

**DRAFT**

Section **4.0**

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# **POPULATION ANALYSIS**

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## INTRODUCTION

The characteristics of a community's population are among the key ingredients given consideration in the long-range planning process. Historical and current population trends have several useful applications. They are especially relevant in identifying the need for various types of community facilities. Future land use and public utility demands are also related to population growth trends and demographic characteristics. Conclusions and the potential planning policy implications of this data are also noted.

The following items are important to a fuller understanding of the characteristics of Riley's total population. These individual topics include the following:

- Population change over time
- Age characteristics
- Household characteristics
- Population projections

The most current available population data for Riley Township is employed in the examination of each of the topics. Wherever possible, comparable data for St. Clair County is also included. Information for the County is provided for the purpose of understanding the relationship of the Township to the larger geographical areas of which it is a part of within Southeast Michigan.

## POPULATION CHANGE

Population change for Riley Township and its neighboring communities over the 40-year period from 1980 to 2022 is shown in Table 9. During this period, the Township's population increased by 1,125 persons, from 2,075 in 1980 to 3,200 in 2022. Of the eight communities that share a common boundary with Riley Township, most, including Riley, experienced their greatest growth in population during the 1990's.

The rate of population change experienced by Riley Township for each of the past four decades is shown in Table 10. Riley displayed population increases over each of these decadal intervals, except for 2010-2020. The strongest growth occurred over the 1990-2000 decade when the Township grew by 892 persons, or 41.4%.

**TABLE 9: COMPARATIVE POPULATION CHANGE 1980-2022**

Community	1980	1990	2000	2010	2020	2022
<b>Riley Township</b>	<b>2,075</b>	<b>2,154</b>	<b>3,046</b>	<b>3,353</b>	<b>3,199</b>	<b>3,200</b>
Columbus Township	3,097	3,235	4,615	4,070	4,112	4,093
Richmond Township	2,453	2,528	3,416	3,665	3,544	3,564
St. Clair Township	3,965	4,614	6,423	6,817	7,085	7,076
Memphis	1,174	1,221	1,129	1,183	1,084	1,150
Berlin Township	2,160	2,399	3,162	3,285	3,115	3,121
Wales Township	2,368	2,294	2,986	3,248	3,180	3,187
Emmett Township	1,413	1,530	2,255	2,385	2,257	2,527
Emmett Village	285	289	251	269	258	244
St. Clair County	138,802	145,607	164,235	163,040	160,383	160,151

**TABLE 10: COMPARATIVE POPULATION CHANGE (% Change) 1980-2022**

Community	1980-1990		1990-2000		2000-2010		2010-2022	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Riley Township	79	3.8%	892	41.4%	307	10.1%	-153	-4.6%
Columbus Township	138	4.5%	1,380	42.7%	-545	-11.8%	23	0.6%
Richmond Township	75	3.1%	888	35.1%	249	7.3%	-101	-2.8%
St. Clair Township	649	16.4%	1,809	39.2%	394	6.1%	259	3.8%
Memphis	47	4.0%	-92	-7.5%	54	4.8%	33	2.8%
Berlin Township	239	11.1%	763	31.8%	123	3.9%	-164	-5%
Wales Township	-74	-3.1%	692	30.2%	262	8.8%	-61	-1.9%
Emmett Township	117	8.3%	725	47.4%	130	5.8%	-142	-6%
Emmett Village	4	1.4%	-38	-13.1%	18	7.2%	-25	-9.3%
St. Clair County	6,805	4.9%	18,628	12.8%	-1,195	-0.7%	-2,889	-1.8%

## AGE

Age characteristics are among the more important demographic variables. They are useful as an indicator of anticipated demand for various types of municipal services and programs, including parks, employment needs, job training, day-care, schools, and services to various other age groups, including the elderly. The Township's future land use needs are also related to its age configuration.

## Median Age

The steady aging of this Nation's population was among the more important trends dimensioned by the 1980, 1990, 2000 and 2010 census. After reaching a high of 30.2 years in 1950, the median age for the Nation declined the following two decades to 29.5 years in 1960, and 28.3 years in 1970. These declines were largely a response to the high birth rates that occurred during the baby boom years following World War II. The aging of the baby boom children, during the 1980's and 1990's, partially explains the rise in median age revealed in the 2000 and 2010 U.S. Censuses. Lower fertility rates and increasingly longer life spans have also contributed to the increase.

The continuing aging trend is clearly reflected in the median age figures noted in Table 11. Median age in Riley Township for 2010 was 41.4 compared to the County's 41.3. Continued increases are reflected in 2022 census data. Riley Township's median age rose 3.8 years to 45.2 in 2022. The Township's median age, also, is slightly higher than the County figure of 44.1.

**TABLE 11: MEDIAN AGE**

Median Age			
Community	2010	2022	Change 2010-2022
Riley Township	41.4	45.2	3.8
St. Clair County	41.3	44.1	2.8

## Population by Age Life Cycle

By reviewing the various age categories that make up Riley's population, it is possible to determine how various segments of the Township's population have changed over time and what impact these changes have had on the Township's growth.

A more meaningful picture of Riley's population age distribution is possible when the individual age categories shown on the previous table are combined into a smaller number of groups, which more closely resemble identifiable stages of a normal human life cycle. Selected categories and the age intervals that they represent include: pre-school (0-4), school (5-17), family formation (18-44), middle-age (45-64), and seniors (65+). The percent of the Township's population that falls into each of these categories is shown in Table 12. Available information for 2017 and 2022 is shown. Similar data for St. Clair County is also provided for comparison purposes. Each of the life cycle stages reflected in Table 12 has important meaning for planning.

**TABLE 12: AGE BY LIFE CYCLE CATEGORY**

<b>Riley Township</b>		
<b>Category</b>	<b>2017</b>	<b>2022</b>
Pre-School (Under 5)	3.2%	4.4%
School Age (5-17)	19%	16.1%
Family Formation (18-44)	29%	29.1%
Middle Age (45-64)	34.2%	37.1%
Seniors (65+)	14.6%	13.2%
<b>St. Clair County</b>		
Pre-School (Under 5)	5.1%	4.9%
School Age (5-17)	16.6%	15.6%
Family Formation (18-44)	30.6%	30.5%
Middle Age (45-64)	30.6%	29.6%
Seniors (65+)	17.2%	19.4%

The pre-school and school-age categories, for example, offer useful indicators of future school enrollment trends and the adequacy of existing facilities to meet these needs. The percentage of the Township’s pre-school population has increased since 2017. In 2017, children under the age of five comprised just over 3% of the Township’s population and by 2022, this increased to more than 4%. In 2017, pre-school children accounted for 5.1% of the County’s population. The County’s percentage of pre-school children fell slightly to 4.9% in 2022. The Township’s school aged population decreased by 2.9% from 2017 to 2022.

In 2017, children between the ages of five and 17 accounted for slightly less than one-quarter of Riley Township’s total population. The Township’s population aged five to 44 has been steadily declining, whereas the population aged 45 and older has been steadily growing over the past couple of decades.

# HOUSEHOLDS

## HOUSEHOLD GROWTH TRENDS

The U.S. Census Bureau has two categories that it uses to describe living arrangements: households and families. A household is one person or a group of persons occupying a housing unit. The number of households and occupied housing units are, therefore, identical. Families, on the other hand, consist of two or more persons, related to each other, living in a household.

Household characteristics, in general, and the rate of new household growth have become increasingly important indicators of demographic change within a community. Changes in the number of households and their composition are recognized as a more valid measure of community growth and vitality than absolute changes in the number of persons. Several reasons account for this view.

At the local level, households generate property tax revenues regardless of how many people are living within the household. Households also generate a demand for durable goods, including cars and appliances, as well as energy (electricity, gas and telephone services) which serves to stimulate local and regional economic growth. Local governmental services are impacted by household growth trends, especially the need for public utilities (water and sewage disposal), police and fire services, and solid waste disposal, among others. The number of households also influences traffic levels and the need for future transportation system improvements.

For example, even though Michigan’s population shrunk by 0.16% between 2000 and 2015, over 42,000 new households were created during this period, for an increase of 1.12%.

Riley Township experienced a much higher rate of household growth over the past 10 years. Between 2012 and 2022, over 42 new households were constructed in the Township, for an increase of 3.5%. St. Clair County’s households grew by 3% over the same period.

**TABLE 13: HOUSEHOLD GROWTH TRENDS**

Community	2012	2017	2012-2017 Change		2022	2012-2022 Change	
			Number	Percent		Number	Percent
Riley Township	1,190	1,173	-17	-1.4%	1,232	42	3.5%
St. Clair County	64,083	64,387	304	0.5%	65,989	1,906	3.0%

## Household Size

Accompanying these increases in household growth was a decline in the size of the average household. At the state level, household size has declined steadily since 1980, when it stood at a level of 2.84 persons per household. By 2000, it had declined to 2.56 persons per household and to 2.52 persons in 2010.

Consistent with broader national and regional trends, average household size in Riley Township declined over the past two decades. In 1980, the size of the average household was 3.71 persons. This declined to 2.97 persons in 2000, 2.81 persons in 2010 and 2.66 persons in 2020. Similar declines are observed for St. Clair County and Michigan.

Several factors are responsible for this decline, including birth rate patterns, the distribution of the population on the age spectrum, and life style changes. The first of these factors is referred to as the baby-boom echo. America experienced a well documented population growth period following the Second World War, commonly known as the baby-boom. Children born during this period have reached the child-bearing years and are starting their own families, creating an echo of the earlier baby-boom. This baby-boom echo is not producing the same number of persons that occurred earlier due to significant declines in the birthrate. Women today are having fewer children than their mothers did. Fewer children mean smaller families and reduced household sizes.

Population distribution patterns also impact household size declines. The aging of the baby-boom generation has begun to increase the proportion of those persons that are no longer considered to be likely candidates for parenthood.

Finally, the increasing number of single-person households has contributed to this trend. Improved medical care has resulted in an increasing number of persons over the age of 65, many of whom are widows or widowers creating single-person households. Young persons have also shown a tendency to marry later and delay having children until later in their lives. Another consequence of this delay is a corresponding decision to have fewer children. Increases in the divorce rate has also increased the number of new households and contributed to the decline in their overall size.

**TABLE 14: HOUSEHOLD SIZE**

Household Size			
Community	2010	2020	SEMCOG 2023
Riley Township	2.81	2.66	2.56
St. Clair County	2.52	2.42	2.34
Southeast Michigan	2.53	2.4	2.38

## POPULATION PROJECTIONS

Projections provide a basis for anticipating future land use and various community service demands. As noted in the previous discussion, the factor that will have the greatest influence on these demands is the anticipated number of new households. While there is no precise way of absolutely predicting the future, past trends offer a useful method of anticipating expected changes in the number of households and the number of residents.

Population projections can be determined by many varying methods. The three projections used in this Master Plan to forecast future population in Riley Township include the Incremental Increase Method, the Linear Growth Method, and using the estimates from the Southeast Michigan Council of Governments' (SEMCOG) 2050 Regional Forecast. Each projection is based on certain assumptions regarding previous trends being carried forward into the future. These methods and their results for Riley Township are summarized as follows:

### **Incremental Increase Method**

In this method, the increment in arithmetical increase is determined from population changes over the past decades and the average of that increment is added to the average increase. Applying this assumption yields the following projected population levels:

- 2030: 4,108
- 2040: 4,409
- 2050: 4,937

### **Linear Growth Method**

This method forecasts population growth which is modeled by adding a fixed amount for each projected time period, based on a project equation. The Linear Growth Method assumes that population growth is growing at absolute equal increments per unit of time. It also assumes that growth will follow a similar pattern in future years. Applying this assumption yields the following population projections for Riley Township:

- 2030: 4,261
- 2040: 4,715
- 2050: 5,169

### **Southeast Michigan Council of Governments (SEMCOG) 2050 Regional Forecast**

The Southeast Michigan Council of Governments (SEMCOG) develops a regional forecast for 233 local communities in Southeast Michigan every five years. SEMCOG's forecast provides a long-range and comprehensive view of future demographic and economic changes. It provides base data for updating the regional long-range transportation plan and other regional planning projects. Member communities use the data in planning for infrastructure and development needs. The SEMCOG projections for Riley Township used in this Master Plan are based on data from SEMCOG's 2050

Regional Forecast. For Riley Township, SEMCOG projects the following population estimates:

- 2030: 3,105
- 2040: 3,201
- 2050: 3,136

The amount of population growth that takes place within Riley Township depends on a variety of factors. These factors include the economy, lifestyle, commuting habits, housing availability, housing affordability, and other factors that influence quality of life. Many of these factors are beyond the township’s control and others may only be slightly influenced by actions of the community. Table 15 summarizes the population projections used in this Plan.

**TABLE 15: POPULATION PROJECTION SUMMARY**

Population Projections			
Community	2030	2040	2050
SEMCOG	3,105	3,201	3,136
Incremental Increase Method	4,108	4,409	4,937
Linear Growth Method	4,261	4,715	5,169
Average Projection	3,825	4,108	4,414

All three projection techniques anticipate continued population growth for Riley over the next 25 years. The forecasts only differ with respect to the amount of growth expected. SEMCOG is projecting the population to essentially remain constant from 2030 to 2050.

Averaging out the projections for each decade, the Township’s population is expected to climb to 3,825 by the year 2030 and to 4,414 by the year 2050.

