haggerty Road Corridor

The Haggerty Road Corridor is one of the key assets of Commerce Township. Haggerty Road carries significant volumes of traffic, it is a regional destination for commercial, office, and industrial uses, and it forms the community's boundary with West Bloomfield.

The current Haggerty Road Corridor plans are to widen and improve Haggerty Road within the 120-foot right-of-way. The Commerce Downtown Development Authority has taken an active role in pursuing and participating in the funding of these improvements. As a way to improve access and circulation and also to encourage future business investment in this area it is critical to provide a high quality and coordinated image along the corridor. A detailed plan for streetscape elements such as street trees and lighting should be developed and funded through Michigan Department of Transportation Enhancement Grants. Given the high profile of the corridor and the need for coordination with West Bloomfield, the project would most likely be a top candidate for grants.

Figure 9.3: Commercial Building Design to Promote Community Character



Source: SEMCOG.

Historic Commerce Village

Commerce Road through the historic village area is another area that requires special consideration. Whether this area evolves into a commercial-oriented neighborhood shopping district or if it remains a predominately residential district, it must be a pedestrian friendly environment. The existing, uncontrolled, off-street angled parking must be improved to provide on-street parallel parking with adjacent sidewalks a minimum of 12-15 feet deep. Amenities such as trees, traditional style light fixtures, and street furniture must also be provided to make this area attractive for the residents and visitors of Commerce Township.

Recommended Road Improvements

The Township has developed a list of road improvement projects intended to enhance the function of the transportation network, including adding turn lanes and other intersection improvements throughout the Township. All road improvements should be coordinated with neighboring municipalities to ensure continuity. Specific projects include:

Major Construction Projects and Non-Motorized Plan Improvements

- Complete multimodal improvements on Haggerty from Pontiac Trail to Richardson
- Implement Complete Streets concepts in planning of all new streets and with all major street reconstructions/renovations
- Adopt a Complete Streets Policy for the Township
- Support the continued efforts of the Commerce/Walled Lake/Wixom Trailways Management Council to develop the former Michigan Air-Line Railway as a non-motorized pathway.
- Non-motorized paths/trails, shared use paths, and on-street biking / striping improvement recommendations are included on the Complete Streets Plan Map
    - On-street bikeway projects should be implemented with routine maintenance and roadway resurfacing projects
    - Path projects can be funded and initiated separately or as major roadway construction projects
    - Projects on the proposed 7 mile and 20 mile bike loops should be prioritized, including links to these loops from neighborhoods

Intersection Improvements

- Improve intersection at West Maple and Beck
- Improve intersection at Oakley Park and Haggerty
- Improve intersection at Wise Road and Carroll Lake Road
- Improve intersection Wise Road and Bogie Lake Road
- Improve intersection at Sleeth and Duck Lake Road – potential roundabout
- Improve intersection at Wixom and Glengary Road
- Multimodal crossing improvements shown on the Complete Streets Plan Map should be implemented along with segment improvements

Congestion Mitigation

- Install right turn lanes if feasible on Welch Road at Oakley Park
- Install right turn lanes if feasible at South Commerce and Oakley Park – potential roundabout
- Install right turn lanes if feasible on Carroll Lake at Cooley Lake
- Install right turn lanes if feasible on Wise Road at Bogie Lake Road
- Install right turn lanes if feasible on Benstein at Sleeth
- Install right turn lanes if feasible on Bass Lake at Benstein
- Install right turn lanes if feasible on McCoy at Benstein
- Explore signal timing improvements on Oakley park from South Commerce to Welch
- Explore signal timing improvements Richardson from Martin Drive to Haggerty
- Explore signal timing improvements Union Lake from Richardson to Commerce
- Explore signal timing improvements Commerce from South Commerce to Newton

This list has been presented to the Road Commission for Oakland County (RCOC) to ensure that these projects are considered for inclusion into their project schedule as funding permits. This Township list of projects should be reviewed annually to ensure that progress is made and that the County is aware of the Township's priorities and funding resources.

Complete Streets Plan

Complete Streets is a comprehensive transportation policy and design approach that requires all streets to be designed, planned, constructed and operated with all users considered regardless of their ages and abilities and for all modes of transit. Complete Streets enables safe, convenient and comfortable travel and access for those walking, biking, driving cars, driving delivery vehicles, or riding public transit.

Complete Streets includes: 1) pedestrian infrastructure including sidewalks, curb-cuts, bump-outs, improved cross-walks, ADA compliant facilities; 2) traffic calming measures including shorter curb radii, center medians, angled face-out parking, road diets; 3) bicycle facilities including protected bike lanes, shared use paths, signage, bicycle parking facilities; and 4) public transit improvements.

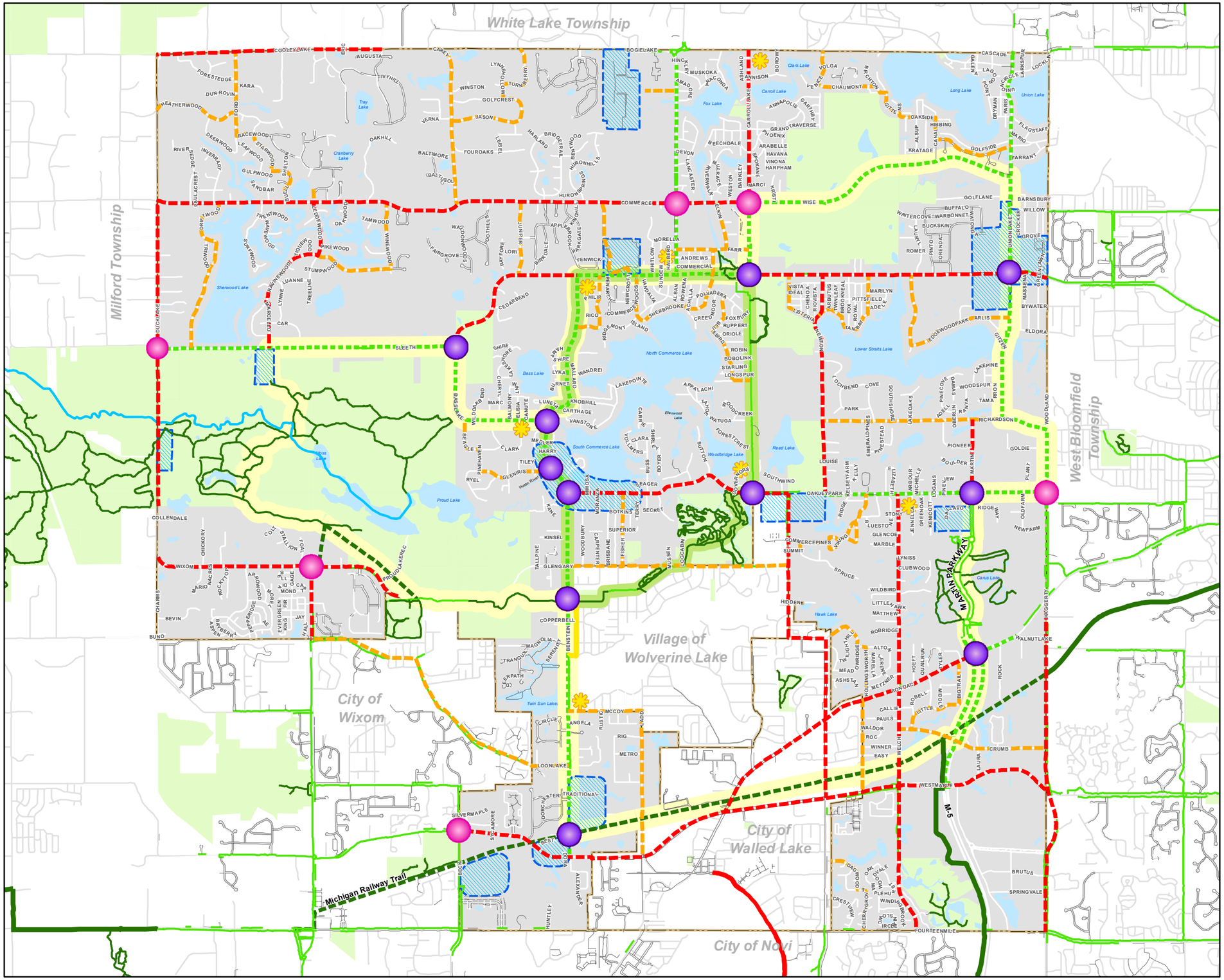
The Complete Streets Plan Map on the following page illustrates the Future Transportation Plan for the Township. Many of the proposals are for intersection improvements and right-of-way preservation of the arterial road network. A network of non-motorized paths and on-street bikeway connections has also been identified to connect the Township's natural and community facilities.

The hallmark of implementing the Township's non-motorized recommendations will be the creation of two separated bike loops in the Township that will be safe and comfortable places for bicyclists of all ages and abilities to ride. These loops will link to the Historic Commerce Village, the high school, the Township offices, Union Lake Shopping, and Township parks. The shorter loop will be about 7 miles and encompass North Commerce Lake, South Commerce Lake, and Woodbridge Lake. The longer loop will be about 20 miles and it will link into the shorter loop and the proposed Michigan Airline Trail.

Non Motorized/ Complete Streets Plan

Commerce Charter Township, Oakland County, Michigan

December 7, 2015



LEGEND

- Congestion Mitigation
- Parks
- Proposed On-Street Bike Marking
- Proposed Bike Route
- Existing Sidewalk
- Existing Water Trail
- Existing Bike Lane
- Existing Park Path
- Existing Route
- Existing Sidepath
- Existing Trail
- Proposed Sidepath
- Proposed Park Path or Trail
- Destination
- 7 mile Bike Loop
- 20 mile Bike Loop
- Intersection Improvements
- Multimodal Crossing Improvement

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N

McKenna ASSOCIATES

Base Map Source: Oakland County GIS, 2014, Data Source: McKenna Associates, 2014

10. COMMUNITY FACILITIES AND UTILITIES PLAN

... attention should be given to the opportunities which the environment presents or precludes for involvement of children both older and younger than themselves.
- Urie Bronferbrenner

Community and Public Facilities

Community and public facilities that provide a high quality of service are a benchmark for premier communities. The following section is a brief analysis of the community and public facilities to provide a general guide for future facilities planning. A five-year Capital Facilities Plan should be compiled to more accurately determine the future Township need based upon more detailed input from Township departments.

Emergency Services

As Commerce Township continues to grow, the need for emergency services (police and fire protection) will grow. The Township has faced challenges in passing a millage for increased funding for emergency services, even though the number of emergency calls has increased while the ratio of patrol cars and fire fighters has remained the same. The Township needs to evaluate the impact of proposed developments on emergency services and begin planning for increases in services as needed.

The provision of emergency services and the expansion of health care facilities are the major community facility issues in Commerce Township.

Township Hall

Township Hall is located in the Commerce Town Center district, and as this area is developed over the life of this Master Plan, all efforts should be made to ensure that the Hall is well connected to the town center development and is accessible for all residents. This civic structure is an important symbol of local governance, and its role within the community should be enhanced as the area is developed. Careful planning should also be undertaken to ensure that the facility is able to respond to any future residential service needs or technological changes that occur in the next 20 years.

Health Care Facilities

Huron Valley-Sinai Hospital has expanded several times since it was first constructed in the mid-1980s. Hospitals are dynamic by nature and the scope of operation at the Huron Valley-Sinai Hospital will change in the next twenty years. With continued growth within the township and the surrounding communities, the likelihood of expansion of the Huron Valley-Sinai Hospital continues.

The Hospital has acquired property west of its access drive from Commerce Road and improved lots along the western boundary line of their property. Additional property contiguous to the north of their existing facility may be required to facilitate the growth of the hospital. The Future Land Use plan acknowledges the potential expansion of the hospital. The Township should continue to coordinate with Huron Valley-Sinai Hospital as they develop.

Recommendations

Assess impacts of proposed developments on emergency services

Since the Township has experienced difficulties in passing a millage for emergency services, the potential impacts of proposed developments on emergency services should be assessed during site plan review. The Township should then use this information to plan for anticipated increases in the level of emergency services.

Land use improvements to Township Hall

Access to Township Hall is a concern to community residents and its location within the developing Commerce Town Center should be enhanced including non-motorized connections. The ability to provide adequate community services is of paramount concern to Township officials.

Plan for Expansion of Health Care Facilities

For master planning purposes, the Township should assume that the Huron Valley-Sinai Hospital will expand onto parcels contiguous to its current campus. The Township should continue to maintain open communication with the hospital administration so any future expansion of their facility will be an asset to the Township and have as little impact as possible on nearby residences.

Utilities

Chapter Seven analyzed the utilities in Commerce Township and concluded that the current utility systems (water, sewer, gas, electric and telecommunications) have the capacity to handle current demands and that of anticipated growth. The water and sanitary sewer systems are operated by the Township and are extended through special assessment districts (SAD's), which are initiated by the property owners. Electricity, gas and telecommunications utilities are provided by private utility companies. The Township should continue to inform these companies of proposed developments so that they can plan to expand their networks, if need be.

Aging septic fields near lakeside property may be the main utility challenge for Commerce Township.

Aging septic fields around the numerous lakes in the Township may be the main utility challenge for the Township in the next twenty years. The Township has placed a high priority on maintaining the environmental integrity of the lakes but aging septic fields are a source of potential water pollution. Most lakefront property owners do participate in SAD's for sanitary sewer since the worth of their property is linked to the quality of the lake. However, the Township may want to consider creating another funding device for installation of sanitary sewer if the unusual situation arises that a lakeside area has septic fields polluting the water and the required number of property owners refuse to participate in a special assessment district. Also, septic fields do leach pollutants into lakes before their failure is evident to the property owner.

Recommendation

Continue open communication with private utilities

The Township should continue to communicate with private utility companies about new developments in the Township, to aid in planning for future growth.

Consider alternative financing for sanitary sewer extension for lakefront properties

Aging septic fields are a potential source of water pollution. The Township should consider creating an alternative financing method for installation of sanitary sewer extension for lakefront property when a SAD cannot be created in time to prevent serious water pollution.

11. ENVIRONMENTAL RESOURCES PLAN

"The smallest patch of green to arrest the monotony of asphalt and concrete is as important to the value of real estate as streets, sewers, and convenient shopping."
- James Felt

Introduction

Two watersheds, the Rouge River and the Huron River, comprised of lakes, rivers, streams, regulated and non-regulated wetlands, and woodlands define the natural areas and features in Commerce Township. This abundant and bountiful flora provides natural habitat for wildlife while offering residents a unique quality of life and countless recreational opportunities. Concerted efforts must be made to ensure the continued existence of the natural resources in Commerce Township.

The Township's policy toward environmental protection was outlined in the Goals and Objectives chapter of this document. To protect, preserve, and enhance the unique and desirable existing natural amenities of Commerce Township will not only require regulation but also enforcement. The objective of this chapter is to identify and develop land use planning tools and techniques, which reflect the Township's desire to preserve natural features, buffer watercourses and wetlands from development, promote pedestrian linked greenways, establish code enforcement, redevelop brownfields, and retain the aesthetic appearance of natural areas, golf courses, and recreational areas.

Underlying Principles

Public participation and intergovernmental cooperation are two principles of overarching importance and are central to the successful implementation of the following planning techniques in Commerce Township.

Public Participation/Education

Protection of the community's natural resource base is inextricably tied to private property rights. Therefore, the inclusion of the public in implementing the following land use planning techniques is crucial. The preservation of natural features and/or ecosystems often presents communities with circumstances that necessitate the sacrifice of development potential on some properties. Recognition of this fact dictates that implementation techniques must be developed and adopted with the involvement of the public in general, and landowners in particular, to be successful. Having a sense of ownership ensures the public will be more likely to

agree to the perceived sacrifices associated with natural resource protection. In addition, some of the factors that contribute to the way a community approaches resource protection, such as scenic or recreational value, are subjective, and thus, should be determined by the residents themselves.

Efforts to educate the public on protection of the community's environmental resources are essential. As mentioned above, residents often feel the conflict between the development potential of their land and the protection of the community's resource base. While this is often inevitable, dispelling certain misconceptions among residents can go a long way toward developing community support.

Intergovernmental Cooperation

Unlike municipal boundaries, which can be illustrated on a map or demarcated by a sign on the landscape, natural resources do not abide by political boundaries. The Rouge and Huron Rivers do not begin nor end within the boundaries of Commerce Township. Therefore, the health of an ecosystem or protection of contiguous open space is often in the hands of a number of governmental units. These same governmental units often have competing interests and divergent priorities, but, somehow must coordinate their efforts and coordinate their activities if successful measures are to be achieved. Even the most rigorous conservation efforts on the part of a single community can be thwarted by poor development regulation outside of their boundaries.

Secondly, the financial and political resources necessary to provide adequate resource protection are not equal across geographic boundaries. As often is the case, rural, largely undeveloped communities are precisely the communities where conservation efforts would be most effective, since they possess the largest tracts of unspoiled land. Development of effective plans and ordinances, as well as the regular administration that they require can be very costly. The development of intergovernmental cooperation agreements provides communities the opportunity to pool their resources more efficiently and effectively to achieve the objective at hand. The flexibility these agreements offer ensures that specific local needs are addressed through negotiations. Although communities must relinquish some of their autonomy to engage in such an arrangement, intergovernmental cooperation agreements can be developed to protect local control.

Intergovernmental cooperation is especially important at the watershed level, because of the number of individual municipalities and other governmental agencies that operate within its boundaries. Each one has the ability to impact the environmental health of the area, and therefore, shares the responsibility to protect it.

Specific actions the Township should initiate, or continue to be involved in include Lake protection with White Lake and West Bloomfield Townships, Rouge and Huron River Watershed Management Programs, and the Oakland County's Linked Path/ Trail System.

Land Use Planning Techniques

Community Planning

Community planning is the process governmental units use for the effective and well-considered coordination of community development. Plans of many varieties attempt to address any number of issues, individually, or in combination, with issues ranging from environmental, social, cultural, political, and physical, to economic. While community plans are not law, communities are enabled through legislation, which provides the basis for policy decision-making, public participation, and coordinated planning during required periodic reviews and updates. The planning process can be focused at the local level, or can be regional in perspective. In addition to this Master Plan document, the following community plans are recommended to promote environmental health and resource protection in Commerce Township.

Area / Special Purpose Plans

Area or special purpose plans focus on particular issues or geographic areas identified in the community's Master Plan as ones which require further attention, such as commercial corridors and downtowns, neighborhood areas, historic districts, and, areas requiring resource protection. Commerce Township has used Area/ Special Purpose Plans method to plan for future development of private recreation facilities, Commerce Village, Huron Valley Hospital, Commerce Town Center, Union Lake/Four Corners Village, and the Haggerty Road Corridor. An Area/ Special Purpose Plan should be initiated for development of a greenways system and for the continued protection of the Rouge and Huron River Watersheds.

Watershed Management Plans

Watershed Management focuses largely on addressing existing water pollutant inputs, through the implementation of traditional conservation Best Management Practices (BMP). To pro-actively address water quality issues, the Plan promotes education and watershed awareness-building among landowners and the general public. Watershed Management Plans have been developed for both the Huron River and Rouge River Watershed. Commerce Township has participated in the development of both watershed plans as a member of the Upper Rouge River Subwatershed Advisory Group (SWAG) and the Upper Huron Initiative. The Township should continue to participate in sub-watershed committees. Watershed Management Plans should be revisited on an annual basis by the Township Board and Planning Commission.

Storm Water Pollution Prevention Initiative. The purpose of the Storm Water Pollution Prevention Initiative (SWPPI) is to marry the goals and actions from the Watershed Management Plan (WMP), Illicit Discharge Elimination Plan (IDEP) and the Public Education Plan (PEP) into a single document necessary to reduce the discharge of pollutants. The Township has initiated a SWPPI program. This effort should be continued and refined.

Greenway Plans

Greenway Plans focus on the maintenance of open space corridors that are either natural, such as rivers and streams, or manmade, such as abandoned railroads and utility corridors, often for recreational use. They also provide a buffer for fragile natural areas, as well as protection of water resources and flood-prone areas. Greenways have positive effects on community aesthetics, increased property values, increased community connectedness, reduced number of vehicle trips, and they may encourage residents to exercise more frequently due to the provision of safe and easily accessible recreational options.

Greenway Plans provide the perfect opportunity for intergovernmental cooperation. Users expect and demand interconnected greenway systems. Since the essence of effective Greenway Planning is the conservation of significant, uninterrupted lengths of open space, linked cross-municipal boundary planning is a requirement.

The Oakland County Linked Path/ Trail System (OCLP/TS) is a component of the Environmental Stewardship Program. One segment of the OCLP/TS, the Multi-Jurisdictional Trail, has been constructed and travels 3.52 miles through Commerce Township from the southeastern portion of Proud Lake to the Richardson Senior Center. Plans are in place to connect the Multi-Jurisdictional trail to the West Bloomfield Trail, Huron Valley Trail, and the Kensington Trail. In addition, the county has mapped proposed local linkages. Commerce Township should evaluate these proposed linkages in relation to their future land use plan. This is the first step to developing a Greenways Plan and prioritizing implementation.

Parks & Recreation Plans

Parks and Recreation Plans identify a community's objectives, needs, and priorities in developing recreation opportunities for residents. These plans provide a policy guide for the nature and location of recreation development. Elements often discussed in a Recreation Plan are the development of passive parks, playgrounds, trails and greenways, as well as any form of recreation programming.

Because recreation improvements often involve natural settings and open space, there is usually the opportunity to further the community's land conservation and environmental protection objectives at the same time that recreation development is being planned. Passive recreation areas can serve as an effective buffer for more environmentally sensitive land beyond.

In 2003, the Board of Trustees adopted a Parks and Recreation Plan for the community, which established goals and objectives that centered on administration and organization, facilities, recreation land, programming, access to facilities, and the Byers Property. Every five years, Parks and Recreation Plans are required to be updated to enable the Township to remain eligible for grant funding from the Michigan Department of Natural Resources. The Township's plan has been updated in 2008 and again in 2014.

The Parks and Recreation Plan included a two-step action plan for implementing these goals and objectives. The first component set an agenda for the Parks and Recreation Committee, and Township Planning Commission, to formulate recommendations for the Byers Property, and a future land use plan for Commerce Village and for the Township Board to implement these recommendations by appropriating specific funds through millages, grants, or other fund raising efforts.

The second component of the action plan initiated a five-year Capital Improvements program that specifies at which facilities funds should be utilized, what improvements and acquisitions should be made and the source from which funds could be acquired. In concert, this two-part Recreation Action Plan guides the Township in maintaining and creating new and exciting recreation opportunities.

The Parks and Recreation Plan should be updated regularly, and all capital projects and Township land use decisions should be evaluated to identify opportunities to implement concepts identified within the adopted Parks and Recreation Plan.

Zoning Regulations

The purpose of the zoning regulations recommended in this section is generally to prevent the fragmentation of the community's valuable natural resources and to promote the conservation of viable ecosystems. Zoning for environmental resource preservation and protection should be viewed not as a barrier to development but rather as a mechanism for guiding new development in a manner that minimizes disruption of the natural environment. For the sake of this document, a viable ecosystem is one that retains those naturally inherent functions and values that provide a higher quality of life for the community.

While many of the regulations discussed below are geared toward the preservation of one particular resource or another, it should be understood that these regulations, in order to provide comprehensive protection, are best utilized together. For example, cluster housing regulations may work better in tandem with a strong woodland protection ordinance.

The following regulations can be applied in a variety of forms: site plan review standards, an overlay zone, cluster housing regulations, natural features setback, or through stormwater management regulations.

Site Plan Review Standards

Site plan review standards are an effective land use decision-making tool. Before approval of a use is granted, the proposed development must be in compliance with all applicable local, state, and federal regulations. In the context of this chapter, site plan review can be used to ensure that development projects are consistent with the community's desire to protect their resource base, provided that the appropriate standards have been adopted by the community. The Township has implemented Site Plan Review procedures in their Zoning Ordinance. Review of these procedures in relation to additional environmental resource protection is advised.

Groundwater: Groundwater protection regulations generally seek to prevent the introduction of harmful substances in the community's groundwater. The protection of a community's groundwater aquifers and recharge areas is critical for a number of reasons, both social and ecological. The Township should establish measures aimed at secondary containment, wellhead isolation areas and prohibition of floor drains that discharge directly into soils or septic tanks. In addition, the Township should require residents who live near the lakes and are currently using private sanitary systems (septic) to connect to the public sanitary sewer.

Wetlands: Wetland regulations are instituted to ensure that wetlands are protected from the potentially harmful impacts of development. Wetlands are crucial for maintaining water quality, managing stormwater retention, ensuring groundwater recharge, and providing important habitat, and therefore, must be protected. Some principal objectives of wetland protection regulations are to provide a protective buffer around wetlands to mitigate the impact of urban run-off and to prevent the filling, dredging, and alteration of wetlands, including alterations to drainage that would impact wetland hydrology. Also, the deposition of hazardous or polluting materials is usually prohibited in a wetland or its buffer. Where wetlands are unavoidably impacted, their mitigation is often required.

Woodlands: Woodland standards in the zoning ordinance as part of Site Plan Review would allow Commerce Township to implement requirements such as a tree survey into the development process and establish a system, which identifies healthy and historic or landmark trees.

Overlay Zones

Overlay zones are special districts that add an additional layer of regulation to the existing zoning of the area. Overlay zones can be used for any number of objectives, ranging from commercial corridor improvement to river protection efforts. Overlay zones are effective when an area, such as a river corridor or central business district, requires a unified set of regulations to achieve a particular outcome, but the parcels are under several different zoning designations. This does raise the question, however, of whether one watershed should be protected while one immediately adjacent is not. Also, a regulation like this may not be best suited for the general protection of natural resources, however, because an overlay district will not protect all of the community's resources unless the district's boundaries match those of the community. For these reasons, the use of community-wide regulation to achieve natural resource conservation goals may be more appropriate.

Groundwater Protection. For groundwater protection applications, an overlay district could be developed to provide special regulations which require public sanitary sewers for new development adjacent to lakes and streams to mitigate the risk of groundwater contamination.

Watershed Protection. For watershed protection applications, an overlay district could be developed to provide special development regulations that are sensitive to water quality, such as streambank buffering, percent open space requirement, etc.

Cluster Housing Regulations

Public Act (PA) 177, 2001 requires all townships over 1800 population to provide an open space preservation option in their local zoning ordinance. The method for achieving open space preservation is through a cluster housing development option. This popular method encourages grouping homes in areas of a development site that are best suited for development, leaving significant natural features and open space intact. While development density permitted by the zoning district is not usually increased (unless incentives are provided to do so), these regulations allow development to occupy a smaller portion of a site by clustering smaller lots together. The remaining open space is usually protected in some manner, either by deed restriction or covenant, conservation easement or, in some instances, deeded to a land conservancy or the community. The amount of open space preserved in such a development is significantly greater than could be obtained traditionally.

This design technique is particularly appropriate for the objectives of this chapter, because it allows development to be located out of view from the roadway, and away from sensitive natural or cultural resources and agriculture. Also, because less of the site is utilized for development, impervious surfaces are reduced, which in turn influences surface water runoff, and thus, water quality. The clustering and flexibility encouraged by this development option also enhances rural aesthetics by avoiding the "cookie cutter" appearance of traditional subdivisions, which is inconsistent with the rural landscape.

In addition, the clustering option technique allows communities more discretion by allowing them to negotiate with the developer. Density bonuses may be granted in order to encourage this type of development, but are not necessarily needed since clustering can reduce the expense of road construction and installation of public

services. Private road standards may be necessary depending on the requirements of the Road Commission for Oakland County for road width, turning radii, boulevards, and circulation.

Natural Features Setback

The intent of the Natural Features Setback is to ensure that development is setback from natural features to prevent physical harm, impairment and/or destruction of or to natural features. The absence of a natural features setback results in intrusions in or onto natural features, which subsequently deteriorate the quality and service of the natural feature. Commerce Township could adopt regulations similar to those in other communities that define natural features and establish setback standards during development.

Shoreline and Lake Protection Provisions

Communities with abundant natural water features such as those located in Commerce Township often adopt regulations which assist in evaluating whether land uses among properties are compatible with the lake water and shoreline uses. Regulations help to preserve the quality of the lake waters and shorelines, ensure future uses of the waters and shorelines are compatible with one another and with existing uses, reduce congestion and density of the shorelines, and protect riparian and /or littoral landowners from overuse and abuse by others using the lakes and shorelines.

Floodplain Regulations

Floodplains are areas of low-lying topography adjacent to riparian corridors that become inundated during a flood-stage event. The damage that is caused by flooding can represent significant costs to the community, most of which are avoidable and unnecessary. Rapid growth and the spread of development often exerts great demands upon the natural resources, increasing the potential for flooding, and filling or drainage of lowlands and wetlands.

Floodplain regulations seek to reduce the damage caused by these flood events by prohibiting inappropriate land uses in them. These regulations also protect the unique riparian environment often found in the floodplain and preserve the natural character of those streams or rivers. Floodplain regulations protect and preserve watercourses and wetlands and minimize or eliminate disturbances to them while preventing damage from erosion, turbidity or siltation, the loss of life, health, and property, fish, wildlife, and vegetation, and the destruction of the natural habitat.

The most effective floodplain regulations generally prohibit structures (primarily residential) within a 100-year flood plain, require a permit for operations or acts that alter the topography of lands that are subject to a 100 year floodplain, and identify appropriate uses within a 100-year floodplain.

Stormwater Management

Poorly developed stormwater management regulations, or the lack of stormwater management regulations, can have a tremendous impact on water quality and habitat. Traditional stormwater management that collects rain water in roadway ditches and storm sewers where it is piped to the nearest tributary, leads to streambank and streambed erosion because of the sheer force and volume of water deposited. Traditional stormwater management interrupts the natural hydrologic cycle, allowing unfiltered run-off to directly enter streams or rivers, instead of following natural drainage patterns or percolating in the ground. This stormwater is often warmer than that of the stream or river, impacting its ability to support aquatic life, and the stormwater tends to have collected more nutrients and pollutants than the rain water itself.

Stormwater management regulations are often developed in one of three ways: (1) excess water is stored on or near the site, slowly releasing the water into the stormwater system over a longer period of time after the wet weather event ends; (2) reduction of stormwater through the use of green infrastructure including pervious paving, bioswales, green roofs, and other techniques designed to allow the infiltration of the stormwater directly onsite ; and/or (3) proposed development planned to ensure that runoff is not significantly increased. All three of these techniques can be deployed to provide a more holistic stormwater management approach. Low-impact development or design can also be encouraged or mandated whereby techniques are utilized to mimic natural systems, taking advantage of biofiltration, constructed wetlands, and other landscape design elements to accomplish stormwater management. These and other types of green or more holistic stormwater management techniques should be considered to be inserted into Commerce Township's subdivision control ordinance and site plan review procedures.

Township Ordinance

Storm Water Pollution Prevention Initiative (SWPPI)

The Township has begun implementing the Storm Water Pollution Prevention Initiative (SWPPI) with the help of the Michigan Department of Natural Resources and Giffles-Webster Engineering, the Township engineering consultants. The purpose of a SWPPI is to bring together the goals and actions of the Watershed Council and the Township into a single document containing Commerce Township's commitments to reduce the discharge of pollutants to the maximum extent practical.

Subdivision Control Ordinance

The subdivision control ordinance establishes review and evaluation procedures for processing plats, information which must be included on the plat, site design principles and standards, required improvements, and financing and maintenance responsibilities. They generally allow the community input into the design process of a proposed subdivision, to ensure that it takes into account issues of a greater context, such as road connectivity, site limitations and natural resource protection, and the adequacy of public facilities and roads. Traditional subdivision control ordinances, however, may not allow sufficient flexibility to preserve the majority of a site's natural features. Also, the length of time required by the plat approval process discourages many developers, who may turn to site condominiums, which are developed using essentially the same process as a site plan. Through the Site Plan Review process, many of the concerns identified in the Subdivision Control Ordinance may be addressed during the Planning Commission review of any site condominium.

Steep Slope Regulation. Steep-slopes seem to attract development due in large part to the scenic view they afford. However, steep slopes are often not stable enough to support intense development, leading to erosion, loss of habitat, and even property damage. In addition, slopes are often widely visible, and therefore so is development upon them, which can have negative aesthetic impacts upon the character of the community. Regulations should depend on the degree of slope, and can be worked into the community's site plan or special land use review provisions. Development guidelines such as the subdivision control ordinance can also address the protection of slopes. Such regulations must be based on a reliable source of data, such as the USGS topographical maps or the local County Soil Survey.

Stormwater Management. Additional provisions to facilitate adequate provisions for stormwater management can be dictated in the subdivision control ordinance or Site Plan Review process. These provisions could include requirements identifying existing conditions within a specified radius of a proposed

development, such as existing sewers, water mains, and storm drains. Additional requirements include a drainage pattern sketch, which graphically displays river, stream, or open (ditch) drainage- ways and the direction of their flow, direction of surface drainage for the proposed site, watershed boundaries, soil drainage characteristics, a topography and slope gradient sketch, a soil sketch, and vegetation and other natural features identification maps.

Woodland Protection

Woodland Protection Ordinances are implemented to protect valuable woodlands located in a community. Woodland regulations seek to promote development that minimizes impacts on a community's woodland resources, by limiting the clearing of large stands of trees. Conventional development without specific regulations to protect natural resources frequently encroaches upon, despoils, or eliminates important trees and other forms of vegetation and natural resources. Trees and woodlands, when preserved and maintained in an undisturbed and natural condition, constitute important physical, aesthetic, recreational, and economic assets to existing and future residents, businesses and the general public. Woodlands benefit the community in a number of ways, such as protecting against erosion and sedimentation, noise buffering, aesthetics, animal habitat, and air filtration and cooling. Some principal objectives of woodlands protection regulations are to identify woodland areas, stands, or individual historic or landmark trees or species for protection, preservation, proper maintenance, and use, and provide for replacement where preservation is not possible, and minimize the impact of grading, clearing, erosion, siltation, before, during, and after development.

Wetland Protection

Part 303 of the **Natural Resources and Environmental Protection Act (Act 451 1994)** provides the regulatory framework for wetland protection. Part 303 makes the distinction between those wetlands that are contiguous to a lake, stream, pond, Great Lake, etc., and those that are not. Wetlands are generally considered to be contiguous if they are within 1,000 feet of a Great Lake, or 500 feet of an inland lake, stream or pond. Wetlands of all sizes considered “contiguous” to such a water body are regulated by the MDEQ. Generally, non-contiguous wetlands of five or more acres are regulated by MDEQ, although any wetlands that are found to be essential to natural resources preservation may regulated. The Act does provide for local governments to enact more restrictive ordinances for wetlands than contained in the statute. Commerce Township should coordinate and collaborate with MDEQ to enact a more stringent wetland ordinance. Township wetlands have been identified on the Natural Features map that is included within this Master Plan.

Groundwater Protection

A groundwater protection ordinance in the case of Commerce Township would primarily focus on the maintenance and replacement of private sanitary sewer systems (septic tanks and drain fields). These regulations would be designed to monitor septic systems after they are installed. Although the regulations most suitable are incorporated in the county health code and require septic system inspection when ownership of property is transferred, local units of government can establish programs to require regular inspections of septic systems and routine pumping of septic tanks.

Public sanitary sewer service is available throughout the Township, and all new development is required to connect to the Township public sanitary sewer system. Historically, the Township has resisted efforts that would force residents using existing septic systems to connect to the public sanitary sewer; instead, preferring an approach that allows residents to decide whether to incur the costs associated with connecting to the Township public sanitary sewer system by initiating the establishment of a Special Assessment District (SAD).

Protection from leaking and poorly maintained septic systems is the primary concern when designing groundwater protection measures. The Township should develop a groundwater protection ordinance, which identifies areas in the Township where private sanitary sewer systems are located and establishes a time line for connecting to the public sanitary sewer provided by the Township. Areas adjacent to or in close proximity to watercourses would be given priority over other areas in the Township.

Hazardous Waste Ordinance. According to the State of Michigan, there are 207 facilities that have either reported hazardous waste activities or have been issued permits to discharge wastewater into rivers. In addition, according to Envirofacts, 10 facilities have reported toxic releases. Although the EPA requires producers of chemicals to report the location and quantities of chemicals stored on-site to state and local governments, Commerce Township does not have a mechanism in place to facilitate this requirement. The adoption of a hazardous waste ordinance would provide the Township with the ability to regulate storage and disposal of hazardous waste.

Redevelopment of Contaminated Sites

Brownfield Redevelopment Authority

The Brownfield Redevelopment Financing Act, PA 381 of 1996, (Act 381, as amended) establishes a method of financing environmental response activities associated with contaminated properties. The Act enables communities, such as Commerce Township, to develop and implement brownfield redevelopment financing plans, which have a mechanism to capture local property taxes from a contaminated site to cover the costs associated with environmental response activities on the contaminated site. Eligible properties include blighted or functionally obsolete lots and buildings throughout the Township.

The Township has established a Brownfield Study Committee to identify and document sites with real and perceived contamination. The Township has set the redevelopment of brownfield sites in Commerce Village as their highest priority.

Open Space Acquisition and Protection

Land Trust/ Conservancy

Land trusts, also known as land conservancies, are local, regional, state, or national nonprofit organizations directly involved in protecting land for its natural, recreational, aesthetic, historical, or agricultural value. They may be established for a single piece of property, or many actively pursue and manage open space across an entire region. Land trusts employ a variety of measures to protect land, including acquisition/purchase, receiving and holding conservation easements, and facilitating the transfer of ownership of conservation easements to other conservation groups. Because these groups are non-profits, they can generally act faster than local governments when conservation opportunities present themselves.

Conservancies and land trusts can offer the technical and financial assistance for acquisition of land for conservancy purposes. They often work in cooperation with government agencies to plan for open space protection. Some land conservancies also manage land owned by others or advise landowners how to protect and preserve the natural character of their land. Land conservancies also accept donations of land or conservation easements. The Southeast Michigan Land Conservancy (SMLC) is dedicated to the preservation and stewardship of natural and agricultural land in the seven county southeast Michigan region of which Commerce Township, Oakland County belongs. The SMLC works to educate the public and public policy makers about land conservation issues.

Open Space/ Conservation Easement

Because most open space acquisition methods offer compensation to the property owner and are legally binding, they lend the local community more protection from "takings" claims than the land use regulatory measures discussed earlier in this chapter.

Open space, or conservation, easements are legally binding restrictions that run with the land in perpetuity. This means that change of ownership does not undermine the original commitment to ensure open space preservation. Open space/ conservation easements are often pursued on environmentally sensitive lands and resources, while having the benefit of providing financial incentives to land owners while retaining the land in private ownership. This option is much less expensive than outright acquisition, and it retains the land in private use thus continuing to provide revenue to the municipality.

Although the initiation of easements by the landowner is voluntary, the development rights that are transferred are maintained in a legally binding manner. Easements are often donated, but can also be purchased. Those making charitable donations of permanent easement rights can benefit from federal income and estate tax relief, provided that the land be used for outdoor recreation, maintenance of natural habitats and ecosystems, scenic enjoyment, or historical significance. The enforcement and monitoring of such easements is often entrusted to a local land conservancy. One of the many functions of the Southeast Michigan Land Conservancy (SMLC) involves promoting the Rouge River Greenway by encouraging landowners to place conservation easements on lands that will protect water quality and sensitive natural areas. This is important, because as land-ownership changes hands, new owners must be made aware of the easements or any other restrictions.

Although they function in the same manner, open space and conservation easements are somewhat different. Open space easements, which are meant to maintain open space for human use, allow limited activities such as agriculture or recreation to take place on the subject property while keeping the encroachment of development at bay. The conservation easement, on the other hand, is not necessarily meant to protect land for human use, but to protect land that is environmentally sensitive or unique.

Land Acquisition

The most simple and straightforward option to preserve natural areas and open space in a community is through direct purchase. Although this can be an expensive option, there are ways to pursue land acquisition in an economically feasible manner, such as land banking (land is systematically purchased and set aside), or lease-back/sell-back, whereby the governmental unit purchases the land and either leases or sells it with deed restrictions. There are also a variety of financing options and means available to leverage funds available to municipalities. They include sale of bonds to raise capital for land purchase, dedicated millages, state and federal grants for acquisition of land for parks and recreation, donations of funds from foundations, and acquisition by a third party, such as a local or regional land trust.

Unfortunately, property values are often artificially escalated when the property owner suspects that a public entity or conservancy wants to acquire their land. Also, citizen support for public acquisition may be difficult to develop in areas not experiencing intense development pressure because of the perception that the need does not exist. It must be remembered that property owned by the community is property that is removed from the tax rolls.

Donation

While a community or land trust cannot force a landowner into donating property, interested landowners can donate their property to a land trust, municipality, or other organization. Public education on the critical importance of the community's natural resource base can go a long way in cultivating landowners to consider land donation. Land can be donated outright, or landowners may opt for the "reserved life estate" option, much the same way the Township acquired the Byers Property. The "reserved life estate" option allows the property owner to live on the property for the rest of their lifetime, after which time property ownership transfers to the community or land conservancy. A landowner can also sell their land to an organization at less than the fair market value. The difference in price can be claimed as a tax deduction. This avenue of land acquisition does not insure that the highest quality land is obtained, of course.

Deed Restriction

Restrictions can be placed upon private property that limits its future uses, including in the form of Subdivision Deed Restrictions and Condominium Documents. Subdivision deed restrictions are used in conventional, platted subdivisions. Site condominium restrictions are usually found in a project's master deed and by-laws. These restrictions can accomplish many objectives, such as: wetland and water body buffers, preservation of existing wooded areas, limitations on pesticide and fertilizer application, natural/indigenous landscaping, impervious surface limitations, etc.

While these restrictions can be similar to those of a conservation easement, they are only enforceable by the prior owner or other involved parties. A site condominium's property owners' association has the power to assess residents, and each resident is a shareholder in the condominium project. In a site condominium, the restrictions are legally binding, and thus must be recorded with the proper authorities. This offers a stronger mechanism for maintaining these restrictions than is possible in a subdivision plat.

Unfortunately, these restrictions may be canceled at any time upon an agreement between the parties to the agreement. Also, like any other development restriction that runs with the land, new landowners must be made aware of the restrictions.

SUMMARY

This assortment of tools has been developed with substantial consideration to the needs of Commerce Township while providing for legitimate development opportunities.

Implementation/Action Plan

Five categories of land use planning techniques were addressed this chapter: Community Planning, Zoning Regulation, Township Ordinances, Development of Contaminated sites, and Open Space Acquisition and Protection. An Action Plan Matrix survey of the Planning Commission was used to prioritize a list of tools and techniques to achieve environmental protection, remediation, and preservation in the five categories of land use. Table 11-1 illustrates results of that survey.

Table 11.1: Action Plan Matrix Results

Tools and Techniques	PRIORITY						
	Continuing Policy	High	High Medium	Medium	Medium Low	Low	Should Not Be Pursued
Intergovernmental Cooperation							
Coordinate Lake Protection with adjacent communities		X					
Area/ Special Purpose Plan for the development of a greenways system		X					
Area/ Special Purpose Plan for the continued protection of the Rouge and Huron River Watersheds		X					
Continued involvement in Rouge and Huron River Subwatershed Groups (SWAG)				X			
Continue efforts of the Storm Water Pollution Prevention Initiative (SWIPPI)		X					
Evaluate proposed linkages to the Oakland County Linked Path/ Trail System		X					

Tools and Techniques	PRIORITY						
	Continuing Policy	High Priority	High Med Prior	Med. Priority	Med. Low Priority	Low Priority	Should Not Be Pursued
Zoning Regulations							
Update SPR Standards for Environmental Prot.	X			X			
Establish Groundwater Protection regulations			X				
Establish Wetland regulations		X					
Establish Woodlands regulations		X					
Groundwater Protection Overlay				X			
Watershed Protection Overlay Zone				X			
Cluster Housing Regulations[1]			X				
Natural Features Setback Requirements				X			
Shoreline and Lake Protection Provisions				X			
Floodplain Regulations				X			
Stormwater Management[2]		X					
Township Ordinances							
Continue efforts of the (SWIPPI)[1]			X				
Update Subdivision Control Ordinance				X			
Adopt Steep Slope Regulations						X	
Adopt Stormwater Management Provisions[2]	X						
Adopt Woodlands Ordinance					X		
Adopt Wetlands Ordinance		X					
Encourage Low-impact Stormwater Mgmt Practices			X				
Adopt Groundwater Protection Ordinance				X			
Adopt Hazardous Waste Ordinance				X			
Establish a Brownfield Redevelopment Authority		X					
Work with SMLC toward Land Conservancy in Commerce Township		X					
Utilize Conservation Easements				X			
Encourage Donation of Environmentally Sensitive Lands in Commerce Township		X					

1 *Currently in place*
2 *Under development*
Source: McKenna Associates, Inc. 2003

Based on the results of the survey, the following tools and techniques were identified as priorities for achieving environmental protection, remediation and preservation. Measures for implementing the environmental plan will be discussed in Chapter 12, Implementation Plan.

Environmental Protection Measures

Intergovernmental Cooperation:

- Coordinate Lake Protection with adjacent communities
- Area/ Special purpose plans for the development of Greenways System
- Area/ Special purpose plan for the continued protection of the Rouge and Huron Rivers

Watersheds

- Continue efforts of the Storm Water Pollution Prevention Initiative (SWPPI)
- Evaluate proposed linkages to the Oakland County Linked Path/ Trail System
- Continued involvement in Rouge and Huron Rivers Subwatershed Groups (SWAG)

Zoning Regulations

- Continue to update Site Plan Review Standards for Environmental Protection
- Establish wetland, woodlands, and stormwater management standards
- Establish groundwater protections regulations
- Continue Cluster housing regulations
- Develop and identify a Groundwater Protection Overlay Zone
- Develop and identify a Watershed Protection Overlay Zone
- Establish Natural Features Setback Requirements
- Establish Shoreline and Lake Protection Provisions
- Establish Floodplain Regulations

Township Ordinances

- Adopt Stormwater Management Ordinance
- Adopt Wetland Ordinance
- Continue efforts of the SWPPI
- Encourage Low-impact stormwater management practices
- Update Subdivision Control Ordinance
- Adopt Groundwater Protection Ordinance
- Adopt Hazardous Waste Ordinance

Environmental Remediation Measures

- Establish Brownfield Redevelopment Authority

Environmental Preservation Measures

- Work with Southeast Michigan Land Conservancy
- Encourage Donation of Environmentally Sensitive Lands
- Utilize conservation easements

12. IMPLEMENTATION PLAN

Growth is inevitable and desirable, but destruction of community character is not. The question is not whether your part of the world is going to change. The question is how!
— Edward T. McMahon

The Master Plan provides guidance for the future growth and development of the Charter Township of Commerce over the next twenty years. It is based on existing land use, population, economic conditions, natural features, transportation routes, and projections for the future growth of the community.

An implementation element in the Master Plan is essential to ensure the success of the plan. The implementation element outlines organizational strategies/ steps and identifies financial mechanisms that would enact recommendations/ policies of the Charter Township of Commerce Master Plan.

Implementation Strategies

Plan Adoption

The first implementation strategy is the adoption of the Master Plan by the Commerce Township Planning Commission under the Michigan Planning Enabling Act 33 of 2008, as amended.

Zoning

The zoning ordinance is the primary regulatory tool used by the Township to implement the Master Plan. Districts are established through zoning for the purpose of regulating the use of land and buildings, their height and bulk, the proportion of the lot that may be covered by them, and the density of development. This classification through regulation assists in the orderly development and growth of the community. In addition, zoning is used to protect property values and investments. Because of the real and/ or perceived impact zoning has on the use of land and related services, a direct relationship must exist between the master plan and the zoning ordinance.

Land use classifications on the Future Land Use Map provide the basis for evaluating future zoning amendments, decisions initiated by the Planning Commission or rezoning requests presented by petitioners. The Township is in the process of updating the Zoning Ordinance to add a new Land Use classification, TLM Technology Light Manufacturing. The Township has adopted periodic text amendments along with annual reviews of such to ensure that the Zoning Ordinance is consistent with the law and the tenant of the Township Board and Planning Commission.

Continuous Planning

Under the Michigan Planning Enabling Act (PA 33 of 2008, as amended), the Commerce Township Planning Commissions is required to review and re-evaluate the Master Plan every five years, as events or changing needs of the Township may impact the Plan. As such, the Commerce Master Plan should be regarded as a continuing work in progress, not as a finished work of art. Periodic adjustment maybe required as population, economic trends and local and regional development patterns fluctuate and change, resulting in the initiation of a plan amendment, such as a corridor plan or small area plan, or an entirely new plan may be warranted.

Public Information and Education

The success of the Master Plan is, to a great extent, dependent upon the involvement of a community's citizens. Successful implementation of the Master Plan requires the support and participation of residents, property owners, and business owners. Efforts to inform and educate citizens and secure their input regarding the Plan for their community have increased dramatically in recent years due to the accessibility of the Internet. Time is afforded, at the beginning of every Planning Commission and Township Board meeting for public comment. Several times text amendments have been initiated as a result of this public input and thoughtful discussion at the Board/Commission level. The Township website has been an integral part of citizen and investor education and is updated frequently.

Development Controls and Incentives

Open Space/ Planned Unit Developments

Planned development involves the use of special zoning requirements and review procedures that provide design and regulatory flexibility, so as to encourage innovation in land use planning and design. Planned unit developments (PUDs) should achieve a higher quality of development than might otherwise be possible, and applied judiciously are an effective zoning technique to achieve development in accordance with the goals and objectives of the Master Plan.

Planned development can be used to facilitate redevelopment in and around the Hospital area, those privately owned recreation areas, Commerce Village, the Union Lake business area, the sand and gravel extraction area at Sleeth and Bass Lake Roads, Commerce Town Center, and along the Haggerty Road corridor. Planned unit development usually includes an incentive component and an ability to negotiate certain items in light of this incentive.

The Township has adopted a Planned Unit Development ordinance, which has been used successfully to achieve a higher quality of development than would have otherwise been possible.

Manufactured Home Community Regulations

A Manufactured Home Community ordinance is intended to provide for the location and regulation of manufactured housing parks, and to ensure necessary community services in a setting, which provides a high quality of life for residents. Regulations established by Michigan Public Act 96 of 1987, as amended, in conjunction with the Manufactured Housing Commission Rules govern all manufactured housing parks throughout the State. The Township may adopt standards that exceed the State law or the Manufactured Housing Commission Rules, so far as they are in accordance with applicable State laws and have the approval of the Manufactured Housing Commission. These higher standards are intended to ensure that manufactured housing parks meet the same development and site plan standards established for other

comparable residential development and to promote the health, safety and welfare of the Township's residents.

Subdivision Controls

A subdivision regulation ordinance outlines procedures and standards for the review and approval of proposed subdivisions pursuant to the Subdivision Control Act of 1967/ Land Division Act (Michigan PA 288 of 1967, as amended). This ordinance typically specifies the design of lots and blocks, access, as well as, internal improvements including streets, drainage, water, and sewer facilities. The Township should consider revising its Subdivision Control Ordinance to reflect the different residential areas identified in this Master Plan.

Condominium Regulations

A condominium development is a form of land division not a form of housing. Due in part to changes in the State's condominium laws, condominium developments have become a popular alternative to subdivisions as a way of developing land. Developers recognize what a tremendous time and money saver site condominium developments are compared to single-family subdivisions, which requires a lengthy and costly platting process. The Condominium Act can be used to facilitate redevelopment of old plats by "overlaying" a condominium on an existing plat, effectively eliminating a time-consuming and cumbersome re-platting process.

Planning Commission Procedures

The Michigan Association of Planning (MAP), a chapter of the American Planning Association (APA) is a membership organization dedicated to promoting sound community planning that benefits the residents of the state. Eighty percent of its members are citizens appointed to planning commissions and zoning boards of appeals. MAP offers educational training and workshops at the regional and local level ideal for reacquainting seasoned officials with current planning tools and techniques.

Michigan State University Extension has developed the Citizen Planner Program, an education program designed for local land use decision-makers. The program covers the essential training needs of citizens appointed to serve on local land use planning and zoning bodies.

Both organizations offer programs that provide basic training for planning and zoning, legal foundations, plan implementation, innovative zoning techniques, public participation, effective meetings and managing conflict.

Capital Improvements Program

Capital improvements programs evaluate, prioritize, and structure financing of public improvement projects including any major capital outlays for infrastructure and major durable good purchases. The Township should prepare and annually update a six year Capital Improvement Program (CIP). The CIP is a valuable tool that the Township administrative leadership, Board of Trustees, and Planning Commission should utilize to evaluate, budget and schedule major infrastructure investments. It is a vehicle that allows for systematic review of proposed improvements and major capital expenditures related to not only the Master Plan while creating the opportunity to coordinate timing, location and financing of those projects.

Economic Development Mechanisms

Tax Increment Financing Tools

Tax Increment Financing (TIF) is a funding method that authorized bodies may use for public purposes. When a TIF district is established, the total state equalized value for property in the district is recorded. Every year thereafter, the property tax revenue generated by increases in the total state equalized value is captured by the TIF. In this manner, the TIF is funded only by increases in property values and the Township's general fund is not affected by the tax capture of the TIF.

The following is a summary of bodies that can use tax increment financing and other funding resources:

Downtown Development Authority (Public Act 197 of 1975). A Downtown Development Authority (DDA) is a quasi-public development corporation which exists for the purpose of promoting a desirable environment for businesses and residents, and implementing economic development projects. A variety of financing techniques are available to DDAs, including bond issues, Tax Increment Financing (TIF), and public and private contributions.

The Townships DDA is primarily located along the M-5, Martin Parkway, and Haggerty Road corridors in the Commerce Town Center district.

Corridor Improvement Authority (Public Act 280 of 2005). This legislation established a method of improving commercial corridors that may not resemble traditional downtown districts. The Corridor Improvement Authority Act allows local governments to create one or more Corridor Improvement Authorities (CIA) to address established, deteriorating commercial corridors located outside their downtown areas. The primary benefit of this tool is to provide local governments with the option of using TIF for improvements in the district(s), and to undertake a wide range of activities to promote economic development and redevelopment in commercial areas.

In order to be eligible to create a CIA, the development area must have a minimum size of 5 acres, consist of at least 50% commercial property, and be zoned to allow mixed-uses, including high-density residential. A municipality must also expedite the local permitted and inspection process in the development area and promote walkable non-motorized interconnections throughout the development area.

An advantage of this act is that it allows more than one CIA to be established in a community, in addition to the one DDA that a community is typically permitted to establish.

Brownfield Redevelopment Authority (Public Acts 381, 382, and 383 of 1996). Communities are authorized to create one or more Brownfield Redevelopment Authorities (BRA) in the community. BRAs may be used to finance the cleanup and reuse of contaminated property. Costs that can be funded by a BRA include the demolition of buildings necessary to remove hazardous substances and new construction if needed to protect against exposure to hazardous substances that are to remain.

A BRA may use a TIF to pay back a developer for activities needed to facilitate the redevelopment of the site. Once the developer has been paid back for initial site remediation, the additional captured property taxes may go into a local site remediation fund to pay for cleanup and rehabilitation activities on other brownfield sites in the community.

An important feature of a BRA is the ability to capture state and local school taxes, but only from the taxes paid by the user of the redeveloped contaminated site. BRAs may also issue revenue and TIF bonds and notes or borrow from the MDEQ's Revitalization Loan Fund.

The Township likely contains eligible properties, and can establish their own BRA or be included in the Oakland County Brownfield Redevelopment Authority, so this tool will likely be appropriate in the future.

Principal Shopping District/Business Improvement District (Public Act 120 of 1961). This Act provides for the establishment of principal shopping districts and for the establishment of Business Improvement Districts or Zones. Municipalities are permitted to complete street and pedestrian improvements, acquire property for and construct parking facilities (including parking garages), along with other facilities that "serve the public interest."

The municipality may also create a board for the management of certain ongoing activities, including various initiatives to promote economic development (i.e. market studies, public relations campaigns, and retail and institutional promotions). In addition, the maintenance, security, and operation of the principal shopping district may be carried out through this board. For ease of description, this board is often referred to as a Downtown Management Board (DMB) and the area it represents as the Principal Shopping District (PSD)/Business Improvement District (BID)/Business Improvement Zone (BIZ).

The DMB may be funded through grants and contributions and may also use the proceeds of special assessment levied by the governing body on property within the PSD specifically for maintenance, security, and operation purposes. All assessments are levied in accordance with the Township's special assessment policies and procedures.

PSDs are a useful tool for addressing issues such as parking construction and operation by shifting responsibility and accountability to a single organization. The organization is business driven, yet closely linked to the Township through the appointment process and funding arrangements. It is therefore an organizational expression of the partnership between the Township and business interests. Its powers to conduct cooperative advertising and promotion, public relations, maintenance, and general operations are broad enough to address many of the previous strategies.

Commercial Rehabilitation Act (Public Act 210 of 2005). The Commercial Rehabilitation Act enables local units of government to create one or more rehabilitation districts in which rehabilitated commercial property may receive property tax reductions for one to 10 years from the municipality (excluding personal property and the land upon which the rehabilitated facility is located).

These tax reductions or abatements may be used to encourage redevelopment in the community; however, they do reduce the amount of tax revenues collected by the Township. Therefore, this tool should be used judiciously.

Local Development Financing Authority (Public Act 281 of 1986). A Local Development Financing Authority (LDFA) is intended to assist industrial development, to promote economic growth, and prevent unemployment. Eligible activities include the support of business investment in districts where the primary activity is the manufacture of goods or materials, agricultural processing, or high-tech activities such as product development, engineering, product testing, or research and development.

A LDFA may use TIF, and only one LDFA may be created in the community.

Community Development Block Grant Program (CDBG)

The Community Development Block Grant program is an annual allocation of the U.S. Department of Housing and Urban Development to local governments for a wide range of community development activities, including housing rehabilitation, public and neighborhood improvements and economic development activities which primarily benefit low and moderate income persons or elimination of slums and blight within the community. The Township receives funds through Oakland County.

Transportation Alternatives Program (TAP).

TAP is a competitive grant program that funds projects such as non-motorized paths, streetscapes, and historic preservation of transportation facilities that enhance a community's intermodal transportation system and provide safe alternative transportation options. These investments support place-based economic development by offering transportation choices, promoting walkability, and improving the quality of life. The program is administered through the Michigan Department of Transportation, and it utilizes Federal Transportation Funds designated by Congress for these types of activities.

Historic Districts

The Township has a Historic District Study Committee, although it has been inactive for several years. A reconnaissance level survey was completed in 2006. Although the Township chose not to proceed with a historic district ordinance, the information remains accessible to guide development and is contained within the Site and Architectural Design Guidelines, a document which is referenced in the Zoning Ordinance and the Master Plan and is utilized for various review (I.e. site plans, special land use, rezoning, variances, etc.) and planning department reports.

Rehabilitation Act

Act 344 of the Public Acts of 1945 is the basic Michigan rehabilitation statute. It provides powers and procedures for local governments to acquire, assemble, and finance the redevelopment of blighted areas for general rehabilitation purposes.

Michigan Natural Resources Trust Fund

This fund replaced the Michigan Land Trust Fund in October, 1985. All proposals for local grants must include a local match of at least 25 percent of total project cost. Projects eligible for funding include: acquisition of land or rights in land for recreational uses or for protection of the land for environmental importance or scenic beauty; and development proposals for public outdoor recreation or resource protection purposes (i.e., picnic areas, beaches, boating access, fishing and hunting facilities, winter sports areas, playgrounds, ball fields, tennis courts, and trails, etc.). Indoor facilities are considered only if their primary purpose is to support outdoor recreation. Examples include nature interpretive buildings and park visitor centers. Outdoor recreation support buildings such as restrooms and storage buildings, are also eligible. Proposed local government fund recipients must have a recreation plan no more than five years old and approved by the Department of Natural Resources.

Fund recipients have specific obligations following project completion. These include properly operating and maintaining properties and facilities, and keeping them available for use by all members of the public. Commerce Township used this grant source, in conjunction with Walled Lake and Wixom, to develop the Commerce-Walled Lake-Wixom Trail (formerly known as the Michigan Airline Trailway).

Other Financing Tools

Besides the general fund and the aforementioned economic development financing programs and mechanisms, the following sources of revenue are available to the Township:

Dedicated Millage: Special millages can be used to generate revenue for a specific purpose.

Special Assessments: Special assessments are compulsory contributions collected from the owners of property benefitted by specific public improvements, such as paving and drainage improvements, to defray the costs of such improvements. Special assessments are apportioned according to the benefits afforded to the property affected. The Township has used special assessments to extend the sanitary sewer system.

Shared Credit Rating Program - Michigan Municipal Bond Authority (MMBA): This program created under Act 227 of 1985 offers municipalities the opportunity to take advantage of the State's credit rating. Because the MMBA is authorized to issue bonds to make loans to Michigan municipalities through the purchase of municipal obligations, the Authority allows municipalities to borrow funds for their capital and operating needs without going to the expense or trouble of entering the bond market on their own. Many small communities are at a disadvantage when issuing debt in the bond market because they frequently have no bond ratings and potential investors know little about their finances or economy. In addition, some communities tend to borrow infrequently, in small amounts. Because such debt issues are not particularly attractive to the financial markets, borrowing costs for such communities can be high.

The Authority sells tax-exempt bonds in the national municipal bond market. Proceeds from the sale are used to make loans to eligible Michigan communities by purchasing their bonds. In essence, the MMBA "bundles" smaller local debt issues into a larger, more attractive bond issue and then offers it to the national market. By consolidating numerous local bond issues, local units will save on printing costs, rating agency fees, and credit enhancements. As participating communities make principal and interest payments to the Authority to repay their debt, the Authority uses these payments to repay the Authority's bond.

HUD Section 202/8: This is a federally sponsored program which provides mortgage financing and rent subsidies for the construction and maintenance of elderly housing. Only non-profit, private organizations (such as churches, unions, fraternal and other non-profit organizations) are eligible sponsors, but local governments usually cooperate in the assembly of land, applications, public improvements and supportive actions. Such projects are tax-exempt, but the State rebates an equivalent amount to local tax jurisdictions.

Environmental Regulations

Woodlands/ wetlands/ natural features ordinances assist in the preservation of the natural environment while encouraging and supporting quality development within the Township.

Commerce Township is fortunate to include within its borders numerous lakes and wetland features. Aging septic systems deteriorate and often fail or discharge directly into these watercourse features. Special assessment districts have been established at the request of residents wanting to connect to the Township's public water and sewer system. The Township should establish a program for identifying and evaluating areas with failing or direct discharge septic systems, followed by a method for prioritizing special assessment districts to connect residents and businesses to public water and sewer.

Private Investment and Action

Private investment and action will be the main sources of development in the future. The Township must provide clear direction and procedures to facilitate private development in accordance with the Master Plan. After the completion of the Master Plan, the Township should evaluate its procedures and regulations dealing with land development to assess if they encourage appropriate development in accordance with the Master Plan. The review of procedures should include the creation of a policy to deal with rezoning applications for property which overlaps into a neighboring municipality.

Commercial Rehabilitation

Throughout the Master Plan process, concern was expressed about the rehabilitation of existing retail facilities, especially landscaping. The Township can utilize a number of tools to aid commercial rehabilitation including code enforcement. The DDA can establish programs to aid rehabilitation of sites or acquire and clean up blighted sites. A Brownfield Redevelopment Authority, if established in the Township, could also assist in the clean-up of contaminated commercial sites, such as older gasoline stations. The Township should also continue strict enforcement of current ordinances.

Action Strategies

During the Master Plan process, a number of strategies described above to implement the Master Plan were identified as strategies that should be pursued in the next five years. These "action strategies" are listed below. The Township should review and prioritize these action strategies on an annual basis to implement the Master Plan:

1. **Update Township Subdivision Control and Condominium Ordinances.** The update should include the following elements:

    - Design standards.
    - Requirements, standards, and design guidelines for linked pathways, sidewalks and other non-motorized transportation modes for all new residential and non-residential development.
    - Options for residential developments that reflect the characteristics of the different future land use single-family categories.
    - Allowances for actual residential neighborhood recreation uses (i.e. tot lots, neighborhood parks, neighborhood pools, ice skating areas) while maintaining consistency with scale and character of neighborhoods.
    - Floodplain regulations.
    - Groundwater protection regulations including standards for detention/retention facilities and incentives for low-impact stormwater management practices.

2. **Develop Reclamation Plan for Holloway Sand and Gravel Company.** The Township should work with Holloway Sand and Gravel Company to develop a reclamation plan for the enterprise when it reaches the end of its profitability.

3. **Establish a Brownfield Redevelopment Authority (BRA).** A Brownfield Redevelopment Authority should encompass as many of the contaminated sites in the Township as possible and as deemed necessary.

4. **Continue to Evaluate Township Procedures.** Township procedures for land development, from concept plan to the issuance of the final Certificate of Occupancy, should encourage high quality development. The following questions should be asked when examining Township procedures:

    - Are design standards enforced throughout the process?
    - Are the procedures clear and easy to follow for the applicant?
    - Do procedures preserve the aesthetic and physical character of the Township?
    - Do procedures strictly enforce codes and regulations for industries that create substantial sound, and visual impacts and those that store or use hazardous chemicals?

5. **Continue economic development efforts in the Township in coordination with the DDA.** The Township should continue to work with the DDA to further economic development efforts in the Township. The following possible action strategies have been identified during the Master Plan process:

    - Roadway improvements specified in the DDA area on the Circulation Map.
    - Work with Michigan Economic Development Council (MEDC) and Oakland County Planning and Economic Development Services (PEDS) to conduct inventory of high-speed internet access and delivery in Commerce Township as well as the internet needs of existing and future businesses.

6. **Create a non-motorized transportation network.** The following strategies can be used to create a non-motorized transportation network:

    - Update Township Zoning and Subdivision Control Ordinances to require all new residential and non-residential development connect to the existing and planned Oakland County Linked Path/ Trail System, much the same way roads are required to be stubbed for future development.
    - Work with the Road Commission for Oakland County to acquire rights-of-way for pathways shown on the Circulation Map.
    - Apply for TAP grants for construction of pathways in developed areas.
    - Coordinate pathway construction with existing and planned Oakland County Linked Path/ Trail System.
    - Continue work with Walled Lake and Wixom and the Commerce/Walled Lake/Wixom Trailway Management Council to complete acquisition of the Michigan Air-Line Railway and apply for further grants to develop the pathway.

7. Continue work with Walled Lake and Wixom and the Commerce/Walled Lake/Wixom Trailway Management Council to complete acquisition of the Michigan Air-Line Railway and apply for further grants to develop the pathway.

8. **Continue or initiate intergovernmental cooperation to protect environmental features.** Protection of environmental features was identified as a top priority for the Township. The following intergovernmental efforts should be pursued or initiated:

    - Coordination of lake protection with adjacent communities.
    - Development of a Greenways System Plan (e.g. connecting utility easements and county drains with open space).
    - Development of a watershed plan or plans for protection of Rouge and Huron River Watersheds.
    - Continue efforts of the Storm Water Pollution Prevention Initiative (SWPPI).
    - Continue involvement in the Rouge and Huron Rivers Subwatershed Groups.
    - Work with Southeast Michigan Land Conservancy.
    - Encourage donation of environmentally sensitive lands to public bodies or organizations which will preserve them in perpetuity.
    - Utilize conservation easements to preserve environmental features.

9. **Establish Township Ordinances to protect natural features.** The Township should consider the development and adoption of the following ordinances, outside of the Zoning Ordinance and Subdivision Control Ordinance, to protect natural features:

    - Stormwater management ordinance
    - Groundwater protection ordinance
    - Hazardous waste ordinance

10. **Continue to monitor the wetland ordinance to ensure that development is proceeding in an environmentally sensitive and economically viable manner.**