



ROLLES
HARBOR
CAFE



Monroe Charter Township
SINCE 1827

MASTER PLAN 2015

MONROE CHARTER TOWNSHIP, MONROE COUNTY, MICHIGAN

ADOPTED · MAY 19, 2015

Master Plan

Monroe Charter Township, Monroe County, Michigan

Adopted May 19, 2015

Prepared with the assistance of:

MCKenna
ASSOCIATES

COMMUNITY PLANNING CONSULTANTS

235 E. Main Street, Suite 105
Northville, Michigan 48167
Telephone: (248) 596-0920

*Dedicated to the Memory of W. Lawrence Toburen
Planning Commission Member 1981-2015*

Acknowledgments

Township Board

Alan Barron, Supervisor*
Bob Schnurr, Clerk*
Penny Barton, Treasurer*
William Heck, Jr
Richard Janssens
Amber Pancone
Richard Wilson

Planning Commission

Josh Henscheid, Chair*
Duane Heck
Larry Toburen
William Heck, Jr, Board Liaison
Charles Jackson
Wendy Spicer*
Fred Williams*

Zoning Board of Appeals

Randy Kull, Chair
Fred Williams, Vice Chair*
Guy Howe, Secretary
Richard Janssens, Board Liaison
Jerry Heck

Administration

Mike Black, Building Official*
Kim Fortner, Planning and Zoning Enforcement Officer*
E.J. McCormick, Township Attorney

***Master Plan Subcommittee Member**

Table of Contents

1.	Background and Purpose	1
	Regional Analysis	3
	Land Use Issues.....	3
	LIAA and Resilient Monroe	3
2.	Demographic and Economic Analysis	7
	Local and Regional Trends	7
	Economic Trends	14
	Summary.....	17
3.	Natural Resources	18
	Resources.....	18
	Summary.....	27
4.	Recreation and Community Facilities.....	29
	Overview	29
	Existing Recreational Facilities.....	29
	Analysis of Existing Facilities and Service Areas	31
	Community Facilities and Services.....	35
	Public Services	36
5.	Transportation Analysis	39
	Functional Classification	39
	Funding and Road Maintenance.....	41
	Geometric Design and Road Operation.....	41
	Traffic Volumes.....	42
	Access Management.....	42
	Complete Streets	47
	Railroads and Transit	47
	Sidewalks and Non-Motorized Pathways	48
	Adjacent Waterways.....	53
	Summary.....	54
6.	Resilient Monroe.....	55
	Planning Process	55
	Building Community Resilience	58
7.	Existing Land Use.....	65
	Land Use Categories	65
8.	Goals and Objectives.....	73
	Goals, Objectives, and Policies	73
9.	Future Land Use Plan	79
	Residential Land Use Categories.....	79
	Non-Residential Land Use Categories.....	81
	Civic and Mixed Land Use Categories	84
10.	Implementation.....	87
	Zoning Plan	87
	LaPlaisance Corridor Plan	91
	Other Proposed Projects	92

11. Action Plan.....	95
Funding Resources.....	99

LIST OF TABLES

Table 2.1: Population.....	7
Table 2.2: Age Distribution, 2010	8
Table 2.3: Value of Owner-Occupied Homes, 2010.....	9
Table 2.4: Housing Units, 2010.....	10
Table 2.5: Household Type, Monroe Charter Township, 2010.....	10
Table 2.6: Household Size, 1990-2010.....	11
Table 2.7: Persons in Household, Monroe Charter Township, 2010	11
Table 2.8: Educational Attainment, Persons over 25 years old, Monroe Charter Township, 2010.....	12
Table 2.9: Housing Units by Structure Type, 1990-2010	12
Table 2.10: Year Structure Built, Monroe Charter Township	13
Table 2.11: SEMCOG Population Forecast, Monroe Charter Township	14
Table 2.12: Income Distribution, 2010	15
Table 2.13: Percentage of Population in Poverty, 2000-2010	15
Table 2.14: Occupation Categories, 2010.....	16
Table 4.1: MDNR Recreation Facility Standards	34
Table 4.2: Park Land Acreage Analysis, Monroe Charter Township	34
Table 7.1: Existing Land Uses, Monroe Charter Township	69

LIST OF FIGURES

Figure 2.1: Age Distribution, Monroe Charter Township, 2010.....	8
Figure 6.1: Automotive Industry Employment, 1990-2010	60
Figure 6.2: Climate Trends Since 1850	61
Figure 6.3: Climate Change Demonstrated Geographically.....	63

LIST OF MAPS

Map 1: Regional Context	5
Map 2: Natural Features.....	21
Map 3: Floodplain.....	25
Map 4: Public and Recreational Facilities	37
Map 5: Transportation and Circulation	45
Map 6: Proposed Non-Motorized Pathways	51
Map 7: Existing Land Use.....	71
Map 8: Future Land Use	85

1. Background and Purpose

The Charter Township of Monroe Master Plan document is the culmination of the efforts of the Township Planning Commission, Board of Trustees, Zoning Board of Appeals, and residents of the Township to create a comprehensive plan for the community's growth and development. The Master Plan has been developed to serve as a set of general policies to guide decision makers within the community and direct the future growth and development of the Township over the next twenty years.

The Master Plan is intended to provide a suitable development pattern for the Township that will promote future economic stability and quality of life to residents of Monroe Charter Township. State enabling legislation requires that the Planning Commission review an adopted Master Plan every five years for its continued validity to the future land use of the Township.

The Michigan Planning Enabling Act (P.A. 33 of 2008, as amended) requires Cities and Townships to plan and zone. The Act requires the Planning Commission to develop and adopt a master plan that, at a minimum, addresses certain specific issues.

"A master plan shall address land use and infrastructure issues and may project 20 years or more into the future. A master plan shall include maps, plats, charts, and descriptive, explanatory, and other related matter and shall show the planning commission's recommendations for the physical development of the planning jurisdiction. A master plan shall also include those of the following subjects that reasonably can be considered as pertinent to the future development of the planning jurisdiction:

(a) A land use plan that consists in part of a classification and allocation of land for agriculture, residences, commerce, industry, recreation, ways and grounds, subject to subsection (5), public transportation facilities, public buildings, schools, soil conservation, forests, woodlots, open space, wildlife refuges, and other uses and purposes. If a county has not adopted a zoning ordinance under former 1943 PA 183 or the Michigan Zoning Enabling Act, 2006 PA 110, MCL 125.3101 to 125.3702, a land use plan and program for the county may be a general plan with a generalized future land use map.

(b) The general location, character, and extent of all of the following:

(i) All components of a transportation system and their interconnectivity including streets and bridges, public transit including public transportation facilities and routes, bicycle facilities, pedestrian ways, freight facilities and routes, port facilities, railroad facilities, and airports, to provide for the safe and efficient movement of people and goods in a manner that is appropriate to the context of the community and, as applicable, considers all legal users of the public right-of-way.

(ii) Waterways and waterfront developments.

(iii) Sanitary sewers and water supply systems.

(iv) Facilities for flood prevention, drainage, pollution prevention, and maintenance of water levels.

(v) Public utilities and structures.

1. Background and Purpose

(c) Recommendations as to the general character, extent, and layout of redevelopment or rehabilitation of blighted areas; and the removal, relocation, widening, narrowing, vacating, abandonment, change of use, or extension of streets, grounds, open spaces, buildings, utilities, or other facilities.

(d) For a local unit of government that has adopted a zoning ordinance, a zoning plan for various zoning districts controlling the height, area, bulk, location, and use of buildings and premises. The zoning plan shall include an explanation of how the land use categories on the future land use map relate to the districts on the zoning map.

(e) Recommendations for implementing any of the master plan's proposals." (M.C.L. 125.3833)

This document, then, is the Master Plan that has been developed and adopted by the Monroe Charter Township Planning Commission pursuant to the Michigan Planning Enabling Act.

The Master Plan defines issues that are most important to the community. Resident and community input was encouraged through a visioning meeting, joint Planning Commission/Township Board/ ZBA meetings, and a formal public hearing. An analysis of the existing features of the Township will be conducted to illustrate some of its defining characteristics. The analysis will include a survey of the existing land uses, population, economic and housing data from census data, and other sources along with a description of the physical constraints, natural resources, and circulation patterns within the community. The stated community land use goals and objectives will guide future land use regulations. The Master Plan proposes a Future Land Use plan to promote appropriate development patterns and use in the review of proposed amendments to the adopted Official Township Zoning Map.

The main purposes of the Plan are:

- to achieve a balance between the continued urban development and the preservation of its natural resources and rural character; and
- to improve the quality of life for those residing and working within the Township; and
- to achieve a balance of land uses that physically, economically, and socially benefit the residents and businesses in the Township.

The Plan serves as a guide for decisions on how land within the Township should be allocated and developed to meet the goals of the citizens and businesses through a future period of time. The Plan provides a long-range vision of what the Township should be in the future. The key word is plan. The Plan serves as the Township's guide for its vision. The zoning and subdivision ordinances and the capital improvement program serve as tools to implement the Plan. The success of the Township reaching its vision is determined by how successfully the Township's citizens implement the Plan.

Regional Analysis

Monroe Charter Township is located in the central southeast portion of Monroe County, Michigan, bordering Lake Erie, and is approximately one (1) mile south of the City of Monroe, Michigan.

The Township has rural/agricultural areas, industrial districts, suburban communities, and even urban neighborhoods. There are three main north/south connectors running through the Township: I-75, Telegraph Road (US-24) and South Dixie Highway (M-125). A connection is made within the Township with the interchange at I-75. I-75 connects Monroe Township with the State of Ohio to the south and the Cities of Monroe and Detroit to the north. M-50, which is an east/west connector, gives access to US-23 and the City of Dundee.

Land Use Issues

The regional setting of Monroe Charter Township highlights the important land use issues affecting the community today. Located immediately south of the City of Monroe, Monroe Charter Township has faced waves of development pressure throughout its history. In the wake of the Great Recession, growth has been slow, which presents an opportunity for the Township to refocus on protecting its rural and agricultural areas while strengthening its existing, developed neighborhoods.

The location of Monroe Charter Township adjacent to the City of Monroe and along the I-75 corridor between Detroit and Toledo makes it a likely candidate for development pressure as the economy improves. An increased rate of development that goes unchecked will have an adverse impact on the existing agricultural characteristics of the Township. In addition, if land uses allowed in the Township were altered to meet a perceived immediate demand without planning for their impact on the entire Township, large-scale high-intensity land uses could be placed in areas unprepared or incapable of landing it. A comprehensive planning approach that factors in the characteristics of a land use category and their impacts on neighboring uses can help to minimize the loss of rural character typically associated with the development of non-residential uses. It is important to prepare now for the land uses, which could result in Monroe Charter Township losing those sensitive attributes that will attract increased development.

LIAA and Resilient Monroe

In 2013, the Land Information Access Association (LIAA) completed a regional planning process for the City of Monroe, Monroe Charter Township, and Frenchtown Charter Township. This process, known as “Resilient Monroe,” inspired Master Plan Updates in all three communities. LIAA’s recommended changes to the Master Plan were reviewed by the Township Planning Commission, and those that were approved were incorporated into the 2015 Update.



Map 1 Regional Context

Monroe Township
Monroe County, Michigan

-  Surrounding Counties
-  Surrounding Municipalities
-  Monroe Township
-  Lakes and Rivers
-  Interstates
-  US Highways
-  State Highways

5/19/14  Miles



Data Source: Michigan Geographic Framework, Michigan Center for Geographic Information, 2016.

1. Background and Purpose

1. Background and Purpose

2. Demographic and Economic Analysis

A key element to planning future land uses and establishing future goals and objectives for the Charter Township of Monroe is an analysis of its demographic characteristics. This section identifies the population and housing trends in Monroe Charter Township, how they compare with surrounding communities, and what their implication is for planning for future growth in the Township. The data and trends identified in the analysis of each factor provide a base from which to develop strategies to address the needs of Monroe Charter Township's residents.

Local and Regional Trends

TOTAL POPULATION

According to the U.S. Census Bureau, the Township's population increased by 1,077 persons between 2000 and 2010, an 8.0 percent rate of growth over ten years. Monroe County, as a whole, grew by 4.2 percent over the same period. Raisinville Township was the only other community in the Greater Monroe area to gain population during the first decade of the 21st Century. LaSalle Township, Frenchtown Charter Township, and the City of Monroe had population decreases.

Table 2.1: Population

	1990 Population	2000 Population	Change 1990 – 2000	2010 Population	Change 2000 - 2010
Monroe Charter Township	11,909	13,491	+13.3%	14,568	+8.0%
Frenchtown Charter Township	18,210	20,777	+14.1%	20,428	-1.7%
LaSalle Township	4,985	5,001	+0.3%	4,894	-2.1%
Raisinville Township	4,634	4,896	+5.7%	5,816	+18.8%
City of Monroe	22,902	22,076	-3.6%	20,733	-6.1%
Monroe County	133,600	145,945	+9.2%	152,021	+4.2%

Source: US Census Bureau

AGE DISTRIBUTION

The age distribution of the population of Monroe Charter Township is similar to that of the surrounding communities and Monroe County. As the large "Baby Boomer" generation ages, a larger portion of the population is over 50 years old. It is important that Monroe Charter Township and all of greater Monroe seek to retain the "Millennial" generation (generally people born after 1980), which is also large, in order to ensure that the region's population does not become skewed towards retirees and seniors.

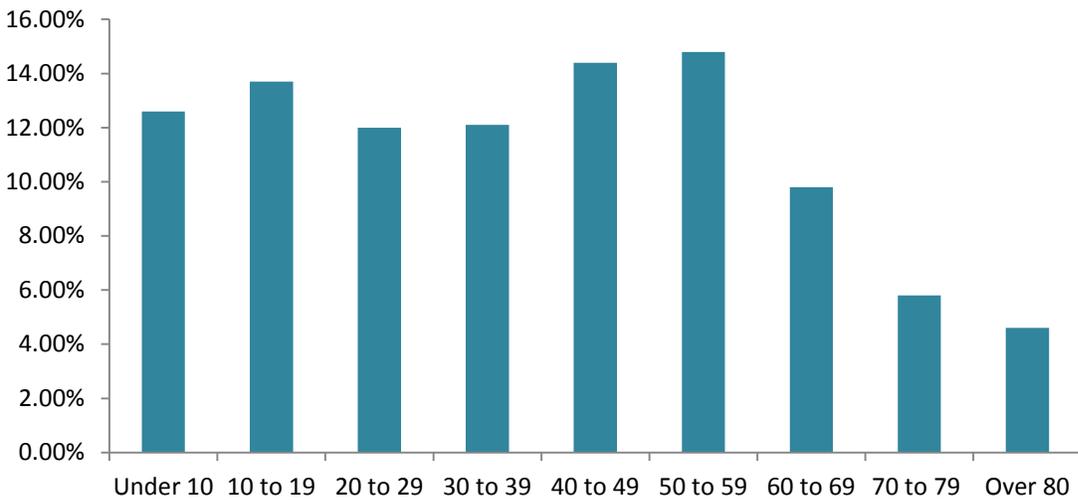
2. Demographic and Economic Analysis

Table 2.2: Age Distribution, 2010

	Monroe Charter Township	Frenchtown Charter Township	LaSalle Township	Raisinville Township	City of Monroe	Monroe County
Under 5 years	5.9%	6.0%	4.3%	4.8%	7.5%	5.7%
5 to 9	6.7%	5.9%	5.2%	6.8%	7.0%	6.5%
10 to 14	7.2%	6.7%	6.6%	8.1%	7.2%	7.3%
15 to 19	6.5%	7.6%	7.7%	8.0%	7.1%	7.4%
20 to 24	6.0%	6.6%	4.5%	4.5%	6.4%	5.7%
25 to 29	6.0%	6.0%	4.5%	4.4%	6.5%	5.4%
30 to 34	5.7%	5.8%	4.2%	4.9%	6.7%	5.5%
35 to 39	6.4%	6.4%	5.7%	6.1%	6.2%	6.2%
40 to 44	6.9%	6.7%	8.1%	7.3%	6.5%	7.1%
45 to 49	7.5%	7.9%	9.0%	8.4%	7.1%	8.2%
50 to 54	7.6%	8.4%	9.5%	8.9%	7.2%	8.4%
55 to 59	7.2%	7.0%	9.6%	8.3%	6.1%	7.4%
60 to 64	5.8%	5.6%	7.2%	6.4%	5.0%	5.9%
65 to 69	4.0%	4.1%	5.1%	4.9%	3.5%	4.3%
70 to 74	3.0%	3.2%	3.3%	3.2%	2.5%	3.1%
75 to 79	2.8%	2.2%	2.5%	2.5%	2.1%	2.3%
80 to 84	2.3%	2.3%	1.9%	1.7%	2.5%	2.0%
Over 85 years	2.3%	1.7%	1.2%	1.0%	2.7%	1.7%

Source: US Census Bureau

Figure 2.1: Age Distribution, Monroe Charter Township, 2010



Source: US Census Bureau

RACE AND ETHNICITY

The population of the Township is predominantly Caucasian (92.9%). African-Americans make up 2.5 percent of the population and Asians make up 0.7 percent of the population. Four percent of the population self-identifies as Hispanic, regardless of race. Compared with the U.S. population, Monroe Charter Township has a significantly higher proportion that is Caucasian and a significantly lower proportion that is Black, Hispanic or Asian.

Although racial makeup can be informative, it is not used as a factor in land use planning.

HOUSING

The distribution of value of owner-occupied housing in Monroe Charter Township is roughly equivalent to that of the surrounding communities and Monroe County. The median value for Monroe Charter Township (\$136,900) is lower than the surrounding communities. However, Monroe Charter Township also has 59 housing units valued at over \$1,000,000, which is much higher than the number in any of the surrounding communities.

Table 2.3: Value of Owner-Occupied Homes, 2010

	Monroe Charter Township	Frenchtown Charter Township	LaSalle Township	Raisinville Township	City of Monroe	Monroe County
Less than \$50,000	654	581	42	87	151	2,760
\$50,000 - \$99,999	1,044	676	167	174	301	4,349
\$100,000 - \$149,999	790	1,161	343	353	1,793	9,930
\$150,000 - \$199,999	725	1,388	408	538	1,494	11,617
\$200,000 to \$299,999	681	958	477	526	675	9,937
\$300,000 to \$499,999	457	567	190	155	99	4,678
\$500,000 - \$999,999	79	47	7	13	0	506
Over \$1,000,000	59	12	0	0	7	206
Median Value	\$136,900	\$142,900	\$173,600	\$172,500	\$139,200	\$161,800
Percentage of Housing Units that are Owner Occupied	77.1%	73.8%	91.6%	93.2%	62.1%	79.8%

Source: US Census Bureau

2. Demographic and Economic Analysis

Table 2.4: Housing Units, 2010

	Total Housing Units	Owner-Occupied Units	Renter-Occupied Units	Vacant Housing Units
Monroe Charter Township	6,152	4,407	1,312	433
<i>Percentage</i>		71.6%	21.3%	7.1%
Monroe County	62,971	46,496	11,734	4,741
<i>Percentage</i>		73.8%	18.6%	7.6%

Source: US Census Bureau

HOUSEHOLD TYPE

The most common type of household in Monroe Charter Township is married couples without children living in the home, who make up 30.4% of the households. People living alone (either male or female) are the second largest group, with 27.3% of households. There are children under 18 in 29.1% of households, but less than two-thirds of those children live with both parents.

Table 2.5: Household Type, Monroe Charter Township, 2010

	Number of Households	Percentage of Households
Married couple	1,739	30.4%
Married couple with children under 18	1,057	18.5%
Female householder	905	15.8%
Female householder with children under 18	436	7.6%
Male householder	656	11.5%
Male householder with children under 18	171	3.0%
Non-family group	755	13.2%
Total Households	5,719	100%

Source: US Census Bureau

HOUSEHOLD SIZE

The average household size has seen a decrease in recent decades, but Monroe Charter Township bucked this trend from 2000 to 2010, with an increase nationwide from 2.46 people per household to 2.49.

Table 2.6: Household Size, 1990-2010

	1990	2000	2010
Monroe Charter Township	2.64	2.46	2.49
Frenchtown Charter Township	2.74	2.53	2.53
LaSalle Township	3.14	2.94	2.67
Raisinville Township	3.15	2.91	2.77
City of Monroe	2.62	2.44	2.44

Source: US Census Bureau

The majority of all households in the Township consist of one to three persons. The table below shows that the approximately 33 percent of households consists of 2 persons.

Table 2.7: Persons in Household, Monroe Charter Township, 2010

Persons in Household	Number of Households	Percentage of Households
1	1,561	27.3%
2	1,903	33.3%
3	939	16.4%
4	813	14.2%
5	317	5.5%
6	132	2.3%
7 or more	54	0.9%
Total Households	5,719	100.0%

Source: US Census Bureau

EDUCATIONAL ATTAINMENT

Educational attainment rates have been increasing in the Township over the past 10-15 years.

In 2000, nearly 22 percent of the Township residents 25 years or older had not completed high school. By 2010, that number had dropped to 18 percent. More impressive, the number of people with a college degree (Associate's, Bachelor's, or beyond) jumped from 13 percent to almost 25 percent. This improvement in educational attainment is likely to have positive results for the economic wellbeing of the Township.

2. Demographic and Economic Analysis

Table 2.8: Educational Attainment, Persons over 25 years old, Monroe Charter Township, 2010

Educational Attainment Level	Percentage of Population
Less than 9 th Grade	6.5%
Some High School	11.8%
Percent without High School Diploma	18.3%
High School Diploma or GED	33.4%
Some College	23.6%
Percent High School Graduate	57.0%
Associate's Degree	7.8%
Bachelor's Degree	11.4%
Graduate or Professional Degree	5.5%
Percent Beyond High School	24.7%

Source: US Census Bureau

UNITS IN STRUCTURE

The majority of new construction of housing units is single family units. Between 2000 and 2010, 426 detached single family homes and 154 attached single family homes were built, compared to 26 two-family buildings and 13 units in multi-family structures. The number of mobile homes in the Township decreased.

Table 2.9: Housing Units by Structure Type, 1990-2010

Structure Type	1990		2000		2010	
	Number	Percentage	Number	Percentage	Number	Percentage
Single Family Detached	2,590	56.0%	3,032	55.0%	3,458	57.7%
Single Family Attached	73	2.0%	168	3.0%	322	5.4%
Two Family/Duplex	127	3.0%	106	2.0%	132	2.2%
Multi-Unit Apartments	654	14.0%	661	12.0%	674	11.2%
Mobile Homes	1,113	24.0%	1,566	28.0%	1,404	23.4%
Other	28	1.0%	6	0.0%	0	0.0%
Total Housing Units	4,585	100.0%	5,572	100.0%	5,990	100.0%

Source: US Census Bureau

YEAR STRUCTURE BUILT

Monroe Charter Township has experienced a building boom since 1990 (although the rate of housing growth slowed during the Great Recession). One-third of the housing in the Township was built in the past 25 years. Approximately another third was built between 1970 and 1990.

Table 2.10: Year Structure Built, Monroe Charter Township

Year	Number of Housing Units	Percentage of Housing Units
Since 2000	1,046	17.5%
1990-99	1,138	19.0%
1980-89	704	11.8%
1970-79	1,208	20.2%
1960-69	387	6.5%
1950-59	638	10.7%
1940-49	304	5.1%
1939 or earlier	565	9.4%

Source: US Census Bureau

Economic Trends

FORECASTS OF POPULATION AND HOUSING

SEMCOG forecasts for population and housing growth show an initial decrease, followed by a steady but slow increase up to 2040, with the population increasing to 15,515. The SEMCOG projections are the most reliable available projection.

Table 2.11: SEMCOG Population Forecast, Monroe Charter Township

Year	Population
Current Population (2010)	14,568
2020	14,513
2030	15,233
2040	15,515

Source: SEMCOG

Households are a better indicator of the number of dwelling units needed than is population. The number of dwelling units will be slightly higher than the number of households, due to vacancies. The vacancy rate in Monroe Charter Township is currently 7.1 percent, which is slightly high due to the recent recession, but is lower than many communities and is trending downward. The average household size increased between 2000 and 2010, but is projected to decline slightly going forward, reflective of the national trend.

Employment is forecasted by SEMCOG to decrease in the manufacturing sector, and increase in the services sector and in health care.

The percentage of the population that is employed is projected to slowly decrease as the “baby boomers” retire. The Township and County must consider the special services this “baby boomer” population will require.

INCOME DISTRIBUTION

Income distribution indicates a broad distribution of income levels, as compared with surrounding communities, with a higher concentration of the lowest income category (under \$10,000) than is found in Monroe County and in the surrounding communities, but also a higher concentration in the highest income categories.

The Township’s median household income (\$46,718) is lower than that of the surrounding communities except for the City of Monroe (\$42,673), in part due to the broad range of income levels of those who live in the Township.

Income data can be used as an indicator for the types of housing that Township residents can afford, the levels of retail development it can support, as well as whether various types of community services can be supported.

Table 2.12: Income Distribution, 2010

Household Income	Monroe Charter Township	Frenchtown Charter Township	LaSalle Township	Raisinville Township	City of Monroe	Monroe County
Less than \$10,000	9.1%	7.6%	4.9%	2.6%	8.8%	5.5%
\$10,000 - \$14,999	3.8%	4.7%	5.4%	2.1%	7.8%	4.5%
\$15,000 - \$24,999	14.6%	10.3%	3.8%	5.8%	12.8%	9.8%
\$25,000 - \$34,999	11.0%	11.3%	9.0%	9.8%	11.8%	10.5%
\$35,000 to \$49,999	13.8%	14.0%	11.6%	13.9%	14.0%	14.3%
\$50,000 to \$74,999	15.7%	24.1%	22.7%	24.7%	16.9%	20.6%
\$75,000 - \$99,999	14.3%	12.0%	21.9%	19.8%	12.9%	15.4%
\$100,000 - \$149,999	11.7%	12.2%	15.7%	18.1%	10.9%	14.4%
\$150,000 - \$199,999	3.4%	2.1%	4.0%	1.3%	3.4%	3.2%
\$200,000 or more	2.6%	1.7%	1.1%	1.9%	0.5%	1.8%
Median Household Income	46,718	\$52,111	\$70,170	\$64,926	\$42,673	\$55,366

Source: US Census Bureau

Households with an income that is below the income threshold are considered to be in poverty. The table below compares the poverty status in the Township with that of the County. The table shows that 10.4 percent of the Township's residents live in poverty, which is greater than the rate for Monroe County, as a whole. However, the Township's rate of poverty has decreased slightly since 2000, while the County's has increased. Female-headed households are more likely to be living in poverty than any other population groups. In Monroe Charter Township, over 33 percent of female-headed households live in poverty, and for female householder families with related children under 5 years, over 60 percent live below the poverty level.

Table 2.13: Percentage of Population in Poverty, 2000-2010

	2000	2010
Monroe Charter Township	10.7%	10.4%
Monroe County	7.0%	9.0%

Source: US Census Bureau

2. Demographic and Economic Analysis

OCCUPATION

The distribution of working population according to occupation categories in Monroe Charter Township is similar to that of the surrounding communities and Monroe County.

Table 2.14: Occupation Categories, 2010

	Monroe Charter Township	Frenchtown Charter Township	LaSalle Township	Raisinville Township	City of Monroe	Monroe County
Agriculture and Forestry	0.4%	0.3%	1.7%	1.2%	0.6%	0.8%
Construction	2.6%	5.7%	9.3%	10.6%	4.4%	6.2%
Manufacturing	19.1%	22.3%	21.3%	23.1%	19.6%	20.4%
Wholesale Trade	2.6%	2.5%	4.0%	1.4%	3.6%	3.4%
Retail Trade	15.5%	12.1%	15.7%	6.8%	11.1%	11.5%
Transportation and Utilities	6.2%	8.1%	6.4%	5.3%	7.1%	7.1%
Information	1.4%	1.4%	1.9%	0.3%	1.6%	1.1%
Finance, Insurance, and Real Estate	4.2%	4.0%	3.9%	7.7%	5.0%	4.5%
Professional Services	9.3%	6.4%	4.1%	6.4%	6.3%	7.2%
Education and Health Care	24.9%	23.1%	14.7%	23.6%	20.4%	21.7%
Entertainment and Tourism	9.2%	8.8%	7.9%	3.8%	9.1%	8.2%
Other Services	3.0%	3.6%	3.5%	5.8%	6.3%	4.8%
Government	1.7%	1.6%	6.5%	3.9%	4.9%	3.1%

Source: US Census Bureau

TRANSPORTATION TO WORK

The vast majority (91.1%) of employed Township residents travel to work by car. Only 4.1% percent of those commuting by car participate in carpools. 2.6% work from home, which is an increase of the proportion that did so in 2000, likely due to improvements in telecommunications technology. The average commuting time to work is 21.4 minutes, which is exactly the same as it was in 2000.

Summary

1. According the 2010 Census, Monroe Charter Township has 14,568 residents. By the year 2040, the population is anticipated to increase to 15,515 residents, assuming that previous trends and land use policies continue.
2. Regional population growth has been slow since 2000, but Monroe Charter Township has increased in population while the City of Monroe and Frenchtown Charter Township have declined.
3. Educational attainment rates in the Township have been increasing since 2000, with the proportion of college graduates almost doubling.
4. Monroe Charter Township bucked the national trend of declining household sizes, with an increase from 2.46 people per household in 2000 to 2.49 in 2010.
5. The median age of the population is anticipated to continue to increase as the Baby Boom generation ages, especially if the Township fails to retain members of the millennial generation and their children.
6. Median household income in the Township is slightly lower than that of surrounding communities, but Monroe Charter Township also has higher proportions of high income residents than surrounding communities.
7. The largest employment classifications for Township residents are Manufacturing, Retail, and Education/Health Care.
7. Most new housing construction in the past 10-15 years has been single family homes (detached or attached). The proportion of mobile homes in the Township has dropped from 28% to just over 23%.
8. Over a third of the Township's housing stock was built after 1990. Over two thirds was built after 1970.

3. Natural Resources

The future land use plan for Monroe Charter Township should reflect patterns of existing uses. In addition, this plan must recognize, utilize, and protect the natural and man-made resources and constraints of the community. The Township possesses a number of valuable resources that contribute to the positive identity of the community. There are also a number of environmental and manmade constraints that are protected by law, or which make the land difficult or unsuitable for development. The challenge of the Master Plan is to guide growth in such a manner as to ensure the efficient use of land and capital expenditures while preserving important natural features, enhancing the quality of life for local residents, and providing growth opportunities for business.

Resources

The resources of Monroe Charter Township include:

- Lake Erie and the adjacent vacant land and the scenic vistas that they provide;
- River Raisin and adjacent vegetation and agricultural land;
- The availability of land which is suitable for residential development;
- The scattered woodlands that remain; and the remaining areas of active agriculture.

SOILS

According to the Soil Conservation Service of the United States Department of Agriculture, Monroe Charter Township soils contain three general types of soil associations.

Lenawee Del Ray

The soils in this association are characterized as having nearly level, poorly drained and somewhat poorly drained, and silty soils on lake plains. The extent of Lenawee Del Ray soils is limited to the eastern one-third of the Township south of the confluence of Plum Creek and is the second most abundant soil type. These soils are suitable for crops but poor for sanitary facilities and building sites.

Lenawee Poneded

Soils of this association are generally located north of the Lenawee Del Ray soil in the Plum Creek area. Lenawee Poneded soils are generally nearly level, very poorly drained, and silty soils on lake plains. Plum Creek and the River Raisin are main contributors to this soil type, bringing soil from other areas to the mouth of the river of Lake Erie. These soils are used as wildlife habitat but are poor for sanitary facilities and building sites.

Pewamo Selfridge Bount

This soil association is the most abundant soil type, covering the western one-half to two-thirds of the Township. These soils are characterized by nearly level, poorly drained, and somewhat poorly drained loamy and sandy soils on till plains, moraines, and lake plains. This soil type is generally well suited for agriculture.

FLOODPLAIN

The eastern portion of the Township plus areas along the River Raisin and Plum Creek and some of the eastern portion of the main creeks, drains, and swales have associated with them a 100-year floodplain. The primary changes in the 2014 update Federal Emergency Management Agency (FEMA) floodplain map was the additional floodplain land north of Dunbar and west of Telegraph, and some areas in the southeast portion of the Township. The 100-year floodplain is an area that historically floods at least once during a 100-year period. Map 3 shows the extent of the 100-year floodplain. The FEMA maps produce the Flood Insurance Rate Maps (FIRM) used by the insurance industry to determine insurance rates in flood-prone areas.

Flooding in the Township occurs mainly in the spring of the year due to a combination of seasonal rains and melting snow. This combination creates high water levels in Lake Erie. These spring conditions create prime conditions for flooding. In addition, during this time of the year, ice from the River Raisin, Plum Creek, and Lake Erie breaks up and occasionally create ice jams flooding the area. The flooding situation is further compounded when the winds come off of Lake Erie pushing water onto the land and restricting the flow of runoff to Lake Erie.

The Township permits development within the 100-year floodplain subject to Section 3.200 of the Zoning Ordinance, which requires all such development to have a finished floor elevation above the flood elevation. New development is also required to acquire permits and approval from the Department of Environmental Quality. In some cases, the Zoning Ordinance regulates the uses and requires that compensating storage be provided as a part of new development so that the volume of water within the 100-year floodplain does not change.

Heavy rainfall has also caused urban flooding from runoff on a number of occasions separate from the River Raisin and Plum Creek. The most recent example of urban flooding from runoff in Monroe Township was in late November, 2011. Using GIS, the Land Information Access Association (LIAA) identified the number of buildings that fall within the 100 and 500 year floodplains. Approximately 3,480 structures would be at risk of damage in the event of a “500 year” flooding event (i.e. a flood with a 0.2% chance of happening in any given year.)

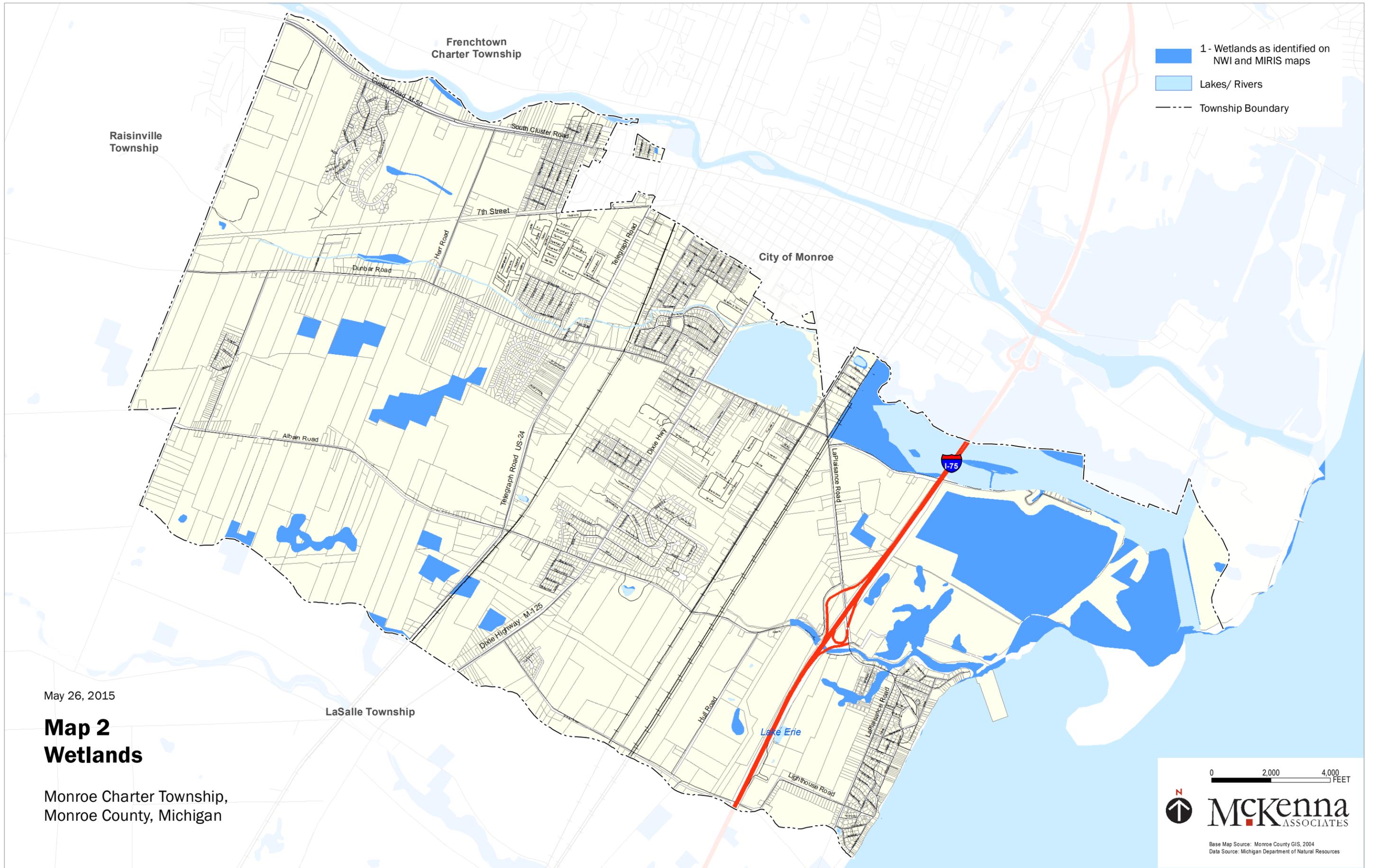
WETLANDS

The Michigan Natural Resources and Environmental Protection Act, Act 451 of 1994, defines wetlands as “land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp or marsh . . .” Under this Act, farming is an allowable activity, without a permit, in wetlands areas.

Map 3 shows the areas within the Township that exhibit wetland characteristics. Most of the wetlands within the Township are located along the River Raisin and Plum Creek. These wetland areas are within the 100-year floodplain, are hydrologically part of the river system, and play a vital role in supporting a viable ecosystem. Many of the other areas are currently under agricultural use, with the wetland vegetation removed. If these areas were allowed to convert back to their natural state, and, if the drainage patterns have not been drastically changed, these areas would revert back to a wetland. However, it is more likely that these areas will remain in agricultural use, thereby making re-vegetation unlikely.

Wetlands provide invaluable ecosystem functions for a community. Wetlands can remove sediments and pollutants from runoff and detain stormwater, reducing the impacts of flooding. The Township should consider restoring some wetlands in vacated industrial areas and open spaces, focusing on areas with the highest wetland potential.

3. Natural Resources



- 1 - Wetlands as identified on NWI and MIRIS maps
- Lakes/ Rivers
- Township Boundary

May 26, 2015

Map 2 Wetlands

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000 FEET



MCKenna
ASSOCIATES

Base Map Source: Monroe County GIS, 2004
Data Source: Michigan Department of Natural Resources

3. Natural Resources

WOODLANDS

Isolated stands of woodlands remain in the Township, providing a reminder of what the Township looked like before the forest was removed to make way for agriculture. There are two basic types of forested areas. Most of the remaining forested areas consist of hardwoods: mainly oak, beech, and hickory and to a lesser extent red maple, sugar maple, basswood, and cherry. These species are found on high and dry ground. The others are stands of soft maple, cottonwood, and elm that thrive primarily in areas with a higher water table and longer periods of flooding.

These scattered stands of woodlands are all that remain and should be protected from total removal. The Township should develop a woodlands preservation ordinance that addresses development in these areas to preserve as many of the trees as possible.

POTABLE WATER

The City of Monroe has a water plant with a capacity of 18 million gallons. The plant can currently process approximately 14.3 million gallons per day (MGD) before improvements need to be made to the draw water system. Current average daily flows are 9 to 10 MGD. Thus, approximately 4 to 5 MGD remain to be allocated. It is anticipated that adequate capacity will be available in the foreseeable future.

Residents and businesses in Monroe Charter Township currently consume approximately 2 MGD of potable water. The Township's central water distribution system is quite extensive with the ability to provide central potable water service to almost all of the property within Monroe Charter Township. Albain Road is now the only major corridor in the Township without sewer and water service.

Ongoing, system-wide improvements in 2014 included replacing the ozone injection system at the water treatment plant and replacing the raw water pump drive system.

According to the Environmental Division at the Monroe County Health Department, the *Karst* geology makes the Monroe area particularly susceptible to contamination when surface water mixes with groundwater. This is especially a concern in rural areas with wells and septic tanks. An overloaded or malfunctioning septic tank in karst landscapes may dump raw sewage directly into underground channels. Currently, the County allows hauled water systems in areas that have high amounts of hydrogen sulfide. Monroe Charter Township should work with Monroe County to explore this option.

WASTEWATER

The City of Monroe in partnership with the Township also provides wastewater treatment to the Township. The City's wastewater treatment plant has a capacity of 25 MGD. The sewer service district is managed by the Monroe Metropolitan Water Pollution Control System, which was established in 1976. There is a seven member board made up of two representatives from the City and from each Township in the service area as well as one representative from the County Drain Commissioner's office.

The wastewater collection system is not as extensive as the potable water distribution system, a condition common in many jurisdictions. The wastewater network is not as extensive in the predominantly agricultural western and southern parts of the Township, where there are only a few residential units. A large portion of the existing system is the result of court-ordered installations due to a high water table and the soil's inability to support private septic systems. Development potential is limited in areas of the Township without access to sanitary sewers.

In 2011, a study was conducted to identify the most cost effective combination of inflow/infiltration removal, waste water treatment plant expansion, and/or storage required to eliminate wet weather define blending for heavy rain events. Wet weather blending is a concern because at one time the City

3. Natural Resources

and Townships had a combined sewer system, which has since been converted to two separate systems – one for storm water and one for sanitary water.

DRAINAGE

The Monroe County Drain Commissioner is responsible for the performance and maintenance of the County's primary drainage system. The Township's major drainage system is composed of a set of interlinked drains, swales, creeks, and rivers that move surface water to Lake Erie. In many instances, where manmade swales and drains exist, the natural water table has been artificially lowered to provide more land for agriculture.

As the Township's housing stock increases, it will become more important to have developments retain/detain rainfall on-site for a period of time. New development with rooftops, asphalt, and concrete substantially increases the impervious surface area, thus increasing runoff (stormwater) from the site. Increasing runoff will increase the potential for flooding downstream. In addition, if runoff water is not held on a site for a period of time to permit solids (silt, etc.) to separate from the water, the quality of the water downtown can be negatively affected. Therefore, the Township should develop stormwater runoff standards that will both control the rate of runoff from the site and maintain water quality.

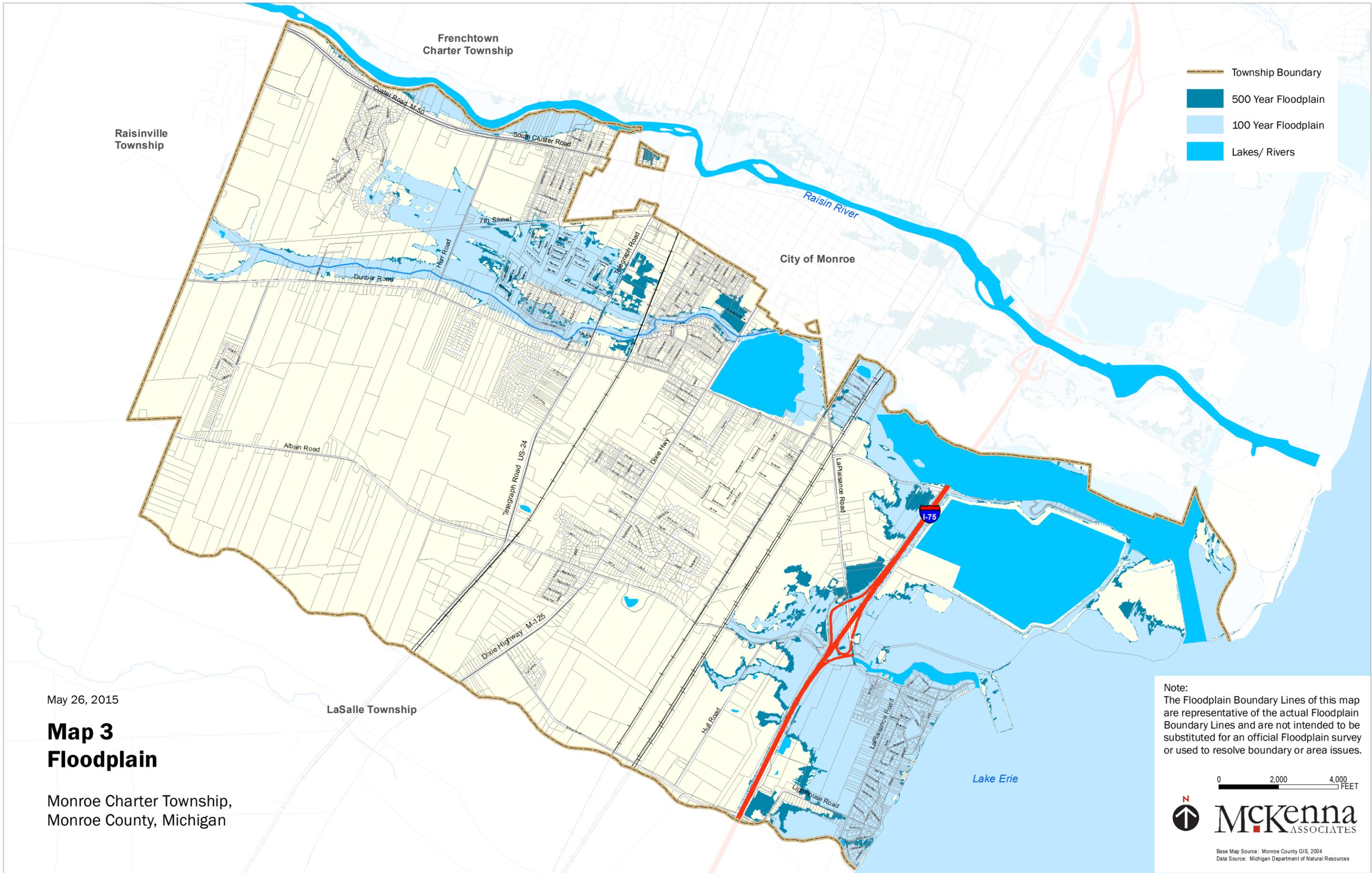
GREEN INFRASTRUCTURE

Long-term climate projections for Southeast Michigan (and nationwide) predict high-intensity rain events will occur more often and with higher severity. Experts expect the total amount of precipitation in the Midwest to increase, especially in the winter, with a projected 30% increase in annual averages. In the summer, streamflows are expected to increase in variability.

Managing stormwater serves a number of important purposes. It can reduce the cost burden on the public water system and improve the quality of rain water entering the watershed. In the case of resilience to climate change, stormwater management increases the capacity of the system, reducing the potential for flooding and reducing waterborne diseases and water supply contamination. Monroe Charter Township should continue its efforts to support low impact development and green stormwater infrastructure.

There are numerous opportunities during the site plan development phase to integrate best practices in stormwater management. Cluster housing developments are a common strategy used by developers to avoid construction on wetlands and floodplains, as are large buffers between development and natural waterways.

Because Monroe Charter Township wishes to contain development within its current footprint, retrofitting impervious surfaces is a common strategy to strengthen the resilience of a stormwater system. The Township should explore financial, zoning, or other incentives for business and landowners to install improved stormwater capture facilities, including small solutions such as rain barrels, on their properties.



-  Township Boundary
-  500 Year Floodplain
-  100 Year Floodplain
-  Lakes/ Rivers

May 26, 2015

Map 3 Floodplain

Monroe Charter Township,
Monroe County, Michigan

Note:
The Floodplain Boundary Lines of this map are representative of the actual Floodplain Boundary Lines and are not intended to be substituted for an official Floodplain survey or used to resolve boundary or area issues.

0 2,000 4,000 FEET



McKenna
ASSOCIATES

Base Map Source: Monroe County GIS, 2004
Data Source: Michigan Department of Natural Resources

3. Natural Resources

Summary

1. The Township has only a few areas of woodlands and wetlands remaining. These areas should be preserved to the extent possible. Development within the woodlands area should be permitted only on a limited basis.
2. The Township should protect its agricultural land through strict enforcement of the Agricultural zoning category.
3. The splitting of lots along the Township's major road system should be controlled through the Township's Land Division Ordinances. The Township should require that sufficient access to the rear of the lots along the road frontage be maintained for future development, in areas that are not zoned for agriculture.
4. Development within the 100-year floodplains should be controlled and the requirements of the Zoning Ordinance strictly enforced. Whenever possible, the Township should consider making or having improvements made to the drainage system to reduce the chances of flooding. Any new development should be required to retain the stormwater runoff it generates on site.
5. The Township should plan for development to occur only where served by existing water and sewer infrastructure.

3. Natural Resources

4. Recreation and Community Facilities

Overview

The community facilities and the services they provide help to define the quality of life in Monroe Charter Township. These facilities relate to the economy, health care, education, and recreation of the residents and visitors to the area. Monroe Charter Township residents have a wide variety of recreational opportunities available to them, ranging from neighborhood parks to large regional parks containing thousands of acres. The inventory consists of a compilation of parks found in the Township and the surrounding region. The inventory is then used to provide an assessment of the Township's facilities compared with national standards.

Existing Recreational Facilities

REGIONAL RECREATION FACILITIES

Monroe Charter Township is surrounded by thousands of acres of park and recreation land. Within a 60-mile radius from the Township there are five State parks, nine State recreational areas, three State game preserves, 20 metro parks, and several county parks. Activities include hunting, camping, horseback riding, skiing, fishing, hiking, walking, nature interpretation, picnicking, boating, and shooting. Many classes, including crafts, nature appreciation, and recreation are available to the public free of charge. Some facilities have cabins and meeting rooms that can be rented by the day.

The metro parks system is a very important source of recreation in the Southeast Michigan/Northwest Ohio region. The Huron-Clinton Metropolitan Authority manages eleven metro parks within the region (three of which are within roughly 15 miles of the Township) and the Toledo-Lucas County Metro Park Authority operates nine around the Toledo, Ohio area. These parks range from 45 to 4,435 acres in size and contain a combined 23,421 acres.

Lake Erie Metro Park is the closest metro park to the Township. Located just nine miles north of the Township, the park includes a marina, boat launch, golf course, wave-pool, and nature study area. Oakwoods is the next closest metro park at 12 miles northwest of the Township. This facility offers canoeing, fishing, cross-country skiing, a swimming pool, nature trails, and a nature center.

RECREATIONAL FACILITIES WITHIN MONROE COUNTY

Several parks and recreational facilities are within close proximity to Monroe Charter Township including one State Park, four County parks, and two State game areas. Sterling State Park is considered by many to be the premiere recreational facility in Southeast Michigan. The 1,000 acre facility contains 288 camp sites and offers numerous amenities including hiking trails, beaches, fishing, wetlands, and other natural areas. Pointe Mouillee (2,486 acres), Erie (1,675 acres), and Petersburg (approximately 700 acres) State Game Areas are all within Monroe County and provide residents with the opportunity to enjoy fishing and observing wildlife.

4. Recreation and Community Facilities

Many Monroe County Parks are also easily accessible from Monroe Charter Township. These parks offer recreational activities and facilities including picnic shelters, restrooms, playground equipment, grills, and parking. These parks are free to the public and range in size from 9 to 80 acres.

1. **Heck Park.** A park that formerly was jointly owned and operated by the City of Monroe and Monroe County. It is currently under the sole ownership of Monroe County. A Vietnam Veterans memorial is located in the park.
2. **Nike Park.** Located on Newport Road in Frenchtown, this park was originally part of the Nike Missile Base and was acquired from the federal government. The park saw major upgrades in the early 2000s, including new soccer fields and hiking trails. Cooperative agreements with private clubs have resulted in the development of a model aircraft flying area and an area for beagle training and competitions is under development.
3. **Vienna Park.** Located in Bedford Township, this park was originally acquired from the State Highway Department after it was used, in part, as a sand pit for road construction. Vienna Park has a small pond and natural areas as well as active recreational facilities. Approximately 15 years ago, the park received an upgrade, with new trails and playground equipment, and an expansion of the golf course from 9 to 18 holes.

RECREATIONAL FACILITIES WITHIN MONROE CHARTER TOWNSHIP

The Township contains approximately 147 acres of recreational land including State, County, City of Monroe, school district, and Township facilities. Most recreational land in the Township is under the control of outside agencies like Monroe County, City of Monroe, Monroe Public School District, and neighborhood associations.

The main Township-owned facility is **Monroe Charter Township Park**, which has volleyball courts, a handicap-accessible playground, nature trails, ball fields, a nature center, a concession stand, a fish pond, and a tot lot. The Township also owns **Evergreen Acres**, which has picnic facilities.

With over 30 percent of all recreational land within the Township, **Monroe Public Schools** provides many recreational opportunities and facilities in the Township. A total of three Monroe schools are located within the Township - the high school and two elementary schools. Each school ground contains a large variety of playground equipment and sports fields. The School District also manages **Gililand Memorial Field** that has several baseball fields.

Bolles Harbor is by far the single largest recreational area in the Township. The Harbor's boat launch facility provides access to Lake Erie. Parking, restrooms, and a small natural area are also found at the site.

Hoffman Memorial is a State-owned Lake Erie public access point in the Township, but it is not open to boat launching.

There are 52.8 acres of mini and neighborhood parks in the Township, mainly adjacent to the Township's residential areas. They range in size from 0.1 to 17 acres. **South Monroe Townsite Park** has the broadest range of facilities, with playground equipment and basketball, baseball, volleyball, tennis, and soccer facilities. It is owned by the Homeowners Association of the Townsite neighborhood. The **Ravenwood** and **Waterloo** subdivisions also have parks owned by the Homeowners Association.

Cairns Field, Mill Race Park, Navarre Field, and LaPlaisance Road Park are City of Monroe parks, but they are located within or contiguous to the Township. Cairns Field is used for ball games and Mill Race Park provides access to the Raisin River and a nature area.

The 9-acre **Waterloo Park** is operated by Monroe County and is located in the north-central section of the Township. Many facilities are found here including playground equipment, ball fields, basketball courts, shelters, picnic tables, grills, restrooms, parking, and river access.

OTHER RECREATIONAL RESOURCES

The **Monroe County Ellis Library** provides river access, picnic tables, and grills on a two-acre site, and **Monroe County Community College** has a fitness trail on their grounds. Both facilities are located in the northwest corner of the Township.

The **Carrington Golf Club** offers 18 holes of golf on fully integrated bent grass greens and fairways. Other amenities include a driving range and practice green. The **Links at Lake Erie** located on LaPlaisance Road was developed as a public/private project. It is a championship course with full amenities.

Analysis of Existing Facilities and Service Areas

The Michigan Department of Natural Resources (MDNR) adopted a set of standards based on those set by the National Parks and Recreation Association (NPRA). The standards provide a baseline to determine the need for recreational facilities in each community. Recreation facilities serving Monroe Charter Township residents are compared to the MDNR standards in Table 4.1 and Table 4.2. These comparisons provide a general idea of deficiencies and areas to be improved, as well as those facilities that adequately supply the needs of the community.

For planning and management purposes, recreation professionals classify park and recreation facilities based on the type of facility and expected usage. Frequently, a six-tier classification system is used, as follows:

MINI-PARKS

Recreation Standards:

Mini-parks are small, specialized parks, usually less than an acre in size, that serve the needs of residents in the surrounding neighborhood. A mini-park may serve a limited population or specific group such as tots or senior citizens.

Characteristics of Monroe Charter Township:

There are an adequate number of mini-parks in Monroe Township. Subdivision and apartment common areas and school grounds provide additional recreational areas that can be considered as mini parks.

Comments/Recommendations:

Monroe Charter Township is well-served by mini-parks. Examples of mini parks include Evergreen Acres, Avalon Beach, Woodpine, Kay, Kentucky Park site, and Cairns Field. Both Bolles Harbor and Ravenwood Neighborhood Associations have small mini-parks available to their residents.

4. Recreation and Community Facilities

NEIGHBORHOOD PARKS

Recreation Standards:

Neighborhood parks are typically multi-purpose facilities that provide areas for intensive recreational activities, such as field games, court games, crafts, playgrounds, skating, picnicking, etc. Neighborhood parks are generally 15 acres or more in size and serve a population up to 5,000 residents located within a quarter-mile to a half-mile radius from the neighborhood they serve.

Characteristics of Monroe Township:

Waterloo Park and South Monroe Townsite Park are good examples of neighborhood parks. In addition, Monroe Public Schools provide many recreation opportunities normally found in neighborhood parks.

Comments/Recommendations:

The NRPA recommends 2.0 acres of neighborhood park acreage per 1,000 residents. The 2010 US Census population data indicates that Monroe Charter Township has 14,568 residents. Based on this population, 29.1 acres of neighborhood parks are required. The Township has over 40 acres of neighborhood parks and easily meeting the standard.

COMMUNITY PARKS

Recreation Standards:

Community Parks typically contain a wide variety of recreation facilities to meet the diverse needs of residents from several neighborhoods. Community parks may include areas suited for intense recreational facilities, such as athletic complexes and swimming pools. These parks usually contain other facilities not commonly found in neighborhood parks such as nature areas, picnic pavilions, lighted ball fields, and concession facilities.

Characteristics of Monroe Charter Township:

Monroe Charter Township Park is an example of a community park.

Comments/Recommendations:

The Township should determine if additional community parks is a priority for the community through the recreation planning process. This process includes input from the public through surveys and a recreation committee.

REGIONAL/METROPOLITAN PARKS

Recreation Standards:

Regional parks are typically located on sites with unique natural features that are particularly suited for outdoor recreation, such as viewing, and studying nature, wildlife habitats, conservation, swimming, picnicking, hiking, fishing, boating, camping, and trail use. Many also include active play areas.

Characteristics of Monroe Charter Township:

The Township is served by several regional parks located nearby, including: several metro parks in northwest Ohio and Southeast Michigan, State parks, Recreation Areas, and County Parks.

Comments/Recommendations:

Regional parks typically serve several communities within a one hour drive. While there are no regional parks within Monroe Charter Township, there are almost 80,000 acres of regional park land within an hour of the Township.

LINEAR PARKS

Recreation Standards.

Linear parks are areas developed for one or more modes of recreational travel, such as hiking, biking, snowmobiling, horseback riding, cross-country skiing, canoeing, and pleasure driving. Some linear parks include active play areas. Linear parks are typically built along utility rights-of-way, abandoned railroad lines, bluff lines, vegetation patterns, and roads. Linear parks often link other parks or components of the recreation system, community facilities, commercial areas, and other focal points.

Characteristics of Monroe Charter Township:

Monroe Charter Township does not currently have any linear parks.

Comments/Recommendations:

As part of the Resilient Monroe planning process, the Township is working with the City of Monroe and Frenchtown Charter Township to develop a comprehensive network of walking/biking paths. See Chapter 5.

PRIVATE AND SPECIAL USE FACILITIES

Recreation Standards:

Special use recreation facilities are typically single-purpose recreation facilities, such as golf courses, nature centers, outdoor theaters, boat launches, interpretative centers or facilities for the preservation or maintenance of the natural or cultural environment.

Characteristics of Monroe Charter Township:

Several special use recreation facilities are located in or near Monroe Charter Township including a golf course, driving range, and private campground.

Comments/Recommendations:

Local governments continually develop recreation programs, focusing primarily on community facilities. Recreation programming could be expanded in the future by forming public-private partnerships (as was done with the Links at Lake Erie Golf Course), thereby providing residents with a greater variety of opportunities.

As the tables below illustrate, Monroe Charter Township far exceeds national park standards for most of the park categories. The proximity of recreation facilities is cited by many Township residents as one of the most attractive features of their community.

4. Recreation and Community Facilities

Table 4.1: MDNR Recreation Facility Standards

Amenity	State Standard	Recommended Number in Monroe Charter Township	Total Existing in Monroe Charter Township	Surplus/Deficiency
Basketball Court	1 per 5,000 people	3	7	+4
Tennis Court	1 per 2,000 people	7	4	-3
Volleyball Net	1 per 5,000 people	3	3	0
Baseball/Softball Field	1 per 5,000 people	3	21	+18
Soccer/Football Field	1 per 10,000 people	1	4	+3
Golf Course	1 per 50,000 people	0	1	+1
Driving Range	1 per 50,000 people	0	1	+1
Swimming Pool	1 per 20,000 people	1	0	-1
Handball Courts	1 per 20,000 people	1	0	-1
Ice Rinks	1 per 20,000 people	0	0	0
Archery Range	1 per 50,000 people	0	0	0
Running Track	1 per 20,000 people	1	2	+1
Playground	1 per 3,000 people	5	6	+1
Picnic Areas	1 per 5,000 people	3	3	0
Cross-Country Ski Trails	1 per 10,000 people	1	1	0
Nature Trails	1 per 20,000 people	1	0	-1
Sledding Hills	1 per 40,000 people	0	0	0

Table 4.2: Park Land Acreage Analysis, Monroe Charter Township

Park Classification	NRPA Guideline Acreage per 1,000 Residents	Monroe Charter Township Recommended Acreage	Actual Acreage in Township	Surplus/Deficiency
Mini Parks	0.25	3.6	10.1	+6.5
Neighborhood Parks	2.0	29.1	42.7	+13.6
Community Parks	5.0	72.5	15.0	-57.5
Regional Parks	10.0	145.6	0.0*	-145.6
Total	15.25 – 17.0	250.8	52.8	-198.0

*While there are no regional parks within the Township boundaries, there are almost 80,000 acres of regional parks within a 60 mile radius.

Community Facilities and Services

This section inventories public facilities within the Township and gives qualitative descriptions of each facility listed. Monroe Charter Township is the home of many County services and agencies that are located throughout the Township. They include the Monroe County Road Commission, Drain Commissioner's Office, Animal Shelter, Emergency Management Division, Fairground, Health Department, Mental Health Department, Youth Services, and the Public Library.

PUBLIC SCHOOLS

Township children attend either Monroe or Ida Public Schools but the three public schools located within Monroe Township fall under the Monroe Public School District. **Custer Elementary** is on Albain Road between South Dixie Highway and South Telegraph Rd. **Monroe High School** and **Waterloo Elementary** are located south of M-50 and east of Herr Road in the northwest section of the Township. Monroe Public School District had an enrollment of 6,450 students for the 2013/14 school year.

The elementary schools educate students in grades pre-K through 5th grade. Students are assigned to their schools based on geographic attendance areas within the district boundaries. Middle school attendance areas are geographically designed to balance student numbers between the 2 middle schools (neither of which is located in Monroe Charter Township). Monroe High School serves all of the district's ninth through twelfth grade students, with 9th grade classes in the Freshman Academy, a "school within a school" located in a designated section of the building with its own staff and administration devoted to 9th grade education.

COMMUNITY COLLEGE

Monroe County Community College is located in the northwest section of the Township off of South Raisinville Road on approximately 190 acres. The college was founded in 1964 as a public two-year institution, accredited to award two-year Associate Degrees. The college also offers career programs leading to a certificate. MCCC partners with Eastern Michigan University and Sienna Heights College to allow a smooth transition to a four-year degree program, but students can also transfer their credit hours to another college or university of their choice. Enrollment is at 4,624 students for the fall 2014 semester, many of whom are Township residents.

PUBLIC FACILITIES

Located on East Dunbar Road, west of U.S. 24, the **Township Hall** is a multi-use facility that serves as the center for Township operations and meetings. The Hall is the home of the Township Supervisor, Clerk, Treasurer, Assessor, and the Building Official and Zoning Enforcement Officer. Official meetings occur in the Hall's main meeting room. With advanced notice, the meeting rooms can be utilized by neighborhood organizations and other civic-minded organizations. A Township maintenance barn is also located on the property.

The main branch of the Monroe County Library, the **Ellis Resource Center**, is located in the northwest corner of Monroe Township. This facility has over 4,300 square feet of usable space containing over 190,000 volumes including books, periodicals, and electronic media. Township residents can borrow library materials at this branch or at any other of the 14 branches located throughout the county.

The **Monroe County Fairground** contains 120 acres in the northwest section of the Township adjacent to M-50. An annual fair is held in August. Other programs and organizations, such as 4-H Clubs, can use fairground facilities throughout the year with permission. However, the site is generally not open to the public and the front gate is locked when not in use.

4. Recreation and Community Facilities

Public Services

POLICE PROTECTION

Currently, the Township does not directly provide police protection. The Monroe County Sheriff responds to citizen complaints and emergencies on a call-by-call basis. The Michigan State Police provides additional police protection when requested.

FIRE DEPARTMENT

The Monroe Charter Township Fire Department (Department 35) consists of 25 volunteer firefighters, one full-time Fire Inspector, and support staff. The firefighters provide protection to the citizens of the Township and respond to approximately 1,100 emergency calls each year. Fire and medical emergencies will continue to grow with the increase in population. The Fire Department provides protection from fire and related hazards. The Monroe Charter Township Fire Department has an ISO rating of class 5/8. Many insurance companies use the ISO rating factor to grade fire protection on a scale of 1 to 10. The ISO rating is one of the factors used in setting the premiums charged for property insurance - the higher the ranking, the higher the insurance premium.

The Department maintains 3 fire stations to provide protection to the citizens of the Township. Service areas are divided into 3 districts by railroad lines.

- Main station #1 15331 South Dixie Highway
- East Side Station #2 14795 LaPlaisance Road
- West Side Station #3 4925 East Dunbar Road (Township Hall)

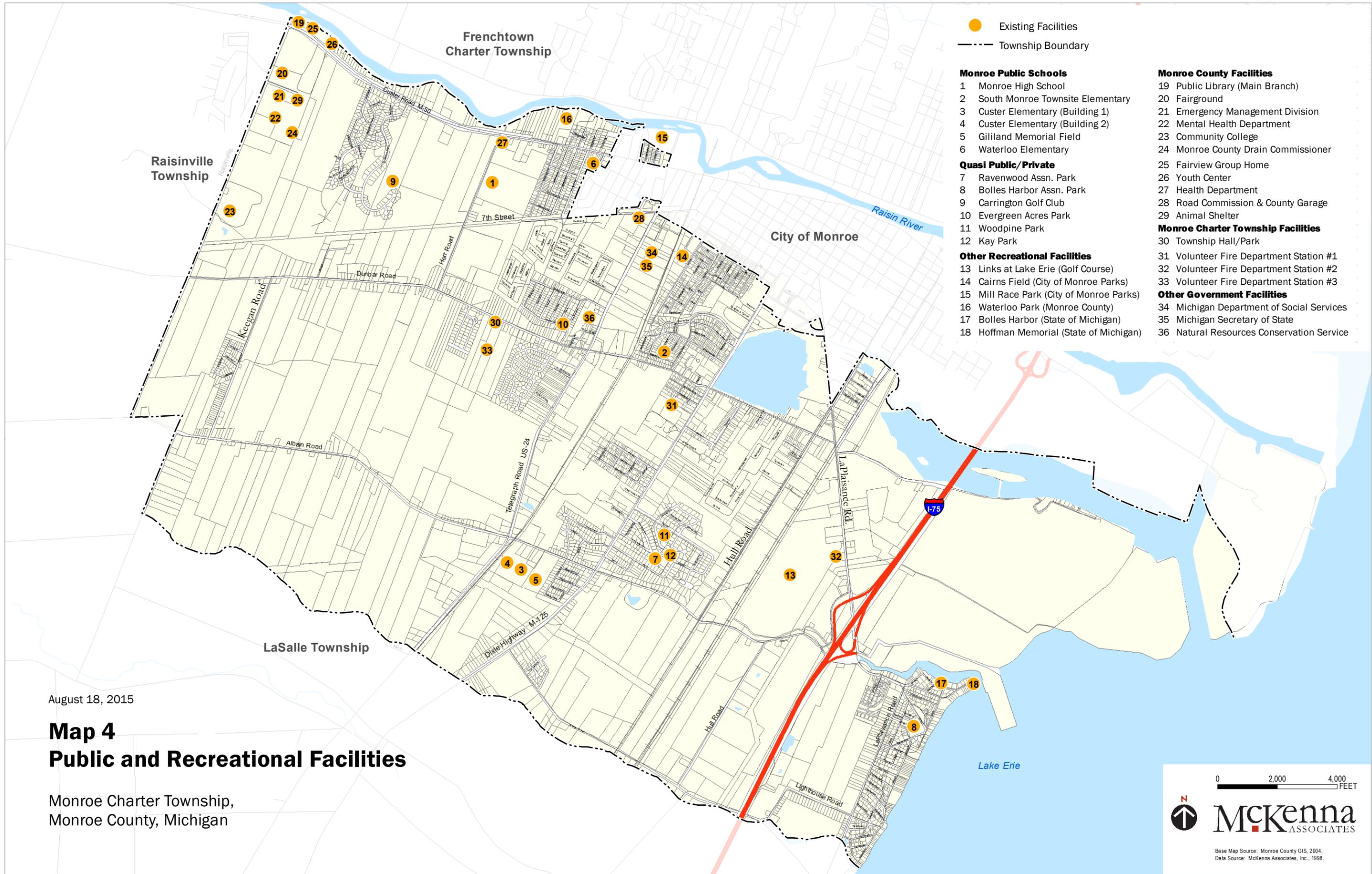
Station #1 has the bulk of the Department's equipment and fire engines. A rescue squad with medical equipment and hydraulic extrication equipment with limited transport is housed there. In addition, the Monroe Charter Township Fire Department has: a fire engine with class A & B foam system; hydraulic extrication equipment with 750 gallons of tank capacity; a fire engine with a 50 foot elevated/water tower with 500 gallons of water capacity; one 85 foot articulating bucket aerial platform with 200 gallons of water capacity. Each fire engine has the capacity to pump 1,500 gallons per minute. The equipment at the main fire station responds township wide. The main station also houses one 4 X 4 utility pick-up truck, a 4 X 4 Suburban Command vehicle, and a 4 X 4 mid-size wildfire fire engine.

The East Side Station, Station #2, is located on LaPlaisance Road near I-75, exit 11. This station maintains one fire engine with a pump capacity of 1,500 gallons per minute along with 1,000 gallons of water tank and medical equipment. The engine primarily responds to any emergency on the east side of the Township including a portion of I-75 and Bolles Harbor.

The West Side Station, Station #3, is located behind the Township Hall building and houses a fire engine with a pump capacity of 1,500 gallons per minute with 1,000 gallons of water along with medical equipment. This engine primarily responds to any emergency on the west side of the Township including Monroe County Community College, Monroe High School and the County Fairgrounds.

TRASH COLLECTION

The citizens of Monroe Charter Township contract for trash collection from private contractors. Twice a year the Township holds a special clean-up day in May and October for residents to dispose of trash.



● Existing Facilities
 - - - Township Boundary

- Monroe Public Schools**
- 1 Monroe High School
 - 2 South Monroe Townsite Elementary
 - 3 Custer Elementary (Building 1)
 - 4 Custer Elementary (Building 2)
 - 5 Gililand Memorial Field
 - 6 Waterloo Elementary
- Quasi Public/Private**
- 7 Ravenwood Assn. Park
 - 8 Bolles Harbor Assn. Park
 - 9 Carrington Golf Club
 - 10 Evergreen Acres Park
 - 11 Woodpine Park
 - 12 Kay Park
- Other Recreational Facilities**
- 13 Links at Lake Erie (Golf Course)
 - 14 Cairns Field (City of Monroe Parks)
 - 15 Mill Race Park (City of Monroe Parks)
 - 16 Waterloo Park (Monroe County)
 - 17 Bolles Harbor (State of Michigan)
 - 18 Hoffman Memorial (State of Michigan)

- Monroe County Facilities**
- 19 Public Library (Main Branch)
 - 20 Fairground
 - 21 Emergency Management Division
 - 22 Mental Health Department
 - 23 Community College
 - 24 Monroe County Drain Commissioner
 - 25 Fairview Group Home
 - 26 Youth Center
 - 27 Health Department
 - 28 Road Commission & County Garage
 - 29 Animal Shelter
- Monroe Charter Township Facilities**
- 30 Township Hall/Park
 - 31 Volunteer Fire Department Station #1
 - 32 Volunteer Fire Department Station #2
 - 33 Volunteer Fire Department Station #3
- Other Government Facilities**
- 34 Michigan Department of Social Services
 - 35 Michigan Secretary of State
 - 36 Natural Resources Conservation Service

August 18, 2015

Map 4 Public and Recreational Facilities

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000 FEET

McKenna
ASSOCIATES

Base Map Source: Monroe County GIS, 2004.
 Data Source: McKenna Associates, Inc., 1998.

4. Recreation and Community Facilities

5. Transportation Analysis

Circulation, or how people maneuver through and throughout the Township, is an important consideration when developing a plan for the future. Roads, transit, and non-motorized transportation routes are means of controlling and organizing land use development within the community. Additionally, roads and road right-of-ways provide locations for public utilities, such as gas, electric, and telephone lines. Roads provide the means by which emergency and public services are delivered to residents. They also provide access to parcels of land, thereby increasing the economic potential of vacant land. The road system establishes the basic form of the Township. The transportation system must be integrated with all other aspects of the Plan. This section of the Master Plan will analyze the circulation patterns of the Charter Township of Monroe and will help determine problem areas that should be addressed.

Because of the many functions of the system, transportation has a significant impact on the economy, environmental quality, energy consumption, land development, and the general character of the Township. Therefore, it is important that land use planning and the circulation system be coordinated to manage existing and future growth.

An examination of the traffic volumes, access points, and conditions of the street network is an integral part of the Master Plan because the street system and land uses are interdependent. For example, commercial uses gravitate toward corridors like South Telegraph Road (US-24), South Dixie Highway (M-125), and LaPlaisance Road which have higher traffic volumes than other roads in the Township and, therefore, provide more opportunity to capture a segment of the pass by traffic. Conversely, the arrangement of land uses can influence how traffic flows. Commercial uses generate high traffic volumes and a significant increase in turning movements. Industrial and office employment centers generate high peak hour volumes and need convenient routes to expressways. Residents desire convenient access to work or shopping but generally want safe, low volume streets in their neighborhood. The intermixing of the various traffic goals helps identify problems and policies for the future.

Functional Classification

The National Functional Classification (NFC) is a planning tool that Federal, State, and local transportation agencies have used since the 1960's. The Federal Highway Administration developed this system of classifying all streets, roads, and highways according to their relative traffic-carrying function.

The NFC designation of a given road has a direct relationship to its eligibility for federal funds, either as part of the National Highway System (NHS) or through the Surface Transportation Program (STP). MAP-21 is the current Federal legislation that governs the eligibility of roads for Federal aid and related matters. All principal arterials, minor arterials, urban collectors, and rural major collectors are eligible for Federal funds for improvement. Interstate and principal arterials have a higher funding priority and thus, a greater amount of funding.

INTERSTATE

The primary function of the interstate system is to move vehicles and commerce over long distances between states at high rates of speed with very limited and controlled access. Typically interstates have posted speed limits between 55 and 70 miles per hour (mph) in rural and 55 mph in urban areas.

5. Transportation Analysis

PRINCIPAL ARTERIALS

Principal arterials carry vehicles over long distances and connect population centers. They provide access to places that create major traffic, such as airports and regional shopping centers. Examples of principal arterials are interstate highways and other freeways, as well as state identified routes between large cities and significant surface streets in large cities.

MINOR ARTERIALS

Minor arterials are similar in function to principal arterials, except they carry trips of shorter distances. State routes between smaller cities, surface streets of moderate importance in large cities, and important surface streets in smaller cities are examples of minor arterials. Minor arterials place more emphasis on land access than do principal arterials, because one of their key functions is to carry traffic to the next junction of a principal arterial.

MAJOR COLLECTOR STREETS

Collector streets connect neighborhood areas of concentrated land use development to minor and principal arterials. They provide access to individual parcels of property and funnel traffic from residential areas to arterials.

LOCAL STREETS

Local streets provide access from individual properties to collector streets. They serve as routes of access through residential development. Local streets are the main interior streets of the Township depending on the density of residential development. Movement of through traffic is deliberately discouraged on local streets.

Monroe Charter Township streets are illustrated on the Transportation and Circulation Map (Map 5). Traffic patterns have evolved over the years as development and economic patterns have changed.

The primary road system is in place. Interstate 75 provides long distance connections linking Toledo, Ohio and Detroit, Michigan. Telegraph Road (US 24), South Dixie Highway (M-125) and to a lesser extent LaPlaisance, Hull, and Raisinville Roads provide north-south routes through the Township. South Custer (M-50), East Dunbar, and Albain roads provide east-west routes through the Township. Both the north-south and east-west roads are generally evenly spaced, providing for good circulation and points of potential access from anywhere. However, railroad grade crossings provide an impediment to circulation, especially for east-west traffic.



Funding and Road Maintenance

Act 51, Public Acts of 1951, as amended, establishes the major and local streets and the urban and rural boundary areas within the Township for state transportation funding of both highways and streets. All state funding goes through the Road Commission. The improvements that result from the Act 51 funding are under the jurisdiction of the Monroe County Road Commission. The Township works cooperatively with the Road Commission for the continued maintenance and future road improvements.

Geometric Design and Road Operation

Traffic operation on streets is influenced by three key factors: the geometric design, conflicting movements between vehicles, and traffic signals. The combination of these factors determines the level of service or how well the street operates. Level of service is a qualitative measure describing factors such as speed and travel time, delay, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

The geometric design refers to the number of lanes, width of lanes, existence of medians, driveway locations, and similar features. The design influences what a motorist perceives as a safe travel speed. One of the most commonly overlooked issues is the impact of turning conflicts between vehicles. The number of vehicles making turns and placement of access points can significantly impact the safety and efficiency of a street. Streets with numerous conflict points have more accidents and slower travel.

5. Transportation Analysis

The timing or coordination of traffic signals is also an important determinant of the level of service because traffic signals stop the progression of traffic and, therefore, reduce the overall travel speed on a street. The degree of impact of a traffic signal is a function of signal timing, signal progression, and intersection geometrics.

Traffic Volumes

AVERAGE DAILY TRIPS

Traffic volume counts are a numeric tabulation based upon usage of a particular segment of street. The counts are a tool used to determine if roads are meeting or exceeding their design capacity. The Michigan Department of Transportation (MDOT) maintains data for arterials and interstates. These 24-hour traffic counts, commonly referred to as Average Daily Trips (ADT), can help identify where the volumes may be approaching or exceeding the design capacity of the road, a capacity deficiency. Traffic counts are taken several times during the course of a year. The counts are then used to determine the average number of trips per day for a one year period. The traffic counts discussed below represent an annual average calculation. Major and local streets, and all publicly dedicated roadways are under the Monroe County Road Commission's jurisdiction. That agency is the source of the traffic count data for those roads.

Traffic volumes (based on traffic counts conducted in 2012) for state trunk lines and major and local county roads are shown on the Transportation and Circulation Map (Map 5). Interstate 75 has the highest traffic volume counts: 46,800 ADT, a decrease of almost 22,000 cars from 2000. The other state trunk lines carry less traffic with the following counts: South Dixie Highway has 21,200 ADT and Telegraph Road has 16,800 ADT on the busiest stretch through the Township. Major roads, such as, LaPlaisance Road has 8,500 ADT and East Dunbar Road has 7,700 ADT on the busiest portions. All of the roads in Monroe County are operating at an acceptable level of ADT.

Access Management

An excessive number of driveways, inadequate spacing between access drives, poor spacing of access drives from intersections, and improper access drive design increase the potential for accidents and reduce the effective function of streets. South Dixie Highway (M-125), South Telegraph Road (US 24) and, to a lesser extent, East Dunbar Road have significant access management problems. In addition, many of the major street intersections have land uses (often gas and/or auto repair stations) with an excessive number of access drives that are poorly distanced from the intersection. Their construction pre-dates effective zoning regulations.

Access management is a tool to improve safety and preserve capacity along our major streets. Access management is a comprehensive approach to control the number, location, and design of access points. Access management is intended to provide a number of benefits listed below:

1. **Improve safety:** One of the major goals of access management is to improve safety along major streets. Some studies have shown that approximately 70% of accidents along major streets are related to left turns. Many access management techniques are intended to separate or minimize left turn conflicts. Studies conducted by the Institute of Transportation Engineers (ITE) have shown that streets with good access management techniques have fewer accidents.

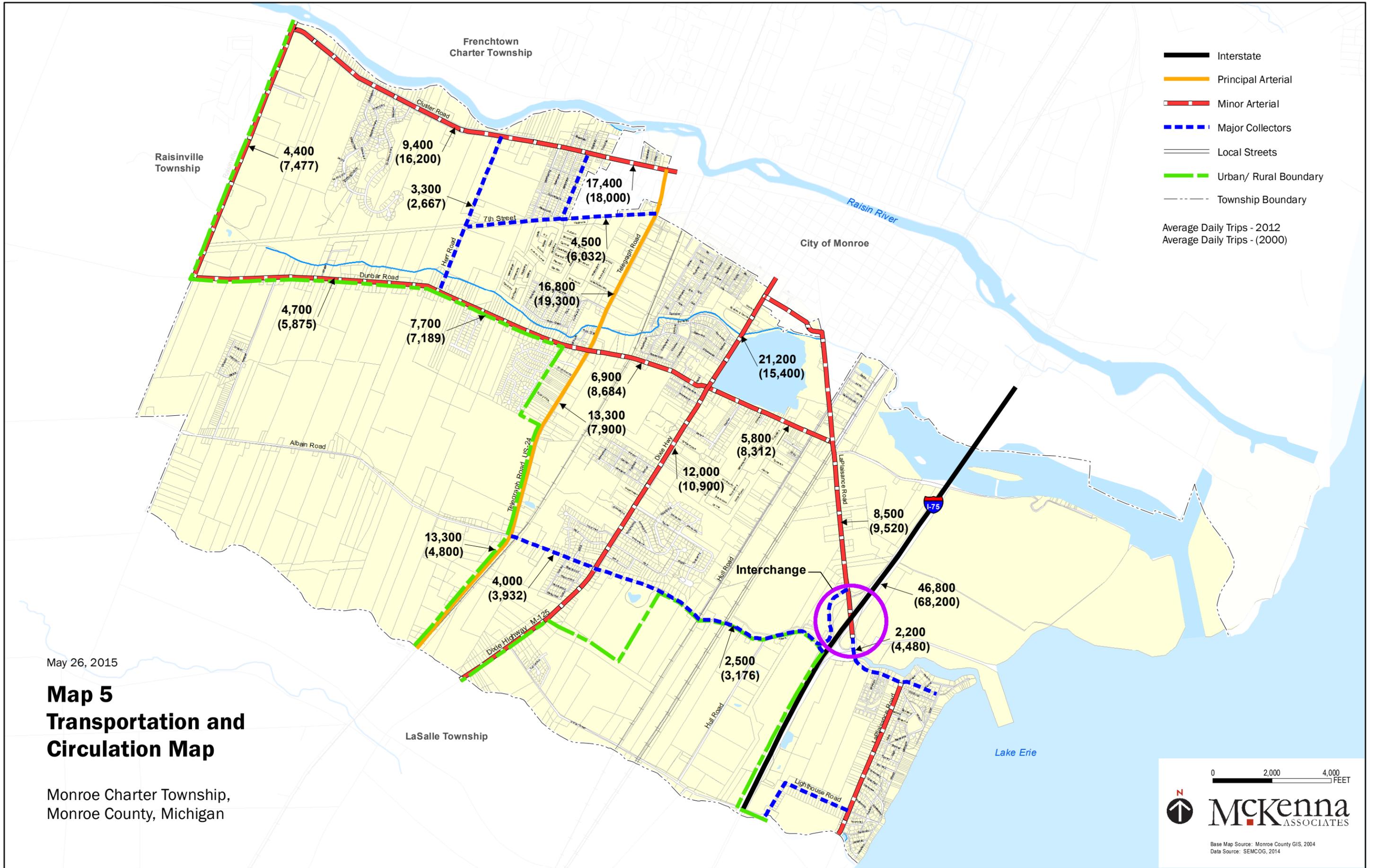
2. **Preserve capacity:** Each turning movement (intersections and/or point of access) and conflict along the street tends to reduce the capacity by causing other vehicles to slow down. Institute of Transportation Engineers (ITE) studies have shown that a street with access management can have a capacity up to 50% higher than a similar street without good access management.
3. **Preserve public investment and the integrity of the roadway:** Acknowledge that substantial public funds have been and will be invested to develop and maintain the street system to move traffic safely and efficiently.
4. **Provide reasonable access:** Each property has a right to “reasonable access”. Reasonable access may not always be direct access, or may not be the number of access points requested by a property owner. Access management can help lessen congestion and thus provide better access to businesses and industry.
5. **Quality of life:** Safer roads and less congestion results in less stress and travel time, which improves one aspect of quality of life.

The Township, neighboring communities, and road agencies must work cooperatively with developers to control access along major streets as development occurs. The Township now considers access management best practices when reviewing site plans along major corridors. The following is a brief description of access management techniques that may be used by Monroe Charter Township which can be enforced through the zoning regulations of the Township:

- **Reduce the number of access points:** Reducing the number of driveways reduces the potential for traffic conflicts, accidents and congestion. Shared access drives, rear service drives and frontage roads are often used to reduce access points. A shared access point usually serves two land uses that generate relatively low traffic volumes, while rear service drives and frontage roads can provide access and internal circulation for any number of sites.
- **Restrict turning movements:** Traffic conflicts and accidents often occur during turning movements. Efforts to prevent left turns in some situations can reduce the potential for traffic conflicts. In addition, installing medians at access points or creating a boulevard directs motorists more efficiently and safely.
- **Spacing of driveways:** Providing adequate spacing between driveways, proper alignment of driveways on the opposite side of the street (offset), and providing a safe distance between driveways and away from intersections is an integral part of access management.
- **Driveway design:** Standards to provide adequate sight distance, drive width, corner radii, and taper lengths are also an important part of access management.
- **Require acceleration or deceleration tapers/lanes:** Access can be improved by removing motorists entering or exiting a site from the flow of traffic through the use of acceleration or deceleration tapers and lanes.

These techniques are usually enforced during site plan reviews by the Township Planning Commission of new or renovated sites.

5. Transportation Analysis



- Interstate
- Principal Arterial
- Minor Arterial
- Major Collectors
- Local Streets
- Urban/ Rural Boundary
- Township Boundary

Average Daily Trips - 2012
Average Daily Trips - (2000)

May 26, 2015

Map 5 Transportation and Circulation Map

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000 FEET

McKenna
ASSOCIATES

Base Map Source: Monroe County GIS, 2004
Data Source: SEMCOG, 2014

5. Transportation Analysis

Complete Streets

Monroe Charter Township is committed to the principle of “Complete Streets.” Complete Streets are roadways that accommodate all users safely and easily – pedestrians, bicyclists, transit, and automobiles. Complete streets offer multiple safe options for transportation and also provide opportunities for physical activity and active, non-motorized transportation. The following are the Township’s guiding principles for Complete Streets:

1. Enhance the pedestrian and bicycle friendliness of major corridors, including installing sidewalks, bicycle/walking trails, and bike lanes. Safe crosswalks should also be added at busy intersections.
2. Improve the walkability of residential neighborhoods by adding sidewalks and bike paths, as appropriate.
3. Require connectivity in the road systems of new residential developments, and discourage the use of cul-de-sacs.
4. Work with Lake Erie Transit to ensure that bus service meets the needs of Township residents.
5. Provide high-quality facilities for transit riders, such as covered bus stops and benches.
6. Work with railroads and Monroe County Road Commission to make rail grade crossings safer for automobiles, bikes, and pedestrians.
7. Investigate the possibility of eliminating rail crossings at street grades in key areas.

Railroads and Transit

FREIGHT RAILROADS

Monroe Charter Township has three rail lines that traverse the Township north to south. The rail lines are owned by CSX (parallel to and near Telegraph Rd) and Norfolk Southern and Canadian National Railroads (both located in a narrow corridor parallel to and west of I-75). The railroad lines are a dramatic interruption to the flow of traffic along the streets of the community. Despite the impact on vehicular traffic, railroad grade crossings have been a long-standing part of the Township. They pre-date the construction of the road network. These lines are important connectors in the national freight rail system, because they connect Detroit and other parts of Michigan not only to Toledo and points south, but also to points east, because the tracks connect to other lines running south of Lake Erie.

PASSENGER RAILROADS

There is no passenger rail service to Monroe Charter Township or the greater Monroe area. This plan supports the idea of providing passenger rail service in the Toledo-Detroit corridor, with a stop in Monroe, however, no specific plans have been proposed as of 2015.

TRANSIT FOR THE GENERAL PUBLIC

Lake Erie Transit provides bus service in the Greater Monroe and the Bedford areas of Monroe County. The following routes serve Monroe Charter Township:

- Route 4 serves S. Telegraph Road between 7th Street and Meadowbrook Drive.

5. Transportation Analysis

- Route 7 serves S. Dixie Hwy between the Monroe City line and the South Monroe Shopping Center near Greenwycke Lane.
- Route 9 serves South Custer Road between Telegraph Road and Monroe County Community College.

TRANSIT FOR SENIORS

The Monroe County Commission on Aging coordinates and supports a number of senior transportation providers that serve the Township. Lake Erie Transit (LETS) operates a dial-a-ride program that offers door-to-door service to seniors at a fixed rate. Otherwise, four service providers furnish door-to-door service for seniors at varying costs. One provider, Karmanos Cancer Institute, offers free rides for cancer patients to and from medical appointments.

Sidewalks and Non-Motorized Pathways

In recent years, there has been a greater push by members of the community for interconnected biking, hiking and walking routes throughout Monroe Charter Township. This trend was reinforced during the *Resilient Monroe* regional planning process in 2013. In the online survey conducted as part of that process, over half of all responding Monroe Charter Township residents felt access to walking and biking paths is “important” or “very important.” However, over half of township residents also felt it is difficult to get around by foot and by bicycle. The Township is responding to the public by including in this Master Plan a system of proposed pathways and bike lanes that would connect Residents with community assets, including recreational facilities, shopping centers, and historical and cultural amenities (Map 6).

Already, there is positive momentum for pathways, both locally and regionally. In 2011, the Township built a pathway that begins at the Town Hall parking lot and continues behind the facility through the woods, connecting a playground and baseball fields. The recently unveiled River Raisin Heritage Corridor Master Plan calls for a connected system of pathways throughout the Monroe Community. One pathway of interest is the proposed Greenway corridor that will connect the Battlefield Park with the historically significant Plum Creek site. Monroe Charter Township should work to continue that pathway to connect with recreational and social destinations within the Township and beyond.

The regional Downriver Linked Greenway Initiative plan calls for additional community trail connections, and SEMCOG is piggy-backing off that effort to create a regional non-motorized transportation plan for all of Southeast Michigan. The proposed Lake Erie Trail will connect the City of Monroe to northern communities via former railroad and/or utility corridors. Local connectors with views and access to Lake Erie are also planned for the Lake Erie Trail. Monroe Charter Township will coordinate and cooperate with regional efforts to build trails. However, the Township prefers that the trails be built in the preferred corridors shown on Map 6.

The preferred corridors for non-motorized pathways are as follows:

- **Telegraph Road.** A pathway along Telegraph could extend from Albain Road in the south to the City of Monroe, Frenchtown Township, and potentially beyond.
- **Seventh Street.** The City of Monroe’s Greenway Plan calls for a path along Seventh Street, and Monroe Charter Township would continue the path as far as Herr Road.

- **LaPlaisance Road.** Bolles Harbor is one of the most popular recreational areas in the community. A pathway along LaPlaisance would connect residents to Bolles Harbor, as well as planned commercial and recreational development along the corridor. (See the LaPlaisance Road Corridor Plan, an addendum to this Master Plan).
- **Monroe Street/ S. Dixie Highway.** The Monroe/S. Dixie corridor is a main route through the Township and leads directly to Downtown Monroe. A bike path, or bike lanes, along this route would provide direct access to many of the Township’s businesses, and the region’s core.
- **Dunbar Road.** A pathway along Dunbar Road would provide an important east-west connection across the Township, and would also allow cyclists to enjoy the scenic quality of the road east of Dixie. This trail could also continue along the I-75 right-of-way to connect to Bolles Harbor.
- **Albain Road.** Albain Road would also provide east-west connectivity, and would connect to schools, businesses, and recreational amenities in the southern and eastern parts of the Township.

5. Transportation Analysis



May 26, 2015

Map 6 Proposed Non-Motorized Trails

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000 FEET

McKENNA
ASSOCIATES

Base Map Source: Monroe County GIS, 2004
Data Source: McKenna Associates, Inc., 1998.

5. Transportation Analysis

Adjacent Waterways

Lake Erie borders Monroe Charter Township to the east. The nearby Port of Monroe is the only Michigan port located on Lake Erie, and provides water transport of raw materials and goods. This waterway provides an important shipping alternative to Monroe area businesses including those in Monroe Charter Township.



5. Transportation Analysis

Summary

1. Besides Interstate 75, the most heavily traveled rights-of-way in the Township are LaPlaisance Road, South Dixie Highway (M-125) and South Telegraph Road (US 24). South Custer (M-50) and East Dunbar Roads are other heavily traveled streets in the Township. Traffic patterns have changed over time due to shifting development and economic trends.
2. Many of the major thoroughfares, especially South Dixie Highway (M-125) and South Telegraph Road (US 24), have significant access management problems that should be addressed through the development review process.
3. The Township is served by adequate public transit for a community of its size and density.
4. A system of non-motorized pathways should be built to improve connectivity for pedestrians and cyclists.
5. Railroad grade crossings should be reviewed for safety upgrades for all users, and the creation of over- and under-passes where possible.

6. Resilient Monroe

Note: In 2013, the Land Information Access Association (LIAA) conducted a thorough public engagement process and developed regional planning recommendations for Frenchtown Charter Township, the City of Monroe, and Monroe Charter Township. This planning process was known as “Resilient Monroe.” Their recommendations have been included throughout this document. The following pages include a summary of the process and findings of “Resilient Monroe.”

Planning Process

Early in 2013, the City of Monroe, Frenchtown Charter Township, and Monroe Charter Township agreed to pool their resources and work together in reviewing and revising their respective master plans under the project name **Resilient Monroe**. Each of these local governments conducts land-use planning and community development separately under Michigan’s planning and zoning laws. However, when taken together, the three jurisdictions include the geographic area most people think of as the greater Monroe Community.

The **Resilient Monroe** project was designed to serve the whole community by supporting the work of all three planning commissions and the elected officials. Together, these public officials have formed the *Community Planning Committee* to review and consider the planning documents developed by the project. Research, planning, and process facilitation services are being provided by the Land Information Access Association (LIAA) with support from the Community Foundation of Monroe County, Michigan Municipal League (MML), Michigan Townships Association (MTA), Michigan Association of Planning (MAP), McKenna Associates, James D. Anulewicz Associates, and the Urban Planning division of the University of Michigan. Funding for this effort was provided by the City of Monroe, Frenchtown Charter Township, Monroe Charter Township, the Kresge Foundation and the Americana Foundation.

Ultimately, the **Resilient Monroe** project was about helping the leaders and citizens of the greater Monroe Community refine their land use and development plans. The input gathered from the process, and the recommendations generated, were used in the 2014 update of this Master Plan.

COMMUNITY PLANNING COMMITTEE

To manage and oversee this project, a *Community Planning Committee* (CPC) was formed by bringing together the appointed planning commissioners and many elected officials from the City of Monroe and Frenchtown and Monroe Charter Townships. Meeting monthly in open public forums, the CPC was responsible for evaluating and recommending changes and updates to local government master plans. However, this was only part of the public process for Resilient Monroe. Project staff members reached out to people across the community for their vision and goals for Monroe. By holding public meetings and focused discussions with people from across the community, project leaders hoped to build a greater public understanding of climate and economic resilience. By engaging citizens in working sessions for visioning and goal setting, project leaders hoped to inform the local government planning process while building citizen leadership. By conducting an extensive community survey of opinions on development and change in Monroe, project leaders hoped to inform and encourage a far-reaching community planning discussion.

6. Resilient Monroe

PUBLIC DISCUSSIONS AND FORUMS

Throughout the early spring of 2013, Resilient Monroe project team members worked to gather information from state and local government agencies, community organizations, nonprofit groups, public schools, and business leaders. Project leaders also met with community leaders individually and in focused discussion settings to help identify shared issues of concern and opportunities for cooperative community development.

Public Gatherings – During April and May of 2013, the Resilient Monroe project team distributed 1,000 project brochures and dozens of posters announcing the project and encouraging public participation. The project team convened three public gatherings in different parts of the community, making brief presentations about the potential for improving community resilience to better manage the challenges of global climate change and economic turbulence. These gatherings also provided an opportunity to receive public comments on issues of concern and hopes for the future.

Leadership Summit – In April, the Resilient Monroe project team offered a day-long *Leadership Summit* to engage interested citizens, public officials and community leaders in a more in-depth discussion. This summit asked community leaders to better understand and come to grips with the challenges of climate change and our changing global economy. Presentations were made by the experts from the University of Michigan, Michigan State University, Michigan Municipal League, Michigan Association of Planning, Michigan Department of Community Health, the Huron River Watershed Council and LIAA. At the end of the day, participants broke up into smaller groups to discuss their vision and goals for the community's future. This exercise helped foster and support more in-depth discussions undertaken by Community Action Teams.

YOUTH INITIATIVES

Early in the Resilient Monroe project, the CPC asked project staff members to engage young people in this discussion about the future of their community. They wanted to learn more about what young people thought would help make their community a vibrant and attractive place to live.

The *Youth Initiative* was designed as a two-day asset mapping, community visioning, and goal setting project involving approximately 60 students from Monroe High School and Jefferson High School. The *Resilient Monroe* project team spent half-days with the students on two consecutive weeks. Because of school transportation difficulties, the process was duplicated at each high school separately.

The curriculum consisted of interactive, hands-on, and group-focused planning activities. On the first day, after discussing the importance of local government and land-use planning, students worked together to identify the most important assets in the Monroe Community in an activity called *Crayon your Community*. Following that, students used aerial photographs to envision the best possible scenarios for their community, assuming no monetary or political constraints. The second session focused on challenges that the Monroe Community faces, and innovative, community-driven ideas for overcoming those challenges. Students were asked to brainstorm ways to thrive with an aging population, a transitioning economy, and a variable climate.

The students compiled a listing of their recommended community development projects. Then, the students conducted a survey to find out how highly the proposed projects would be rated among their peers. Approximately 100 participants at these schools were asked to rate the importance of each proposed development project to the community using a scale of 1 for not-at-all- important to 5 for extremely important. Results from the student input can be found in the Resilient Monroe Resource Atlas.

COMMUNITY ACTION TEAMS

As part of the Resilient Monroe project, citizens from throughout the community were invited to join a set of working sessions to develop topic-specific community planning recommendations for the City of Monroe, Frenchtown Charter Township and Monroe Charter Township. Participants were asked to select one of six topics to examine and discuss together in groups known as *Community Action Teams (CATs)*. The topics were (1) Access and Transportation, (2) Business and Economy, (3) Buildings and Neighborhoods, (4) Agriculture and Food, (5) Human and Social, and (6) Natural and Environmental. Each team had the opportunity to learn about the workings of the topic or system, as well as its strengths and weaknesses.

A diverse group of approximately 75 individuals participated in a series of four CAT meetings during the months of May, June, and July of 2013. CAT members represented the public and private sector, and included farmers, elected officials, church leaders, nonprofit directors, private business leaders, and numerous other stakeholders. Participants chose the system or topic they were most interested in working on. At each meeting, all six teams gathered in a large meeting space to hear a short presentation on aspects of planning for community resilience.

Then, the teams conducted separate discussions followed by a short period for reporting out to the larger group. Each team had a discussion leader (sometimes two), a facilitator for note-taking, and at least one Community Planning Committee representative.

The primary work of the participants focused on identifying key goals that would address community-wide issues and concerns. These goals were further developed by each CAT to include underlying objectives and specific task lists. The CAT participants have submitted a full report, including a complete list of goals, objectives and tasks, as their community planning recommendations to the City of Monroe, Frenchtown Charter Township and Monroe Charter Township. A full listing of the overall goals developed by the CAT participants can be found in the Resilient Monroe Resource Atlas.

COMMUNITY PLANNING AND DEVELOPMENT SURVEY

The *Community Planning Committee (CPC)* worked with staff members to develop a public opinion survey for the residents of the City of Monroe, Frenchtown Charter Township and Monroe Charter Township. The goal was to learn more about what residents like most about the Monroe Community and what cultural and natural features are most important. They also wanted to learn what residents thought about key land-use planning and development concerns identified by the CPC.

To obtain opinions from a representative sample of community residents, they selected a random sample of names and addresses from the lists of registered voters maintained by each of the three participating jurisdictions. At that time, there were a total of 40,639 voters registered in the three jurisdictions. With help from the U.S. Postal Service, they selected a total of 10,870 voter names with valid addresses at random from the lists. To achieve a statistically significant, representative sample for each jurisdiction, a response rate of about 10% was needed.

A total of 1,578 surveys were returned, yielding a very respectable 14.5% response rate and a good representative sample of all registered voters in the Monroe Community. The survey yielded a large number of responses from a broad cross-section of the population (based on the demographic data), providing valuable information about the preferences of voting citizens with an active interest in the community. A full survey report can be found in the Resilient Monroe Resource Atlas in Chapter 10.

6. Resilient Monroe

TELEGRAPH ROAD CHARRETTE

A three-day planning *charrette* was conducted for the Telegraph Corridor as part of the Resilient Monroe project. A charrette is a collaborative planning event that engages local officials, state and regional agencies, business owners, local stakeholder groups, and interested citizens to create and support a feasible and transformative plan for a specific issue or area of the community. The focus of the charrette was on a seven-mile portion of Telegraph, roughly bound by Dunbar Road to the south and Stewart Road to the north. See the Telegraph Final Report for a full overview of the process and detailed community recommendations.

Building Community Resilience

Most communities across Michigan are wrestling with difficult economic, social, and environmental challenges. The shifting global economy and statewide recession is forcing big changes in business practices and employment. State and federal funding is declining and new long-term assistance appears unlikely. Further, paying for basic energy supplies continuously siphons off community resources. Making matters worse, the harmful impacts of extreme weather events on agriculture, infrastructure and human health are being felt almost everywhere across Michigan.

These are turbulent times for many Michigan communities. However, with planning and preparation, communities can weather the storms and recover, becoming even better places to live and thrive. Through community-wide planning, resilient cities and townships actively cultivate their abilities to recover from adverse situations and events, working to strengthen and diversify their local economies and communications networks, increase social capital and civic engagement, enhance ecosystem services, improve human health and social systems, and build local adaptive capacity.

RESILIENCE

Resilience can be described as the capability of a person or community to withstand and recover from a shock or serious misfortune without permanent disruption. According to the Rand Corporation, community resilience is *a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and/or recover from adverse situations*. Communities that are resilient are able to learn from adversity and adapt quickly to change. In general, the most important characteristics of community resilience are: (1) strong and meaningful social connections, (2) social and economic diversity, (3) innovation and creative problem solving capacity, and (4) extensive use of ecosystem services.

Resilience includes adaptive capacity. Adaptation is a critically important part of resilience because it allows us to prevent further harm from disasters and disruptions while making the most of the new conditions. By adapting rapidly to changing circumstances, communities may not only survive challenges, but thrive.

Communities interested in becoming more resilient assess their vulnerabilities and make action plans to reduce their sensitivities and exposures to hazards of all kinds. Improvements in social cohesion and civic engagement also improve community resilience, by increasing the capacity of volunteer organizations and providing more secure neighborhoods, among other things. Planning processes can help increase civic engagement by improving communications and cooperation between cultural and service organizations and assuring more effective community projects.

To improve economic resilience, communities can work to encourage and support local production of goods and supplies, increasing self-reliance and reducing the flow of funds out of the community. Programs to encourage local investing and entrepreneurship have been helpful in building both employment and production capacity. Local investments, consumption of locally produced products, and locally owned businesses all help to diversify the community's economy, giving it greater resilience.

ECONOMIC TRENDS AND CHALLENGES

Over the past 20 years, technologies such as broadband digital communications and the rapid transport of agricultural and manufactured goods have changed the global economy. Many manufactured goods can now be produced anywhere in the world and transported anywhere else, increasing global competition. As a result, many manufacturing jobs have been and are being moved to countries with the lowest labor and related costs.

The trend toward moving jobs to other, lower-cost countries together with the continuing automation of processes has resulted in the nation losing manufacturing jobs. The impact of this changing trend has been particularly hard on Michigan's economy, which has relied more heavily on manufacturing than most other states' economies. In the vehicle manufacturing sector alone, Michigan lost 65,100 jobs from 1990 to 2010. Overall, between 2000 and 2010, Michigan lost 367,000 manufacturing jobs.

Over the past decade, most communities across Michigan have faced severe economic challenges due in part to a statewide loss of manufacturing jobs combined with a severe national recession. Along with the harsh economic downturn has come a loss in population and a significant loss in real estate values as many people moved to other locations. Ranked 17th of all states in 1970, Michigan was ranked 34th in average household income by 2014.

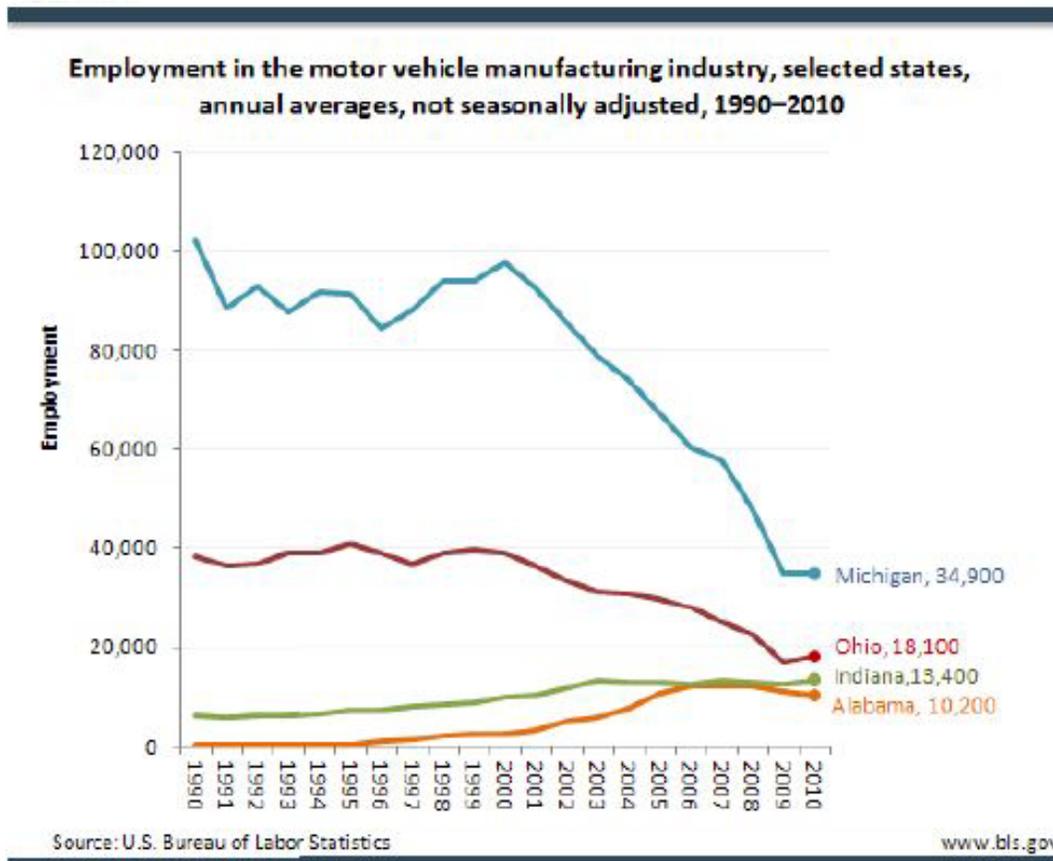
According to many experts, most of the future economic growth in Michigan will come in the high-technology and services sectors, including health care, financial management, highly-skilled manufacturing, human services and the food industry. While the recovering manufacturing sector will remain a major component of our state's economy, most of the jobs already lost will not return. Rather than compete for a decreasing number of manufacturing jobs, the experts say, communities and regions should embrace this *New Economy*.

The *New Economy* is a buzz-phrase used to describe the transition from a manufacturing-based economy to a service-based or innovation-based economy. In the new economy, communities and regions are encouraged to build from within, expanding existing businesses and supporting new entrepreneurial enterprises. To rebuild or retain economic vitality, the experts say, communities will need to attract and retain educated and talented people.

There are a number of things that communities and regions can do to improve their economic outlook. Economic development actions recommended by many experts reflect on the characteristics of the *New Economy*. For example, the following list presents some of the actions suggested by Michigan State University's Land Policy Institute's (MSU LPI) 2010 training course. All of these actions could, if properly focused, increase community resilience.

6. Resilient Monroe

Figure 6.1: Automotive Industry Employment, 1990-2010



Actions We Could Take to Restore Prosperity

1. Diversify our economy.
2. Expand our markets.
3. Embrace the Green Economy and its focus on alternative energy.
4. Promote and support entrepreneurialism.
5. Focus on talent retention and attraction.
6. Focus on population retention and attraction.
7. Focus on effective placemaking and place-based strategies.
8. Right-size and maintain our infrastructure.

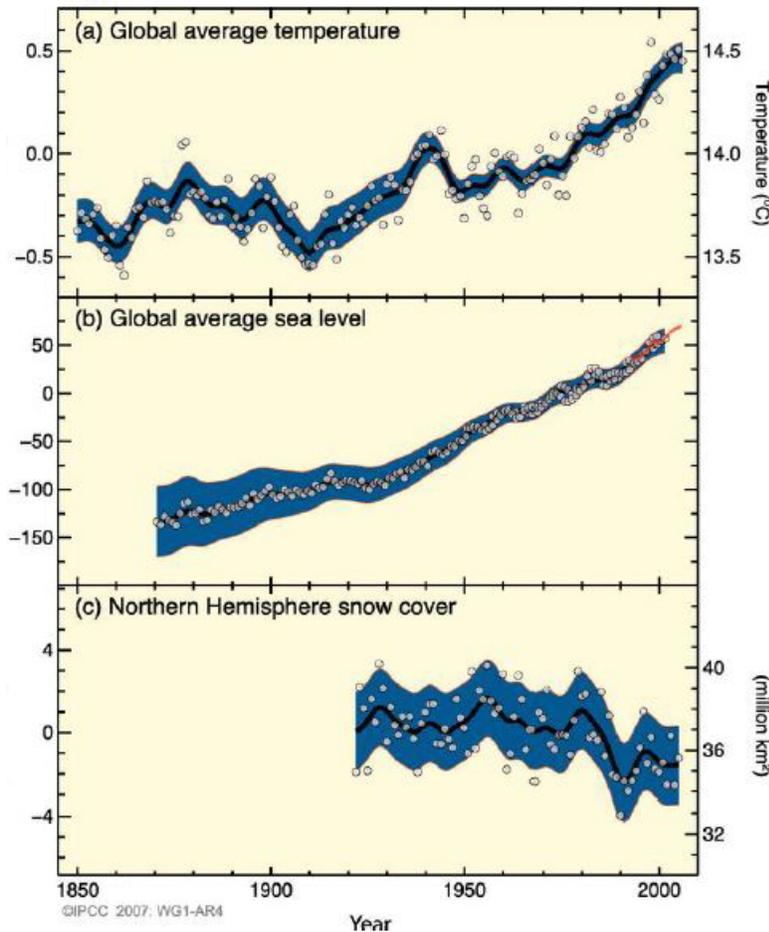
CLIMATE CHANGE AND VARIABILITY

Climate and *weather* are directly related, but not the same thing. *Weather* refers to the day-to-day conditions we encounter in a particular place: sun or rain, hot or cold. The term *climate* refers to the long-term patterns of weather over regions or large areas. When scientists speak of global climate change, they are referring to generalized, regional patterns of weather over months, years and decades. Ongoing and predicted climate changes refer to the generalized weather characteristics or averages on a regional basis.

As stated by the *Intergovernmental Panel on Climate Change*, significant changes in the earth's climate have been observed and thoroughly documented. *Warming of the climate system is unequivocal* and is now evident in average air and ocean temperatures, rising sea levels and the melting of ice. Further, more change is expected.

Figure 6.2 provides a summary of observed changes in several key climate indicators over the last 100 to 150 years, as compiled by the *Intergovernmental Panel on Climate Change*.

Figure 6.2: Climate Trends Since 1850



To help predict what the climate will be in the future, scientists are using computer models of the earth's atmosphere, oceans and land surfaces to predict large-scale changes in climate. These *General Circulation Models* (GCM) have been improved and verified in recent years, resulting in relatively reliable predictions for climate changes over large regions. To help predict climate change at the earth's surface for smaller regions, scientists apply downscaling techniques.

The *Great Lakes Integrated Sciences Assessment* (GLISA) is a consortium of scientists and educators from the University of Michigan and Michigan State University that is helping to provide downscaled models for the Great Lakes Region in support of community planning efforts like *Resilient Monroe*. According to GLISA, the Great Lakes region has already experienced a 2.3° F increase in average temperatures from 1968 to 2002. An additional increase of 1.8 to 5.4° F in average temperatures is projected by 2050. Although these numbers appear relatively small, they are driving very dramatic changes in Michigan's climate.

Based on the most recent models, the climate of Monroe and southeast Michigan will continue to warm, with greater increases in temperature during the winter months and at night. There are a variety of weather impacts expected with this change in average temperatures. For example, storms are expected

6. Resilient Monroe

to become more frequent and more severe. Some of the potential impacts of climate change for Monroe and southeast Michigan include:

1. Increases in winter and spring precipitation
2. Less precipitation as snow and more as rain
3. Less winter ice on lakes
4. Extended growing season (earlier spring/late fall)
5. Greater frequency and intensity of storms
6. More flooding events with risks of erosion
7. Increases in frequency and length of severe heat events
8. Increased risk of drought, particularly in summer

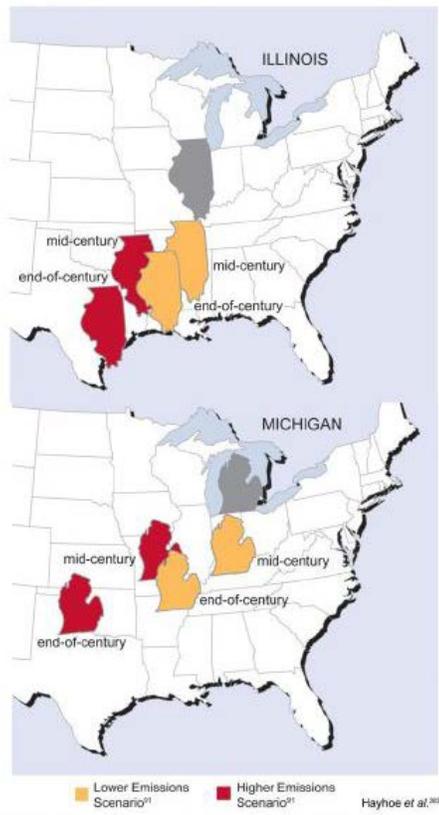
These changes in climate could have a number of both good and bad effects on the greater Monroe area. For example, an extended growing season could help increase crop yields for area farmers. On the other hand, the highly variable weather conditions such as severe storms and flooding mixed with summer droughts present big challenges to farming.

The *National Climate Assessment for 2009* (U.S. Global Change Research Program) includes a number of illustrations that help us understand the extent and character of anticipated climate change impacts. The section on the Midwest includes an illustration of projected summer climate for Illinois and Michigan under two different emissions scenarios (see Figure 3). The higher emissions model refers to the continuation of existing discharge levels. Models indicate that Michigan's climate will feel more like present-day Arkansas or Oklahoma by the end of the century.

Responding to the impacts of climate change will challenge many different parts of the Monroe Community, from social services to industrial production. The following is a partial list of climate change impacts on community life as described by GLISA and Michigan's State Climatologist:

- **Rivers, Stream and Lakes**
Decline in coldwater fish populations – changing fisheries. Lower river and lake levels and more frequent lake stratification. Increases in pollution from stormwater runoff.
- **Plants and Wildlife**
Increases in invasive species that damage local trees and plants. Changes in tree species able to survive in the new regional climate.
- **Energy & Industry**
Increases in electrical energy demand due to heat waves. Reduced water availability from streams and groundwater.
- **Transportation**
Increased damage to roads and bridges from flooding and heat waves. Additional difficulty for shipping on the Great Lakes due to lower water levels.
- **Public Health Risks**
Increased risk of illness and death due to high heat and humidity. Increased risk of water contamination from flooding events. Increased risk of disease spread by mosquitoes, ticks and other vectors.

Figure 6.3: Climate Change Demonstrated Geographically



Model projections of summer average temperature and precipitation changes in Illinois and Michigan for mid-century (2040-2059), and end-of-century (2080-2099), indicate that summers in these states are expected to feel progressively more like summers currently experienced in states south and west. Both states are projected to get considerably warmer and have less summer precipitation.

Hayhoe et al.²⁶³

7. Existing Land Use

An updated existing land use inventory provides a base from which current and long-range planning recommendations and decisions can be made. This inventory identifies what and where particular uses have occurred. It also provides an insight into where future development might occur and where conflicts may exist or develop. It is important to note that some existing land uses may not be compatible with the current zoning ordinance or the proposed future land use mapping.

Land Use Categories

A field investigation and review of aerial photographs were completed to identify the existing land use patterns within Monroe Charter Township. The field investigation was conducted by windshield survey from the public rights-of-way. The land use categories establish a broad range of uses within which specific uses have been generally categorized.

The Existing Land Use map delineates eight (8) land use categories: Single and Two-Family Residential; Multiple Family Residential; Mobile Home Parks; Commercial; Industrial; Stone Quarries; Public and Semi-Public, and Open Space.

Following is a definition of each of the existing land use classifications, and a description of where the land uses exist within the Township.

SINGLE AND TWO-FAMILY RESIDENTIAL

This category includes all single-family and duplex residential units. In areas where the unit occupies only a relatively small portion of the overall lot, only the area with the improved residence was delineated.

Approximately 1,677 acres or 15.7 percent of the Township's total land area is devoted to single- and two-family residential development. Residential development generally occurs in two patterns within the Township: residential subdivisions or a single line of lots fronting on major roads.

There is a concentration of older residential development occurring along the shores of Lake Erie and adjacent to the City of Monroe. These subdivisions have developed in a more conventional grid road pattern with very narrow streets and open swales for storm drainage. As a result, the lots have a traditional, rectangular shape and have less variation in size than newer subdivisions. The lot area in the older subdivisions are relatively small and as a result, houses are closer together.

The newer subdivisions such as Western Carrington Farms and Southern Canterbury Farms are located in the western part of the Township and further away from the City of Monroe leaving a large area of undeveloped land for future infill development. Larger lots and homes, and curvilinear street patterns characterize these newer subdivisions. The streets are improved with curb and gutter. Storm runoff is captured in retention ponds.

The other form of single-family residential development that has occurred recently is a proliferation of single-family residential land divisions fronting on major roads. This type of

7. Existing Land Use

frontage development is most prevalent along South Custer, East Dunbar and Albain Roads. These lots are usually 1/4 acre or larger with a large home. Each lot has its own access drive from the major road. Continuation of such a pattern of development will result in land locking the unused land to the rear of the lots, reducing the number of accesses possible for the future development of the vacant land, and reducing the traffic capacity of the road system. Monroe Charter Township is taking steps to mitigate the impact of a proliferation of this type of strip development.

The majority of the two-family homes are also located in the older subdivisions that are close to the City of Monroe. These duplex units are most commonly the result of a conversion of older single-family homes. Most of these duplexes are located south of Eighth Street, between South Dixie Highway and South Telegraph Road.

MULTIPLE-FAMILY RESIDENTIAL

Multiple-family residential uses are defined as any building or structure with living quarters for three (3) or more families or individuals. This form of housing is commonly referred to as “apartments”. However, this classification may also include attached condominiums, senior housing complexes and nursing homes. No attempt was made to survey each structure to determine the exact number of individual units or the condition of those units.

Approximately 60 acres, or 0.5 percent, of the Township is developed as multiple-family residential. This category includes high-density senior housing. This represents an increase of 21 acres in multiple-family development since the last Master Plan update. All but approximately 4 acres is located along South Dixie Highway. Major multiple family developments include the Mabel Kehres Tower, Greenwycke Commons, and Charring Square.

MANUFACTURED HOUSING PARKS

This classification includes land areas that are occupied by predominantly manufactured off-site and manufactured housing communities. It does not include a home that is situated outside of a mobile home park.

Monroe Charter Township has five manufactured housing parks. Over two-thirds of the units are located in a cluster of three parks located south of Seventh Street and west of South Telegraph Road. These are Holiday South (143 units), Meadowbrook Estates (453 units), and Willow Green (431 units). South of East Dunbar Road and west of Hull Road is Oakridge Estates (429 units). On the west side of South Telegraph Road two thousand feet south of East Dunbar Road is Sunny South Villa (64 units). Monroe Charter Township currently has 1,520 dwelling units in mobile home parks. This comprises 273 acres of the Township. The Manufactured Housing Commission of the State of Michigan has substantial control over licensed parks and local regulatory ordinances for them. No additional mobile home park developments should be approved in the Township.

COMMERCIAL

Commercial uses provide for the sale of a wide range of goods and services from neighborhood convenience stores to large retailing establishments like Kroger. Examples of commercial uses are gas stations, services shops, car sales, franchise and “mom-and-pop” restaurants, and private recreational facilities. These uses are predominantly located along the Township’s major thoroughfares.

Approximately 431 acres, or 3.6 percent, of the Township's land is in commercial development. Commercial development is generally located in four areas along South Telegraph Road and South Dixie Highway, at the Interstate 75/LaPlaisance Road interchange, and the commercial recreation uses along Harbor Road.

The Township's largest shopping area is located at the boundary of the City of Monroe and South Monroe Street. Anchored by Kroger, it includes several large storefronts and other areas for small shops. The size and location of the shopping center attract consumers from outside of the Township. As of 2014, Kroger is undertaking a renovation of the shopping center to expand their grocery store and relocate the gas station.

Along both South Telegraph Road (US 24) and South Dixie Highway (M-125), smaller shopping centers and a variety of single stores and offices line the right-of-way. South Monroe Plaza, along South Dixie Highway, has a grocery store and other stores that cater primarily to the needs of the immediate neighborhood. Other single stores like car care facilities, restaurants, banks, real estate offices and upholstery shops serve the local residents and capture pass-by traffic as well. Some of the storefronts on both South Telegraph Road and South Dixie Highway are deteriorating and in need of repair. In addition, in several areas, single family homes front on these major roads. As development pressures and traffic volumes increase on these roads, pressure will be exerted to convert the homes to either office or commercial use.

The commercial recreation area of the Township is located along Harbor Road, Bolles Harbor. Commercial uses in this area have developed as a result of access to Lake Erie. The recreational commercial area covers approximately 20 acres and continues to expand across Harbor Road to LaPlaisance Road. Private and public marinas, boat storage facilities, bait shops, and charter boats now line the road catering to the boating public and tourists alike.

INDUSTRIAL

This classification includes improved parcels of land for activities such as manufacturing, assembling and general fabrication facilities, warehouses, and other non-manufacturing uses which are considered to exert influences on adjacent areas due to the scale and type of operation or type of traffic.

Industrial development within the Township covers 1,601 acres. However, only approximately 486 acres are light industrial uses.

Detroit Edison owns the remaining 1,115 acres. Detroit Edison uses the area for containment for fly ash. This facility is located on the east side of Interstate 75 between East Dunbar Road and Bolles Harbor. The site is the location of the plant, the cooling ponds, fly ash, and coal storage areas.

STONE QUARRIES

Monroe Charter Township contains one active stone quarry totaling 193 acres, comprising 1.8 percent of the Township's land area.

The stone quarry operation is located on the west side of South Telegraph Road, north of Albain Road, and south of the Davis Drain. Operations for this facility are extensive, including removal of stone from the quarry and the installation of an asphalt plant. The mining operation requires the use of dynamite and a large number of vehicles to haul stone from the site. The quarry has a high berm around the perimeter which mitigates the visual nuisance.

7. Existing Land Use

The former quarry located between South Dixie Highway, Hull Road, the northern Township boundary line, and East Dunbar Road has filled with water and is now a lake that has attracted new residential development and proposed recreation area/beach.

PUBLIC AND SEMI-PUBLIC

The public land category includes improved parcels of land owned by Federal, State, County or Township governments or by local school districts. Examples of public land uses are the Township Hall, library, post office, public schools, and public recreation land. Semi-public land uses include facilities that are privately owned or operated and are used by the public or a limited number of persons. Semi-public uses include such uses as churches, private clubs, parochial schools, hospitals, and cemeteries.

There are approximately 774 acres of public and semi-public land within the Township. Of the 774 acres, approximately 240 acres are devoted to Monroe County Community College. This property also includes the Michigan State University Cooperative Extension Service and Monroe County fairgrounds. The fairgrounds are located in the northwest corner of the Township along the east side of Raisinville Road.

Public properties such as the Township hall, fire stations and school facilities are located throughout the Township. The Township hall and one fire station are sited on East Dunbar Road midway between South Telegraph and Herr Roads. The main fire station is located on South Dixie Highway between East Dunbar and Albain Roads. An additional fire station with training facility is located on LaPlaisance Road near I-75.

Monroe Charter Township contains approximately 147 acres of state, county, city and Township recreational lands. Regional facilities that not only serve Township residents but the entire region include Bolles Harbor, the Hoffman Memorial, and Community recreational facilities. These facilities are used mainly by residents and include Waterloo Park and the recreation facilities at the schools. The Township has several neighborhood parks that provide play areas for the surrounding residential neighborhoods including South Monroe Townsite, Bolles Harbor Association, Avalon Beach, Ravenwood Association, Woodpine, and Evergreen Acres, Parkside, and others.

TRANSPORTATION

Approximately 950 acres or 8.0 percent of the Township's land area is used for transportation. Railroad lines (Conrail and Grand Trunk and Western Railroad) bisect the Township in a north-south direction paralleling Hull Road. Interstate 75 with its 200 to 300 feet of right-of-way encompasses approximately 122.3 acres. Major roads include South Telegraph Road, South Dixie Highway, South Custer Road, and East Dunbar Road occupy approximately another 501 acres.

OPEN AND OTHER

The remaining acreage, 3,756 acres or 38.9 percent of the total land area within the Township, still remains in agricultural production or is vacant. However, with the presence of potable water and sanitary sewer along most of the major roads and the trend of residential development to move out from the most populated areas of the Township, pressure to convert agricultural land for development will continue to increase. Open space also includes all water bodies, and forested areas. Between 1996 and 2005 there was a decrease of 781.7 acres to development.

Public Act 116 of 1974 allowed farmers to enroll in a development rights agreement. The land owner receives tax credits and other benefits in exchange for agreeing not to develop their land

for a specified period of time (between 10 and 90 years). The act was rolled into the Part 361, Farmland and Open Space Preservation, of the Natural Resources and Environmental Act, Public Act 451 of 1994, but that did not impact the existing contracts and the program is still known colloquially as “PA 116.” It is the intent of the Township to protect its remaining farmland and to concentrate new development adjacent to existing residential areas.

The existing land uses summarized on the Existing Land Use map highlight a number of resources within Monroe Charter Township that may be of significant to the future development of the Township and are based on the classification system described above. The map indicates the general pattern of land use observed during the field survey. This survey was not conducted for enforcement purposes. Other uses may be present, and the identification of specific uses is not an acknowledgment of their legal status under the zoning ordinance.

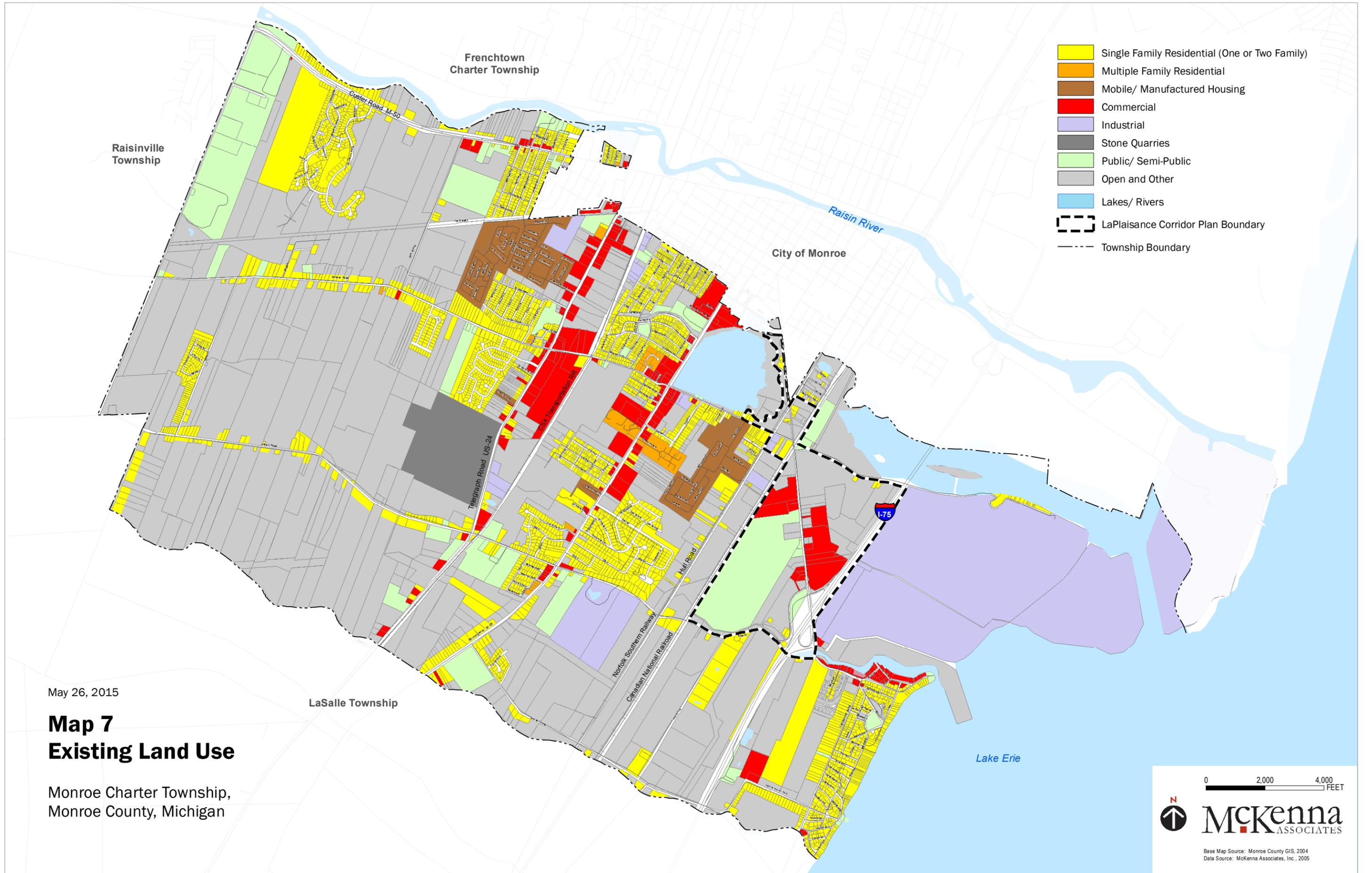
The table below summarizes land uses by amount, acreage and percent of total Township land area for 2014 and contrasts that with existing land use acreage at the time of the last three Master Plan updates.

Table 7.1: Existing Land Uses, Monroe Charter Township

Land Use	1987		1996		2005		2014		Change Since 1987 (in acres)
	Acreage	%	Acreage	%	Acreage	%	Acreage	%	
Residential	1,454	12.8%	1,762	15.5%	1,921	16.2%	2,010	18.5%	+556
Single/Two Family	1,285	11.3%	1,448	12.7%	1,588	13.4%	1,677	15.7%	+392
Multiple Family	47	0.4%	68	0.6%	60	0.5%	60	0.5%	+13
Manufactured Home Park	122	1.1%	247	2.2%	273	2.3%	273	2.3%	+151
Commercial	300	2.6%	290	2.6%	444	3.7%	431	3.6%	+131
Industrial	1,434	12.6%	1,615	14.2%	1,601	13.9%	1,601	13.9%	+167
Light Industrial	-	-	500	4.4%	486	4.1%	486	4.1%	
DTE	-	-	1,115	9.8%	1,115	9.8%	1,115	9.8%	
Quarries	-	-	403	3.5%	395	3.3%	193	1.8%	
Public and Semi-Public	475	4.1%	460	4.0%	776	6.6%	774	7.3%	+299
Open Space	7,024.5	61.8%	6,538	57.5%	5,757	48.6%	3,756	38.9%	-3,269
Transportation	690	6.1%	712	6.3%	950	8.0%	950	8.0%	+260
Railroads	57	0.5%	57	0.5%	57	0.5%	57	0.5%	0
Roads	643	5.6%	655	5.8%	893	7.5%	893	7.5%	+250

Source: Previous Master Plan, 2014 McKenna Associates Aerial Photography Review

7. Existing Land Use



May 26, 2015

Map 7 Existing Land Use

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000 FEET

McKenna ASSOCIATES

Base Map Source: Monroe County GIS, 2004
Data Source: McKenna Associates, Inc., 2005

7. Existing Land Use

8. Goals and Objectives

Monroe Charter Township is a community with multiple characters. On its east side, it has lakefront living, natural areas, and industry. In its center, it has urban and suburban neighborhoods adjacent to the City of Monroe. And on its west side, it has an agricultural base and strong rural character. This Plan strives to protect and strengthen all three characters, even as the Township develops over time.

Goals, Objectives, and Policies

The preceding analysis of existing conditions, circulation, trends, and forecasted changes in population, housing, and land use accentuates a number of current and emerging issues in Monroe Charter Township. The following is statement of general goals and objectives and policy statements to provide the Township with guidance to address these issues and others that will arise in the future.

Goals are general in nature and, as related to Township planning, are statements of ideals toward which the Township wishes to strive. They represent the ultimate purpose of an effort in a way that is broad. Goals also express a consensus of community direction to public and private agencies, groups, and individuals.

Objectives are more specific and are intended to present a means to attain the stated goals. Objectives take the form of more measurable standards, or the general way in which the goals can be attained. In some instances, they are specific statements that can be readily translated into detailed design proposals or action recommendations.

Policies are specific in nature and are intended to provide a course of action to reach the objective. Policies are measurable and usually have a set of measures that can be implemented.

Together, the following goals, objectives, and policies provide the foundation of the Master Plan and the framework for future implementation strategies.

RESIDENTIAL

Goal: *Protect the character of existing residential neighborhoods.*

Objective: Preserve, and enhance the quality of life and living environment for the population residing in Monroe Charter Township.

Policy: Prevent non-residential uses from encroaching into neighborhoods and subdivisions.

Policy: Carefully consider the development of major corridors through areas heavily developed with residential.

Policy: Connect existing residential neighborhoods together with non-motorized pathways along major corridors.

Policy: Build sidewalks to connect residents to schools, jobs, and shopping when they are within walking distance of homes.

8. Goals and Objectives

Objective: Provide for existing manufactured housing to remain, but plan no additional land for the development of new manufactured housing parks unless and until a clear market can be demonstrated.

Policy: Encourage redevelopment and encourage the infill of housing stock in manufactured housing developments that is attractive and livable for residents and provides a quality environment for the Township residents.

Policy: Examine all relevant factors, including available sites in existing manufactured housing parks, prior to zoning any additional land for manufactured housing.

Goal: Require new residential development to be high-quality and to respect the existing uses, natural features, and infrastructure of the Township.

Objective: Utilize zoning and other regulatory tools to ensure that new housing in the Township is high-quality, connects to existing neighborhoods, provides amenities for residents, and is developed in a pattern that reduces sprawl, preserves agriculture and natural features, and improves quality of life for all residents.

Policy: Encourage new residential development to be compatible with the underlying natural features of the site. Preserve significant topographic features, tree stands, wetlands, and other natural features wherever possible. Encourage rural open space planning where it would retain the rural character of the land.

Policy: Require the planting of trees along all public rights-of-way, where possible given the location of power lines.

Policy: Require sidewalk construction in all new residential developments.

Policy: Adopt an amendment to the Zoning Ordinance that encourages the protection of tree stands in the Township and requires replacement of trees when they are damaged or destroyed by development.

Policy: Require street design that connects neighborhoods to each other, to amenities, and to job centers. Discourage dead-ends and cul-de-sacs.

Policy: Permit residential development only in accordance with the availability of necessary public services including utilities, road construction and maintenance, police and fire services, governmental administrative services, and educational services. Consider the costs of both construction and maintenance of capital improvements necessary to serve proposed developments.

COMMERCIAL

Goal: Encourage and make provisions for appropriately sized, convenient, attractive and well-located business centers, and service areas to provide services and jobs to area residents.

Objective: Encourage commercial development that provides attractive low-rise architecture that harmonizes with the natural environment and surrounding development through design and landscaping.

Policy: Establish architectural guidelines for commercial and office development and redevelopment along the South Dixie, South Telegraph, and LaPlaisance Corridors.

Policy: Re-visit the landscaping standards in the Zoning Ordinance to ensure that they encourage quality development without dis-incentivizing investment or creating traffic and pedestrian safety challenges.

Policy: Re-visit the signage standards in the Zoning Ordinance to ensure that they are consistent with the Township’s goals for its commercial corridors.

Objective: Encourage a practical distribution of commercial development in the Township to conveniently serve the residents. Commercial nodes shall be encouraged and strip commercial development shall be avoided.

Policy: Limit further commercial rezoning along South Telegraph Road and South Dixie Highway unless the applicant can demonstrate a need and proposes to develop a community commercial multiple use development.

Policy: Require all existing and future commercial developments to be screened from adjoining residential areas. Plan for transitional uses, where possible, between commercial uses and adjoining residential uses.

Policy: Closely monitor and promote enforcement of building and maintenance codes in commercial and office areas. Encourage buildings, signage, landscaping, and parking areas to be renovated or repaired on a timely basis, and monitor changes in business uses to be certain that new uses are in compliance with adopted building and zoning codes.

Objective: Create a new walkable commercial node for both retail and office along LaPlaisance Road, using traditional design standards as described in the LaPlaisance Corridor Plan.

Policy: Create a DDA to oversee the re-development of the LaPlaisance area in light of the failure of the outlet shopping malls.

Policy: Create new zoning districts for LaPlaisance Core Commercial and Commercial Recreation to ensure that development along the corridor is consistent with the Township’s goals.

Policy: Build a non-motorized pathway down LaPlaisance Road to bring people to the new commercial district.

INDUSTRIAL

Goal: *Protect and preserve industrial areas where the already exist.*

Policy: Ensure that zoning and other regulations allow the continued efficient operation of existing industrial businesses in the Township.

Policy: Work with industrial businesses to ensure that they are supported by the infrastructure and services they need to be successful.

8. Goals and Objectives

Goal: *Buffer industrial areas to reduce impacts on residential neighborhoods.*

Objective: Minimize the impact of mining operations within the Township and require intensive restoration of areas that have been mined.

Policy: Require that any new mining operations be required to conduct a comprehensive environmental impact study to determine the adverse impacts the proposal will have on the Township and then require that restoration and impact mitigation plans be provided.

Policy: Require an annual engineering review to ensure compliance with the approved site plan and the reclamation plan.

Objective: Enforce zoning standards to ensure high-quality industrial development.

Policy: Improve and enforce landscape standards for industrial development or redevelopment.

Policy: Promote strict enforcement of codes and regulations applicable to industrial areas, particularly for industries suspected of using or storing hazardous or toxic chemicals.

Goal: *Develop a new industrial park in the LaPlaisance area, as described in the LaPlaisance Road Corridor Plan.*

Objective: Concentrate new industrial development in the area between LaPlaisance Road and I-75, designed as an industrial park as envisioned by the LaPlaisance Road Corridor Plan.

Policy: Create a DDA to oversee the re-development of the LaPlaisance area in light of the failure of the outlet shopping malls.

Policy: Work with developers, the Monroe County Road Commission, and the newly-created DDA to install the infrastructure for the industrial park and divide the land into development sites.

TRANSPORTATION

Goal: *Ensure that Monroe Charter Township's transportation system is efficient for all users – autos, pedestrians, cyclists, transit riders, and others - and that it supports the healthy growth and development of the Township.*

Objective: Work to maintain and maximize the capacity of the Township's current transportation system through mechanisms that preserve and maximize road capacity.

Policy: Enforce the access management standards in the Zoning Ordinance.

Policy: Amend the Zoning Ordinance to require traffic studies for developments that can have an extensive impact on the Township's road system.

Policy: Conduct a study to determine the feasibility of extending Herr Road south to Albain Road. This future transportation corridor should be preserved to the extent possible.

Policy: Investigate the possibility of grade-separated railroad crossings for auto traffic or non-motorized pathways in key locations.

Policy: Work with the Monroe County Road Commission to re-align the intersection of LaPlaisance and East Dunbar Roads, as described in the LaPlaisance Road Corridor Plan.

Policy: Work with MDOT to improve the I-75 interchange with LaPlaisance to make it safer and more friendly for non-automobile transportation on LaPlaisance Road.

Policy: Assist in the City of Monroe and Monroe County’s attempts to have railroad lines consolidated.

Objective: Develop a non-motorized pathway system, including sidewalks, bike paths, bike lanes, and shared-use pathways, that provides safe and efficient routes within the Township and connecting to the larger region.

Policy: Work towards implementing the non-motorized pathways system envisioned by this plan, as shown on Map 6. Work with neighboring communities, Monroe County, and SEMCOG to ensure that the pathways system seamlessly crosses community boundaries.

Policy: Provide wayfinding signage to commercial and recreational destinations for cyclists and motorists.

Objective: Reduce the total amount of impervious surfaces along the public road right-of-way to reduce flooding and run-off during heavy storms.

Policy: Examine the feasibility of pervious pavement in Township-owned parking lots and low traffic roadways.

Objective: Work with regional transit providers, especially Lake Erie Transit, to expand the frequency and service of the system to meet the existing needs of riders and the growing needs of the community.

Policy: Improve the system to attract people who might choose to use transit instead of a personal vehicle to accommodate an aging population and an increase in “choice” riders.

Policy: Improve the quality of transit stops on public property by adding benches, canopies, and additional informational signage.

Policy: Use zoning and the site plan review process to improve the quality of transit stops of private property by requiring property owners to accommodate transit users through benches, canopies, and additional informational signage.

Objective: Work with the City of Monroe and Frenchtown Township to improve the aesthetics and functionality of the Telegraph and Monroe/Dixie corridors.

Policy: Create a multi-jurisdictional “Corridor Improvement Authority” for each corridor to oversee redevelopment, non-motorized transportation, streetscape, wayfinding, branding, and beautification.

8. Goals and Objectives

9. Future Land Use Plan

Monroe Charter Township's land use plan represents the long-range vision for growth, development, and redevelopment in the Township. As a representation of the preferred land use arrangement for the community, it identifies and defines the major future land use categories as well as the appropriate locations for various uses as envisioned by the Township.

The following narrative describes the land use categories designated on the Future Land Use Map. **The future land use categories are not zoning districts. The land use map provides a guide for the future development of the Township. The zoning districts are the regulations that implement the master plan.** The future land use categories are broader in nature than zoning districts, and several zoning districts may be reflective of one future land use category.

Future changes to the zoning ordinance text and zoning map are expected over time as the economic, social, and physical climates change. The work extensively performed by the Planning Commission within this document should serve as a guide in evaluating a proposed change to the zoning ordinance and/or map. Any deviation from the Master Plan should be considered with care and the reason for the deviation noted when the Master Plan is updated.

Residential Land Use Categories

The residential land use categories illustrated on the future land use map are general in nature. There are 6 categories as follows: Agricultural/Open Space, Low, Medium, and High Density Residential, Multiple Family Residential, and Mobile/Manufactured Housing.

It is intended that development in the residential land use categories be tied to overall density in terms of units per acre, rather than minimum lot size. This will permit greater flexibility in the development and redevelopment of land, and presents an opportunity to create parks and other types of neighborhood features without reducing the overall potential yield on any particular piece of property.

AGRICULTURE AND OPEN SPACE

This category is devoted to the preservation of agricultural land and open space. The intent of the district is to preserve the large areas of open space, minimizing the disruption caused by residential lot splits, in order to maintain agricultural land and special natural areas, and, in some cases, to provide for future development of large parcels of land. Minimum lot area in this district is five acres. The agricultural area is mainly in the southern portion of the Township, south on Albain Road and west of South Telegraph Road (US 24).



LOW DENSITY RESIDENTIAL (1 DWELLING UNIT PER ACRE)

This classification includes the land area for single family residential uses at a density of one dwelling unit per acre.

9. Future Land Use Plan

Much of this category has not yet been developed including areas along the north side of East Dunbar Road, west of South Telegraph Road, South of Albain Road between South Telegraph Road and South Dixie Highway, and east of South Dixie Highway (M 125) to Hull Road.

For much of these remaining areas, especially where floodplains or important natural features predominate, Planned Unit Developments shall be encouraged but are not intended to be a means of increasing the density of the development. One dwelling unit per acre is the planned overall density.

In all cases, service by public water and sanitary sewer and the provision of connectivity between adjacent developments is a priority. Stub streets should be provided in all residential developments that abut vacant land or land with redevelopment potential. If public water and sanitary sewer is not available, the density should be one dwelling per five (5) acres.

MEDIUM DENSITY RESIDENTIAL (4 DWELLING UNITS PER ACRE)

This district is based on the existing single-family development patterns and plans densities of up to four (4) dwelling units per acre. New development of this type is planned adjacent to existing areas with similar character. Public sanitary sewer and water service is available for these locations. Cluster Development or Planned Development are encouraged for the open space and amenities that they provide to the residents.



HIGH DENSITY RESIDENTIAL (5 DWELLING UNITS PER ACRE)

This district is also based on the existing single-family development pattern, and permits varying densities of detached single-family development based on the established character of the neighborhood. Densities are permitted at approximately five (5) dwelling units per acre dependent on the type and design of the project. The high-density residential areas include the residential uses along the Lake Erie waterfront and properties adjacent to the core of the City of Monroe. New development of this type is planned adjacent to existing areas with similar character.

MULTIPLE FAMILY RESIDENTIAL

This category may accommodate a wide-range of development types, including attached single-family dwelling units, townhouses, senior housing, or garden apartment complexes. In general, the expected density range of development in the Multiple Family Residential category is between five (5) and ten (10) dwelling units per acre, depending on the type and design of the project. The largest areas of this land use encompass existing apartment complexes. A few areas are designated for future multiple family development including South Dixie Highway south of East Dunbar Road. This land use is a buffer or a transitional use from nonresidential development to the single-family residential development and is planned for areas in the central part of the Township where improved access and availability of public services exist.



MANUFACTURED HOME PARK

The Future Land Use Plan has not designated additional land for manufactured housing parks. The Township currently has approximately 272 acres in manufactured home parks. Use of the existing manufactured home parks is planned to continue. The Township encourages the upgrade of the existing manufactured housing stock. Density is planned for up to five dwelling units per acre.

Manufactured housing parks have a substantial impact on the Township's infrastructure and services, requiring such services at a higher rate than other residential uses within the Township. Manufactured home park facilities provide Township residents with an affordable home ownership option to renting. If the need for additional manufactured home park acreage becomes apparent, the following criteria should be used to identify manufactured home park locations:

- Manufactured home parks should have direct access to and should front on paved arterial or collector roads.
- Manufactured home parks should have access to public water and sanitary sewers.
- Manufactured home parks should be screened from adjacent conventional single-family developments. This screening may consist of abundant landscaping or a natural wooded buffer.
- Generally, manufactured home parks should be located adjacent to other high density residential uses, such as multiple family residential development.

If mobile home parks are redeveloped, then the redevelopment should take a form envisioned by the Multiple Family Residential Land Use Category.

Non-Residential Land Use Categories

The non-residential land use categories encompass a wide variety of office, service, retail, and industrial activities within the Township. The categories are Commercial and Office, Commercial Recreation, LaPlaisance Core Commercial, Light Industrial, and Heavy Industrial.

COMMERCIAL AND OFFICE

The commercial and office classification is a category for uses that are commercial in nature. This category is broad and includes professional offices, personal services, and retail uses. Examples of uses that are considered service uses include barbershop, beauty salons and specialty shops. Examples of retail uses include drug stores, hardware stores, grocery stores, video rental, dairy products, delicatessens, day care, and shoe repair. Office uses include real estate, doctor and other professional offices.

This master plan combines the two classifications into one category. The office uses within the Township today and during the anticipated twenty years will consist mainly of mixed-use complexes with a combination of office and retail facilities. This type of office facility exhibits characteristics similar to commercial uses. It is intended that the uses in a commercial/office designation will be compatible with the intensity of uses on the surrounding properties to lessen any negative impact on the neighboring properties.

The majority of the commercial and office uses are concentrated in linear districts along the two major arterials South Telegraph Road and South Dixie Highway. Within these corridors, the type of commercial

9. Future Land Use Plan

or office development allowed should be sensitive to existing and planned uses nearby. In the northern part of South Telegraph Road office and commercial district, the existing commercial development, proximity to the City of Monroe, and the demands of a denser residential population make the more intense uses appropriate. This is also the case in the northern portion of the South Dixie Highway corridor, though the closer proximity to interspersed residential uses makes local commercial uses more appropriate for many sites. Further south, particularly to the south of Albain Road, the adjoining uses are agricultural and low-density residential. In these areas, lower-impact office and neighborhood-oriented local commercial development is more appropriate.

The LaPlaisance Corridor Plan also envisions Commercial/Office development near the I-75 interchange with LaPlaisance Road. More details are included in that document.

COMMERCIAL RECREATION

Commercial Recreation promotes development of recreational uses to serve tourists who visit the Township's water resources, especially Lake Erie. Uses in this category include marinas, boat storage, bait shops, restaurants, golf courses, go carts, batting cages, and private beaches, among others.

This land use category has been designated in several areas of the Township, including Bolles Harbor, the LaPlaisance Corridor, and Gross Quarry Lake. Additional details regarding the Commercial Recreation category within the LaPlaisance Corridor Plan area are included in that document.



LAPLAISANCE CORE COMMERCIAL

This is a new category introduced as part of the 2014 Master Plan Update in order to facilitate the development of a new commercial center for Monroe Charter Township.

Supported by an industrial park, recreational businesses and amenities, and the I-75 corridor, a new walkable business district will be built along LaPlaisance Road in the area identified on the Future Land Use Map.

This area will be the target of investment in walking and biking improvements, traffic calming measures, placemaking initiatives, a marketing plan, and branding. It is the intent of this plan that the Township through a newly-created DDA district will partner with a developer to build a business district with the following characteristics:

- Mixed-use multi-story retail and office buildings built to the front lot line or close to it.
- New pedestrian walkways and on-street parking along LaPlaisance to service uses.
- Shared parking behind the buildings, to promote parking once and walking to multiple stores.



- Attractive architecture that reflects the character and history of the greater Monroe community, creating a memorable place that leaves a lasting impression for visitors.
- Office development in the rear of large lots, to create vibrancy during the day and act as a buffer between the walkable business district and the industrial park or golf course.
- A grid system of cross streets to connect LaPlaisance Road to parking, office uses, the industrial park, and the new parallel road proposed by the LaPlaisance Corridor Plan.
- A wide range of retail and office uses that prohibits auto-oriented uses such as gas stations or auto repair.
- Public art, landscaping, banners, attractive pedestrian-scale street lighting, and other placemaking improvements.

Residential uses are not encouraged within the LaPlaisance Core area, although they could be approved as upper floor apartments above retail. It is the intent that the businesses in this corridor will draw from workers in the industrial park, visitors enjoying the Township's recreational amenities, and residents drawn to the attractive and fun atmosphere that will be created in the Township's new walkable commercial center.

LIGHT INDUSTRIAL

This classification is intended for development of a modern business park to accommodate light industries, research office and office warehouse uses, and prototype product development.

High quality development standards should continue to be emphasized in these areas, especially where they are visible from public roads. Loading areas should be located to the side or rear of the buildings. Sides of the buildings visible from the road should be designed with high quality building materials such as stone, brick, and other natural materials. Heavy landscaping should be used to maintain quality visual environment in Monroe Charter Township.

The Light Industrial designation is primarily along the south side of Albain Road between South Dixie Highway and Hull Road between LaPlaisance Road and I-75. The LaPlaisance area is envisioned to be an industrial park, developed in conjunction with a newly created TIF district. More details are included in the LaPlaisance Corridor Plan.

HEAVY INDUSTRIAL

This land use is illustrated on the plan for the Edison Power Plant facility and south of Plum Creek along the east side of the railroad to East Dunbar Road. The uses in this classification have the potential to create a negative impact on the community in terms of noise and odor. They can be a visual eyesore on the Township. The Township should continue to work with these facilities to manage the impacts on the greater community.

Civic and Mixed Land Use Categories

The intended purpose of the following categories is to provide for the "quality of life" within the Township. It recognizes the intangibles that make a community a good place to live and work, and provides a sense of place to the residents.

PUBLIC/SEMI-PUBLIC

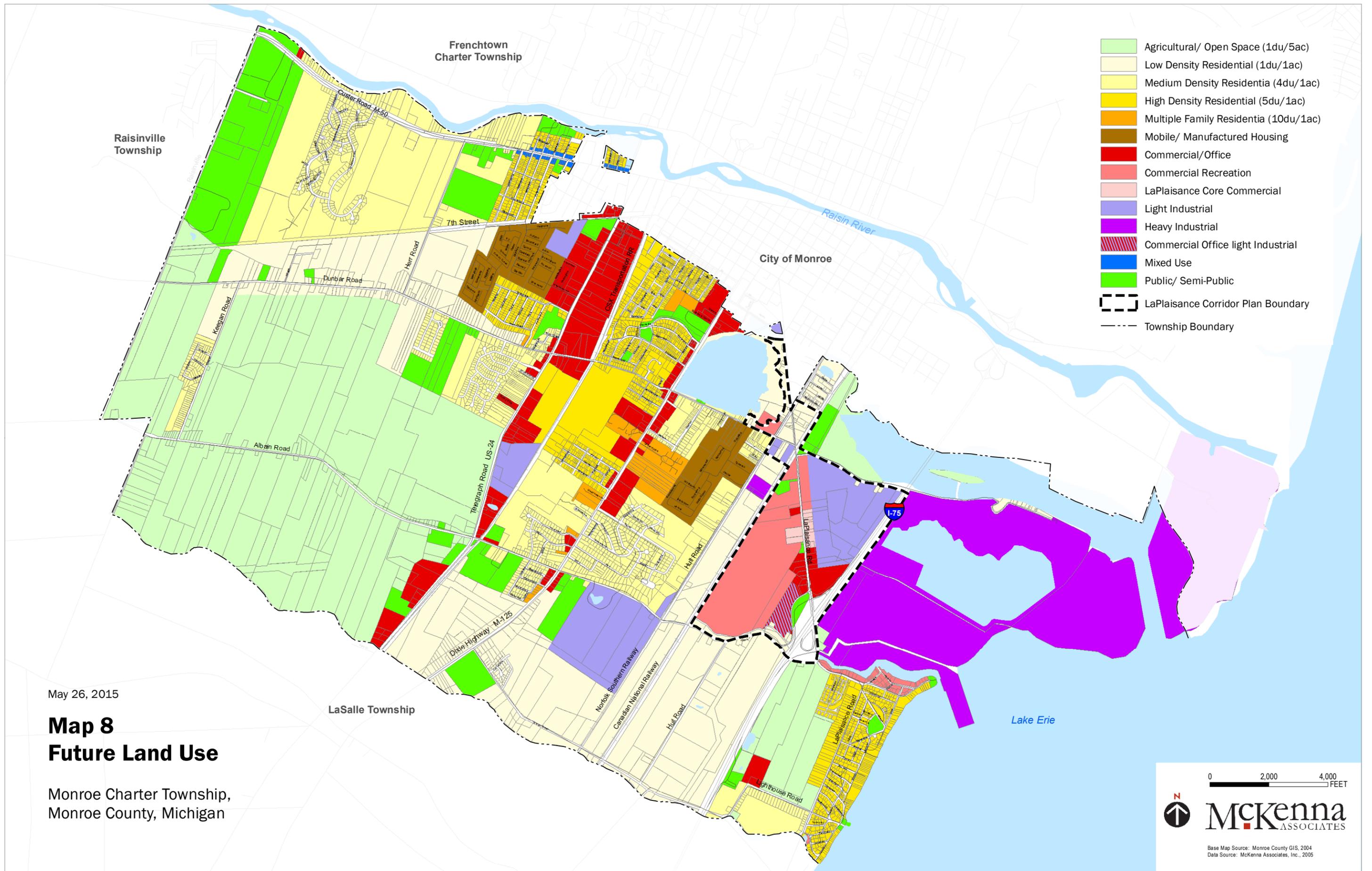
Community parks, churches, schools and other land uses owned or used by the public to provide noncommercial, cultural, recreational and social services are included in this category. These public/semi-public uses are allowed in most zoning districts. Any change to a public/semi-public site should revert to the adjacent compatible planned land use. A substantial number of Monroe County services are located in Monroe Charter Township. One of the most important areas of public land use is the Community College and fairgrounds located on Raisinville Road on the northwest side of the Township between South Custer and Dunbar Roads.

MIXED-USE DISTRICT

The intent of this district, located along South Custer Road, is to permit flexible redevelopment of land with a mixture of use types. Such uses may include residential, public, institutional, professional office, general office, business and personal service uses, and very limited retail uses. Such uses may be located in combination with one another within a single building, as a live/work combination. Parking should be limited to the rear of the structure. Signage should be minimal and similar to the style of the structure. The planned residential density is up to four (4) units per acre.

RAILROAD RIGHTS OF WAY

The railroads are confined to the existing track rights-of-way to avoid the creation or expansion of negative impacts on adjacent properties.



- Agricultural/ Open Space (1du/5ac)
- Low Density Residential (1du/1ac)
- Medium Density Residential (4du/1ac)
- High Density Residential (5du/1ac)
- Multiple Family Residential (10du/1ac)
- Mobile/ Manufactured Housing
- Commercial/Office
- Commercial Recreation
- LaPlaisance Core Commercial
- Light Industrial
- Heavy Industrial
- Commercial Office light Industrial
- Mixed Use
- Public/ Semi-Public
- LaPlaisance Corridor Plan Boundary
- Township Boundary

May 26, 2015

Map 8 Future Land Use

Monroe Charter Township,
Monroe County, Michigan

0 2,000 4,000
FEET

MCKenna
ASSOCIATES

Base Map Source: Monroe County GIS, 2004
 Data Source: McKenna Associates, Inc., 2005

9. Future Land Use Plan

10. Implementation

The Master Plan is a statement, illustrated by graphics and tables, of visions and goals concerning the future physical development of the community. Maintaining the correct emphasis between the protection of natural resources, the demands on infrastructure and services, and the existing and future development of the Township will be a continuing balancing act.

This section of the Plan provides the Action Plan for the Township's citizens, community leaders, and Township staff to implement the Master Plan. The implementation measures outlined in the Master Plan are effective only if people in the community participate. Community improvement requires a compelling vision; persistence; the flexibility needed to respond to changing needs, opportunities and circumstances, and an ability to achieve consensus.

The tools and techniques identified in this chapter are capable of being implemented under current enabling legislation.

Zoning Plan

The Zoning Ordinance is the major tool available to local government to implement the land use element of the Master Plan. The Monroe Charter Township Master Plan Future Land Use Map indicates residential growth areas of different densities and provides locations for commercial and industrial uses. The land use classifications on the map and the corresponding descriptions of those classifications forms the basis for evaluations of future land use and the corresponding development associated with that use. The Master Plan provides very general land allocations while the Zoning Map uses precise land parcel boundaries, for the application of specific land use decisions. The purpose of zoning is to regulate the use of land and buildings by the adherence to set dimensional standards and to protect areas from the adverse impact of disruptive land uses.

A zoning plan is required by the Michigan planning and zoning enabling acts. Section 33(d) of the Michigan Planning Enabling Act, PA 33 of 2008, as amended, requires that the master plan prepared under that act shall serve as the basis for the community's zoning plan. 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 (as described in Section 201 of the Michigan Zoning Enabling Act). The zoning plan identifies the zoning districts and their purposes, as well as the basic standards proposed to control the height, area, bulk, location, and use of buildings and premises in the Township. These matters are regulated by specific provisions in the adopted zoning ordinance.

All ordinances currently in place should be critically evaluated by the Township to determine if they effectively implement the objectives of the Master Plan in their related areas. The following sections should be evaluated to ensure that they achieve the desired objectives of the individual land use categories:

- The permitted land uses and uses permitted after special or conditional approval of the zoning ordinance
- Definitions of both land uses and regulated elements
- Site plan review procedures (to ensure adequate information is submitted)

10. Implementation

The following is a list of ordinances, regulations, and policies that the Township should review or enact to promote the desired residential, commercial, and industrial development pattern and protect the rural environment of the Township.

MIXED-USE DISTRICT

The Master Plan Future Land Use Map has created a Mixed-Use District for the frontage lots along South Custer Rd (M-50) as it approaches South Telegraph Rd (US 24). The Mixed Use District allows a combination of limited commercial use and residential uses on the same parcel while maintaining the residential streetscape. Uses in the district should be limited to those most likely to use the existing residential building without putting excessive demands on utility systems.

The current mixed-use district ordinance should be evaluated to ensure that it reflects the vision for the Mixed-Use District in this plan.

LANDSCAPING AND DESIGN

Landscaping is a vital component in the Township’s efforts to improve its appearance, maintain its rural character and quality of life. Landscaping has the greatest impact on visual appearance and can be a determining factor in the community’s identity. The Townships in southeast Michigan that are recognized as “the best places to live and those having the best quality of life” have taken a strong stance on enforcing landscaping provisions and preservation of existing vegetation and trees. Over-landscaping a site can lead to maintenance problems and pedestrian/auto safety issues. Burdensome regulations dis-incentivize investment by the private sector.

Monroe Charter Township should review its landscape requirements to ensure they promote an attractive and sustainable built environment, while avoiding concerns about maintenance, safety, and discouraging investment.

SIGNS

Signage plays a significant part in the overall appearance of the Township. All signage should be attractive and improve the look of the public realm. Signs should be a function of use and adequately identify the business in question. However, the extensive use of signage should be avoided so that it does not become an eye sore to the community.

Signage standards should be developed for LaPlaisance Road as it is redeveloped into a gateway and commercial node for the Township. The signage should support the branding efforts for that area.

Signage along the other major commercial corridors, South Dixie Highway and South Telegraph Road, should be strictly enforced. Signage on buildings and freestanding signs should be required to meet the standards and variances should not be granted. In addition, the amount of banners, flags (except the American flag) and posted flyers should be regulated to protect the Township’s rural visual quality and maintain a high quality of development.

However, the amount of signage permitted in the Zoning Ordinance has proven inadequate for some businesses. Without changing its goals with regard to signage, the Township should evaluate its regulations to ensure that they are not excessively burdensome on business.

The Township should review the current standards of the Sign Ordinance. Special signage regulations for certain districts such as LaPlaisance Road or the Mixed-Use District should be considered. Signage regulations should not be overly burdensome on businesses.

OVERLAY DISTRICT

The purpose of an overlay district is to assist with the development of land and structures for compatibility within the district. The Overlay District allows a higher level of protection or quality within a specific zoning district. It allows flexibility in the application of standards that may not be available under the existing zoning for the area. The underlying zoning of the properties are not changed but additional uses or conditional uses may be permitted to achieve a unique character for the district. The Township may want to consider an overlay district for waterfront properties, especially single family homes abutting lakes and streams.

The Township should consider the establishment of an Overlay District for waterfront residential properties.

ZONING DISTRICTS

The zoning districts in the Township are described below and their relationship to the Master Plan is discussed along with recommended new Zoning Districts to integrate new land use designations.

Districts and Dimensional Standards

There are twelve (12) zoning districts in the Township, each of which is described in the current Zoning Ordinance. There, uses permitted in each district are described. The Zoning Ordinance's schedule of lot, yard, and area requirements defines specific area, height, and bulk requirements for structures in each zoning district. The Zoning Map is a part of the Zoning Ordinance and illustrates the distribution of the defined zoning districts throughout the Township.

The following is a list of proposed Master Plan land use designations and their corresponding zoning district. Not all of the Master Plan's future land use categories will match the current location or regulations of the zoning district in which they are located. Recommended revisions the Zoning Ordinance are discussed below.

Master Plan Future Land Use Designation	Zoning District
Agriculture/Open Space	AG Agricultural
Low Density Residential	R-1 Low Density Residential
Medium Density Residential	R-2 Medium Density Residential
High Density Residential	R-3 High Density Residential
Multiple Family Residential	R-4 Multiple Family Residential
Mobile/Manufactured Housing	R-5 Manufactured Housing Park
Commercial/Office	C-1 Local Commercial, C-2 General Commercial
Commercial Recreation	MD Marinas, <i>New Zoning District</i>
LaPlaisance Core Commercial	<i>New Zoning District</i>
Light Industrial	LI Light Industrial
Heavy Industrial	HI Heavy Industrial
Mixed Use	M-U Mixed Use
Public/Semi-Public	None

10. Implementation

Agriculture/Open Space – This land use category is meant to preserve the Township’s agriculture and other rural/natural space. The AG Agricultural Zoning District meets the intent of this Future Land Use Category.

Low Density Residential – This land use category includes existing and future large-lot residential development in the Township. The R-1 Low Density Residential District meets the intent of this Future Land Use Category.

Medium Density Residential – This land use category includes many of the existing residential developments in the Township, and the land adjacent to them which is planned to be developed with a similar character. The R-2 Medium Density Residential District corresponds to the goals of this category.

High Density Residential – This land use category includes the densest single family residential districts in the Township, especially those near the City of Monroe. The R-3 High Density Residential District meets the intent of this Future Land Use Category.

Multiple Family Residential – This land use category includes the existing multiple family developments in the Township, along with some additional sites for future development. The R-4 Multiple Family Residential District fits this category.

Mobile/Manufactured Housing – This land use category includes the existing manufactured housing parks in the Township. The R-5 Manufactured Housing Park district fits this category.

Commercial/Office – This land use category includes the general commercial and office uses in the Township that are not in a special category like LaPlaisance Core Commercial or Commercial Recreation. Both the C-1 Local Commercial and C-2 General Commercial districts fit this category, depending on the specific context.

Commercial Recreation – This land use category is designed to create districts of recreational amenities and businesses that support those amenities. An example is the district along LaPlaisance Road that has go-karts, mini-golf, a full-size golf course, and an RV Park. Waterfront recreational areas, including marinas, are also included in this category. Although the MD Marinas district covers marinas, another zoning district should be created to enforce the vision for the Commercial Recreation category.

LaPlaisance Core Commercial – This Plan and its companion, the LaPlaisance Corridor Plan, envision a walkable retail/office core along LaPlaisance Road. This category delineates the planned area for that development. A new zoning district should be created to help implement the plan.

Light Industrial – This land use category includes the land the Township has set aside for light industrial development. The LI Light Industrial district meets the goals of this category.

Heavy Industrial – This land use category includes the land the Township has set aside for more intensive industrial uses. The HI Heavy Industrial district meets the goals of this category.

Mixed Use – This category envisions multiple uses co-existing along the dense and history stretch of South Custer Road in the northwest part of the Township. The Mixed Use zoning classification generally meets the intent of this classification, although it should reviewed to ensure that it is effective in enforcing the visions.

Public-Semi Public – The Future Land Use Map identifies the public facilities and amenities in the Township. However, they are all zoned to be consistent with the surrounding uses and there is no zoning district for Public-Semi Public land uses.

RECOMMENDED REVISIONS TO THE ZONING ORDINANCE AND MAP

In order to meet the goals of this plan, the following revisions to the Zoning Ordinance and Map are recommended:

- The Mixed Use zoning district should be evaluated to ensure that it effectively enforces the vision for Mixed Use future land use category.
- The landscaping and signage standards in the Zoning Ordinance should be evaluated to ensure they meet Township goals without unnecessarily burdening business or creating unforeseen problems.
- Consideration should be given to an amendment to the Zoning Ordinance that encourages the protection of tree stands in the Township and requires replacement of trees when they are damaged or destroyed by development. A “tree bank” to allow property owners to meet landscaping requirements via a donation of off-site trees should be created.
- An overlay district should be created for waterfront residential properties.
- New zoning districts should be created for the Commercial Recreation and LaPlaisance Core Commercial future land use categories.
- The Zoning Map should be updated to match the Future Land Use map, especially within the LaPlaisance Corridor Plan boundary.

LaPlaisance Corridor Plan

The LaPlaisance Corridor Plan is an addendum to this document that was completed in conjunction with the 2014 Master Plan update. Monroe Charter Township decided to undertake the corridor planning process in order to re-imagine what LaPlaisance Road could be. Its previous incarnation as a regional retail center based on outlet shopping has failed. The corridor needs a new vision – one that takes advantage of current economic trends, such as the need for additional industrial space along the I-75 corridor, and cutting edge techniques in planning and redevelopment, such as placemaking and non-motorized transportation facilities. The new LaPlaisance Road will be economically vibrant, open to bicycles and pedestrians, as well as cars, and, most of all, a memorable place that the Township can point to as its signature district.

The Action Plan contained within the LaPlaisance Corridor Plan is a companion to the Action Plan in this document. When the Township considers requested rezonings within the LaPlaisance Corridor Plan Area, the LaPlaisance Corridor Plan should be used as a guide, in addition to the Master Plan.

The portion of the Township included in the LaPlaisance Corridor Plan is centered on LaPlaisance Road, running from the Township’s boundary with the City of Monroe on the north to I-75 on the south. The western boundary is the railroad tracks from Albain Road to just south of East Dunbar Road and the shore of Gross Quarry Lake from East Dunbar Road to the Township line. The eastern boundary follows I-75 north from LaPlaisance Road to East Dunbar Road, then runs along East Dunbar Road back to the railroad tracks, then north to just south of St. Vincent Street, and from there to the Township line.

Other Proposed Projects

STORMWATER MANAGEMENT PLAN

The purpose of a Storm Water Management Plan is to effectively manage storm water runoff as development occurs within the Township. Of primary concern is the prevention of property damage caused by flooding. Another concern is the preservation of natural features such as wetlands, floodplains, and any forest stands adjacent to existing drains. Where appropriate, the plan should place the burden of implementing measures to prevent flooding and water quality degradation on the developers responsible for the changes in the land use that cause the increased storm water runoff. General Stormwater Management guidelines include the following:

- The design must show that the proposed development will not cause any impact to adjacent properties with regard to the rate or volume of stormwater discharge.
- The development plan shall be fitted to the topography and soil to create the least erosion potential and to effectively accommodate the increased runoff caused by altered soil and surface conditions during and after development.
- The proposed structures or other permanent structures on, and adjacent to, a proposed development are and will remain safe from flooding.
- All temporary erosion control devices shall be in place during all phases of construction.
- Filters shall be provided at catch basins and culvert inlet points to prevent sedimentation of storm sewers for both new and existing systems.
- Whenever feasible, natural vegetation shall be retained and protected.

FURTHER CORRIDOR PLANNING/CORRIDOR IMPROVEMENT DISTRICTS

A quick look at the existing land use pattern in Monroe Charter Township reveals that much of the nonresidential development has occurred along the major roadway corridors, US-24 (South Telegraph Rd), M-125 (South Dixie Highway). The relatively high traffic volumes attract development along these corridors. As new facilities are constructed, additional traffic is generated, which attracts even more development. Unless carefully planned and managed, these corridors can become highly congested and unattractive with a proliferation of signs, excessive pavement, lack of landscaping, poorly designed access, and a proliferation of “franchise” architecture. Eventually, congestion can become so severe that businesses move out to the next emerging corridor, leaving behind obsolete and degraded conditions.

Corridor Planning involves developing a master plan that includes guidelines for development and access along a major roadway corridor. General transportation and corridor planning may include many elements such as:

- Reviewing existing traffic conditions and problems such as traffic volumes verses capacity and high accident locations.
- Requiring traffic studies to be completed for large projects.
- Relating future land use to road capacity by indicating where high traffic generators (e.g., large retail stores) should be located.
- Applying land use regulation techniques to control setbacks for buildings and parking, to require landscaping, to control the number and placement of driveways, and to require consistent signage.
- Reviewing environmental and health factors, such as noise levels, impacts on air and water quality, and effects on natural resources.

- Consolidating signage for large-scale developments onto a single directory sign and enforcement of design standards affecting size, placement, type of materials, etc.
- Adopting Private Road Standards to minimize dead-ends and lengths of cul-de-sacs, requiring connections to adjoining neighborhoods, and managing drainage and vegetation.
- Setting up a Special Assessment or TIF District to acquire funds to facilitate transportation planning and improvement projects.

The Township should partner with the City of Monroe and Frenchtown Township to create multi-jurisdictional Corridor Improvement Districts that could undertake planning, infrastructure investment, marketing, and branding activities to improve the corridors.

FARMLAND DEVELOPMENT RIGHTS AGREEMENTS

The Farmland Development Rights Agreements, commonly known as Public Act 116 of 1974, allows a land owner to sign a "development rights agreement" which states that the land will remain as either agricultural or open space for a specified period of time, with a minimum of ten years. This program was instituted to preserve agricultural land.

Farmland eligibility is determined either by the size of the farm or by the income of the farm (between 5 and 40 acres). Open Space eligibility depends on the site's historic, recreational, or environmental importance.

In return, the land owner receives income or property tax benefits including: exemption from special assessments for sanitary sewers, water, lights, or non-farm drainage and the landowner can claim as a credit on his Michigan Income Tax the amount by which the property taxes on the farmland exceed seven-percent of their income. The purpose of this act is to alleviate the rapid and often premature conversion of lands uniquely suited for agriculture and open space to more intensive uses.

The Michigan Department of Agricultural currently (as of November, 2002) shows Monroe County with 69.7 acres in P.A. 116 agreements.

In addition, to further preserve farmland, the State of Michigan passed in 2000, P.A. 262, which establishes a State Agriculture Preservation Fund that gives matching funds to qualified local programs. A farmer who qualifies for participation in this program relinquishes in perpetuity his development rights. The farmer retains all ownership rights that are not expressly restricted by the granting of the easement.

To participate the Township must adopt a PDR (Purchase of Development Rights) Ordinance. This positions the Township to receive matching funds from the Michigan Agricultural Preservation Fund to purchase developmental rights from qualified Farmlands. A PDR program compensates landowners for the difference between the developmental value and the agricultural value of the property in exchange for a permanent conservation easement that prohibits future residential development.

10. Implementation

11. Action Plan

The tables on the following states pages present a detailed summary of all of the recommended implementation activities, who is responsible for completing the activity, and indicates available funding resources for each activity.

KEY

Priority		Timeframe		Responsibility (Color)	
A	Most Important	1	W/in one year		Project Lead
B	Very Important	2	1-3 years		Key Participant
C	Important	3	3+ years		Contributor
		4	As available		
		5	Ongoing		

RESPONSIBILITY (ABBREVIATION)

MC	Monroe County	PC	Planning Commission
MCT	Monroe Charter Township	HO	Home Owners
BO	Business Owners	FCT	Frenchtown Charter Township
MDOT	Michigan Department of Transportation	SEM	SEMCOG
SM	State of Michigan	DDA	Newly Created DDA Board
TB	Township Board	MCKA	McKenna Associates
COM	City of Monroe	MS	Mannik and Smith
TS	Township Staff	DEV	Developers
CIA	Newly Created Corridor Improvement Authorities	RR	Railroads
LET	Lake Erie Transit		

FUNDING

Public	Includes public funds from the Township operating budget, County, and State funding. May also include local government bonds and grants.
Private	Includes funds from private sources such as grant monies, corporate funding, or property owners
DDA/TIF	Tax increment financing provided by an authorized body. Please refer to the summary of economic development tools.

11. Action Plan

ECONOMIC DEVELOPMENT								
PROJECT	PRIORITY	TIMEFRAME	RESPONSIBILITY			FUNDING		
			TOWNSHIP	OTHER GOV'T	PRIVATE	PUBLIC	PRIVATE	TIF
Create a DDA to oversee the re-development of the LaPlaisance area into an industrial park and walkable commercial/retail center.	A	1	TB	DDA	MCKA	●		●
Collaborate with the City of Monroe and Frenchtown Charter Township to create multi-jurisdictional Corridor Improvement Authorities for Telegraph and Monroe/Dixe.	A	1	TB	COM FCT	MCKA	●		●

ZONING AND LAND USE								
PROJECT	PRIORITY	TIMEFRAME	RESPONSIBILITY			FUNDING		
			TOWNSHIP	OTHER GOV'T	PRIVATE	PUBLIC	PRIVATE	TIF
Create new zoning districts for the LaPlaisance Core Commercial and Commercial Recreation FLU categories.	A	1	PC TB		MCKA	●		●
Evaluate the signage standards in the Zoning Ordinance to ensure they still meet Township goals.	A	1	PC TB		MCKA	●		
Evaluate the landscaping standards in the Zoning Ordinance to ensure they still meet Township goals.	A	1	PC TB		MCKA	●		
Update the Zoning Map to be consistent with the Future Land Use Map, especially inside the LaPlaisance Corridor Plan boundary.	A	1	PC TB		MCKA	●		
Evaluate the Mixed Use zoning district to ensure that it effectively enforces the vision for the Mixed Use FLU category.	B	2	TB PC		MCKA	●		
Limit further commercial rezoning along Telegraph Road and South Dixie Highway unless the applicant can demonstrate a clear need.	C	4	PC TB		MCKA	●		
Adopt an amendment to the Zoning Ordinance that encourages the protection of tree stands in the Township and requires replacement of trees when they are damaged or destroyed by development.	C	4	PC TB		MCKA	●		

ENVIRONMENTAL PROTECTION								
PROJECT	PRIORITY	TIMEFRAME	RESPONSIBILITY			FUNDING		
			TOWNSHIP	OTHER GOV'T	PRIVATE	PUBLIC	PRIVATE	TIF
Adopt a stormwater management plan.	B	2	TB PC	MC SM		●		
Examine the possibility of pervious pavement in Township-owned parking lots and low traffic roadways.	C	3	TB	DDA CIA MC	MS	●		●
Encourage new development to be respectful of natural features. Restrict new development that would threaten the rural areas of the Township.	C	3	PC TB		BO DEV MCKA MS	●	●	●
Pursue additional farmland development rights agreements.	C	3	PC TB				●	

TRANSPORTATION								
PROJECT	PRIORITY	TIMEFRAME	RESPONSIBILITY			FUNDING		
			TOWNSHIP	OTHER GOV'T	PRIVATE	PUBLIC	PRIVATE	TIF
Require sidewalk construction for all new developments.	B	2	PC TB	DDA CIA	BO DEV MCKA MS	●	●	●
Work with regional partners, TIF authorities, and the private sector to construct the network of non-motorized pathways envisioned by this plan.	B	2	TB	DDA CIA MC MDOT	BO DEV MCKA MS	●	●	●
Work with the Monroe County Road Commission to re-align the intersection of LaPlaisance and East Dunbar Roads, as envisioned in the LaPlaisance Road Corridor Plan.	C	3	TB	MC DDA	MS	●		●
Build sidewalks in strategic locations to connect residents to schools, amenities, jobs, and retail.	C	3	TB	DDA CIA MC	BO HO MCKA MS	●	●	●

11. Action Plan

Work with Lake Erie Transit to improve the rider experience through improved transit stop amenities on both public and private property.	C	3	TB	LET	DEV BO	•	•	•
Require street design that connects neighborhoods to each other, to amenities, and to job centers. Discourage dead-ends and cul-de-sacs.	C	3	PC TB	MC MDOT	DEV MCKA MS	•	•	•
Conduct a study regarding the feasibility of road extensions, such as extending Herr Road to Albain Road.	C	3	TB	MC	MS	•	•	
Work with MDOT to improve the I-75 interchange with LaPlaisance Road, as envisioned in the LaPlaisance Road Corridor Plan.	C	4	TB	MC MDOT		•		
Investigate the possibility of grade-separated railroad crossings for auto traffic or non-motorized pathways in key locations.	C	4	TB	MC MDOT	RR	•	•	•
Assist in the City of Monroe and Monroe County's attempts to have railroad lines consolidated.	C	4	TB	COM MC	RR	•	•	

Funding Resources

The following is a list of potential funding sources for the projects listed in the Action Plan:

DEDICATED MILLAGE

Special millage can be voted upon to be used to generate revenue for a specific purpose.

SPECIAL ASSESSMENTS

Special assessments are compulsory contributions collected from the owners of property benefited by specific public improvements, such as paving and drainage improvements, to defray the costs of such improvements. Special assessments are apportioned according to the assumed benefits to the property affected. It is an excellent way to allow for the payment of a wanted or required improvement over time by making annual bond repayments. State Acts, especially PA 188 of 1954, as amended, state the procedure to be followed.

BOND PROGRAMS

Bonds are one of the principal sources of financing used by communities to pay for capital improvements. General obligation bonds are issued for specific community projects and are paid off by the general public with property tax revenues. Revenue bonds are issued for construction of projects that generate revenue. The bonds are then retired using income generated by the project (for example, water and sewer service charges).

TAX INCREMENT FINANCING

Tax increment financing is authorized by the Brownfield Redevelopment Act, Downtown Development Authority Act and the Local Development Finance Authority Act. When a tax increment finance district is established, the state equalized value of all properties in the district is recorded. Every year thereafter, the property tax revenue generated by any increase in the total state equalized value is captured by the BRA, DDA, or LDFA. Corridor Improvement Authorities also use TIF. Often revenue bonds are issued to meet the large cost of the improvements, and the annual collection of tax increment revenues is used to repay the bonds

INDUSTRIAL PROPERTY TAX ABATEMENT

Property tax incentives are available through Michigan Public Act 381 of 1996, as amended, and PA 198 of 1974, as amended to eligible businesses to renovate or expand aging manufacturing plants or to build new plants. They can reduce property taxes (real and personal) for up to 12 years. For an obsolete plant or machinery that is being replaced or restored this results in a substantial exemption from the property tax on the value of the improvement. For a new plant, the local unit of government is able to reduce the local millage by half, and the Michigan Economic Development Corporation is able to abate the 6-mill statewide education tax.

MONROE CHAMBER OF COMMERCE

The Monroe Chamber of Commerce has affiliations with regional, statewide, and national organizations that provide updates on legislative matters and other relevant topics pertaining to business and industry. The Chamber provides a networking center for Monroe County businesses by providing programs and services to assist their membership.

11. Action Plan

MICHIGAN MUNICIPAL BOND AUTHORITY (MMBA)

This program created under Act 227 of 1985, as amended, offers municipalities the opportunity to take advantage of the State's improved credit rating. Because the MMBA is authorized to issue bonds to make loans to Michigan municipalities through the purchase of municipal obligations, the Authority allows municipalities to borrow funds for their capital and operating needs for less expense than entering the bond market on their own. Many small communities are at a disadvantage when issuing debt in the bond market because they frequently have no bond ratings and potential investors know little about their finances or economy. In addition, some communities tend to borrow infrequently, in small amounts. Because such debt issues are not particularly attractive to the financial markets, borrowing costs for such communities can be high.

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

MICHIGAN ECONOMIC DEVELOPMENT CORPORATION (MEDC)

The Michigan Economic Development Corporation (MEDC) is a collaborative alliance between the State of Michigan and local communities. The MEDC Board of Directors is comprised of private sector individuals that direct the Corporation with assisting new or existing business with site location, job training, new business development, economic profiles, manufacturing, technology, and life sciences information, and tax abatements. The MEDC employs field personnel who work directly with Monroe County's economic development organizations to promote development in Michigan.

MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY (MSHDA)

This Authority provides low interest loans for home improvements through local lending institutions. The Home Improvement Program (HIP) is not targeted to any specific area, but can be utilized County-wide. Interest rates on loans are related to income. The property must be twenty years or older in age or in need of repair. The loans must be utilized to correct items that are hazardous to health and safety, or for items related to energy conservation.

The Neighborhood Improvement Program (NIP) is another home improvement program developed by MSHDA, but it is directed toward specific revitalization areas. Loans, with interest rates dependent on income, are made available to homeowners within such areas. The program operates very similarly to the HIP with local lending institutions participating in the program.

Also, MSHDA underwrites mortgages for low/moderate income housing in communities by working with developers.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES GRANTS

Land and Water Conservation Fund (L&WCF)

Eligible projects include community recreation and trail way improvements. Grant amounts range from \$10,000 to \$250,000 to local units of government for development of facilities such as ball fields, tennis courts, playgrounds, trails, and picnic areas. The scope of work can include support facilities and renovation of existing facilities. Funds are provided through Federal appropriations. Grant match basis is 50 percent MDNR/50 percent local.

Michigan Natural Resources Trust Fund (MNRTF)

Eligible projects include acquisition of land or rights in land for recreational uses or for protection of the land because of its environmental importance or scenic beauty, including additions to existing parks, forest and/or wildlife areas. Development of public outdoor recreation facilities is eligible (such as picnic areas, beaches, boating access, fishing and hunting facilities, winter sports areas, playgrounds, ball fields, tennis courts, and trails). Funds are provided through sale of oil and mineral leases on State land. Local contributions equal to at least 25 percent of the total project cost are required.

Passport Grants

Passport Grants are another MDNR grant program. Funded through the proceeds for purchases of the “recreation passport,” which allows Michigan residents to visit any State Park unlimited times for a flat fee, the program can be used to fund a wide variety of local recreational improvements.

COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG)

The Community Development Block Grant program is an annual allocation of the U.S. Department of Housing and Urban Development to local governments for a wide range of community development activities, including housing rehabilitation, public and neighborhood improvements and economic development activities which primarily benefit low and moderate income persons. Funds are channeled through the MEDC and MSHDA on the State level.

BROWNFIELD FINANCING REDEVELOPMENT ACT OF 1996

These acts establish an alternate method of utilizing the TIF financing mechanism. A community and landowner or potential user working together to finance the cleanup and reuse of contaminated property can use this new initiative. Costs that can be funded include the demolition of buildings if necessary to remove the hazardous substances, and new construction if it is needed to protect against exposure to hazardous substances that are to remain. An important feature of this new initiative is that it restores the ability to capture state and local school taxes but only from the taxes paid by the user of the redeveloped contaminated site.

The Brownfield Act was amended to allow the TIF funds to be used for redeveloping obsolete buildings/uses that contribute to the negative conditions within a Brownfield Area.

TRANSPORTATION ENHANCEMENT ACT (TEA-21)

Transportation Enhancement Act (TEA-21) grants are available for improvements to the Township’s transportation system, including motorized and non-motorized systems. This federal program provides funding for all types of transportation-related projects, and has been used throughout Michigan by communities to further a range of improvements.

SAFE ROUTES TO SCHOOL

Safe Routes to School is a Federal program administered by the Michigan Fitness Foundation and MDOT that awards grant money to schools and communities to promote walking and biking to school. The money can be used for infrastructure construction, such as sidewalks.



Planning · Landscape Architecture · Community Development

235 E. Main Street, Suite 105

Northville, MI 48167

(248) 596-0920

www.mcka.com

Phillip McKenna, AICP, PCP

Christopher Khorey, AICP

Sabah Aboody-Keer

Carrie Wakulat

President

Project Manager

GIS Mapping

Graphic Design

