

2025 MASTER PLAN FOR LAND USE

CHARTER TOWNSHIP OF PLYMOUTH, WAYNE COUNTY, MICHIGAN

DRAFT - April 16, 2021

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This document represents a complete update of the Charter Township of Plymouth Master Plan for Land Use, and replaces the 2015 Master Plan.

Adopted by the Charter Township of Plymouth Planning Commission and distributed to the Board of Trustees for approval on: _____.

Adopted by the Charter Township of Plymouth Board of Trustees on: _____.

Prepared with the assistance of:



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DRAFT - April 16, 2021

ACKNOWLEDGMENTS

Thank you. The participation and cooperation of residents, members of the business community and stakeholders in the preparation of the 2025 Master Plan for Land Use is greatly appreciated and we thank everyone who participated in its development. The update would not have been possible without the dedication and support of Township officials.

In particular, we acknowledge the efforts of:

PLANNING COMMISSION

Dennis Cebulski, Chairperson
William Pratt, Vice-Chairperson
Kendra Barberena, Secretary
Bob Doroshewitz, Trustee
John Itsell
Robert Ostendorf
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John Stewart, Trustee

Former Trustees:

Jack Dempsey, Trustee 2016-2020
Gary Heitman, Trustee 2016-2020

Special thanks to Wendy Harless, Chair of the Township's Historic District Commission, for the historical account of the community (pages 4-5).

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WELCOME & BACKGROUND

Plymouth Township's Master Plan provides a comprehensive view of the community's desire for the future.

This Plan serves as an aid in daily decision making regarding land development. The goals and policies outlined in this Master Plan exist to guide Planning Commissioners and the Township Board of Trustees in their deliberations on matters including zoning, subdivisions, capital improvements, and others relating to land use and sustainable development.



The Plymouth Township Master Plan aims to synchronize public improvements and private development. It is the coordinating document for community-wide policy and decisions involving land use, transportation, neighborhoods, infrastructure and open space, among other topics. This Plan is not only a vision statement towards future development of growth areas and preservation of open space and natural features, but also a template for collaborative relationships with external funding sources.



PURPOSE OF THE MASTER PLAN

The 2025 Master Plan for Land Use provides a framework for Township leaders to make decisions that will further enhance the quality of life, social inclusion, and sustainable development in the community.

The Michigan Planning Enabling Act of 2008, P.A. 33 of 2008, as amended (MPEA), expressly authorizes local units of government to engage in planning and zoning. The MPEA requires the Planning Commission to “Make careful and comprehensive surveys and studies of present conditions and future growth within the planning jurisdiction with due regard to its relation to neighboring jurisdictions.” In Plymouth Township, the Planning Commission and the Board of Trustees are the official bodies that approve the Master Plan.

The 2025 Master Plan for Land Use presents the Township’s vision for the future and is a long-range plan, examining past trends and making projections for the next five+ years. It serves as a policy guide for the community, and informs the decisions of Township officials and administrators, governmental agencies, organizations, and private individuals. It is designed to provide a flexible road map for future development and to ensure that new growth is consistent with the community’s goals and objectives.

One of the most important functions of the Master Plan is to provide a solid foundation for future land use decisions. The recommendations presented in the text and shown graphically in the maps provide a legal basis for zoning and other land use controls utilized by Plymouth Township. Additionally, the Master Plan serves as an educational and inspirational tool. It should inspire readers to work toward achieving a standard of excellence in creating a quality built environment, and in preserving valuable natural resources. For any vision to be implemented successfully, its inspiration must be communicated across succeeding generations of residents and officials.



HISTORICAL DEVELOPMENT

The area that is today known as Plymouth Township served as home to the Potawatomi tribe of Native Americans for generations until the arrival of settlers from the East in the early nineteenth century. Their Chief Tonquish is a significant historical figure in this region and the tributary of the Rouge that runs through Plymouth is named for him. The abundant streams in the area furnished opportunity for fishing and the heavily forested land provided all sorts of game and lumber for the construction of frontier homes, barns and goods stores.

Plymouth Township settlement by people of European descent began in the early 1820s. The earliest 'permanent' settler came in 1825, coinciding with the opening of the Erie Canal. The Township was formed in 1827 and is among the oldest in Michigan. This became a reality by virtue of the Act of Territorial Council, April 12, 1827, dividing Wayne County, comprised of surveyed townships one and two south, in range eight east. The first Township meeting was held on the property of one of those early settlers, John Tibbits (see Laws of the Territory of Michigan, Vol. II, Lansing: W.S. George & Co., 1874, p. 479), on May 25, 1827, in the Tibbits barn, which still stands today at 46225 North Territorial.



After several suggestions for a name, these early settlers decided to name their new community Plymouth, a name that harkens back to the New England roots of many of those present at the meeting in the Tibbits' barn.

Self-governance thus began nearly two hundred years ago. The same desire for responsive local government led the Township to be split into four subdivisions: the southern half split off as Canton Township in 1834; the northern quarter split off as Northville Township in 1898; and the City of Plymouth incorporated in 1932. Today's Township size of 16 square miles is one-fourth the original.

One of Michigan's territorial roads runs westerly through the township all the way to the Meridian/Baseline State Historic Park. Both the "North Territorial" and the "South Territorial" (known now as Goddard Road) were among the earliest transportation routes for Native Americans and early settlers.

One of Michigan's most famous Civil War units, the 24th Michigan Infantry Regiment, was raised in significant part from Plymouth. The regiment became part of the Iron Brigade and on the first day of the Battle of Gettysburg went into action with 499 present for duty; the next morning 99 answered the call to fall in. The regiment also served as honor guard during the funeral services for President Abraham Lincoln.

An early commercial establishment was a mill on one of the Rouge River tributaries running through the township. The "Phoenix Mill" served the community until it burned down. In the 1920s, Henry Ford acquired it for one of his "village industry" facilities and built a new manufacturing plant on the site. The Albert Kahn firm contributed to its expansion. Located off of Northville Road, the Phoenix Mill Ford Plant was the first-ever all-female factory where women earned the same wage as men—something unheard of before or during the 1940s.

The Township has served as the home base for a number of iconic American corporations including Burroughs, which gifted substantial land holdings in the area to the Wayne County Road Commission for creation of the historic Hines Drive; several historic structures along the Drive, dating to the 1930s. The Commission prepared a master plan for the Drive in 1928 and sought to establish similar parkways along every major river course in the county. The Daisy air rifle originated as a premium given to township farmers who purchased an iron windmill for their farms from a local company.

The Township is also home to several sites in the Motor Cities-Automobile National Heritage Area.

Between 1950 and 1980 Plymouth Township's population swelled from approximately 5,000 to over 20,000. Situated between the Detroit and Ann Arbor metro communities, and after the opening of the M-14 limited access trunkline

highway in the 1970s, it became a convenient commuter hometown. Charter status, attained in 1979, helped provide a modern form of government while maintaining the township structure. Farms became residential subdivisions and apartment complexes, and the transition from farming to suburban home community has transformed a once-rural area.

Our historic environment makes Plymouth Township a special, unique place. This historic character draws small and start-up businesses, diverse neighbors, tourists, and jobs as rehabilitation is more labor intensive than new construction. Historic preservation is good for our environment, keeping the waste of demolition out of our landfills and promoting the principles of smart growth. Rehab and reuse of our historic buildings serve not only as a catalyst for additional rehabilitation, but also for new development.

Historic preservation is a significant reason why people choose Plymouth Township to live, work and play.



TOWNSHIP SNAPSHOT

REGIONAL SETTING

Plymouth Township consists of approximately 16.6 square miles, which is less than half of a standard township, and is located in the northwest portion of Wayne County. The City of Plymouth occupies 2.3 square miles in the approximate center of Plymouth Township. The Township is bounded by Five Mile Road to the north, Eckles Road to the east, Joy Road to the south, and Napier Road to the west. The neighboring communities include: the City of Plymouth, Northville Township, the City of Livonia, the City of Westland, Canton Township, Salem Township, and Superior Township.

Plymouth Township is served by the CSX Railroad, and two major freeways: M-14 (I-96), which runs from east to west through the northern portion of the Township, and I-275, which runs from north to south through the eastern portion of the Township. The freeways establish key linkages to the City of Ann Arbor and the City of Detroit, and provide convenient access to the Detroit Metropolitan Wayne County Airport (DTW).



STRONG QUALITY OF LIFE

Township residents have long prioritized the quality of their community, particularly the quality of residential life, the natural environment, and of the schools and other public services. This Plan is intended to protect and preserve those qualities on which residents place such great value.

Building upon these existing elements is a tremendous advantage for the Township as it moves towards its goal of growing a creative, vibrant, progressive and inclusive community that is attractive to residents, businesses, and visitors.

COMMUNITY DEMOGRAPHICS

The socio-economic demographic makeup of the community is a critical component in any Master Plan. Plymouth Township's current demographics and trends provide the foundational understanding of the existing social and economic capacities and strongly informs future planning possibilities.

POPULATION

| | |
|---------------|----------------------------------|
| 27,093 | Plymouth Township |
| 9,054 | City of Plymouth |
| 29,017 | Northville Township |
| 91,223 | Canton Township |
| 1.11 m | Wayne County (excluding Detroit) |
| 4.76m | Southeast Michigan |

AVERAGE HOUSEHOLD SIZE

| | |
|-------------|----------------------------------|
| 2.42 | Plymouth Township* |
| 2.08 | City of Plymouth |
| 2.56 | Northville Township |
| 2.7 | Canton Township |
| 2.48 | Wayne County (excluding Detroit) |
| 2.46 | Southeast Michigan |

**Note: In 2000, the average household size was 2.49.*

POPULATION TRENDS & FORECASTS

| | 1990 | 2000 | 2010 | 2018 | % Growth 1990-2018 | 2045 |
|-------------------------------------|---------------|-----------------|-----------------|-----------------|-----------------------|-----------------|
| Plymouth Township | 23,648 | ↑ 27,798 | ↓ 27,524 | ↓ 27,093 | ↑ 12.7% | ↑ 30,649 |
| City of Plymouth | 9,560 | ↓ 9,022 | ↑ 9,132 | ↓ 9,054 | ↓ 5.3% | ↑ 9,786 |
| Northville Township | 17,313 | ↑ 21,036 | ↑ 28,497 | ↑ 29,017 | ↑ 67.6% | ↑ 36,886 |
| Canton Township | 57,040 | ↑ 76,366 | ↑ 90,173 | ↑ 91,223 | ↑ 59.9% | ↑ 114,119 |
| Wayne County (excluding Detroit) | 1,083,713 | ↑ 1,109,892 | ↓ 1,106,788 | ↑ 1,110,651 | ↑ 2.5% | ↑ 1,149,249 |
| Southeast Michigan | 4,590,568 | ↑ 4,833,386 | ↓ 4,704,809 | ↑ 4,767,013 | ↑ 3.9% | ↑ 5,104,922 |

Source: ACS 2019, SEMCOG 2020

MEDIAN AGE

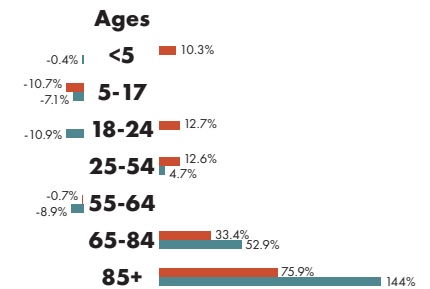
| | |
|-------------|----------------------------------|
| 45.5 | Plymouth Township* |
| 41.3 | City of Plymouth |
| 44 | Northville Township |
| 39.5 | Canton Township |
| 38.4 | Wayne County (excluding Detroit) |
| 38.3 | Southeast Michigan |

***Note:** Ply. Twp. Median Age has increased from 39.6 in 2000 to 45.5 in 2018, **an increase of 14.9%.**

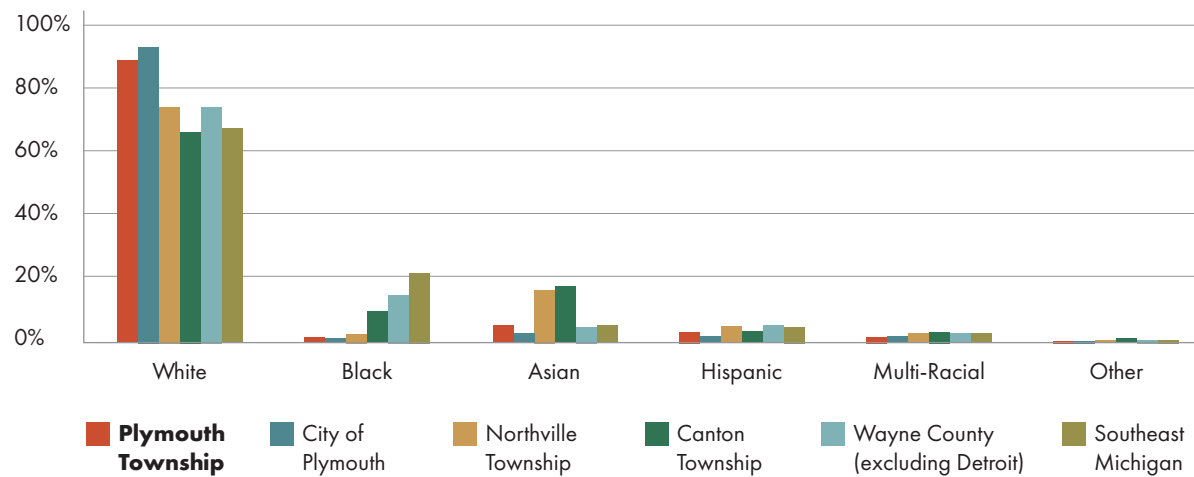
2010-2018 OLDER ADULT & YOUTH POPULATION TRENDS

| Under 18 | 65+ years | |
|---------------|----------------|----------------------------------|
| ↓ 9.5% | ↑ 27.2% | Plymouth Township |
| ↓ 5.8% | ↑ 11.4% | City of Plymouth |
| ↑ 2.0% | ↑ 21.9% | Northville Township |
| ↓ 7.8% | ↑ 53.7% | Canton Township |
| ↓ 1.0% | ↑ 13.5% | Wayne County (excluding Detroit) |
| ↓ 6.8% | ↑ 19.5% | Southeast Michigan |

2045 AGE FORECAST



POPULATION BY RACE / ETHNICITY



Source: ACS 2019, SEMCOG 2020



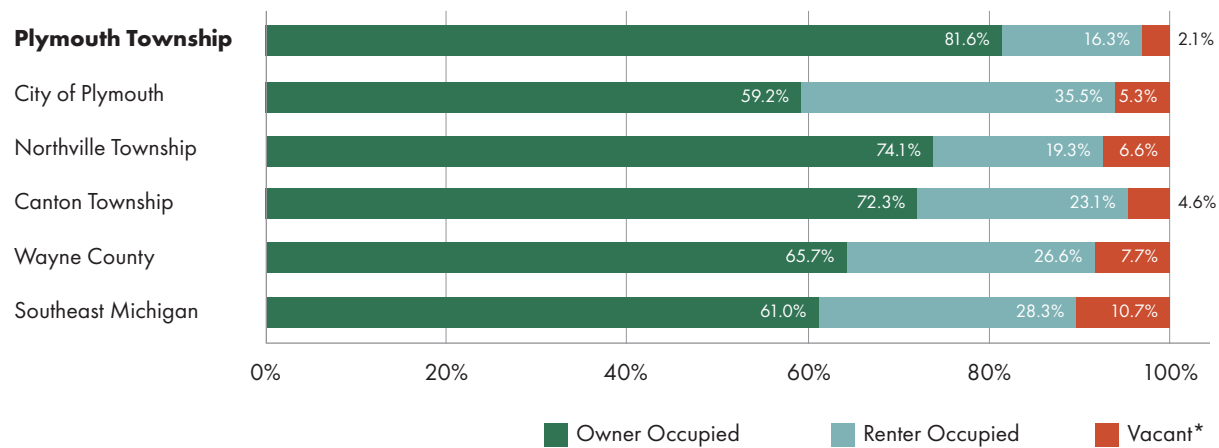
CHANGE IN HOUSING UNITS

| | 2010 | 2018 | % Change |
|----------------------------------|---------------|---------------|---------------|
| Plymouth Township | 11,021 | 11,116 | ▲ 0.9% |
| City of Plymouth | 4,437 | 4,510 | ▲ 1.7% |
| Northville Township | 10,879 | 11,962 | ▲ 10.0% |
| Canton Township | 32,667 | 34,777 | ▲ 6.5% |
| Wayne County (excluding Detroit) | 461,270 | 450,873 | ▼ 2.3% |
| Southeast Michigan | 2,063,325 | 2,078,810 | ▲ 0.8% |

Source: ACS 2019, SEMCOG 2020



HOUSING TENURE



*Note: Vacant housing includes 31 homes as seasonal vacant for Plymouth Township.



Above: Residence at 49800 Joy Road: a mid-century design, constructed in 1959 by Tivadar Balogh.

YEAR HOUSING UNIT BUILT

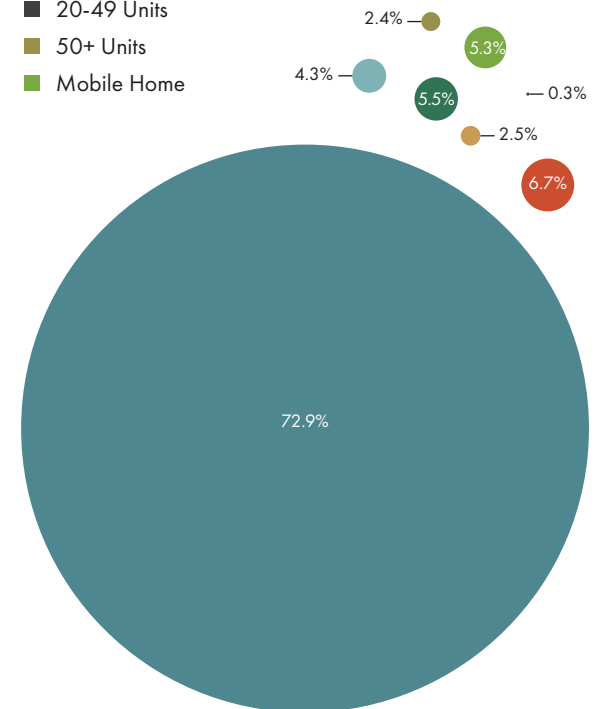
| PLYMOUTH TOWNSHIP | NUMBER | PERCENT |
|-------------------|--------|---------|
| 2010-2018 | 141 | 1.3% |
| 2000-2009 | 878 | 7.9% |
| 1990-1999 | 1,957 | 17.6% |
| 1980-1989 | 1,647 | 14.8% |
| 1970-1979 | 2,523 | 22.7% |
| 1960-1969 | 2,254 | 20.3% |
| 1950-1959 | 1,104 | 9.9% |
| 1940-1949 | 319 | 2.9% |
| 1939 or earlier | 293 | 2.6% |

*Note: Median year structure built: 1976.

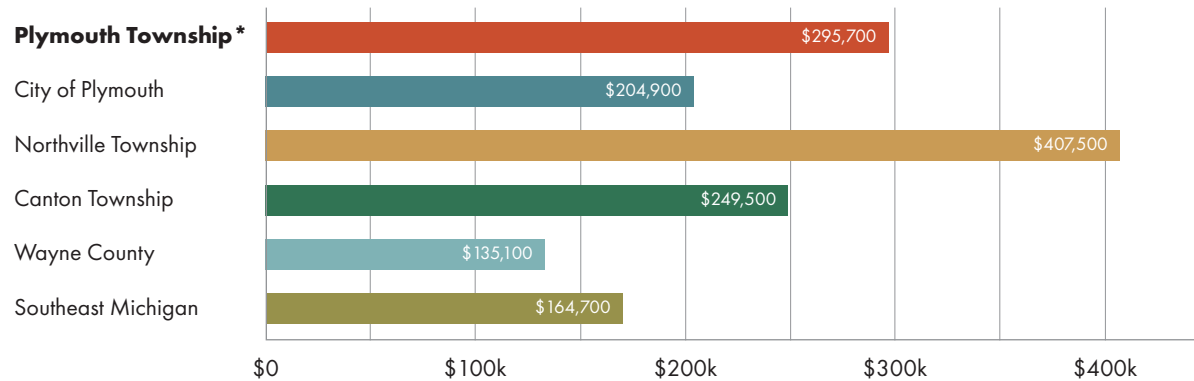
HOUSING UNIT TYPE

Plymouth Township

- Detached, Single-Family
- Duplex
- 3-4 Units
- 5-9 Units
- 10-19 Units
- 20-49 Units
- 50+ Units
- Mobile Home



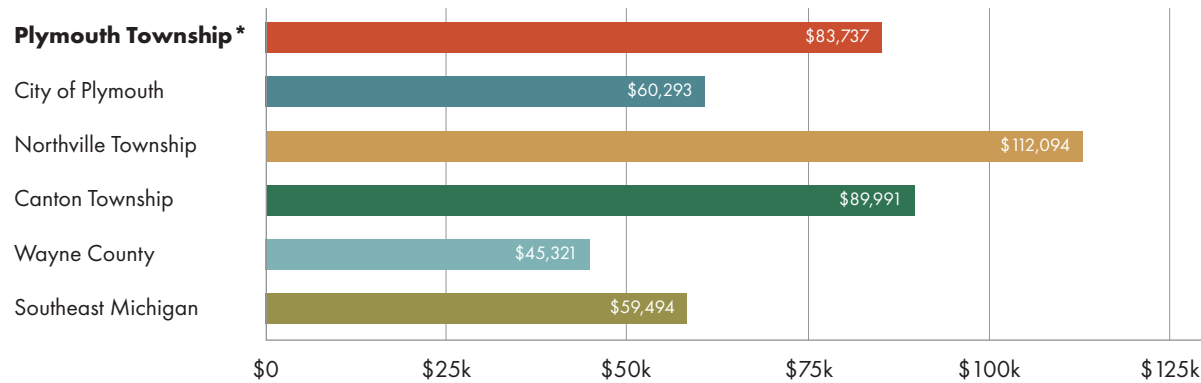
MEDIAN PROPERTY VALUE



*Note: In the Twp. down -2.3% since 2010 (was \$302,755).

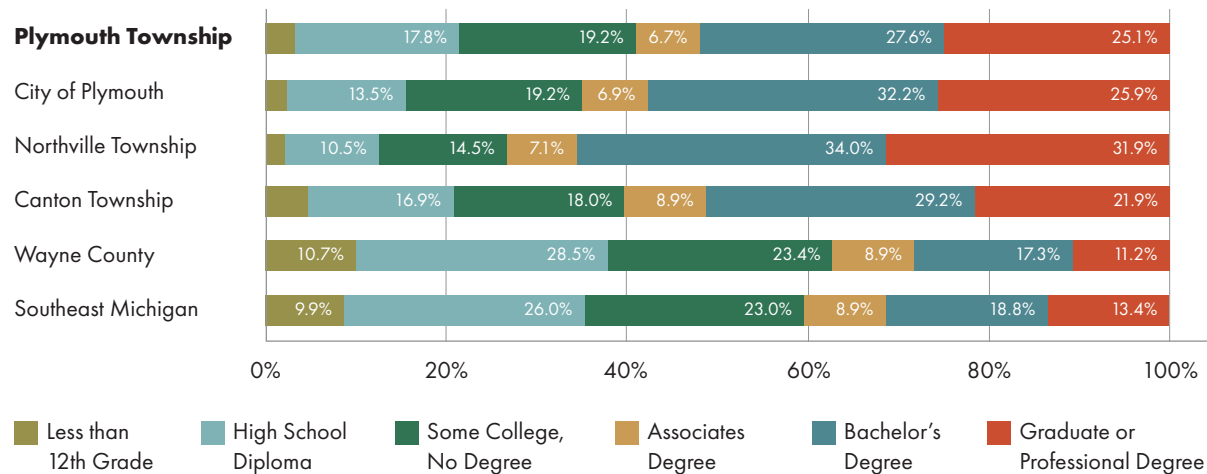
Source: ACS 2019, SEMCOG 2020

MEDIAN HOUSEHOLD INCOME



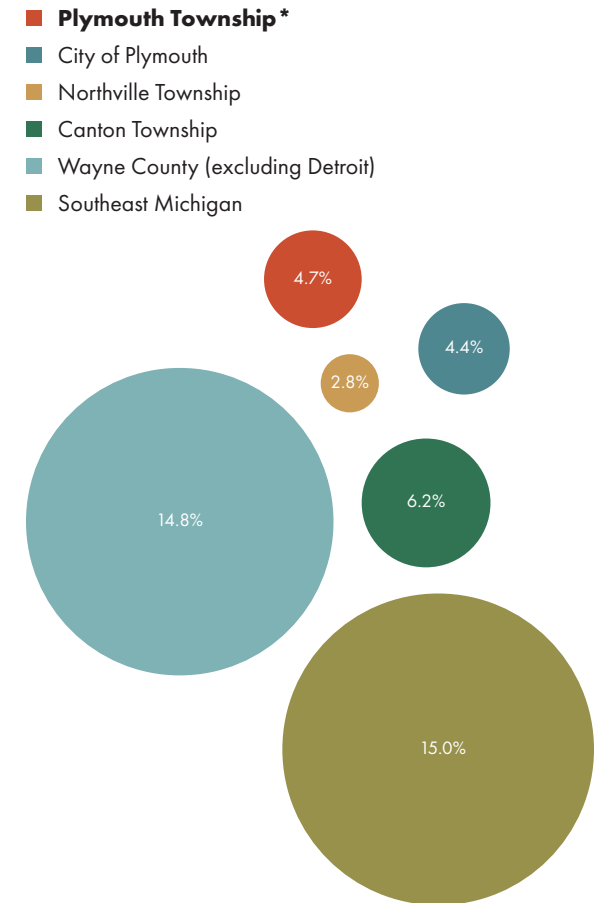
*Note: In 2010, was \$104,893, decrease by approximately -20%.

EDUCATIONAL ATTAINMENT, ADULTS 25 & OLDER



Source: ACS 2019, SEMCOG 2020

POVERTY RATE, BY PERSON



*Note: Ply. Twp. Increased from 3.1% in 2010 (1.6% increase for a total of 1,284 in poverty).

EMPLOYMENT

Plymouth Township



1,118

Total Businesses



36,642

Daytime Population*

***Note:** Daytime population is calculated by the total number of workers (63%) and non-working residents (37%) present in the Township during normal business hours.

WHERE TOWNSHIP RESIDENTS WORK, TOP 10 LOCATIONS (13,103 WORKERS)

| COMMUNITY | PERCENTAGE |
|--------------------------|--------------|
| Plymouth Township | 16.4% |
| City of Livonia | 11.2% |
| City of Detroit | 10.0% |
| City of Ann Arbor | 7.0% |
| City of Plymouth | 6.5% |
| Canton Township | 6.3% |
| City of Dearborn | 6.0% |
| City of Farmington Hills | 4.0% |
| City of Southfield | 3.3% |
| City of Novi | 3.2% |
| Elsewhere | 25.9% |

Source: SEMCOG 2016

EMPLOYMENT RATES *

60.2% Plymouth Township

| | |
|-------|----------------------------------|
| 67.9% | City of Plymouth |
| 61.8% | Northville Township |
| 65.5% | Canton Township |
| n/a | Wayne County (excluding Detroit) |
| n/a | Southeast Michigan |

***Note:** Includes those in the civilian labor force, 16+ years and older.

Source: ACS 2019, SEMCOG 2020

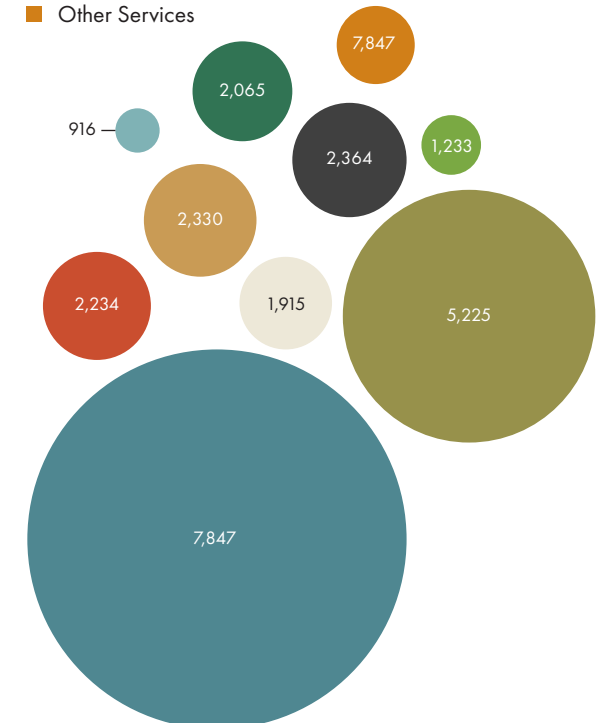
ACCESS TO TECHNOLOGY

- 93.5%** Percentage of households that have a computer.
- 88.7%** Percentage of households that have an Internet subscription.

JOBS BY INDUSTRY SECTOR

Plymouth Township, 2020

- Construction and Manufacturing
- Education, Public Administration, Administrative Support, Waste Services
- Wholesale Trade
- Retail Trade
- Transportation, Warehousing, Utilities
- Information and Financial Activities
- Professional and Technical Services, Corporate HQ
- Healthcare Services
- Leisure and Hospitality
- Other Services



KEY SOCIO-DEMOGRAPHIC FINDINGS:

- Since 2000, the Township's population has remained relatively stable, just over 27,000 individuals. The largest period of growth in the Township's population was between 1960 and 1970.
- Since 1990, the Township has grown at a slower rate than the adjacent communities, but faster than the County or State.
- The population is expected to increase another +/-3,000 individuals over the next 25 years, 120 residents a year. Based on the average household size, only 50 new household units are projected.
- The Township's demographic is reflective of an older community, when compared to the adjacent communities but also the County and State. However, the Township is expected to see a slight increase in the 18-54 age group over the next 25 years. Attracting family forming and young professional households is an objective important moving forward.
- Racially, the community is not diverse, and not representative of Wayne County or the State's composition.
- There has been a slight increase in housing units over the past eight years, primary in the form of smaller, infill residential developments. There is a large concentration of owner-occupied housing, over 81%, with the median property value of owner-occupied housing at \$295,700.
- The Township is home to an historic housing stock: 60% of the housing stock was constructed before 1980, with over 600 residential structures built prior to 1950. However, housing that is older than 50 years can pose challenges for those aging in place, as those structures can be challenging to retrofit and/or maintain the property.
- The overwhelming majority of housing consists of single-family dwellings, leaving an opportunity for Missing Middle Housing.



EXISTING LAND USE PATTERNS

Identifying existing land use patterns and the relationship between established uses is a significant component of any master plan. Documenting the Township's existing land use framework not only identifies the locations of particular land use activities, but it highlights the areas with future growth potential and areas where land use conflicts exist.

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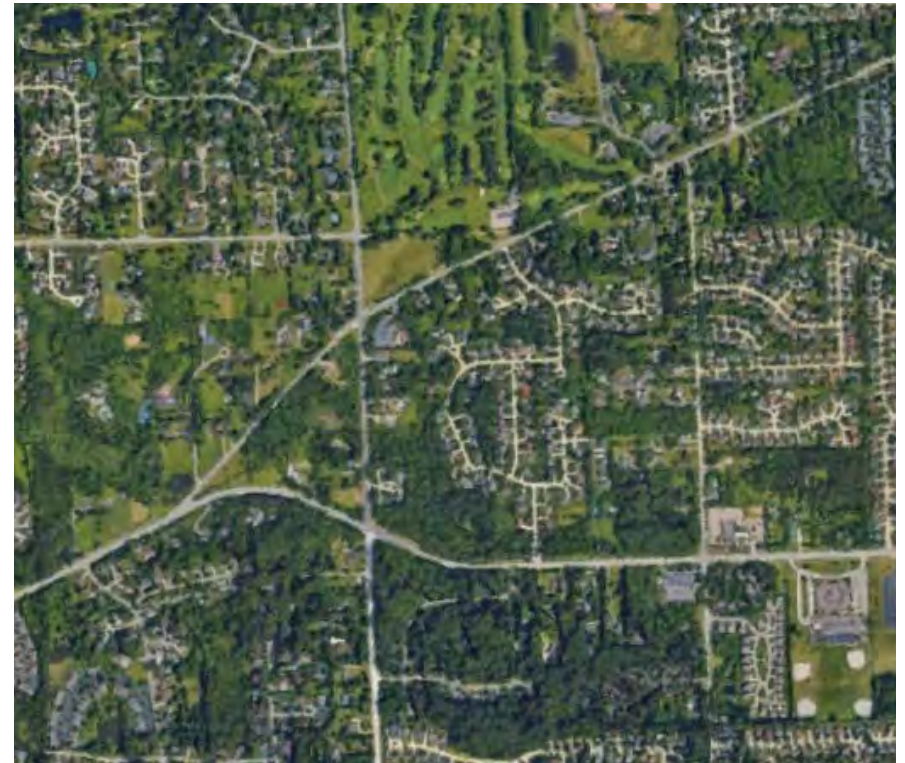


LAND USES TODAY

Land in Plymouth Township is identified by the following ten (10) general land use categories as shown in the table below:

Existing Land Use Categories, Plymouth Township 2020

| EXISTING LAND USE CATEGORIES | 2020 ACREAGE |
|-----------------------------------|-----------------|
| ■ Agricultural / Undeveloped Land | 665 |
| ■ Single-Family Residential | 3783 |
| ■ Multiple-Family Residential | 242 |
| ■ Mobile Home | 225 |
| ■ Office | 122 |
| ■ Commercial | 300 |
| ■ Technology and Research | 545 |
| ■ Industrial | 988 |
| ■ Public / Institutional | 677 |
| ■ Recreation / Open Space | 977 |



Above: A significant transformation - changes in land use from 1952 to 2020, Ann Arbor Road, Ann Arbor Trail and Beck Road.

Growth and development within Plymouth Township provides residents with jobs, a positive economic outlook and a mix of neighborhoods. With the opportunity that a developed community provides, also comes responsibility for environmental protection. In order to maintain responsible and resilient community growth, environmental protection efforts must be at the forefront of Township efforts.



Agricultural / Undeveloped Land

Land used for farming purposes, or is otherwise undeveloped.

These few areas (less than 8% of the total land area) are concentrated in the western portion of the Township and occur in a variety of zoning districts, including the industrial district.



Single-Family Residential

Land used for one single-family dwellings. This includes residential developments within Cluster Housing Options (CHO) or Residential Unit Development Options (RUD).

Single-family residential has four corresponding zoning districts: R-1-E, R-1-H, R-1-S, and R-1. A key distinction between these districts is the maximum permitted density. The R-1-E District has the lowest maximum density at 0.8 dwellings per acre. The single-family district with the highest maximum density is the R-1 District, which is a medium-density district that allows for no more than five dwellings per acre.

For the most part, medium-density, single-family residential is concentrated in the eastern portion of the Township, and lower-density, single-family residential is in the western portion, south of M-14. Many of the existing single-family residential developments were created under a Cluster Housing Option or a Residential Unit Development Option in the 1980s and 1990s. By far, single family residential is the predominant land use, at 44% of the total land cover.





■ Multiple-Family Residential

Land used for multiple-family structures, including apartment buildings, townhouses, or attached condominiums.

The Zoning Ordinance has two zoning districts which accommodate two-family or multiple-family uses, including the R-2 and R-2-A Districts. Additionally, the Mid-Rise District permits multiple-family uses. Multiple-family residential has typically been used as a transition between single-family residential uses and more intense land uses. Overall, there is a limited amount of multiple-family housing typologies within the community (only 3%).



■ Manufactured Housing

Land used for manufactured single-family housing.

The RM, Mobile Home zoning district permits manufactured homes. The Township's only manufactured community, Oak Haven, is located in the northwest portion of the community along Ridge Road, and also contains a large wetland conservation area. Township records indicate that the land currently zoned for manufactured uses was developed to maximum capacity in 1990 (less than 3% of the total land area in the Township, of which, approximately half is dedicated to wetland preservation and not habitable).



■ Public / Institutional

Land which is used for public or institutional purposes, such as churches, private schools, utilities, or Township offices.

Such uses include the Township Municipal Complex (houses Township Hall, the Fire Department, and the Police Department) and the senior center, known as Friendship Station, which is located on Schoolcraft Road. Also within the public / institutional land use category are religious facilities, private schools and clubs, the Wayne County Conservation Club and utility corridors. The largest land use in this category is the St. John's Seminary and Golf Course. In total, public / institutional uses account for 8% of the total land area in Plymouth Township.



The Ann Arbor Road Corridor is the Township's Downtown Development Authority (DDA) and the main commercial district within the community.

As of spring 2021, significant development are currently under construction or within the approval process, including a 130,000 square foot Henry Ford Health medical facility, a specialty grocery store and new residential.



■ Commercial

Land used for commercial purposes, such as convenience or comparative retail, personal service, restaurants, or automotive.

Commercial land uses may be located within the C-1, C-2, ARC, or MR zoning districts; the largest contiguous area of commercial uses is located along Ann Arbor Road, which is also the Downtown Development Authority (DDA) corridor. Smaller commercial developments are dispersed throughout the eastern portion of the Township, and also occur at the intersection of Five Mile Road and Sheldon Road, and at the intersection of Five Mile Road and Beck Road. Commercial uses only account for less than 4% of the total land area.



■ Office

Land used for office purposes, such as medical facilities and financial, professional, administrative, or executive offices.

This land use category has three corresponding zoning districts, including OS, OS-ARC, and OR. Similar to the multiple-family residential districts, the office districts have been utilized as a buffer between single-family residential and more intense land uses. Although most of the land presently zoned for office uses has been developed, office uses also exist in other zoning districts as accessory uses, especially in regards to industrial and technology and research developments. In total, office only accounts for less than 2% of the Township's land area.



Technology & Research

Land used for high-technology, research and prototype developments.

Technology and research uses may be located within the TAR or MR zoning districts. The TAR zoning district is located north of M-14 between Ridge Road and Sheldon Road and contains the Metro West Technology Park, which is home to many automotive research businesses, including Adient, Freudenberg-NOK, and AVL. Also within the TAR zoning district is the Michigan Life Science & Innovation Center, which is a regional incubator for early-stage life science, bio-science, pharmaceuticals, and medical device companies. The total land area allocated for technology and research uses is approximately 12%.

Industrial

Land used for industrial purposes, such as warehousing, manufacturing, assembling, packaging and/or testing of products.

Many of the industrial uses are located within platted industrial parks, for instance, the Metro West Industrial Park, which is located south of Five Mile Road between Beck Road and Sheldon Road, contains over 50 businesses. Convenient access to the freeways and the CSX Railroad, combined with the local labor force, has made the Township an attractive location for major automotive suppliers.

The Michigan International Technology Center - MITC

Since 2009, Plymouth and Northville Townships have collaborated with numerous stakeholders to redevelop the Five Mile Corridor between Napier and Beck Roads. Formerly known as the former Detroit House of Corrections (DeHoCo) properties, the goal of the MITC is to transform these unused parcels into an economic development and job-creation zone.

Planned infrastructure improvements in the corridor include sewer lines, water lines, and a rebuild and widening of Five Mile and Ridge Roads to accommodate the expected development in the corridor – approximately \$28 million in needed infrastructure work. The MITC Authority will capture a portion of the tax increment in the subject area to provide funding to clean up the contaminated areas, and do the infrastructure improvements.

The MITC Authority is governed by a 5-member board comprised of the Township Supervisors for Plymouth and Northville, two Township representatives (one from each township) and a business owner who is affiliated with the MITC corridor. The Authority is a separate governmental unit and complies with all open government laws. Currently, development is underway at Five Mile and Ridge Roads, and on the Northville side of Five Mile west of Beck.



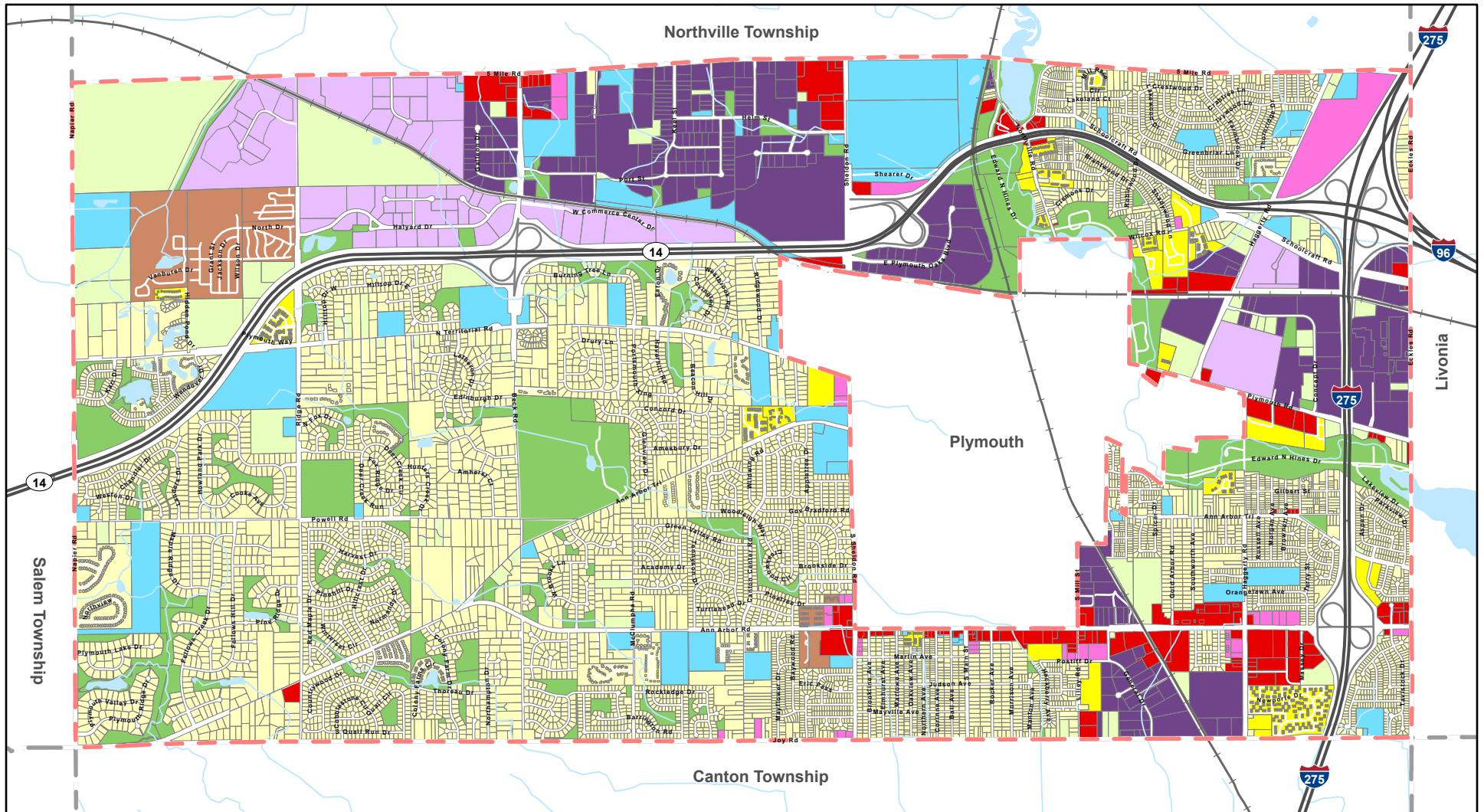


■ Recreation / Open Space

Land used for recreational purposes, such as Township-owned parks, the Middle Rouge Parkway and private open space within subdivisions.

One of the largest contiguous areas of recreation/open space uses is the Middle Rouge Parkway, which occupies approximately 278 acres in the eastern portion of the Township, and is owned and maintained by Wayne County.

Additionally, many of the platted subdivisions within Plymouth Township contain private open space areas. These areas are specifically delineated as a park on the official plat layout of the subdivision, and cannot be utilized for any other purpose. For this reason, private open space areas within a subdivision plat have been included within this land use category, and not single-family residential. However, these are private spaces, and thus, not available for enjoyment by the larger community.



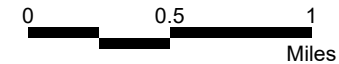
Map 1: Existing Land Use

Charter Township of Plymouth,
Wayne County, Michigan

April 13, 2021

LEGEND

| | |
|--|---|
| Agricultural / Undeveloped | Office |
| Single-Family Residential | Public / Institutional |
| Multiple-Family Residential | Recreation / Open Space |
| Manufactured Housing | Technology & Research |
| Commercial | Industrial |



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.



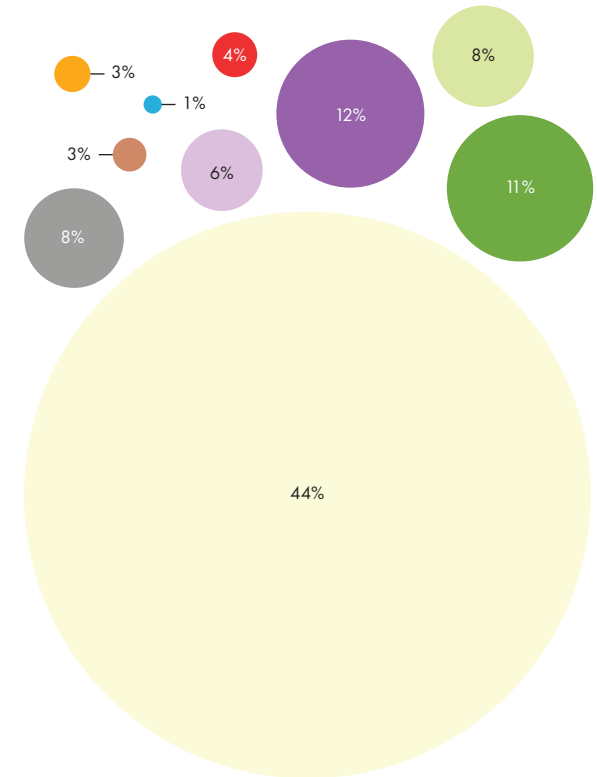
LAND USE PATTERNS

The Existing Land Use Map demonstrates that a significant portion of the land area within Plymouth Township is occupied by single-family residential uses. As of 2020, the single-family residential land use category accounts for 44% of the land area. The next largest categories are industrial, with 12% of land area, and recreation/open space at 11% of land area. Within the past 5 years, the amount of agricultural/vacant land experienced the largest decrease in land size by 28%. These land use patterns indicate that Plymouth Township is nearing its maximum build-out and that new development projects may likely involve the redevelopment of underutilized or grayfield sites.

Existing Land Use, Plymouth Township 2015–2020

| EXISTING LAND USE | 2015 ACREAGE | 2020 ACREAGE | DIFFERENCE | |
|-----------------------------------|-----------------|-----------------|------------|---------|
| | | | ACREAGE | PERCENT |
| ■ Agricultural / Undeveloped Land | 928 | 665 | ↓ 263 | ↓ 28% |
| ■ Single-Family Residential | 3,730 | 3,783 | ↑ 53 | ↑ 1% |
| ■ Multiple-Family Residential | 256 | 242 | ↓ 14 | ↓ 5% |
| ■ Manufactured Housing | 225 | 225 | 0 | 0% |
| ■ Office | 121 | 122 | ↑ 1 | ↑ <1% |
| ■ Commercial | 243 | 300 | ↑ 57 | ↑ 23% |
| ■ Technology & Research | 207 | 545 | ↑ 338 | ↑ 163% |
| ■ Industrial | 1,189 | 988 | ↓ 201 | ↓ 16% |
| ■ Public / Institutional | 571 | 677 | ↑ 106 | ↑ 18% |
| ■ Recreation / Open Space | 1,021 | 977 | ↓ 44 | ↓ 4% |
| Total: 8,524 acres | | | | |

Figure 1. Existing Land Use, A Scaled Comparison, 2020



NATURAL FEATURES & OPEN SPACE

The woodlands, wetlands, watercourses and other natural features of Plymouth Township help to define the character of the community and contribute to a positive visual image. As a community that is mostly “built out,” one of the challenges that the Township faces is ensuring that redevelopment projects fit into the context of the existing environment. The preservation of natural features is one technique that may be used to create a transition between land uses, and also contributes to the overall image of the community.



Surface Water Quality

Surface water bodies function as an interconnected system, meaning the condition of one body of water will affect the other. The addition of paved surfaces increases the risk of contamination for surface water and increases the amount of water flowing through rivers and streams. Stormwater runoff, flooding, and municipal wastewater discharge are just some of the ways toxins are introduced into surface water.

Plymouth Township has the ability to create best management practices that fill in gaps within county, state and federal water regulations. Increasing the number of trees and vegetation, riparian buffers, improvements in storm drainage systems, reuse of wastewater, environmentally conscious designed recharge ponds, and green infrastructure are some of the ways the Township can preserve surface water.

Additionally, some communities conduct resource inventory and information analyses, create watershed management plans, or provide zoning based incentives to developers in return for preservation of open space or environmentally critical features. Considerations of these initiatives should be a priority for the Township.

EXISTING NATURAL FEATURES

Within Plymouth Township are a number of natural features, including woodlands, wetlands, rivers, streams and lakes. As shown on Map 2: Natural Features, this includes:

- 311.98 acres of wetlands;
- 80.42 acres of lakes and rivers; and
- 30.89 miles of streams and drains.

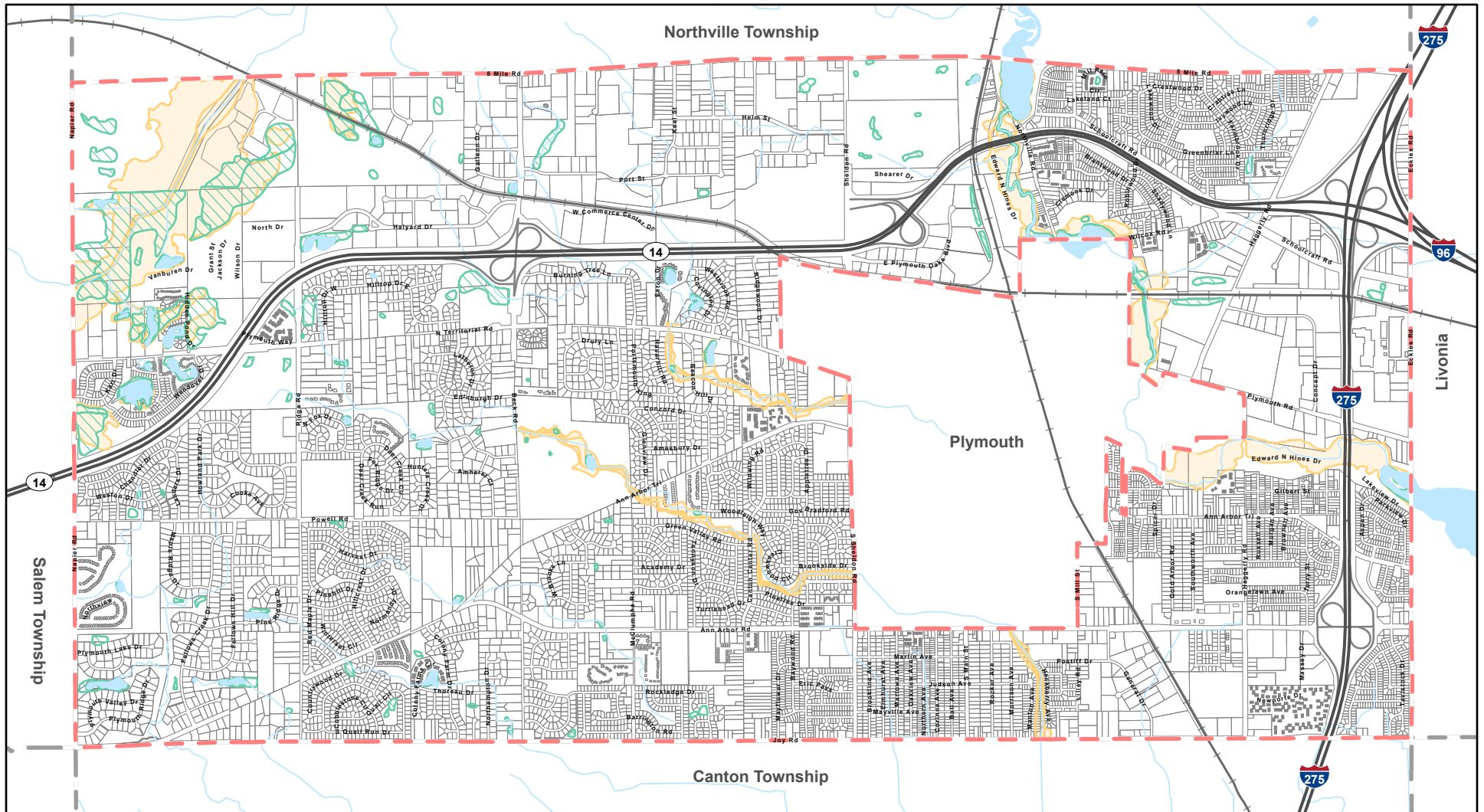
Since all of the Township is located within the Rouge watershed, all land areas (16.6 square miles) drains into the Rouge River system. This encompasses drainage from all residential properties, commercial and industrial sites, and roadways. The Township is a member of the Alliance of Rouge Communities (ARC), which encourages regional cooperation for the sustained quality of the Rouge River watershed. Educational awareness by the community of these natural features is critical to ensuring they are maintained and enhanced for future generations of residents to enjoy.

WATERCOURSES

Within the Township are the following rivers, creeks and tributaries:

- Johnson Creek Drain
- South Branch Tonquish Creek
- Middle Rouge River
- Tonquish Creek
- Willow Creek
- North Branch Fellows Creek
- Fellows Creek

A number of lakes are also located in Plymouth Township: Phoenix, Wilcox and Newburgh which are all part of the Middle Rouge water system. These three lakes have the potential of offering particular recreation uses which would otherwise be difficult for the Township to provide for its residents.



Map 2: Natural Features

Charter Township of Plymouth,
Wayne County, Michigan

April 13, 2021

LEGEND

- Plymouth Township Boundary
- Other Municipal Boundaries
- Floodway
- Wetlands
- Lakes
- Rivers, Streams, and Drains



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.





WOODLANDS

Historically, the Township was primarily covered by a mix of Beech-Maple and mixed Oak forests. Today, only a few large wooded areas remain, including Miller Woods. The Plymouth Canton Community School District owns this 39-acre property (known as the Miller Woods), located at the northeast corner of Ridge and Powell Roads. This wooded area has been determined to be of special value per the University of Michigan, and has been used by the University as a field classroom. The Township should work closely with the School District to ensure protection and preservation of this important natural resource area; if the District determines there will not be a need for the property and finds it to be surplus property, the Township should consider the purchase of the site.

FUTURE TREE CANOPY

Currently, the Township does not have a community-wide woodland or tree preservation ordinance. While there are some standards for tree replacement with new developments, only 25% of trees that are removed must be replaced. In the past, the Township has instead encouraged the use of a Development Option, which acts as an overlay on a property being proposed for development, and allows for the site to be modified in order to retain natural features and create open space.

Examples include:

- Ridgewood Hills Subdivision, approved contingent to the maintenance of wooded and swale areas.
- Eaton Estates, provided for 12 acres of private park and a small lake.
- The woods at the north end of Township Park, which contain a valuable Beech forest (17 acres), was donated to the Township during a development in the early 2000's.

By updating certain Township Ordinances to reflect best practices, and by continuing initiatives such as the Residential Tree Planting Program, improvements to the tree canopy can be made. One important facet of the future tree canopy is diversification of species. New and replacement tree will often be a different species than what was or is current there; this is specifically designed to create a greater diversity of species within the site, which will help ensure longevity and resiliency of the overall tree canopy.



WETLANDS

A number of wetlands are scattered across the community and are generally concentrated within the northeast portion of the Township. Some of these wetlands are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). However, EGLE typically only regulates wetland areas that are within 500-feet of an inland pond, lake or stream or if the wetland is greater than 5-acres. Additional local regulations could be investigated, such as the potential for a wetland preservation setback of 50-feet, or natural planting standards, to provide for greater environmental protection and restoration of wetlands.

SOILS

The soils of Plymouth Township are varied as a result of the glacial action which passed through Michigan during the glacial age. There are approximately five primary soil types distributed throughout the Township consisting of sand, clay, muck, loam and alluvium. The eastern one-half of the Township consists mainly of loam and sandy soils while the western one-half of the Township consists mainly of clay. The alluvium deposits follow the river and stream beds and are found along the open drainage areas of the Township.



Above: New residential trees planted in a neighborhood right-of-way, 2020.

RESIDENTIAL TREE PROGRAM

The Township should continue to offer the residential tree program through the establishment of a dedicated budget, and quantify the results, starting with a GIS inventory of the existing public streets trees and the tree canopy. The tree canopy is a living organism which requires on-going maintenance so it can remain viable and provide the community with the benefits associated with healthy tree cover. Trees are a vital piece of the Township's infrastructure.



NATURAL FEATURES & OPEN SPACE RECOMMENDATIONS

The following action steps are recommended to maintain and improve the Township's natural resources and open spaces:

1. Continue to offer the Residential Tree Planting Program.
2. Research and adopt a woodland protection ordinance for tree and rural character preservation, including appropriate fines for violation of tree removal.
3. Develop zoning standards for Low Impact Development (LID) techniques and best practices. LID is a stormwater management approach that focuses on using natural systems and features to filter and contain rainwater, protecting the water quality of the area. Examples of LID include native vegetation, bioswales with filters, impervious surfaces, cisterns, etc.
4. Become a designated Tree City USA. This national program provides the framework for managing and expanding the tree canopy and requires that four (4) standards are met. The criteria are: (1) having a designated tree board (or similar environmental organization); (2) having a tree care ordinance; (3) having an annual budget for tree activities; and (4) observation of Arbor Day by resolution of the municipality. Such a designation provides the Township with direction, technical assistance, public attention and national recognition.



5. Work with the School District to realize the potential of school sites as a passive recreational visual and environmental asset to the surrounding neighborhoods and provide technical assistance.
6. Research and adopt a Dark Sky Ordinance. In developed areas, light pollution is a common issue. In Plymouth Township, the Planning Commission has consistently heard concerns by residents regarding the brightness and height of existing and new commercial/industrial lighting. While the Township is only one community in the Detroit metropolitan, it can be proactive in setting best practice standards. To do this, the Township should revise the existing lighting standards of Article 28 in the Zoning Ordinance to limit glare and light trespass.
7. Require environmental impact assessment statements to evaluate the impact that proposed development may have on the natural resources of an area, including geology, slopes, vegetation, historical features, wildlife, and infrastructure needs.



Left: Resident rail barrel pick-up, hosted by the Environmental Leadership Commission, summer of 2020, with a partnership with Friends of the Rouge.

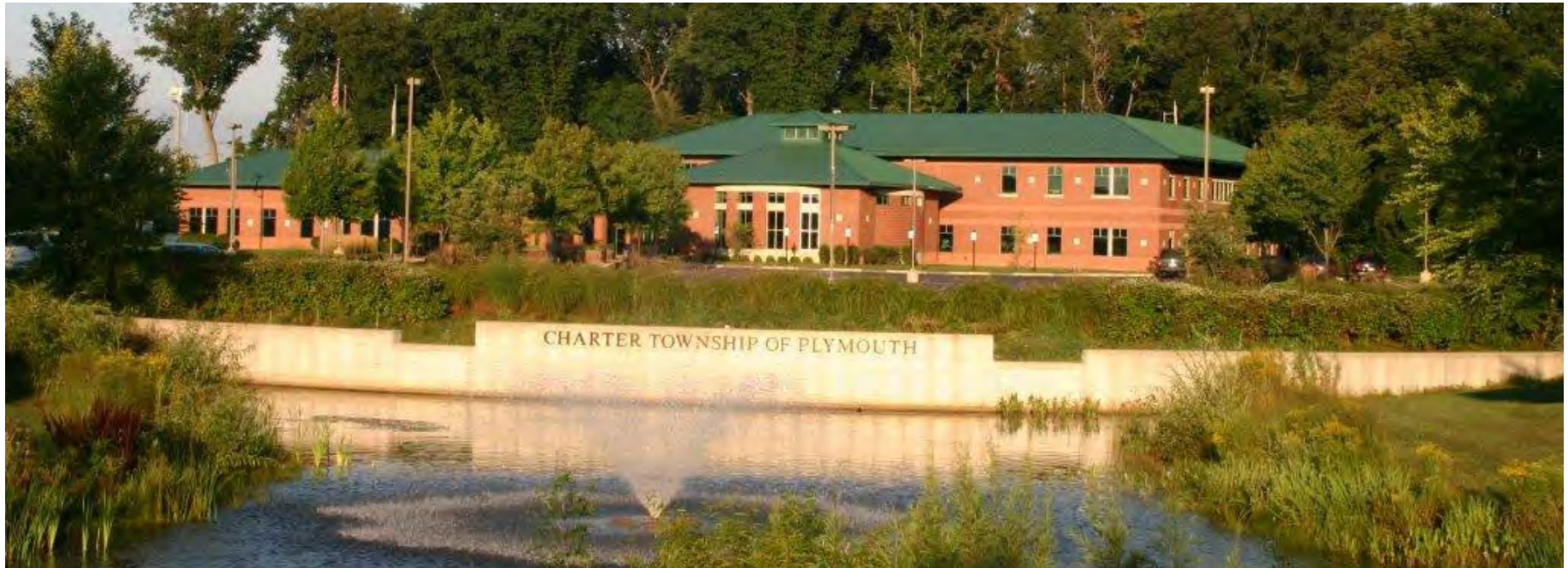
Environmental Leadership Commission

The Township's Environmental Leadership Commission was created in 2019 by Ordinance N0. 1016, Amendment No. 23. The purpose was to create a citizen commission to address local environmental education, programs, stewardship, sustainability, outreach, and similar issues in and for the residents and guests of the Charter Township of Plymouth. The Commission is charged with the following:

- Educating residents, businesses and guests regarding environmental stewardship and awareness, environmental policies, sustainability, and best practices.
- Partnering with individuals, government agencies, businesses, and allied environmental organizations to promote community participation in local environmental protection, awareness, education, and enhancement projects and initiatives.
- Serving as a resource for information to answer questions from residents of the Township and others about environmental protection issues and policies.

COMMUNITY SERVICES & INFRASTRUCTURE

The presence of community services, infrastructure and amenities are among the many factors considered when an individual chooses a location for a home or a business. In the case of residential development, the quality of the local schools and recreation opportunities may attract potential home buyers. Public safety and other services also contribute to the desirability of a community for all types of development. Within the context of the Master Plan, it is important to recognize the impact that community services and infrastructure may have on the physical development of the community, and identify any potential barriers for future growth.



TOWNSHIP SERVICES & FACILITIES

The need for public safety and other services has grown along with the community. In the early 1950's, Plymouth Township had a volunteer fire department, which later transitioned to the Plymouth Community Fire Department. Today, the Charter Township of Plymouth operates a full time professional fire department that continues to grow to serve the community's needs. The Fire Department is now an all hazards department that is prepared to handle emergencies into the 21st century.

Today, the Fire Department operates from Fire Station #1, which is the headquarter building located adjacent to the Township Municipal Complex, Fire Station #2 at 41212 Wilcox Rd and Fire Station #3, which is located northeast of North Territorial Road and Beck Road. The Fire Department staff includes 24 full-time firefighter/paramedics, who service the community through fire suppression and investigation, rescue operations, paramedic services, hazardous material services, emergency management, and environmental emergency mitigation. The Fire Department also provides safety programs for children and senior groups.

Similarly, police services were provided by Wayne County, until the Plymouth Township Police Department was formed in 1985. Plymouth Township provides a variety of facilities for public safety, as well as administrative functions and other community services.

MUNICIPAL OFFICES & FACILITIES

In 2006, the construction of the Township Municipal Complex was completed in order to provide residents, businesses and visitors with a single location from which all administrative offices are accessible. The Township Municipal Complex houses Township Hall, the Fire Department (Station #1), and the Police Department. The facility also contains meeting rooms, which may be reserved by homeowner associations and non-profit organizations. Other Township offices include the Department of Public Works building, which is located on Port Street. This facility is used by the Department of Public Works field crew for maintenance activities and equipment storage; the Township is currently considering selling a portion of this site as it is largely underutilized.

SCHOOL SYSTEM

Plymouth Township is serviced by an excellent public school system. The Plymouth-Canton Community School District currently operates three elementary schools, two middle schools, and one alternative school within the boundaries of the Township. The School District also owns undeveloped property at the northeast corner of Powell Road and Ridge Road; the property contains an existing wooded area, which is known as Miller Woods.

Additional private and charter schools are also located throughout the Township. In some cases, the schools are located on major thoroughfares and adjacent to residential neighborhoods. Schools located within non-residential areas, such as a technology or industrial park, are not appropriate and are not supported by this Master Plan.

OTHER PUBLIC FACILITIES

Other public facilities available to Township residents include the Plymouth District Library and the U.S. Post Office. The library is located on Main Street in the City of Plymouth, and was established as a joint venture between Plymouth Township and the City of Plymouth in 1985. The library offers a wide array of books, magazines, books on tape, DVDs, video games, digital e-books, and e-audio books. The U.S. Post Office provides services from a facility located northwest of Clipper Street and Beck Road.



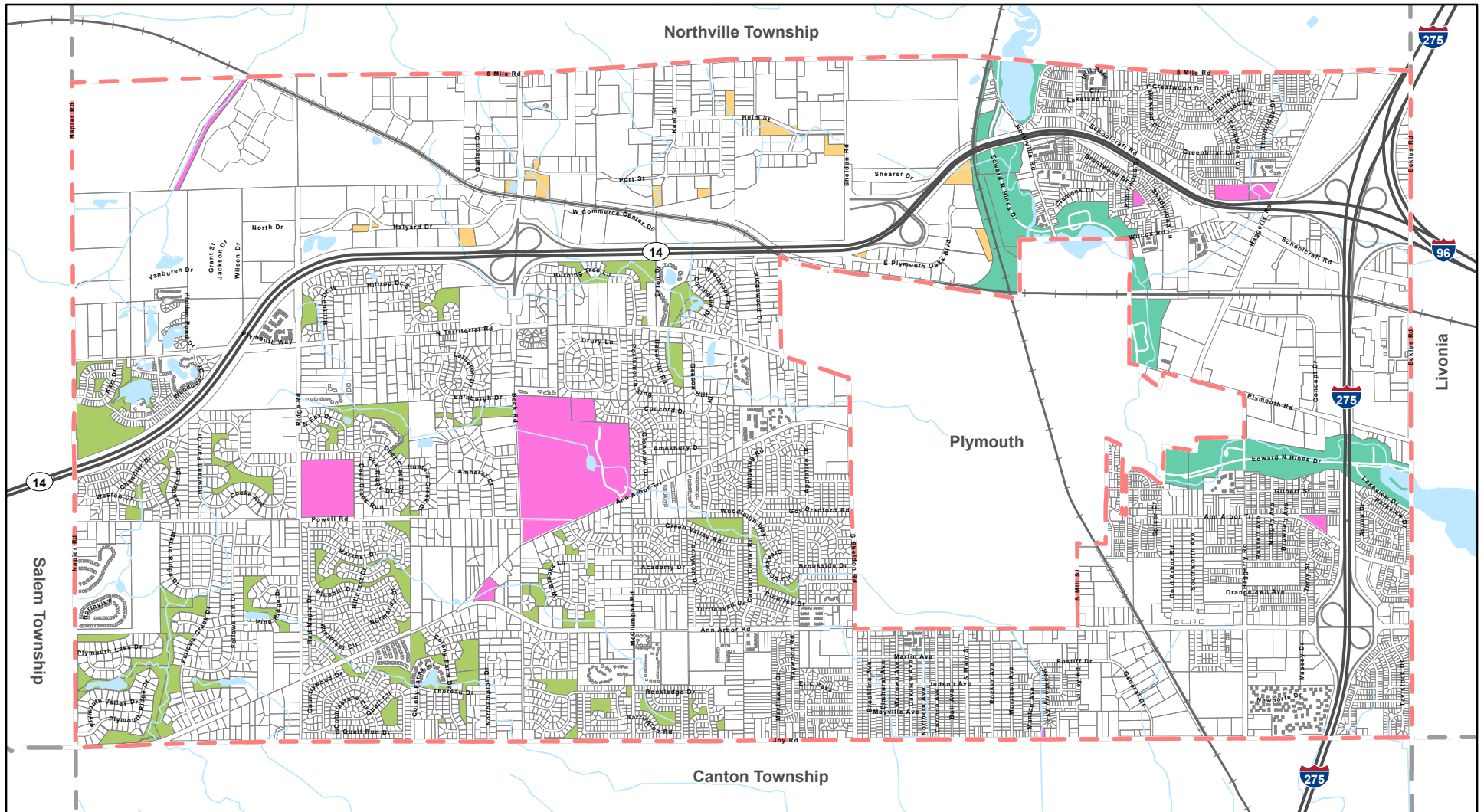
Above: There is an opportunity to consolidate and sell a portion of the current DPW yard (at 13-acres in size) to accommodate a new technology or light industrial business.



PARKS & RECREATION

Over the years, the Township has expanded the recreation opportunities available to Township residents. The Amrhein farm property was purchased in 1969 and developed into Township Park, which is located adjacent to an 18-hole golf course (Hilltop Golf Course). Township Park features baseball diamonds, a sledding hill, a sprayscape, play structures, a fishing pond, walking paths, and pavilion and shelter facilities. The Township has also developed several smaller parks; two of the most popular are the Lake Pointe Soccer Park, which is located northwest of Haggerty Road and Schoolcraft Road, and the Miller Family Park, which is located along Ann Arbor Trail. The Lake Pointe Soccer Park provides two soccer fields, a pathway system, and a shelter with restroom facilities. The Miller Family Park offers play structures, a pavilion, and a large open play area for children. Township residents also have access to the Middle Rouge (Hines) Parkway, which meanders through the eastern portion of the Township and provides a variety of recreation opportunities, including play structures, baseball diamonds, picnic areas, pathways, shelters with restroom facilities, and natural open space areas. The Middle Rouge Parkway is owned and maintained by Wayne County. For older adults, the Friendship Station provides a variety of activities for seniors including card games, exercise opportunities, and group dinners.

The City of Plymouth and Plymouth Township have partnered on the development of a joint 5-year Parks and Recreation Master Plan (2018-2022). The Plan serves as a guide for future open space, recreation facilities and programming. The joint Plan could be strengthened with the next update to include a detailed analysis of the pedestrian and cyclist network, potential links to the southeast regional non-motorized system and identification of opportunities for new recreation areas and amenities.



Map 3: Public & Private Open Space

Charter Township of Plymouth,
Wayne County, Michigan

April 13, 2021

LEGEND

- Plymouth Township Boundary
- Other Municipal Boundaries

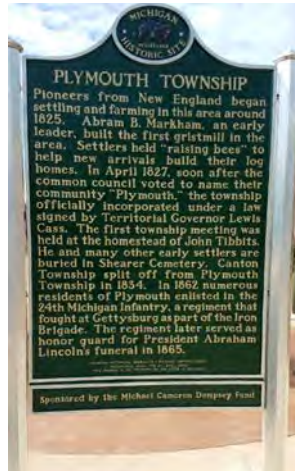
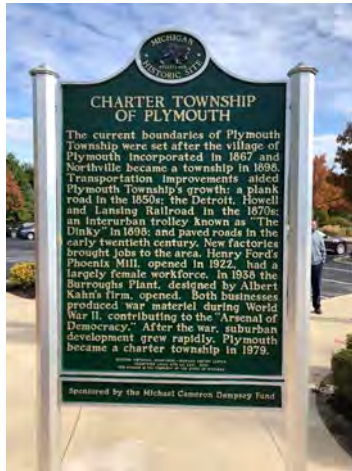
- Public Open Space
- Private Open Space
- Non-Residential Detention Areas
- Other Open Space

0 0.5 1
Miles



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.





Left: The first State Historical Marker was installed in October of 2020 at Township Hall offices, courtesy of the Michael Dempsey Foundation.

Historic District Commission

It is the responsibility of the Historic District Commission (HDC) to educate the community about the historic locations and structure within Plymouth Township. The Commissioners are charged with producing educational literature and recognizing historic locations and structures through the creation of historical markers and signage in the Township.

The HDC generates interest in historical buildings and sites by:

- Publishing a historic fact about Plymouth Township in every Township newsletter.
- Creating historic markers throughout the Township.
- Developing a photographic inventory of all structures within the Township that are at least 50 years old. These structures can be studied in depth at some point in the future.
- Creating a printed brochure highlighting some of the Township's most interesting historical structures and sites.
- Studying Shearer Cemetery, with the goal of having it become the Township's first official historic district.

PUBLIC UTILITY SYSTEMS

Access to public utility systems is another factor which may impact the potential for future growth in Plymouth Township. The rapid growth experienced in the 1960's prompted significant capital improvement projects, which led to the extension of a reliable water system and sanitary sewer system throughout the community. In 1961, a connection was made to the Detroit water system, and plans for the construction of a Township water main were completed in 1968. The first major sanitary sewer improvements coincided with the construction of the Lake Pointe Village subdivision, which was completed in 9 phases between 1957 and 1966. The Township Department of Public Works is responsible for maintaining the water and sanitary sewer systems. Conversely, the storm sewer system is not a Township-owned system.

STORMWATER

Each new development in Plymouth Township must provide facilities for managing the stormwater runoff associated with the development of the property. The proposed stormwater management facility must be designed to discharge stormwater runoff at the same rate as undeveloped or agricultural land. In most cases, stormwater runoff

is held on-site in a pond and then discharged, at an agricultural rate, to a public drain or a natural watercourse.

WATER

All municipally supplied water in Plymouth Township comes from the Detroit River. The Township is connected to the Detroit water system in the following locations: 1) Joy Road and Rocker Avenue, 2) Five Mile Road and Sheldon Road, and 3) Joy Road and Ridge Road. Water is dispersed from the three master locations to individual sites. In order to adequately service the areas of the Township with varying elevations, the Township water supply is divided into two pressure zones. The higher elevation areas are part of the Five Mile Road Tank District, and the lower elevation areas are part of the Lake Pointe Tank District. The Township water system includes over 174 miles of water main and two water towers. One tower, the Five Mile Road Tank, is located southwest of Five Mile Road and Beck Road. The other water tower, the Lake Pointe Tank, is located along Wilcox Road, south of Schoolcraft Road.

SANITARY SEWER

The Township sanitary sewer service was greatly expanded during the 1970's and 1980's, in order to support the development of new single-family residential subdivisions and industrial parks. In general, the sanitary sewer projects were privately financed by the developer. The Township sanitary sewer system includes over 140 miles of sanitary sewer and a lift station, which is located in the western portion of the Township. The sanitary sewer system discharges to the Wayne County Middle Rouge Interceptor Sewers, which are located within the Rouge Parkway and along Haggerty Road and Joy Road. The Township is restricted in the amount of wastewater that can be discharged into these sewers.

In order to ensure that the future sanitary sewer needs of the Township would be met, Plymouth Township joined Canton Township and Northville Township in forming a sanitary sewer and wastewater treatment authority, known as the Western Townships Utility Authority (WTUA) in 1986. Through WTUA, the three member communities have financed and constructed a regional wastewater collection and transportation system to increase the sanitary sewer capacity available to each community.

COMPLETE STREETS NETWORK

Land use patterns and transportation systems are inherently interconnected. Proximity to efficient and connect transportation networks is a primary factor in determining where new development occurs. However, the traffic generated from new development often exceeds the capacity of transportation systems and traffic becomes more congested. It is important that land use planning and transportation systems are coordinated, and for the transportation system to allow individuals to get around not only by car, but also by walking, bicycle or other means.

5

Township Roadways

Streets account for approximately 201 miles of land within the Township and serve an important, multi-faceted role for transportation, business activity, residents quality of life, and the health of the environment. As a charter township, Plymouth Township does not have jurisdiction over its roads.

ROAD JURISDICTION, BY MILE

| | | |
|----------------------|------------|---------|
| Wayne County: | 70% | ■■■■■■■ |
| MDOT (State): | 18% | ■■ |
| Private: | 12% | ■ |

Per 2020 SEMCOG road centerline data.



ROAD PASER RATING, BY MILE

| | | |
|---|--------------|---------------|
| ■ | Good: | 18-19% |
| ■ | Fair: | 32-35% |
| ■ | Poor: | 47-49% |

Per 2018-19 SEMCOG data.

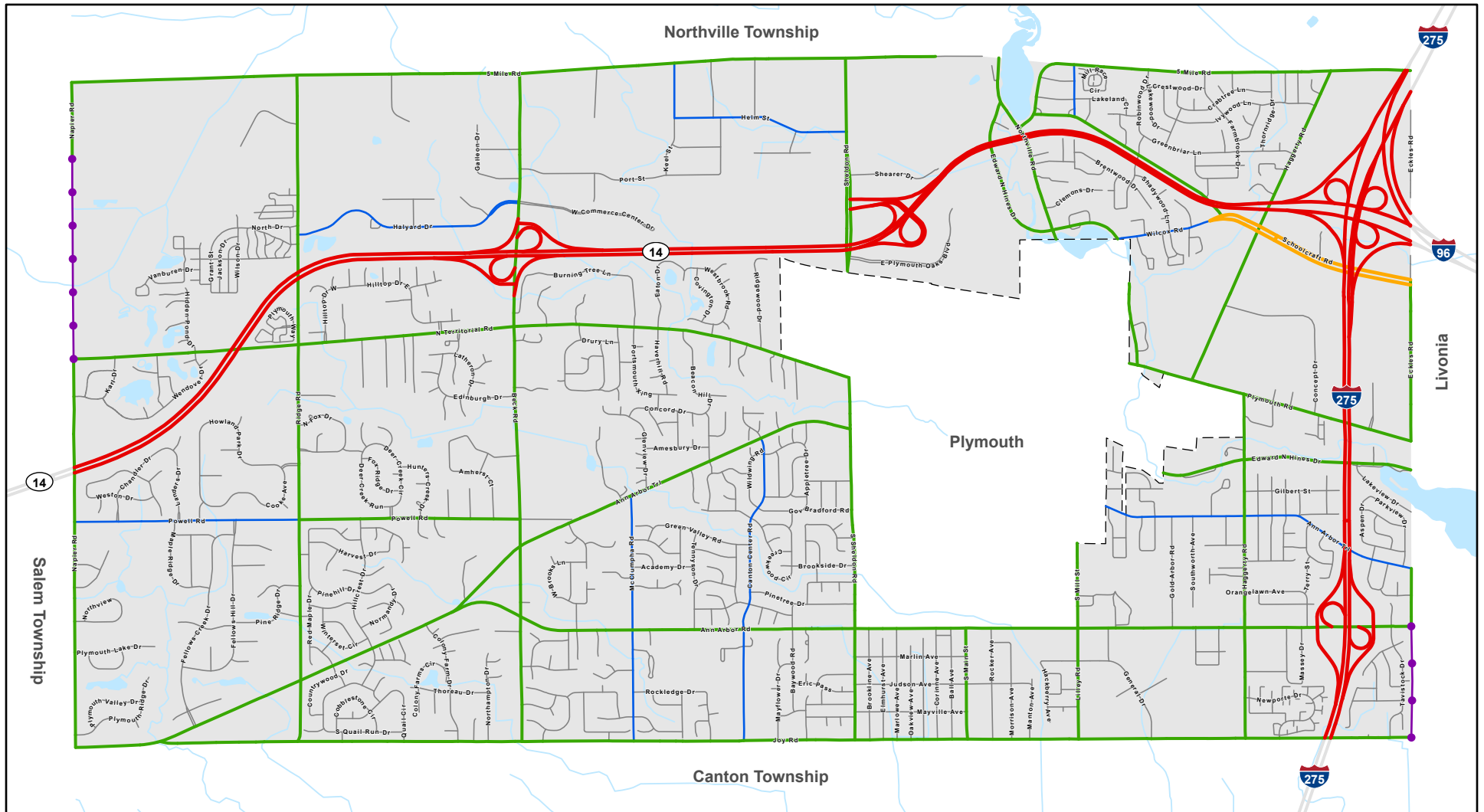
STREET NETWORK

The transportation network has played a significant role in shaping the existing development pattern of Plymouth Township, and also affects the type of development which may occur in the future. It is important that the Township continues to consider the intended function of a roadway and opportunities for non-motorized transportation paths, when making land use and development decisions.

ROAD CLASSIFICATION & JURISDICTION

As a charter township, Plymouth Township does not have jurisdiction over its roads. The state trunk line system, which includes Ann Arbor Road and the I-275 and M-14 freeways, is under the jurisdiction of the Michigan Department of Transportation (MDOT). Other major roads, which connect to the state trunk line system and provide access throughout the Township, are under the jurisdiction of Wayne County. The remaining local roads are also under the jurisdiction of Wayne County, unless the road is a private road. A number of local roads, often in residential subdivisions, are private and maintained by a Home Owners Association (HOA). This presents a challenge to the on-going maintenance and upkeep of private roads, especially for HOAs in neighborhoods that were established in the 1980s - 90s, significant investment is necessary by the homeowners to repair and replace aging infrastructure. Promoting public roads in future developments should be considered as part of the development plan process, so that future homeowners are not unnecessarily burdened.

As Plymouth Township does not have jurisdiction over roads, it is critical that the Township continues to work cooperatively with Wayne County and the MDOT, and inform these agencies of any traffic or circulation issues observed at the local level. Data regarding the traffic volume and the number of accidents for a given roadway may be used to facilitate discussions. While the County has a schedule for making road improvements, the Township can proactively conduct PASER inspections and develop a 10-year transportation Capital Improvement Plan (CIP). The PASER scale is a rating system for road pavement conditions and often informs the priority of road maintenance. The pavement condition information supplied by SEMCOG (2018-2019 data) indicates that the majority of Township roads are in poor condition (shown left).



Map 4: Road Classifications

Charter Township of Plymouth,
Wayne County, Michigan

April 13, 2021

LEGEND

- Freeway
- Super Highway (204-ft ROW*)
- Major Thoroughfare (120-ft ROW)
- Collector Road (86-ft ROW)
- Local Street (60-ft ROW)
- Future Thoroughfare (120-ft ROW)

*ROW: Right-of-Way

0 0.5 1
Miles



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.



ACCESS MANAGEMENT

One option that Plymouth Township has available to reduce vehicle conflicts and improve the traffic flow along major roads is through proper access management. While the Zoning Ordinance contains provisions for access management standards within the ARC, Ann Arbor Corridor District, these standards only apply to this one corridor in the Township. Ordinance provisions for access management should be expanded to encompass all roadways within the Township, in addition to new standards to encourage shared access and parking between sites, reducing impervious surfaces. The Township should also make an effort to coordinate with Wayne County and the MDOT to resolve traffic flow issues, which may result from forced lane shifting or unclear road pavement markings, when observed at the local level.

THE PEDESTRIAN & BICYCLE NETWORK

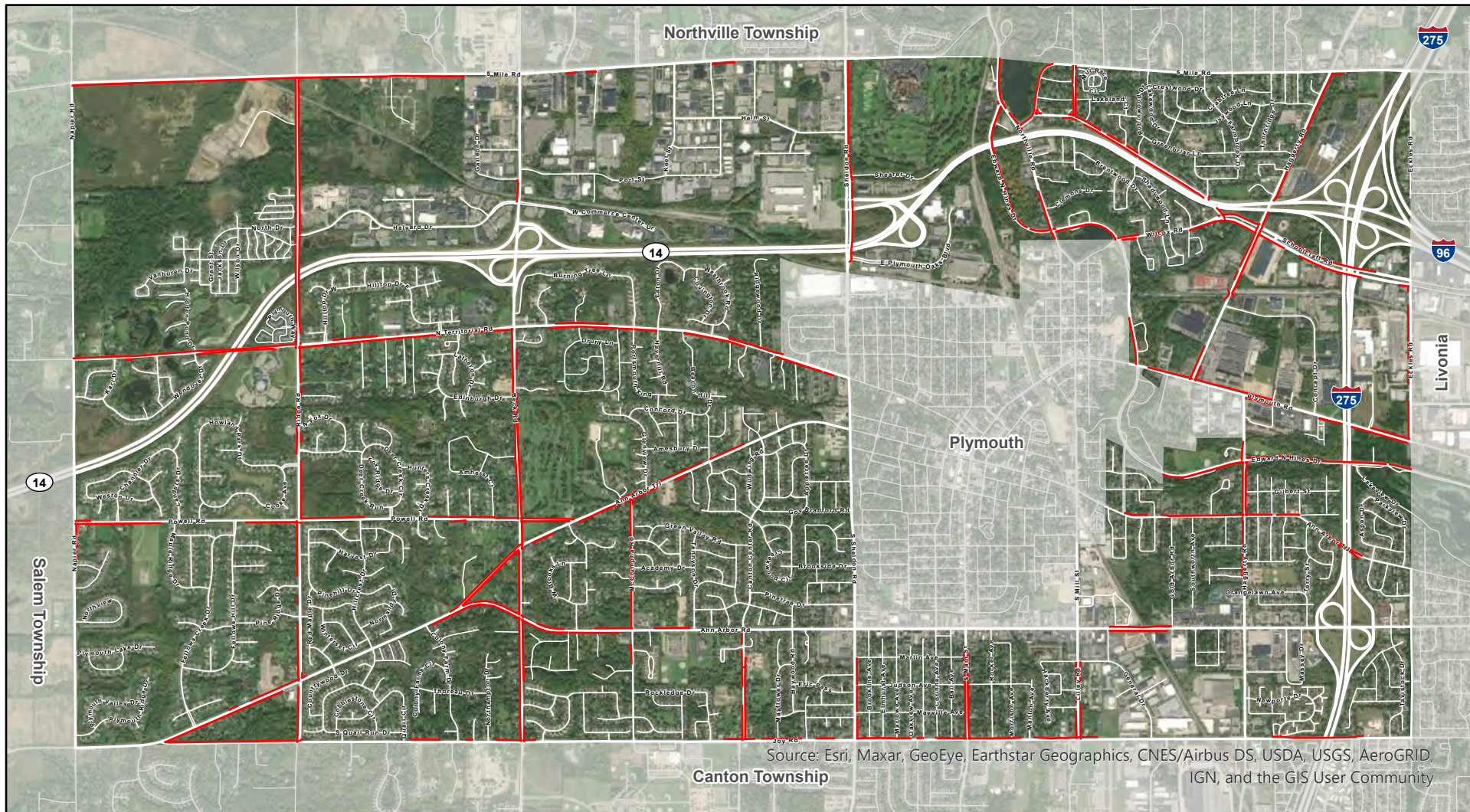
Moving forward, the Township should coordinate with SEMCOG and Wayne County to enhance pedestrian connectivity to provide safe, non-motorized routes from neighborhoods that connect to parks, schools and other destinations, and adjacent communities.

Non-motorized transportation paths provide a direct means for promoting community health. Many of the major thoroughfares include a 5-foot sidewalk within the road right-of-way. However, there are some gaps within the existing sidewalk network. In 2020, the Township completed a comprehensive Sidewalk Inventory to provide a long range guide for the planning and prioritizing of sidewalk installations. Map 4: Sidewalk Gaps illustrates all sidewalk gaps - the total length of which is 194,583 linear feet (36.85 miles).

To encourage biking opportunities, bike stations and parking should be located at key points of the non-motorized network to encourage use. Such facilities often provide tools for basic bike repair and maintenance but also provide an ideal stop to rest with facilities to secure the bicycles. In 2020, the Township installed its first bike hub at Township Park. Additional bike hubs should be strategically placed throughout the community and incorporated with new developments.

RAILROADS

The CSX railroad traverses the Township and includes crossing as several points either at or above grade. Good rail access and service is one advantage in attracting industrial users. However, many of the Township's existing and/or planned industrial areas are geared towards technology, research and fabrication, instead of distribution and heavy manufacturing. As such, the railroad does not significantly contribute economically, and has presented challenges for connectivity and public safety in the Township. The Township should continue to work with CSX to improve safety at railroad crossings and to reduce noise and/or blight from the railroad.



Map 5: Sidewalk Gaps

Charter Township of Plymouth,
Wayne County, Michigan

April 13, 2021

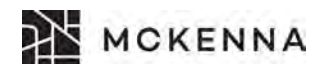
LEGEND

— Sidewalk Gaps

0 0.5 1
Miles



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.



COMPLETE STREETS NETWORK RECOMMENDATIONS

The following action steps are recommended to maintain and improve the Township's complete streets network:

1. Develop a plan with Wayne County and SEMCOG to connect into the regional non-motorized system, including Hines Parkway, and increase the roadway shoulder/install bike lanes in conjunction with the plan.
2. Implement the sidewalk gap program, with a priority to extend continuous sidewalks along/at: Ann Arbor Trail, N. Territorial, Wilcox; Powell Road, from Ridge to Beck; Ann Arbor Road; McClumpha; and Canton Center, between Joy Road and Ann Arbor Road.
3. Implement traffic calming measures and pedestrian improvements with a priority for: installing a crosswalk and/or signage to Township Park from McClumpha; improve the pedestrian crosswalk at the Beck and Ann Arbor Trail intersection; install a pedestrian crosswalk at Ridge and Ann Arbor Roads; enhanced sidewalk and bike access to Miller Park (protected shoulder); and ensure public schools, such as the High School along Joy Road (in coordination with Canton Township), have proper pedestrian crosswalks and signage.
4. Explore a reduction to the speed limits on residential roads, including N. Territorial, Ann Arbor Trail, and Ann Arbor Road.
5. Work with Wayne County to designate Ridge Road, north of M-14, as a Class A roadway.
6. Work with Wayne County and surrounding municipalities to develop preferred routes for truck traffic.
7. Install additional landscaping and screening buffers along I-275 and M-14 to reduce noise and congestion.
8. Develop requirements for streets to have a grid pattern and connections with nearby streets, and discourage dead ends and cul-de-sacs.
9. Explore opportunities to connect neighborhoods to one another via pedestrian pathways, with public easements.
10. Install lighting for pedestrian and vehicular safety along neighborhood streets and within park and recreation areas.

PLANNING FOR TOMORROW: GOALS & OBJECTIVES

Community participation brings vitality to the planning process and lays the foundation for future efforts. The Goals and Objectives from the 2015 Master Plan have been updated to reflect the Township's various stakeholders. This section details the Township's public engagement process and feedback, and the resulting goals and objectives.

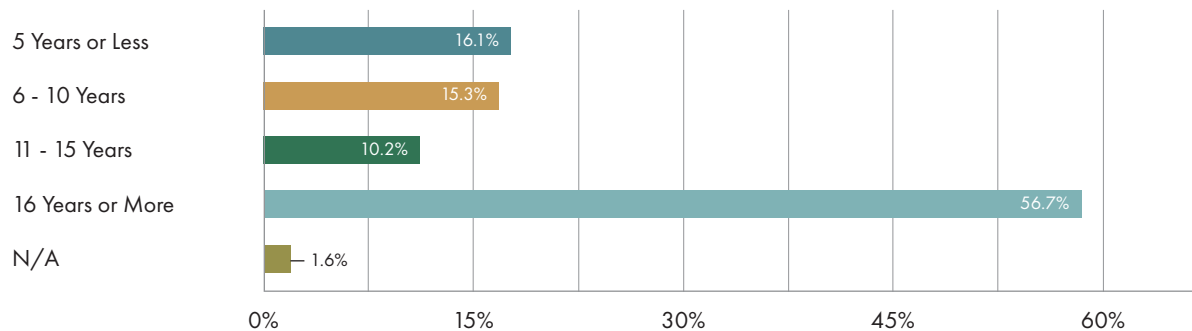


PUBLIC ENGAGEMENT OPPORTUNITIES

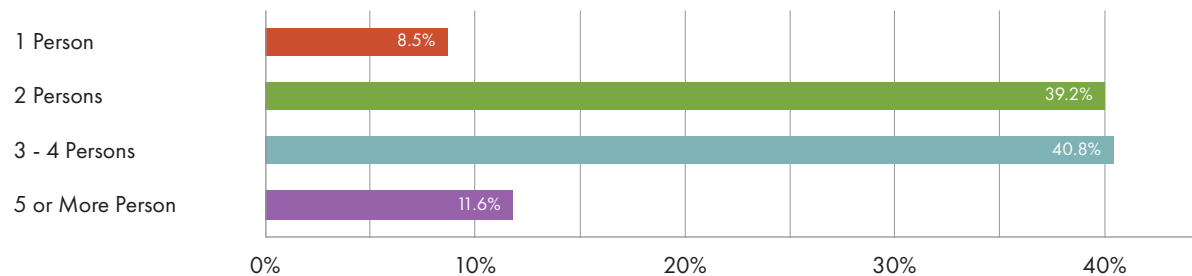
To garner input on the Master Plan, the Township hosted a community-wide survey during November and December of 2020. Over 900 stakeholders participated; key findings are documented on the following pages. Several demographic statistics on the participants of the survey are shared below.

In addition to the regularly scheduled Planning Commission meetings, the following appointed boards discussed various components of the Master Plan at public meetings: the Board of Trustees, the Historic District Commission and the Environmental Leadership Commission.

LENGTH OF RESIDENCY IN PLYMOUTH TOWNSHIP

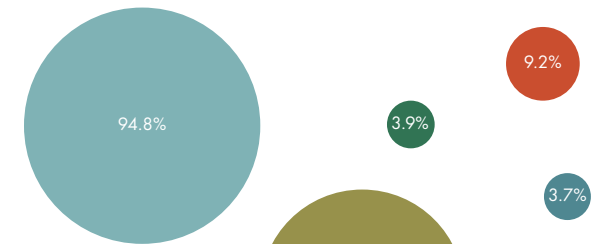


HOUSEHOLD SIZE



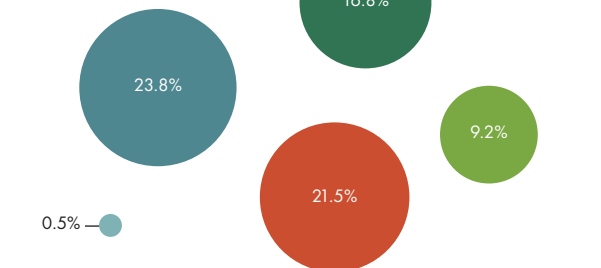
IDENTITY

- Resident of Plymouth Township
- Property Owner in Plymouth Township
- Business Owner in Plymouth Township
- Work in Plymouth Township
- I live nearby



AGE GROUPS

- Under 18
- 18 - 24 Years
- 25 - 34 Years
- 35 - 44 Years
- 45 - 54 Years
- 55 - 64 Years
- 65 - 74 Years
- 75 Years and Better



GOALS & OBJECTIVES

The community's goals are general statements of ideals which Plymouth Township strives towards. They express a consensus for community direction and are long-range considerations, aiding in the articulation of preferred development patterns.

The following seven themes are intended to provide a framework for the goals to guide the physical development of the community, and assist Township leaders in land use and community development decisions:

1. Housing & Neighborhoods
2. Sustainable Mixed-Use Development
3. Placemaking
4. Transportation
5. Open Space & Natural Resources
6. Parks, Trails & Recreation
7. Healthy Communities

Community's Vision Statements:

"To remain a calm, beautiful community where people can gather together downtown."

"Would love to see investment in public spaces and common areas. More natural areas, bike paths, and sidewalks."

"Preservation of green space while supporting business growth and development."

"Maintain and improve high standards of development and quality of life."

"After living here for 40+ years, it still has a small town feel to it, and feels like home."

A. HOUSING & NEIGHBORHOODS

NEIGHBORHOOD FEATURES

When asked to identify favorable features of their Plymouth Township neighborhood, residents responded:

- #1 Safety
- #2 Walkability
- #3 Access to Downtown Plymouth

TOWNSHIP FEATURES

When asked to rank their top three favorite features of living in Plymouth Township, residents responded:

- #1 Proximity to Downtown Plymouth
- #2 Natural Features & Open Spaces
- #3 Public Safety Services

Encourage the development of a variety of housing typologies and residential living environments to accommodate a diversity of ages and incomes.

Strategies:

1. Establish standards of excellence in aesthetics and design of residential developments that ensures the high-quality of housing units and stability of neighborhoods.
2. Encourage “missing middle housing” developments that introduce a diversity of housing options at various scales of affordability, while encouraging denser, walkable, and more connected communities.
3. Promote redevelopment efforts that embody Aging in Place design standards and encourage new senior housing developments throughout the Township.
4. Preserve historic housing stock to maintain the character and heritage of the Township.
5. Place substantial emphasis on preserving existing natural features and creating new park and open space features within residential developments, which respond to the natural features of the site or establish a framework to create a future natural area.
6. Require lots in new single-family residential developments, with frontage along a major thoroughfare or collector road, to be arranged so that the back or side of the home will face the major thoroughfare or collector road. There shall be no direct vehicular access from the lots to the major thoroughfare or collector road.

FAVORABLE MISSING MIDDLE HOUSING TYPOLOGIES

When asked if any of the following missing middle housing typologies would be supported in the Township, residents responded with the top four (4) choices as:

- #1** Bungalow Court (63% support)
- #2** Townhouse (60% support)
- #3** Side-by-Side Duplex (42% support)
- #4** Converted Garage (39% support)



Triplex

19%



Side-by-Side Duplex

42%



Fourplex

19%



Townhouse

60%



One-Story Courtyard Apartments

30%



Converted House to a Duplex

37%



Bungalow Court

63%



Carriage / Tiny House

36%



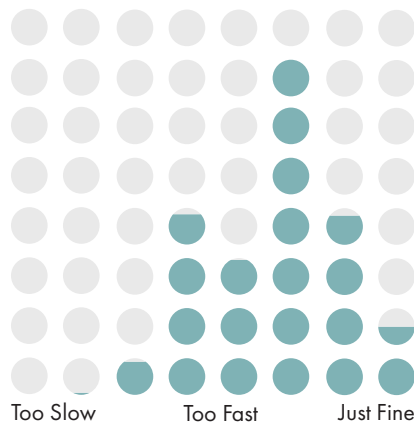
Converted Garage

39%

B. SUSTAINABLE MIXED-USE DEVELOPMENT

PERCEPTION OF GROWTH

When asked to rate the speed of development and growth in Plymouth Township, residents responded:



ENVIRONMENTAL FEATURES

When asked to rank their favorite environmental features of Plymouth Township, residents responded:

- #1 Natural Assets
- #2 Tree Coverage
- #3 Trails
- #4 Accessibility to Parks
- #5 Recycling Program

Provide for a balance of residential and non-residential uses, which will serve the needs of the community without having an adverse impact on the living environment.

Strategies:

1. Encourage the development of research and development, light industrial, and high-technology uses, to strengthen the tax base and provide jobs for Township residents.
2. Ensure that non-residential buildings and infill development located near single-family residential developments are mindful of the residential character and provide a gentle transition between the zones.
3. Promote Missing Middle housing development that encourages denser residential units such as incorporating units above first-floor commercial spaces or supporting live-work projects.
4. As part of private and public development and renovation projects, attempt to maximize green spaces, natural surfaces, plants and streetscape.
5. Provide for the continuance of nonconforming uses until they are removed, but do not encourage their continuation.

C. PLACEMAKING

Preserve the community's historic character while supporting future development that promotes an establishment of place and a healthy, active community.

Strategies:

1. Require high-quality design standards that contribute to the positive image of the Township, this includes requiring that all sides of a building, including the rear, be of a high-quality, uniform design, the incorporation of accent materials and architectural features, the treatment of a building addition to complement the existing portion of the building. .
2. Enhance understanding of Plymouth Township's historic and historic character. Support projects which incorporate interpretive panels, historical markers, and public installations about the Township's history.
3. Encourage adaptive re-use of buildings by promoting rehabilitation and reuse of existing structures.
4. Avoid locating commercial uses at every intersection of major roads. Commercial development should not be located in an area which could negatively impact residential developments and, in particular, should not alter the residential character of the portion of the Township, located west of Sheldon Road between M-14 and Joy Road.
5. Avoid unchecked "strip commercial" development, which generally occurs in an unplanned fashion and stretches out in a narrow thin configuration along a major thoroughfare, is not in the best interest of the public health, safety, and welfare because it may result in the following: (a) Numerous curb cuts along the thoroughfare resulting in conflicting turning movements and increasing the potential for traffic accidents; (b) Unsightly conditions due to the amount of continuous hard surface parking areas and signs; and (c) Potential impairment of land values for existing and future residential areas due to the hours of operation, traffic, noise, headlight glare, and on-site lighting glare.
6. Regulate streetscape improvements that promote walkability, connectivity and economic development.
7. Require that Township-owned facilities exemplify the design standards that are required of the private sector and are well-maintained.
8. Require off-street parking areas be screened by a landscape buffer or that the parking areas are located behind buildings.

D. TRANSPORTATION

FIVE YEAR PLAN

When asked to rank the top priorities for Plymouth Township over the next five years, residents responded:

- #1 Maintain & Enhance Natural Landscapes
- #2 Improve Parks & Recreation
- #3 Make Roadways Accessible to All Users
- #4 Encourage Landscaping & Architecture Standards
- #5 Limit Truck & Truck Routes

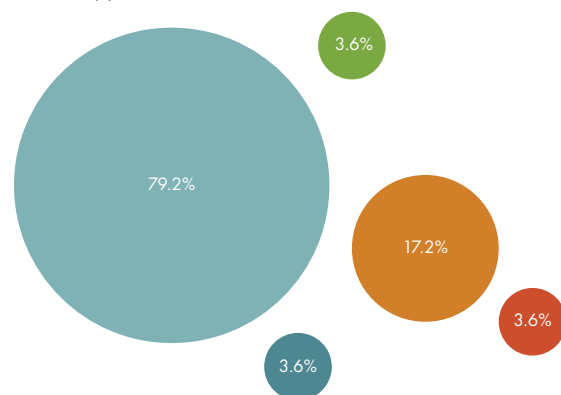
Promote a circulation system which will facilitate the smooth, safe, and efficient flow of motorized and non-motorized transportation.

Strategies:

1. Maintain and improve communication with Wayne County and the MDOT regarding traffic and circulation. Ensure that the County and State are aware of development projects that create an increase in traffic, especially truck traffic.
2. Coordinate with Wayne County and the MDOT to accommodate a non-motorized pathway system throughout the Township to support pedestrian and bicycle travel as part of roadway improvement projects.
3. Coordinate the development of major entry points to the community with Wayne County and the MDOT, including landscaping and right-of-way projects.
4. Reduce the potential for vehicular conflicts by keeping the number of curb cuts along major thoroughfares and collector roads to a minimum and encourage the use of shared access points.
5. Promote linkages and better connections between the downtown Plymouth, Hines Park, schools, and other community destinations; this includes the installation of crosswalks, and other traffic calming measures.
6. Encourage and facilitate the use of the Special Assessment District (SAD) process to ensure that local streets within residential developments are repaired when poor conditions exist.
7. Use all means possible to limit the extent of heavy truck traffic through the majority of the Township.
8. Minimize conflicts among auto, transit, bicycle and pedestrian uses for a safe circulation system.
9. Encourage all neighborhood streets to have a grid pattern and connections with nearby streets, and discourage dead ends and cul-de-sacs.

TYPICAL COMMUTE

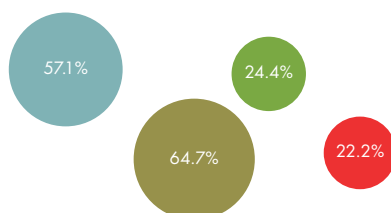
- Automobile (alone)
- Automobile (carpool/van pool)
- Walk
- Bike
- Not Applicable



TOWNSHIP IMPROVEMENTS

When asked to identify the top opportunities for improvement in Plymouth Township, residents responded:

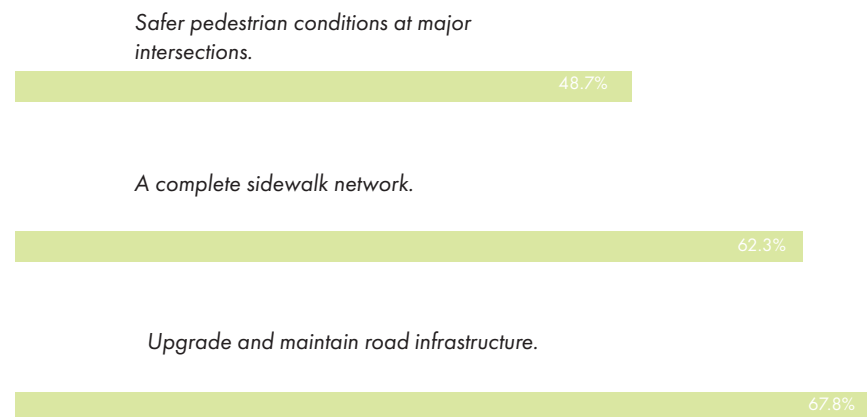
- Age & Number of Public Facilities
- Sidewalks & Bike Paths
- Road Maintenance
- Truck Traffic



TOP THREE FUTURE GOALS

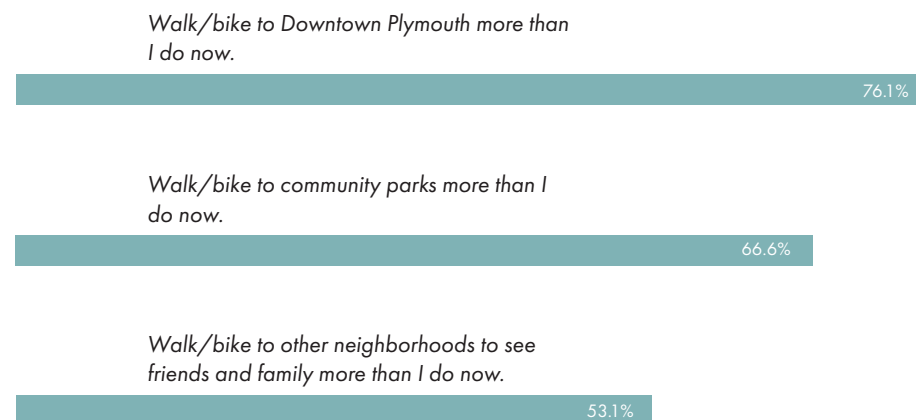
TOWNSHIP TRANSPORTATION

When asked to identify the most important transportation goals in Plymouth Township for the next five (5) years, residents responded:



PERSONAL TRANSPORTATION

When asked to identify personal transportation goals for the next five (5) years, residents responded:



E. OPEN SPACE & NATURAL RESOURCES

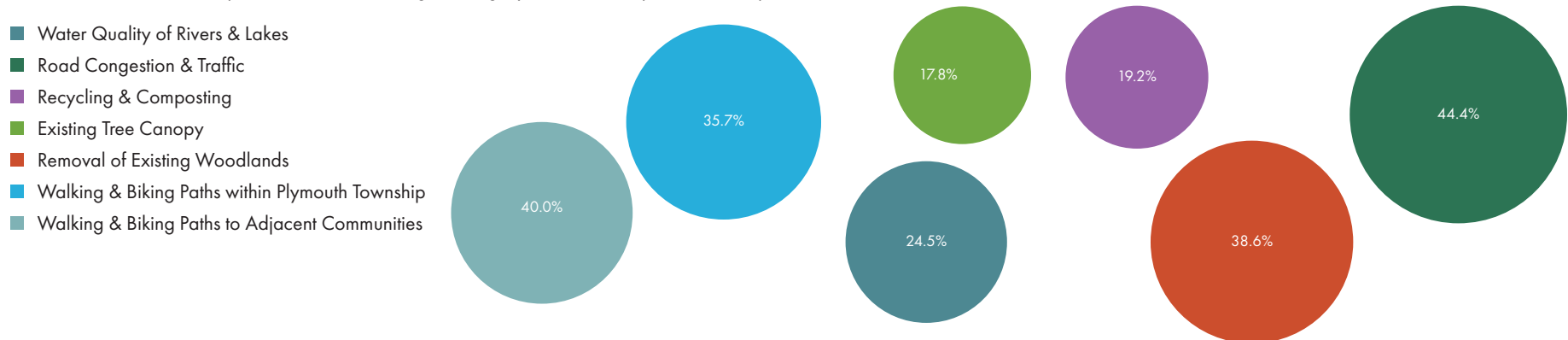
Preserve and protect the natural resources and environmentally sensitive lands within the community while maintaining appropriate public use, access, and enjoyment.

Strategies:

1. Maintain the Rouge River Middle One Sub Watershed Management Plan when implementing improvements to water bodies within Plymouth Township.
2. Encourage the proper maintenance and preservation of open space and wooded areas.
3. Protect existing streams, ponds, swales, wetlands, and open drainage areas as they form an important network which contributes to the positive image of the Township and provides for an economical means of carrying stormwater runoff.
4. Strive to protect and restore water quality, stream channels, and riparian corridors in public parks by implementing erosion control measures, soft shoreline stabilization techniques, and “no mow” areas.
5. Utilize environmentally friendly design and construction standards, including Low Impact Development (LID) techniques and stormwater best management practices when making improvements to Township parks and facilities, and during the private sector development process.

ENVIRONMENTAL CHALLENGES

When asked to rank their top environmental challenges facing Plymouth Township, residents responded:



F. PARKS, TRAILS & RECREATION

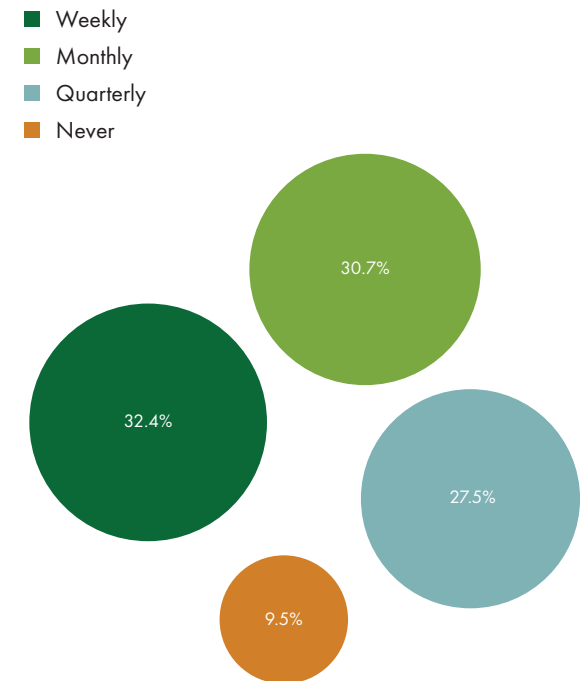
Provide quality of life benefits for Plymouth Township that promote active living, healthy lifestyles, and accessibility to recreation.

Strategies:

1. Maintain a Recreation Plan for the Township and conduct 5-year reviews of the plan to ensure that the existing and future recreation needs of the community are met.
2. Provide opportunities for a variety of recreation activities, both active and passive, throughout the Township and ensure the preservation of existing public and private parks.
3. Install a network of non-motorized pathway systems throughout the Township to improve pedestrian and cyclist safety and mobility.
4. Encourage the development of recreation facilities by the private sector and other partners, that advocates accessible recreation for community members at any stage in life.
5. Coordinate with other recreation providers to provide the community with diverse program and facilities opportunities that are cost effective.
6. Coordinate with the school district to upgrade the recreational potential and environmental qualities of the existing elementary and middle school sites.

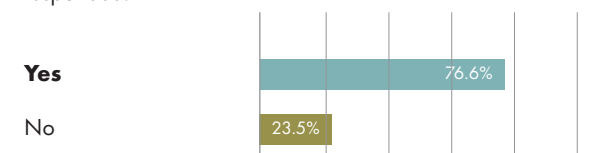
FREQUENCY

When asked often they visited a Plymouth Township or Wayne County park and/or recreation facility within the past 12 months, residents responded:



DOGS IN PARKS

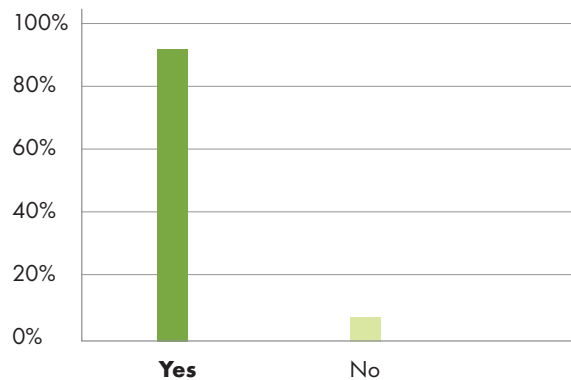
When asked if they believed leashed dogs should be permitted within Plymouth Township parks, residents responded:



G. HEALTHY COMMUNITIES

FUTURE LAND USE

When asked if they would support more land within Plymouth Township being designated for parks, recreation, and open spaces, residents responded:



Promote transparency and efficiency within municipal leadership and initiatives that support a vibrant, inviting, and safe Plymouth Township.

Strategies:

1. Continue to prioritize good governance and leadership by operating in an open and financially stable manner, focusing on maintaining high levels of citizen involvement and achieving measurable results.
2. Support the review and appropriate amendments of the Township Zoning Ordinance to ensure conformity and ultimate alignment with the goals and strategies of the Master Plan for Land Use.
3. Establish a marketing and branding campaign to increase awareness about Plymouth Township's strong quality of life.
4. Develop partnerships that center innovation to promote equitable, sustainable, and healthy development.
5. Continue to require site plan approval for all uses, except conventional single-family uses.
6. Ensure that all government units, including the Township Board of Trustees, Planning Commission, Zoning Board of Appeals, Building Department, and Community Development Department are aware of the goals and objectives of the Township and are working toward the same goals.
7. Continue the practice and enforcement of ordinances regulating property maintenance.

FUTURE LAND USE PLAN

7



BACKGROUND: FUTURE LAND USE MAP

The Future Land Use Map is a visual display of the expected future development pattern of Plymouth Township, and is an integral component of the Master Plan for Land Use. This Map provides recommendations for the continued use, new development, and redevelopment of land in the Township over the next 20+ years. The Future Land Use Map is intended to be a policy guide and should be consulted when modifications are being proposed to the Township Zoning Ordinance, or the zoning designation of a given site.

A detailed description of each of the aforementioned future land use designations is provided on the following pages, which outlines the intent and general location of each designation.

FUTURE LAND USE DESIGNATIONS

Residential

A goal of the Master Plan is to provide for a variety of housing types and residential living environments to accommodate a range of ages and incomes. The Future Land Use Map accomplishes this goal by establishing the following residential future land use categories:

RESIDENTIAL LOW DENSITY

The Residential Low Density designation is intended for large, estate-size single-family residential development with a density of 0.8 to 1 dwelling units per acre. The largest contiguous area of land designated for Residential Low Density uses is located west of Ridge Road and south of North Territorial Road and M-14.

RESIDENTIAL LOW INTERMEDIATE DENSITY

The Residential Low Intermediate Density designation is intended for single-family residential development with a density of 1 to 3 dwelling units per acre.

RESIDENTIAL MEDIUM DENSITY

The Residential Medium Density designation is intended for single-family residential development with a density of 4 to 5 dwelling units per acre. The areas which comprise Residential Medium Density uses are primarily located in the eastern portion of the Township.

RESIDENTIAL HIGH DENSITY

The Residential High Density designation is intended for multiple-family residential uses with a density of 6 to 10 dwelling units per acre. The Residential High Density areas are dispersed throughout the Township and occur in locations which serve as a buffer between single-family residential uses and more intense uses.

MANUFACTURED HOMES

The Manufactured Homes designation accommodates mobile home development, which is located in the northwest portion of the Township.

Commercial / Mixed-Use

The Master Plan strives to provide for a wealth of offices and commercial and service establishments to serve the needs of the residents of Plymouth Township. This Plan establishes the following commercial and mixed-use future land use categories:

OFFICE

The Residential Low Density designation is intended for large, estate-size single-family residential development with a density of 0.8 to 1 dwelling units per acre. The largest contiguous area of land designated for Residential Low Density uses is located west of Ridge Road and south of North Territorial Road and M-14.

MIXED-USE

The Mixed-Use designation is intended to provide for a variety of local commercial and service uses, as well as residential, specifically multiple-family and 'missing middle housing'.

COMMERCIAL

The Commercial designation is intended to offer a mix of businesses and services for the Plymouth community, and where appropriate, the larger region.

ANN ARBOR ROAD COMMERCIAL

The Ann Arbor Road Corridor Commercial designation applies to commercial uses located exclusively within the Ann Arbor Road Corridor area, the Downtown Development Authority (DDA) District.

Technology, Research & Development & Industrial Uses

A goal of the Master Plan is to encourage the development of light industrial, high-technology, and research and development uses, which will strengthen the tax base and provide jobs. This goal is supported by the Future Land Use Map, which designates a significant portion of land in the Township for Technology, Research and Development and Light Industrial land uses. These uses are represented by the following future land use categories:

TECHNOLOGY & RESEARCH

Uses that will provide an open, campus-like setting for medical, manufacturing, business, and scientific research and development. It will be an incubator for high-tech, research and development and medical businesses, and educational institutions. Production will be limited to research, development or evaluation of the merits of products, plans, or designs, as well as small scale production. This use is intended to accommodate research facilities, pilot plants, prototype production and other manufacturing operations that require the continual or recurrent application of research knowledge and activity as an integral part of the manufacturing process. Light industrial in this area should include a front office space in addition to a rear light manufacturing or warehouse space.

LIGHT INDUSTRIAL

The Light Industrial designation is intended for light manufacturing, assembling, warehousing, distributing, packaging, or testing operations. Permitted industrial uses should not impact neighboring properties, and/or do not produce large amounts of noise, smoke, glare, waste, or other adverse off-site environmental effects. Light Industrial areas should serve as a transition to between non-industrial and heavy industrial areas.

HEAVY INDUSTRIAL

The Heavy Industrial designation is intended for large-scale manufacturing, assembling, warehousing, distributing, packaging, or testing operations. These industrial uses are of a higher intensity, and should be located along railroads and/or major thoroughfares, and generally buffered by light industrial uses.

Recreation / Open Space / Public Uses

The Master Plan recognizes the importance of providing recreation/open space areas throughout the community, as well as public and institutional uses. These uses are separated into the following future land use designations and are intended for public or private parks, recreation, natural features and open spaces, along with some public and institutional uses.

RECREATION SPACE

The Recreation Space designation is intended for Township-owned parks, the Middle Rouge Parkway, developed or undeveloped public school sites, as well as water conservation or environmental preservation areas. These uses are scattered throughout the Township.

PRIVATE OPEN SPACE

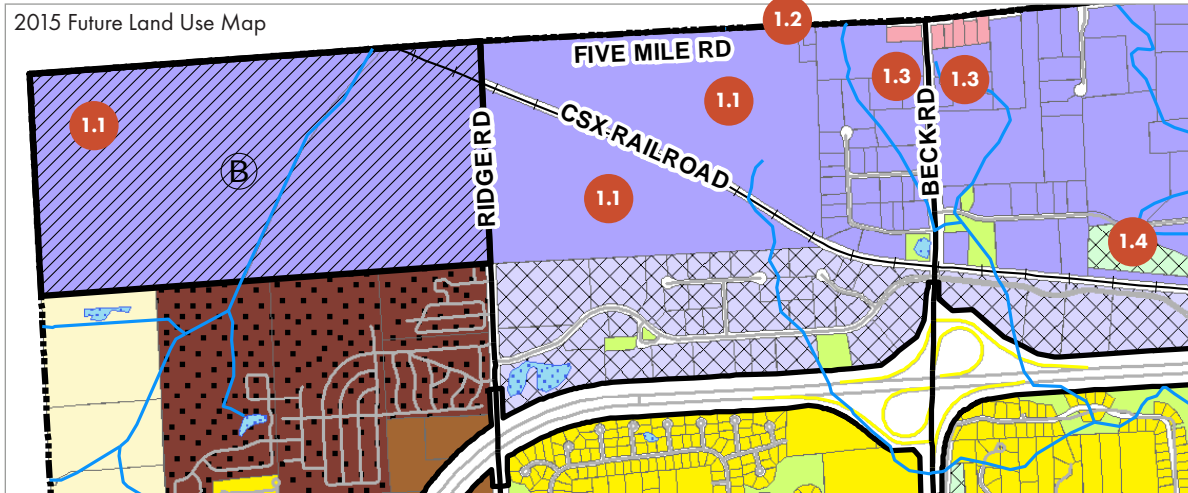
The Private Open Space designation is intended for private recreation/open space within a platted subdivision or industrial / business park and may be used for stormwater management. These areas are set aside as privately owned open space, and no further development is permitted; only passive and active recreation uses are permitted activities in these areas. These future land uses primarily occur within the Single-Family Residential zoning districts, but are also found within the TAR and IND Districts.

PUBLIC / INSTITUTIONAL USES

Public/Institutional uses are represented by the Public/Quasi-Public future land use group. These uses are dispersed throughout the Township and specifically pertain to Township administrative offices and buildings, fire stations, and the utility uses located south of Powell Road and east of Napier Road. The PL District is the main corresponding zoning district for Township buildings. However, the Department of Public Works building on Port Street is located on property that is zoned IND, and the aforementioned utility uses are located on property that is zoned R-1-E.

PROPOSED MODIFICATIONS TO THE FUTURE LAND USE MAP

The following section details proposed changes to the future land use designations of certain areas to reflect existing conditions or changed circumstances, and has made specific recommendations for the development or redevelopment of select locations. The proposed modifications are noted by a number, which corresponds to a specific subject area.



SUBJECT AREA #1

- 1.1** Current: Light Industrial
Proposed: Technology/Research & Development

Note: More in line with the vision of the Michigan International Technology Center (MITC); reflective of the existing corporate park.

- 1.2** Current: Light Industrial
Proposed: Public/Quasi-Public

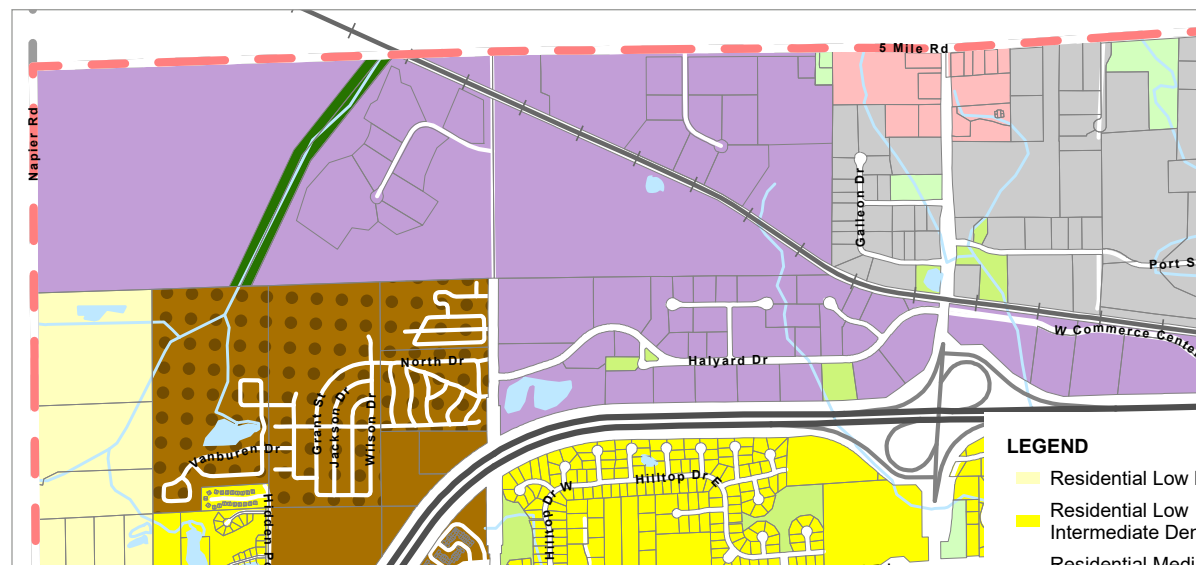
Note: Adjusted for Township water tower and utility area, as well as the Post Office on Beck and the Mosque on Five Mile Road.

- 1.3** Current: Light Industrial
Proposed: Commercial

Note: Commercial properties today (ex: Home Depot, Buddy's, etc.)

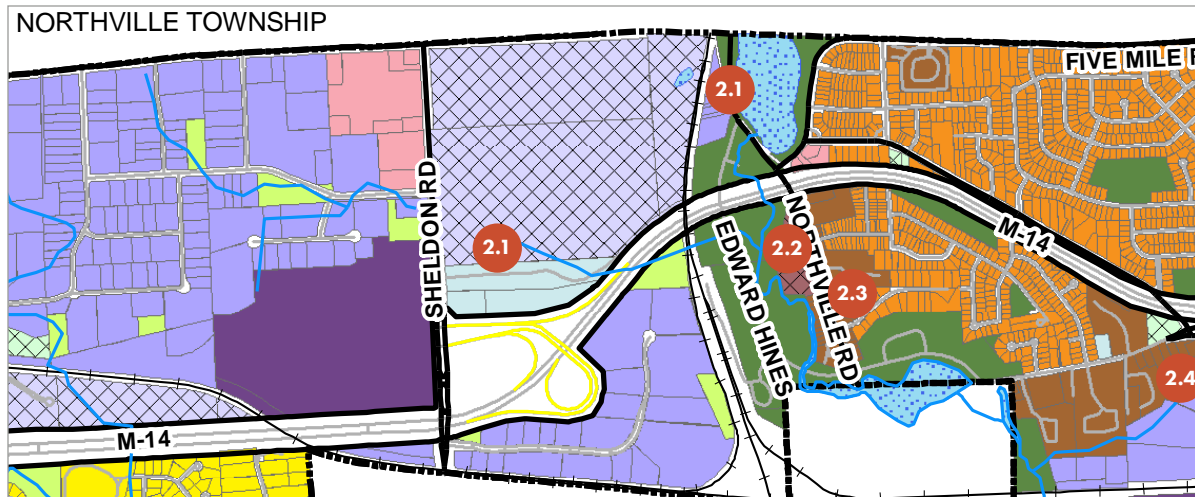
- 1.4** Current: Public/Quasi-Public
Proposed: Light Industrial

Note: Future IND development site with the sale of a portion of the DPW yard.



LEGEND

- | | | |
|--------------------------------------|------------------------------------|-----------------------------------|
| Residential Low Density | Manufactured Homes | Technology/Research & Development |
| Residential Low Intermediate Density | Office | Light Industrial |
| Residential Medium Density | Ann Arbor Road Corridor Office | Industrial |
| Residential Intermediate Density | Mixed-Use | Public/Quasi-Public |
| Residential High Density | Commercial | Recreation Space |
| | Ann Arbor Road Corridor Commercial | Private Open Space |
| | | * Existing Cell Tower |



SUBJECT AREA #2

- 2.1** Current: Technology/Research & Development
Proposed: Mixed-Use

Note: To account for the Inn at St. Johns and other undeveloped/underutilized sites.

- 2.2** Current: Recreation Space / Industrial
Proposed: Commercial

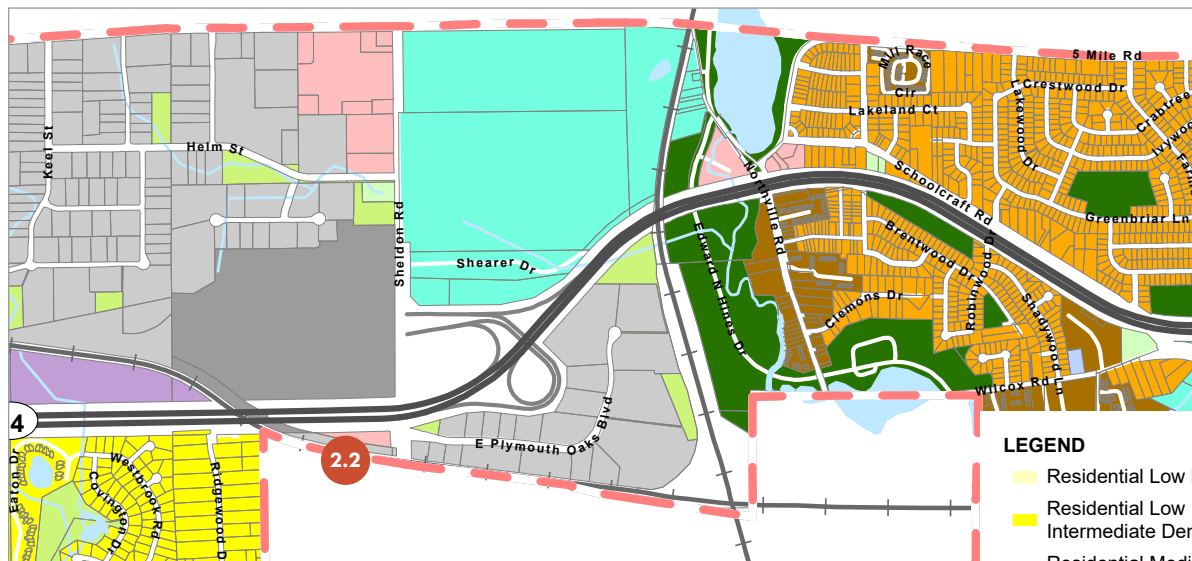
Note: To accommodate the redevelopment of the Phoenix Mill, as well as the self-storage facility on Sheldon, south of M-14.

- 2.3** Current: Residential High Density
Proposed: TBD

Note: This site is under further review by the Commission; it could potentially be single-family, multiple-family or mixed-use.

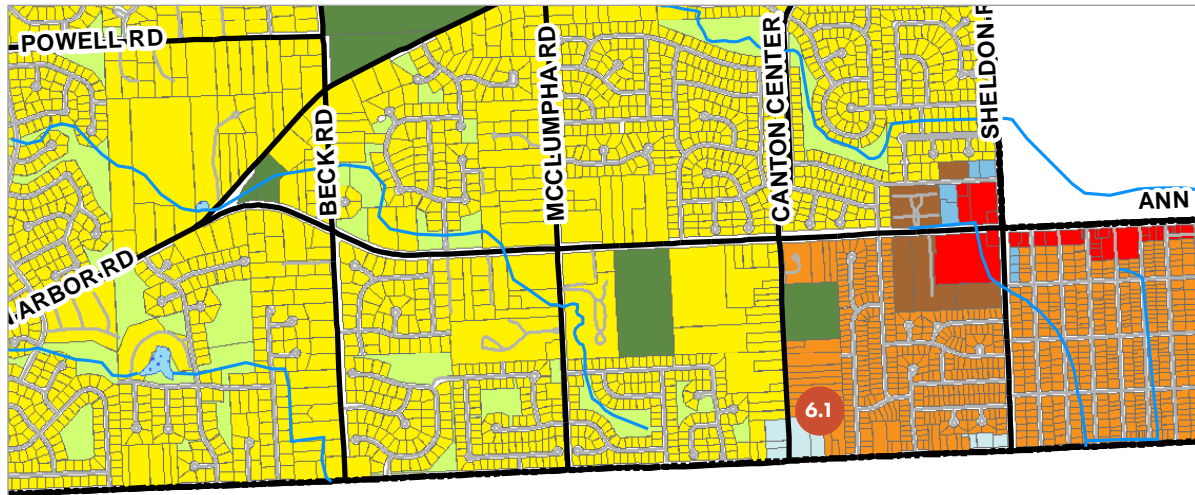
- 2.4** Current: Residential High Density
Proposed: Residential Medium Density

Note: To accommodate existing single-family homes and their development pattern.



LEGEND

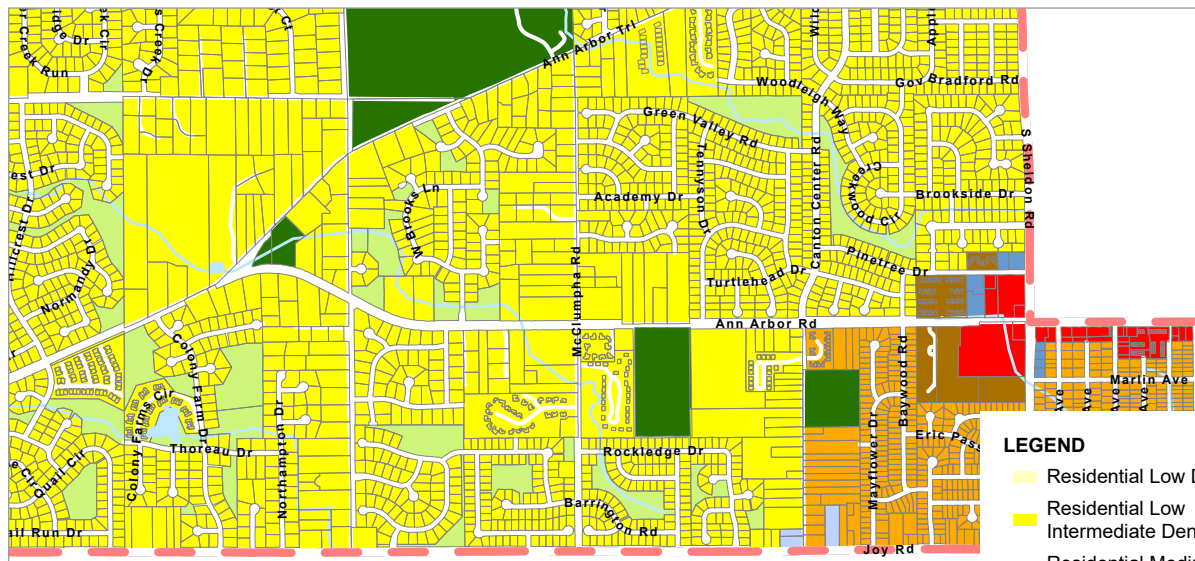
- | | | |
|--------------------------------------|------------------------------------|-----------------------------------|
| Residential Low Density | Manufactured Homes | Technology/Research & Development |
| Residential Low Intermediate Density | Office | Light Industrial |
| Residential Medium Density | Ann Arbor Road Corridor Office | Industrial |
| Residential Intermediate Density | Mixed-Use | Public/Quasi-Public |
| Residential High Density | Commercial | Recreation Space |
| | Ann Arbor Road Corridor Commercial | Private Open Space |
| | | * Existing Cell Tower |



SUBJECT AREA #6

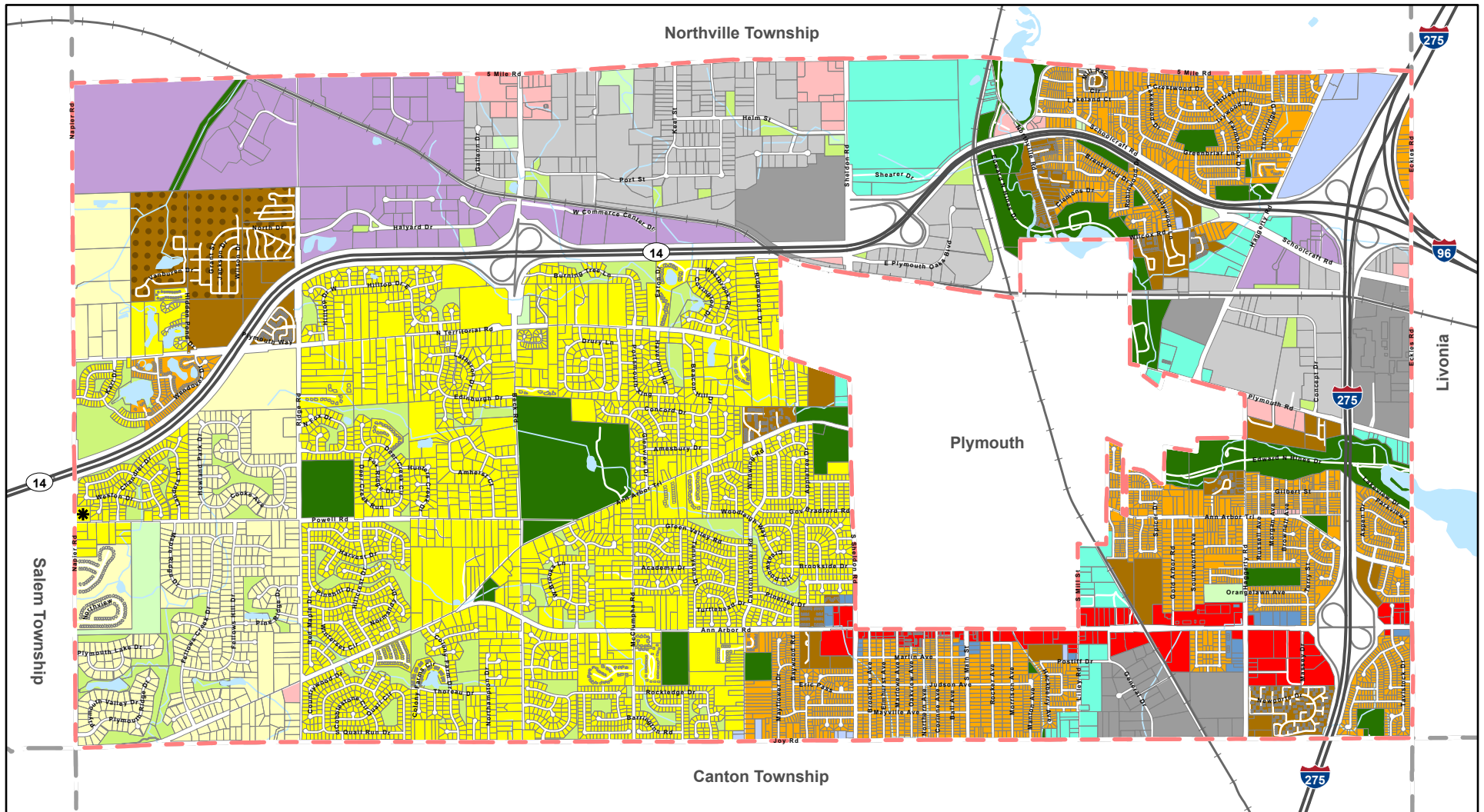
- 6.1** Current: Office
Proposed: Residential Medium Density

Note: Land has been redeveloped as single-family residences.



LEGEND

- | | | |
|--------------------------------------|------------------------------------|-----------------------------------|
| Residential Low Density | Manufactured Homes | Technology/Research & Development |
| Residential Low Intermediate Density | Office | Light Industrial |
| Residential Medium Density | Ann Arbor Road Corridor Office | Industrial |
| Residential Intermediate Density | Mixed-Use | Public/Quasi-Public |
| Residential High Density | Commercial | Recreation Space |
| | Ann Arbor Road Corridor Commercial | Private Open Space |
| | | * Existing Cell Tower |



Map 6: Future Land Use

Charter Township of Plymouth,
Wayne County, Michigan

April 14, 2021

LEGEND

- | | | |
|--|--|---|
| Residential Low Density | Manufactured Homes | Technology/Research & Development |
| Residential Low Intermediate Density | Office | Light Industrial |
| Residential Medium Density | Ann Arbor Road Corridor Office | Industrial |
| Residential Intermediate Density | Mixed-Use | Public/Quasi-Public |
| Residential High Density | Commercial | Recreation Space |
| | Ann Arbor Road Corridor Commercial | Private Open Space |
| | | * Existing Cell Tower |

0 0.5 1
Miles



Basemap Source: Michigan Center for Geographic Information, v. 17a. Data Source: Plymouth Township 2021. McKenna 2021.



ZONING PLAN

A Zoning Plan is required by the Michigan Planning Enabling Act (MPEA) and Zoning Enabling Acts (MZEAs). Section 33(d) of the MPEA (PA 33 of 2008), as amended, requires that the Master Plan shall serve as the basis for the community's Zoning Plan. Additionally, the Michigan Zoning Enabling Act (PA 110 of 2006), as amended, requires a Zoning Plan to be prepared as the basis for the zoning ordinance. The Zoning Plan must be based on an inventory of conditions pertinent to zoning in the municipality and the purposes for which zoning may be adopted.

Table 7.1 to the right presents the zoning districts that apply to each of this Plan's Future Land Use designations. Rezoning (map amendment) requests should be reviewed against this table to determine whether the requested district is supported by this Plan. In some cases, a new zoning district may be the most effective way to implement the vision of the Future Land Use Plan. Where new regulations are recommended to implement the conceptual elements of this Plan, the "new district" or "district revisions" descriptions is included along with the applicable zoning districts.

Key recommended revisions to the Zoning Ordinance are discussed in the next section, and Table 7.1 details the Zoning Plan.

Table 7.1: Zoning Plan (Future Land Use and Zoning Map Correlation)

| FUTURE LAND USE DESIGNATION | CORRESPONDING ZONING DISTRICT | ZONING DISTRICT REVISIONS / RECOMMENDATIONS |
|--------------------------------------|--|---|
| Residential Low Density | AG, Agricultural R-1-E, Single-Family Residential | District Revisions - See Note 1 |
| Residential Low Intermediate Density | AG, Agricultural R-1-H, Single-Family Residential R-1-S, Single-Family Residential | District Revisions - See Note 2 |
| Residential Medium Density | R-1, Single-Family Residential R-2, Two-Family Residential | District Revisions - See Note 3 |
| Residential High Density | R-2-A, Multiple-Family Residential MR, Mid-Rise | District Revisions - See Note 4 |
| Manufactured Housing | RM, Mobile Home | - |
| Office | OS, Office Service OR, Office Research MR, Mid-Rise OS-ARC, Office Services Ann-Arbor Road Corridor | District Revisions - See Note 5 |
| Commercial | C-1, Neighborhood Shopping C-2, General Commercial ARC, Ann-Arbor Road Corridor | District Revisions - See Note 6 |
| Mixed-Use | n/a | New District - See Note 7 |
| Technology / Research & Development | TAR, Technology & Research | District Revisions - See Note 8 |
| Light Industrial | IND, Industrial | District Revisions - See Note 9 |
| Heavy Industrial | IND, Industrial | - |
| Public / Quasi-Public | Varies | District Revisions - See Note 10 |
| Recreation Space | PL, Public Lands | - |
| Private Open Space | Varies | - |

**Note: Planned Unit Developments (PUD) and Single-Family Cluster Housing Options (CHO) are additional development vehicles for redevelopment.*

RECOMMENDED REVISIONS / UPDATES OF THE ZONING PLAN

The following are recommended revisions to the Zoning Ordinance and Map in order to further implement the vision of the Future Land Use Plan. Each number listed below corresponds to the 'Note' listed in Table 7.1.

Note 1: Consider revisions to the Cluster Housing Option to better encourage residential developments where environmentally sensitive areas will not be negatively impacted. Remove the AG, Agricultural Zoning District and rezoning these few properties to residential.

Note 2: Same recommendations as Note 1 apply.

Note 3: Consider revisions to incorporate 'missing middle housing' typologies into areas where they can easily be integrated into the existing character of the district. Examples of residential housing to incorporate include accessory dwelling units (ADUs), duplexes, triplexes, fourplexes and townhouses. Develop an overlay district that requires site design and architectural standards for such 'missing middle housing' developments, in order to ensure compatibility with the existing character. Consider provisions to permit limited non-residential use of historic buildings in the Township, to encourage historic reuse and rehabilitation.

Note 4: Consider removal of the MR, Mid-Rise Zoning District. Update the multiple-family residential standards to accommodate additional use standards, such as guest parking, common and private areas for open space and landscaping, and other amenities. Consider updates to senior housing standards to reflect current building/lifestyle trends.

Note 5: Consider removal of the MR, Mid-Rise Zoning District.

Note 6: Refine all commercial district standards to avoid further proliferation of strip commercial development as this can result in long-term, re-use issues associated with obsolete strip commercial buildings. Adaptively retrofit areas of strip-center retail to accommodate evolving trends. Enhance the requirements for landscaping, lighting and site-design, to ensure high-quality developments that will attract and retain tenants. Create provisions for gateways standards to announce arrival into the Township, including landscaping, signage and public art.

Note 7: Create a new zoning district to correspond to the Mixed-Use Future Land Use Category. Such a transitional, mixed-use district should include uses not currently provided for, such as live-work spaces, makers space and other mixed-use facilities.

Note 8: Consider refinement to the Technology and Research Zoning District to expressly permit office uses, as well as other emerging technology-related businesses, and standards for the development of business type campuses.

Note 9: Same recommendations as Note 8 apply, for the Industrial Zoning District.

Note 10: Consider revisions to this district to include municipal cemeteries and other uses, such as wetland/woodland conservation.