

CHAPTER 3. COMMUNITY CHARACTERISTICS

Population and demographic change are among the most important measures to express growth or decline and its likely impact on land uses in a community. Therefore, it is helpful to recognize the Township’s “community characteristics” in preparing a realistic and meaningful Master Plan.

Community Summary

The presence of the wineries, a second-home population, and proximity to Lake Michigan establish a budding tourism potential that is likely to blossom in the future.

The Village of Baroda was platted on 240 acres of Lake Township in 1860 by Michael Hauser. The Indiana and Lake Michigan Railway Company established a railroad line connecting South Bend, Indiana to St. Joseph, Michigan in 1889; and the railroad traversed through the unincorporated Village of Baroda. In 1907, the Village incorporated and grew around the railroad. In 1923, Lake Township was split; the eastern half became Baroda Township, while the western half remained Lake Township.³ This arrangement results in an 18-square mile community, which is smaller than a typical 36-square mile township in Michigan.

Over the decades, the Baroda community and broader region has emerged into an agricultural hotspot, with prosperous wineries, large-scale farming operations, and smaller hobby farms dotting the landscape. The Round Barn Winery is in Baroda Township, and several others exist in neighboring communities; including Domaine Berrien Cellars & Winery, Free Run Cellars, Hickory Creek Winery, Lemon Creek Winery, Founders, Public House, Dablon Vineyards, and Tabor Hill Winery. The presence of the wineries, a second-home population, and proximity to Lake Michigan establish a budding tourism potential that is likely to blossom in the future.

The community is proud of its rural heritage.

The community is proud of its rural heritage, evidenced in the Village of Baroda’s motto, “Heart of Wine Country.” This is manifested during Party on the Pavers, a community celebration that includes a ½ marathon along the wine trail.

Baroda Township’s low-density living environment helps to establish the community’s identity as a rural enclave, although near to several larger cities as shown on Map 1 in Chapter 2.

Recent Population Growth

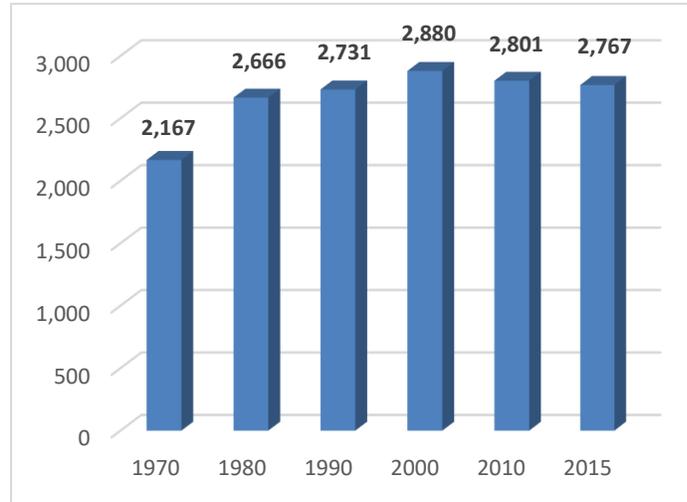
Baroda is a farming community experiencing modest low-density growth.

It is appropriate to determine the overall population change the Township has experienced in the recent past. Like many rural Michigan townships, Baroda is a farming community that experienced modest yet relatively steady low-density growth, primarily in the form of acreage “estates” until 2000. From 1970, to 2000 the United States Census Bureau reports that the Township’s population increased from 2,167 to 2,880 in 2000, or by a total of 713 persons, representing a 32% increase. In other words, the Township grew at an average annual rate of

³This information was derived from the Village of Baroda website and the Baroda Township website.

about 1% over that 30-year period. Those figures reflected the slow pace of change that is cherished by some in the community.

Figure 3.1. Historical Population Change in Baroda Township, 1970-2015



Since 2000, however, the Township has experienced a slight decline in total population. This is not unexpected and directly attributable to two key factors. An aging population combined with the effects of the Great Recession of 2008 to 2011 resulted in a loss of 113 persons or 3.9% of the total population.

To put Baroda Township’s population change into perspective, the following table lists the population change in neighboring communities and the county. The table provides data based on the decennial Census for the years 1970 to 2010 and the current population estimate for the year 2015. The data shows the total population by number and the change between periods by number and percent.

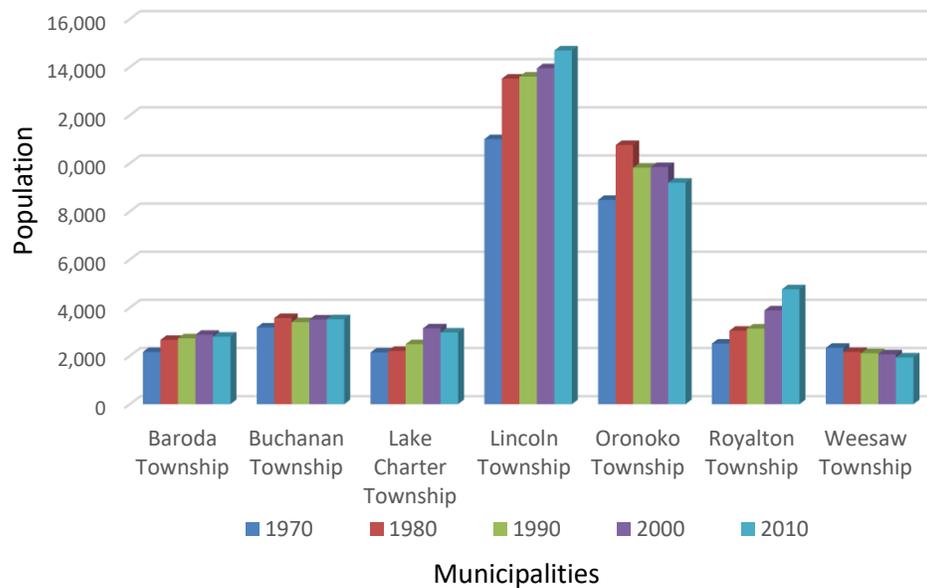
Comparative Demographics

POPULATION	1970	1980	1990	2000	2010	2015
Baroda Township	2,167	2,666	2,731	2,880	2,801	2,767
Buchanan Township	3,182	3,571	3,402	3,510	3,523	3,510
Lake Charter Township	2,146	2,212	2,487	3,148	2,972	2,948
Lincoln Township	11,007	13,520	13,604	13,952	14,691	14,591
Oronoko Township	8,482	10,761	9,819	9,843	9,193	9,151
Royalton Township	2,513	3,046	3,135	3,888	4,766	4,772
Weesaw Township	2,338	2,164	2,114	2,065	1,936	1,748
Berrien County	163,940	171,276	161,378	162,453	156,813	155,565
CHANGE (Number)		1970 to 1980	1980 to 1990	1990 to 2000	2000 to 2010	2010 to 2015
Baroda Township		499	65	149	-79	-34
Buchanan Township		389	-169	108	13	-13

CHANGE (Number)		1970 to 1980	1980 to 1990	1990 to 2000	2000 to 2010	2010 to 2015
Lake Charter Township		66	275	661	-176	-24
Lincoln Township		2,513	84	348	739	-100
Oronoko Township		2,279	-942	24	-650	-42
Royalton Township		533	89	753	878	6
Weesaw Township		-174	-50	-49	-129	-188
Berrien County		7336	-9898	1075	-5,640	-1,248
CHANGE (Percent)		1970 to 1980	1980 to 1990	1990 to 2000	2000 to 2010	2010 to 2015
Baroda Township		23.0%	2.4%	5.5%	-2.7%	-1.2%
Buchanan Township		12.2%	-4.7%	3.2%	0.4%	-0.4%
Lake Charter Township		3.1%	12.4%	26.6%	-5.6%	-0.8%
Lincoln Township		22.8%	0.6%	2.6%	5.3%	-0.7%
Oronoko Township		26.9%	-8.8%	0.2%	-6.6%	-0.5%
Royalton Township		21.2%	2.9%	24.0%	22.6%	0.1%
Weesaw Township		-7.4%	-2.3%	-2.3%	-6.2%	-9.7%
Berrien County		4.5%	-5.8%	0.7%	-3.5%	-0.8%

By way of graphical comparison, the changes are shown in the following graph.

Figure 3.2. Population Change in Baroda Township and Surrounding Communities



Population Projections

Statistical averaging techniques were employed to project the Township's likely population growth to the year 2040. These approaches are intended to provide a general sense of growth in the future. The following generalizations are limited in scope and are based on past trends documented by the United States Census Bureau and Township data.

These projections have implications regarding future land use necessities, the demand for various public services and capital improvements, and they help to understand the future position of the Township in terms of growth and total population. The following describes the projection techniques.

The Constant Proportion (or ratio) Method of projecting population assumes that Baroda Township will continue to represent the same percentage of Berrien County's actual and projected population in the years 2020, 2030, and 2040 that it represented in 2010.

The Growth Rate (or geometric) Method projects future population growth or decline based on the rate of change in the Township in the past. Using the growth rate method, the following assumes that growth in the future will occur at the same average rate as has occurred annually since 1970.

The Arithmetic Method is similar to the growth rate method in that population projections are based on growth that occurred in preceding decades. This method, however, bases population growth on the overall average increase in the number of persons per year, rather than on growth rates.

The Building Permit/Housing Method uses present growth trends based on the actual number of residential building permits issued and homes constructed in the Township. The number of units is divided into the population to determine the number of persons per unit. The Township's annual growth in the number of units is 13.2 over the past several years. The average household size is 2.14 persons. Extrapolating these figures into the future is used to project likely population change, if current trends remain the same.

The following table shows the result of each of these four population projection methods. The bottom row is the average population projection based on the four methods.

Baroda Township may grow to about 3,000 people by 2020, and 3,200 people by 2040.

Projected Population	2010	2020	2030	2040
Berrien County	156,813	162,969	161,688	160,407
Baroda Township				
Constant Proportion	2,801	2,911	2,888	2,865
Growth Rate	2,801	3,094	3,242	3,390
Arithmetic Method	2,801	2,960	3,118	3,277
Building Permit Method	2,801	2,910	3,052	3,193
Average	2,801	2,969	3,075	3,181

Despite no growth over the past decade, some limited growth is expected to resume. This will occur as the lingering effects of the Great Recession fade.

Demographic Data

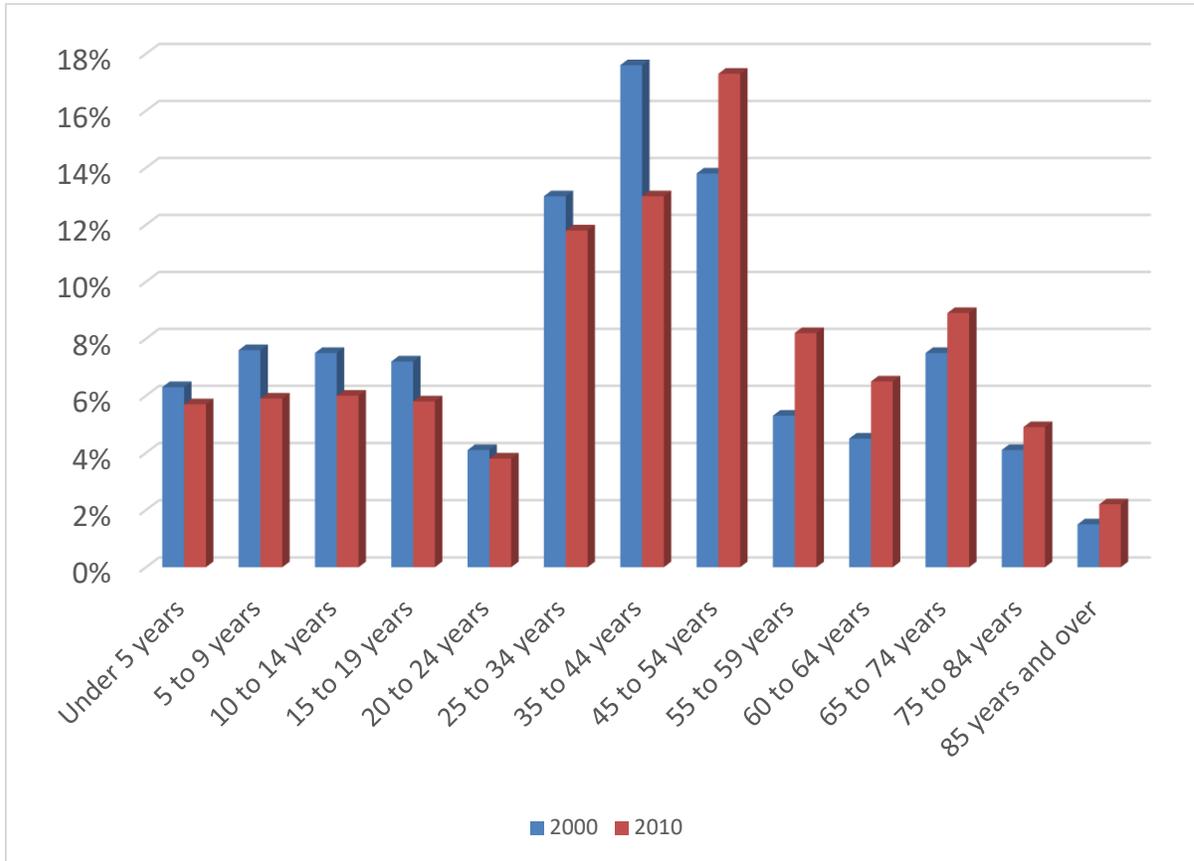
Aging Trends

Contemplating age characteristics can assist in determining the type of housing, community services and recreational facilities that may be needed. For example, if a large portion of the population were younger, the Township may benefit from additional park and playground facilities. Similarly, the rate of increase in a senior population may have implications for more senior living opportunities, such as condominiums, and public services.

The median age of Baroda Township residents was 41.8 years, which is similar to the County and slightly older than the State.

There is a continuing shift toward an older population in Baroda Township. In 2000, the median age of Baroda Township residents was 37.9 years. In 2010, the median age had increased to 41.8 years. The median age represents the mid-point in the range of all ages within the Township; one-half of the population is younger and one-half of the population older.

Figure 3.3 Age Distribution in Baroda Township, Michigan
2000 Compared to 2015



The aging of the “baby boomer” population is the primary reason for the shift. This does not suggest that there is no longer a need for schools, parks, and other youth-related facilities. With almost 18% of the population under the age of 15 those needs remain. However, more than 30% of the Township’s population is over the age of 55 in 2010 as compared to 23% in 2000. This indicates that the needs of the older population are of increasing importance.

It is also worth noting that only about 4.1% of the Township’s population is between the ages of 20 and 24. This apparent outward migration is somewhat typical as many youth move away from home to pursue higher education opportunities or employment. It may also suggest that the Township lacks a variety of employment opportunities; affordable, yet high-quality “starter homes;” or recreational opportunities that would attract people within this age range.

Educational Attainment and Income

In addition to age, it is appropriate to catalog educational attainment and income trends in the community. The following table provides information for Baroda Township, Berrien County, and the State of Michigan.

Despite a slightly lower bachelor's degree attainment level compared to the County, Township residents earn higher incomes than County residents overall.

Educational Attainment			
Baroda Township	2000	2010	2015
High School or More	83.1%	90.6%	90.8%
B.S. degree or More	12.9%	17.6%	18.4%
Berrien County	2000	2010	2015
High School or More	83.1%	85.6%	88.6%
B.S. degree or More	19.6%	23.3%	26.0%
Michigan, State of	2000	2010	2015
High School or More	76.8%	88.1%	89.6%
B.S. degree or More	17.4%	25.1%	27.0%
Median Household Income			
Baroda Township	2000	2010	2015
	\$44,129	\$44,200	\$49,732
Berrien County			
	\$38,567	\$42,625	\$44,993
Michigan, State of			
	\$44,667	\$48,432	\$49,576

Since 2000 the educational attainment of the Township residents continues to increase. More people in the Township have a high school diploma or more than in the county or state. However, Township residents lag both the county and state in the percent of the population holding a college degree or more.

Despite a slightly lower bachelor's degree attainment level compared to the County, Township residents earn higher incomes than County residents overall. According to the 2015 American Community Survey data from the Census Bureau, the median household income in Baroda Township was \$49,732 the County median was only \$44,993. The Township median household income figure is very like the State of Michigan's median income of \$49,576.

IMPLICATIONS – COMMUNITY CHARACTERISTICS

The Township should be prepared to accommodate the limited growth that is desired without infringing on the rural attributes that define it.

1. Baroda is a charming community near various cultural institutions and tourist attractions. The Township should explore becoming a partner in marketing these amenities to bring people into the community, particularly the downtown area in the Village of Baroda.
2. While population increase has been relatively modest, it has been steady and notwithstanding the current dip in housing permits (discussed in the next chapter), it can be reasonably expected that growth will continue into the future. Based on the projections in this chapter, the Township will need to accommodate about 200 additional homes. Clearly, Baroda is a desirable community, evidenced in the fact that Baroda has grown consistently while some neighboring municipalities have periodically lost

population. The Township should be prepared to accommodate the limited growth that is desired without infringing on the rural attributes that define it.

3. Only 3.8% of Baroda Township's population is age 20 to 24. To remain vibrant, it may be appropriate to explore the tools necessary to keep and attract a young, talented population. These tools may include more innovative opportunities for employment, a variety of housing choices, or recreational opportunities that would attract people between the ages of 20 and 24.

CHAPTER 4. LAND USE PATTERNS AND ECONOMIC DEVELOPMENT

The predominant land use pattern in Baroda Township may be described as “rural.”

Baroda Township boasts a healthy rural aesthetic that is balanced by the presence of the Village of Baroda. The Township is comprised of wooded natural areas, agricultural fields, and low-density residential uses. The predominant land use pattern in Baroda Township may be described as “rural,” and the features that establish and define this pastoral quality are embraced.

This chapter analyzes the land use and economic development trends within the community. This analysis includes a review of state equalized value trends, land use and development patterns, building permit trends, general housing characteristics, and employment characteristics

Housing Characteristics

Number and Age of Housing Units

Housing units in terms of number and age is an indication of investment in a community. The following table shows the number of homes constructed in each time period since the U.S. Census Bureau began tracking that information in 1939.

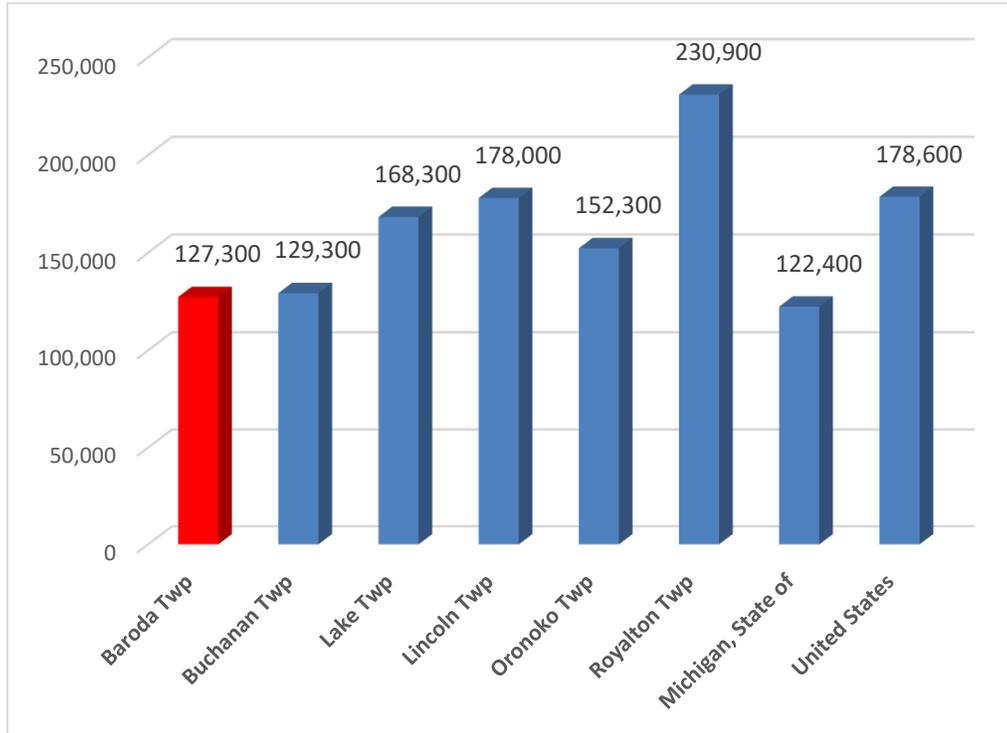
YEAR STRUCTURE BUILT	Number	Cumulative
Built 2010 or later	7	1,294
Built 2005 or later	36	1,287
Built 2000 to 2004	76	1,251
Built 1990 to 1999	194	1,175
Built 1980 to 1989	149	981
Built 1970 to 1979	266	832
Built 1960 to 1969	161	566
Built 1950 to 1959	132	405
Built 1940 to 1949	34	273
Built 1939 or earlier	239	239

Clearly, the dramatic drop in housing construction since 2010 is a direct reflection on the impact of the Great Recession. It is anticipated, with continued low interest rates, location, and increasing demand for housing that construction will return to pre-recession levels.

Housing Values and Attainability

Figure 4.1 below summarizes the average value of a home in Baroda and neighboring and regional communities. Baroda Township experiences reasonably average home values for the region.

Figure 4.1. Average Housing Values In Baroda Township, Surrounding Municipalities, Michigan and US - 2015



It is appropriate to analyze housing affordability, which can assist in determining whether housing in the community is unattainable for its residents. General planning practice and housing specialists typically agree that housing is attainable if rent or mortgage payments represent no more than 25% to 30% of monthly gross income. Using this figure as a barometer, the 2010 Census reveals that about 87% of Township residents may find that housing in the Township is affordable. It should be noted that 15% of Township homeowners indicate paying 30% or more of gross monthly income on mortgage costs, compared to 17% of County homeowners overall. For renters, 27% of the Township pays more than 30% of income on monthly payments, compared to 36% of County renters overall.

Housing Type and Tenure

In 2010 in Baroda Township, 69.6% of dwelling units were single-family detached homes; while 23.3% of dwelling units are manufactured homes. The balance of dwellings in Baroda Township, or 7.1%, is multi-family structures with two or

more units. This represents a shift towards more single family detached homes from 2000 when 66.8% were in that category.

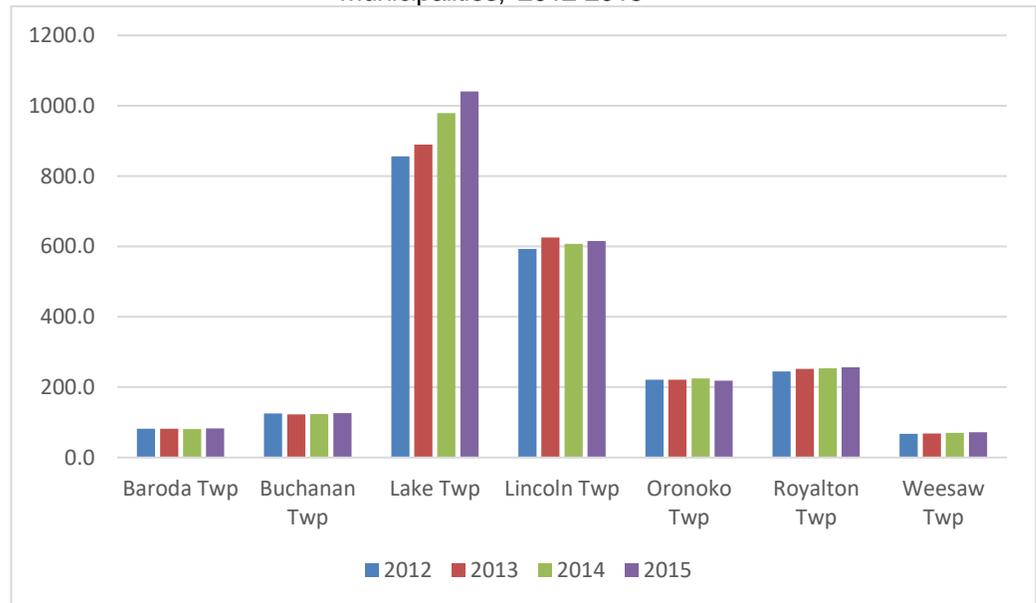
In Berrien County overall, 76.3% of homes consist of single-family detailed homes, 5% consist of manufactured homes, and 18.7% of dwellings consist of structures with two or more units.

In 2010, 88.7% of the homes in the Township were owner-occupied, while 11.3% were renter-occupied. As with the housing mix these numbers show a shift from 2000 towards more owner-occupied units (85.6%). These figures indicate a reasonably stable residential environment, as high rental percentages and high vacancy rates can point toward instability or high turnover, both of which can depress sense of community.

Property Values

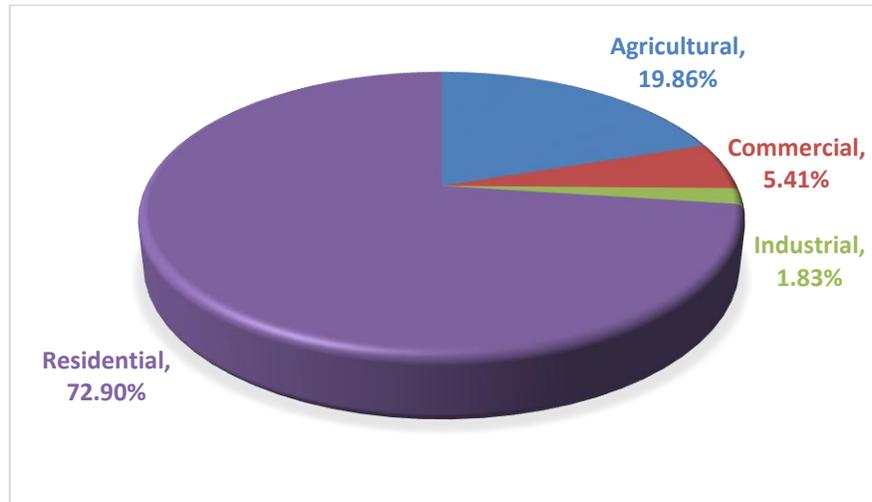
Property values are a key measure of economic growth and the financial strength of a community. Property values reflect both investment in new development and the degree of growth in the value of those investments. Annually, the Assessors of each jurisdiction report total valuation within their respective jurisdictions, and these reports can provide an illuminating impression of the character of a community. The table below compares the annual taxable values of real property in Baroda Township to those of surrounding municipalities.

Figure 4.2
Change in Taxable Value of Real Property Baroda Township and Surrounding Municipalities, 2012-2015



The total real property taxable value for Baroda Township in 2000 was \$51.3 million, and by 2008 it had increased by about 57% to \$80.9 million. During the Great Recession of 2009 to 2011 property values in general either declined or stayed mostly unchanged. Overall, there was little growth in property values not only in the Township but in the region and state. The exception being Lake Township. Since that time property values elsewhere have slowly rebounded. In the Township, the total taxable value in 2012 was \$81.6 million. This has increased to \$82.7 million in 2015.

Figure 4.3. 2015 SEV Breakdown



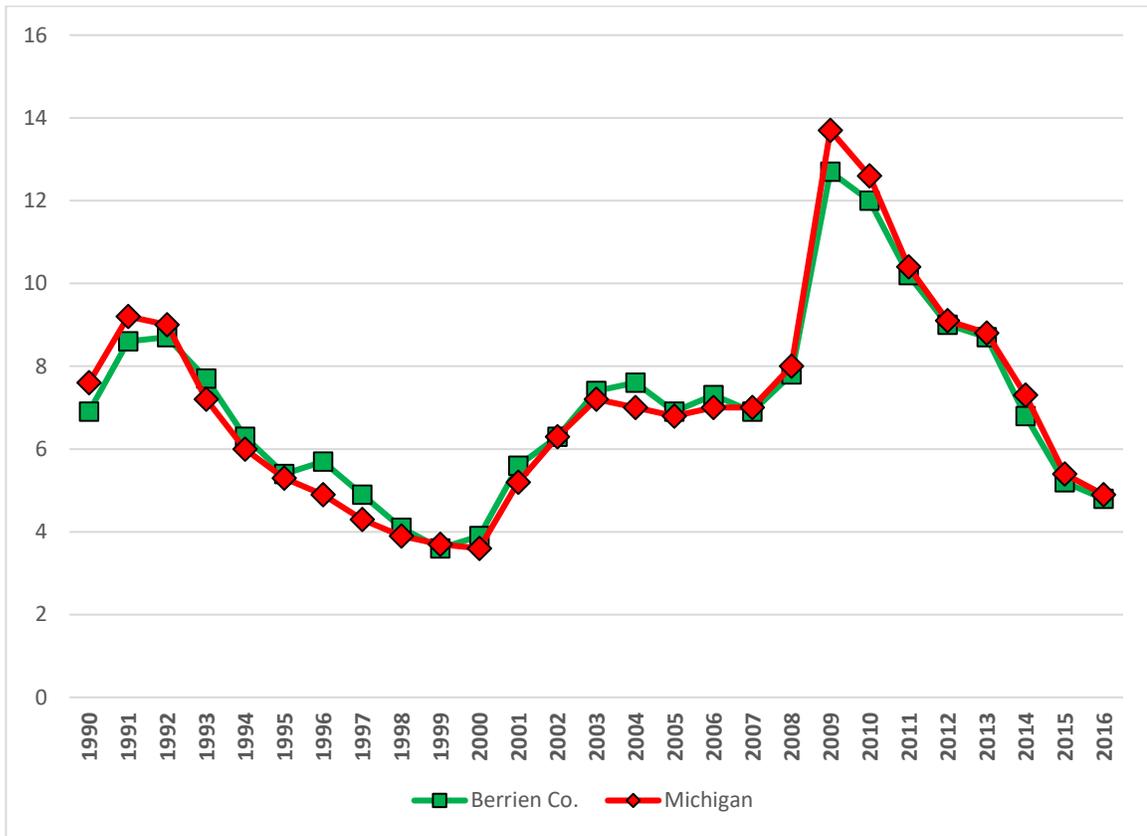
It is also important to further examine property values to consider the breakdown among land use categories (property classifications) in the Township. Despite agricultural lands comprising more than three-quarters of the land use in the Township, it only accounts for 19.86% of the Township’s tax base. Lands classified as residential, on the other hand, constitute only about 5% of the Township’s land use, but comprise 72.9% of its tax base.

Employment

The mean travel to work time for Baroda Township residents is 18.6 minutes with 82.9% traveling alone by private automobile. Even though this commute time is less than the mean travel to work time of 25.5 minutes for the United States it still reflects that the bulk of Township residents work outside of the Township.

Over the last twenty-six years, the jobless rate in Berrien County has closely mirrored that of the State in general. In the late 1990s, the jobless rate steadily declined to a low in Berrien County of 3.6% in 1999. By 2004, however, the jobless rate had more than doubled to 7.6% in the County and 7.1% in the State of Michigan.

Figure 4.4. Jobless Rate in Berrien County and the State of Michigan



The jobless rate peaked in 2009 during the depth of the Great Recession with the state jobless rate reaching 14% and the County rate at 13%. Since that time, as the recession has ended, the county and state economies have steadily improved.

No data exist on the local level; however, it is expected that the Township jobless rate closely follows the state and county rates. This is due to the parallels in most aspects between the occupations of the workforce at the Township, County and State level.

Table 4.2 provides a breakdown by major employment groups of the workforce in Baroda Township, Berrien County, and the State of Michigan.

Occupation	Baroda Township		Berrien County		Michigan	
	No.	Pct (%)	No.	Pct (%)	No.	Pct (%)
Management, Professional, Education, Healthcare	418	30.2%	22,492	32.9%	1,525,263	34.9%
Service Occupations	226	16.4%	12,888	18.8%	796,215	18.2%
Sales and office occupations	346	25.0%	15,783	23.1%	1,037,272	23.7%
Natural resources, construction, and maintenance occupations	175	12.7%	6,026	8.8%	339,141	7.8%
Production, transportation, and material moving occupations:	217	15.7%	11,274	16.5%	675,627	15.4%
Total	1,382		68,463		4,373,518	

Given the more rural, agrarian nature of the Township it is not surprising that the major difference in occupations lies in the Natural Resources (including farming), Construction and Maintenance occupations category.

Overall, Baroda Township has a fairly diversified workforce, with 30.2% employed in management, professional and related occupations, 25.0% in sales and office occupations and 15.7% in production, transportation and material moving operations. Additionally, 16.4% are employed in service occupations according to the 2015 American Community Survey conducted by the U.S. Census Bureau.

Since Baroda Township is a rural and agricultural community, there is little employment centered in the Township. However, there are several employers in the Village of Baroda, and employers and institutions such as Andrews University in Oronoko Township are nearby. The following is a listing of several of the largest employers with locations in the Township and Village:

Tigmaster Company	CR Lawn Care
Quality Mold and Engineering	South Shore Tool
Midwest Die Corp	Lakeshore Die Casting
D'Agostino Excavating	Round Barn Winery, Brewery & Public House

Land Use Change

The land use information for the Township was been derived from computerized mapping efforts of the Michigan Resources Information System (MIRIS) in 1978. An objective of MIRIS was to create a “statewide computerized database of information pertinent to land utilization, management, and resource protection activities.” It is important to note that the information in Map 6 was prepared from aerial photographs and reflects composite groupings of land use categories. MIRIS information is not bounded by parcel lines, but instead follows natural systems. Therefore, the map is intended not to reflect zoning or exact land uses. Williams & Works updated this information in 2008, based on 2005 digital aerial photography and updated parcel data. Map 6 illustrates land use change in the Township between 1978 and 2005.

The Township’s land uses have not changed much since the last Master Plan was adopted in 1993. In 2005, more than three-quarters of the land in the Township was considered to be agricultural, compared with less than 5% classified as “urban or built-up.” Table 4.3 summarizes land use change in the Township from 1978 to 2005.

Table 4.3. Land Use Change in Baroda Township, 1978-2005

Land Use Category	1978 (acres)	1978 (Percent)	2005 (acres)	2005 (Percent)	Change (acres)	Change (Percent)
Agricultural Land	8,923	78.22%	8,868	77.74%	-55	-0.62%
Barren Land	4	0.04%	4	0.04%	--	0.00%
Forest Land	707	6.20%	859	7.53%	152	21.50%
Rangeland	1,248	10.94%	1,149	10.07%	-99	-7.93%
Urban and Built Up	472	4.14%	471	4.13%	-1	-0.21%
Water	28	0.25%	32	0.28%	4	14.29%
Wetlands	25	0.22%	24	0.21%	-1	-4.00%
Total	11,407	100%	11,407	100%	--	--

During this time period, the Township experienced very little land use change. The largest change was an additional 152 acres classified as “forest land,” which could be attributed to vacant or unused lands reverting to a natural state. Lands classified as “rangelands” decreased by 99 acres, and lands classified as “agricultural land” decreased by 55 acres. Overall, land uses in Baroda Township have remained relatively constant over the last thirty years or so.

Given the rural and agricultural nature of the Township and surrounding communities, land use conflicts with neighboring communities are minimal.

**Regional
Consistency and
Conflicts**

The Township borders Oronoko Charter Township to the east, and land uses along this border are primarily agricultural. To the west is Lake Charter Township. While Lake Township has seen population growth near the lakeshore, the I-94 corridor and the City of Bridgman, the Township’s shared border with Baroda Township consists primarily of agricultural uses. To the south is Weesaw Township, which is also primarily an agricultural community. The Berrien County Development Plan indicates that this shared border is planned to continue with agricultural land uses into the future.

To the north is Lincoln Charter Township, which is one of the more developed communities in the area. However, growth in Lincoln Township has not yet impacted Baroda Township, so currently few conflicts exist in this area. Lincoln Township’s General Development Plan, adopted in 2007, plans for agricultural uses near the boundary with Baroda Township.

Finally, the Village of Baroda’s most recent future land use plan was written in 2011, and being updated in 2017, may not reflect current land use conditions or desired policies.

Nevertheless, the plan generally calls for agricultural uses and open space along the east Village limits and medium-density residential uses along the west Village limits. This is consistent with current land use in the Township.

IMPLICATIONS – LAND USE PATTERNS AND ECONOMIC DEVELOPMENT

1. The increase in taxable value of real property has been slower in Baroda than in most neighboring townships. This may be expected, given that Baroda Township is primarily a countryside community. However, many neighboring communities are fairly rural, as well. The Township should decide if recent trends in economic development are adequate and to what extent future growth should be encouraged and controlled.

Presumably, any future growth should not undermine the Township's rural character; and proper planning, zoning requirements and design standards can help to assure that new developments and buildings are designed to reflect the small-town personality of Baroda.

2. Even though housing in Baroda Township is comparatively more attainable than the County overall, affordability problems exist for some residents. To help lessen the impacts of foreclosure and blight, the Township should think about collaborating with adjacent communities to evaluate whether the immediate region provides for adequate affordable, high-quality housing.

