SHREWSBURY PUBLIC SCHOOLS

POPULATION AND ENROLLMENT FORECASTS, 2022-23 THROUGH 2031-32

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MCKIBBEN DEMOGRAPHIC RESEARCH, LLC
JEROME MCKIBBEN, PH.D.
ROCK HILL, SC

j.mckibben@mckibbendemographics.com

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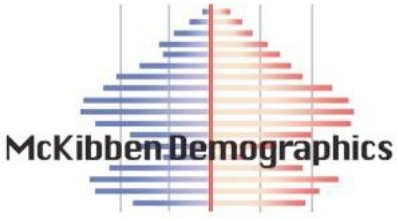

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EXECUTIVE SUMMARY

1. The resident total fertility rate for the Shrewsbury Public Schools over the life of the forecasts is below replacement level. (1.82 vs. the replacement level of 2.1)

2. Most in-migration to the district continues to occur in the 0-to-9 and 25-to-44-year-old age groups.

3. The local 18-to-24-year-old population continues to leave the district, going to college or moving to other urbanized areas. This population group accounts for the largest segment of the district's out migration flow and will increase steadily over the next 10 years. The second largest migration outflow is in the 70+ age groups.

4. The primary factors causing the district's enrollment to decrease over the next nine years is the increase in empty nest households, the relatively low number of elderly housing units turning over coupled with a flat rate of in migration of young families.

5. Changes in year-to-year enrollment over the next ten years will primarily be due to small cohorts entering and moving through the school system in conjunction with larger cohorts leaving the system.

6. The elementary enrollment will begin to increase after the 2024-25 school year.

7. The median age of the district's population will increase from 43.7 in 2020 to 46.6 in 2030.

8. Even if the district continues to have some amount of annual new housing unit construction over the next 10 years, the rate, magnitude, and price of existing home sales will become the increasingly dominant factor affecting the amount of population and enrollment change.

9. Total district enrollment is forecasted to decrease by 80 students, or -1.4%, between 2021-22 and 2026-27. Total enrollment will decrease by 168 students, or-2.9%, from 2026-27 to 2031-32.

INTRODUCTION

By demographic principle, distinctions are made between projections and forecasts. A projection extrapolates the past (and present) into the future with little or no attempt to take into account any factors that may impact the extrapolation (e.g., changes in fertility rates, housing patterns or migration patterns) while a forecast results when a projection is modified by reasoning to take into account the aforementioned factors.

To maximize the use of this study as a planning tool, the ultimate goal is not simply to project the past into the future, but rather to assess various factors' impact on the future. The future population and enrollment change of each school district is influenced by a variety of factors. Not all factors will influence the entire school district at the same level. Some may affect different areas at dissimilar magnitudes and rates causing changes at varying points of time within the same district. The forecaster's judgment, based on a thorough and intimate study of the district, has been used to modify the demographic trends and factors to predict likely changes more accurately. Therefore, strictly speaking, this study is a forecast, not a projection; and the amount of modification of the demographic trends varies between different areas of the district as well as within the timeframe of the forecast.

To calculate population forecasts of any type, particularly for smaller populations such as a school district, realistic suppositions must be made as to what the future will bring in terms of age specific fertility rates and residents' demographic behavior at certain points of the life course. The demographic history of the school district and its interplay with the social and economic history of the area is the starting point and basis of most of these suppositions particularly on key factors such as the age structure of the area. The unique nature of each district's and attendance area's demographic composition and rate of change over time must be assessed and understood to be factors throughout the life of the forecast series. Moreover, no two populations, particularly at the school district and attendance area level, have exactly the same characteristics.

The manifest purpose of these forecasts is to ascertain the demographic factors that will ultimately influence the enrollment levels in the district's schools. There are of course, other non-demographic factors that affect enrollment levels over time. These factors include, but are not limited to transfer policies within the district; student transfers to and from neighboring districts; placement of "special programs" within school facilities that may serve students from outside the attendance area; state or federal mandates that dictate the movement of students from one facility to another (No Child Left Behind was an excellent example of this factor); the development of charter schools in the district; the prevalence of home schooling in the area; and the dynamics of local private schools.

Unless the district specifically requests the calculation of forecasts that reflect the effects of changes in these non-demographic factors, their influences are

held constant for the life of the forecasts. Again, the main function of these forecasts is to determine what impact demographic changes will have on future enrollment. It is quite possible to calculate special "scenario" forecasts to measure the impact of school policy modifications as well as planned economic and financial changes. However, in this case the results of these population and enrollment forecast are meant to represent the most likely scenario for changes over the next 10 years in the district and its attendance areas.

The first part of the report will examine the assumptions made in calculating the population forecasts for the Shrewsbury Public Schools. Since the results of the population forecasts drive the subsequent enrollment forecasts, the assumptions listed in this section are paramount to understanding the area's demographic dynamics. The remainder of the report is an explanation and analysis of the district's population forecasts and how they will shape the district's grade level enrollment forecasts.

DATA

The data used for the forecasts come from a variety of sources. The Shrewsbury Public Schools provided enrollments by grade and attendance center for the school years 2017-18 to 2021-22. Birth and death data for the years 2000 through 2018 were obtained from the Massachusetts Department of Health. The net migration values were calculated using Internal Revenue Service migration reports for the years 2000 through 2018. The data used for the calculation of migration models came from the United States Bureau of the Census, 2005 to 2010, and the models were designed using demographic and economic factors. The base age-sex population counts used are from the results of the 2010 Census.

Recently the Census Bureau began releasing annual estimates of demographic variables at the block group and tract level from the American Community Survey (ACS). There has been wide scale reporting of these results in the national, state, and local media. However, due to the methodological problems the Census Bureau is experiencing with their estimates derived from ACS data, particularly in areas with a population of less than 60,000, the results of the ACS are not used in these forecasts. For example, given the sampling framework used by the Census Bureau, each year only 350 of the over 14,300 current households in the district would have been included. For comparison 1,600 households in the district were included in the sample for the long form questionnaire in the 2000 Census. As a result of this small sample size, the ACS survey result from the last 5 years must be aggregated to produce the tract and block group estimates.

To develop the population forecast models, past migration patterns, current age specific fertility patterns, the magnitude and dynamics of the gross and net migration, the current age specific mortality trends, the distribution of the population by age and sex, the rate and type of existing housing unit sales, and future housing unit construction are considered primary variables. In addition, the change in household size

relative to the age structure of the forecast area was addressed. While there was a slight drop in the average household size in the Shrewsbury Public Schools as well as most other areas of the state during the previous 20 years, the rate of this decline has been forecasted to slow over the next ten years.

ASSUMPTIONS

For these forecasts, the mortality probabilities are held constant at the levels calculated for the year 2010. While the number of deaths in an area are impacted by and will change given the proportion of the local population over age 65, in the absence of an extraordinary event such as a natural disaster or a breakthrough in the treatment of heart disease, death rates rarely move rapidly in any direction, particularly at the school district or attendance area level. Thus, significant changes are not foreseen in district's mortality rates between now and the year 2031. (At this point in time, there is insufficient data of the geographic and age level impacts of COVID-19 on mortality rates. We assume that most areas will return to their traditional mortality rate levels by 2022.) Any increases forecasted in the number of deaths will be due primarily to the general aging of the district's population and specifically to the increase in the number of residents aged 65 and older.

Similarly, fertility rates are assumed to stay fairly constant for the life of the forecasts. Like mortality rates, age specific fertility rates rarely change quickly or dramatically, particularly in small areas. Even with the recently reported rise in the fertility rates of the United States, overall fertility rates have stayed within a 10% range for most of the last 40 years. In fact, the vast majority of year-to-year change in an area's number of births is due to changes in the number of women in childbearing ages (particularly ages 20-29) rather than any fluctuation in an area's fertility rate.

The resident total fertility rate (TFR), the average number of births a woman will have while living in the school district during her lifetime, is estimated to be 1.82 for the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered the theoretical "replacement level" of fertility necessary for a population to remain constant in the absence of in-migration. Therefore, in the absence of migration, fertility alone would be slightly below the level needed to maintain the current level of population and enrollment within the Shrewsbury Public Schools over the course of the forecast period. At the current TFR and given the number of women in prime childbearing age in the district (ages 20–34-year-old), the district will consistently see the number of total resident births be on average over 60 lower than the average enrollment in grade one.

A close examination of data for the Shrewsbury Public Schools has shown the age specific pattern of net migration will be nearly constant throughout the life of the forecasts. While the number of in and out migrants has changed in past years for the Shrewsbury Public Schools (and will change again over the next 10 years), the basic age pattern of the migrants has stayed nearly the same over the last 30

years. Based on the analysis of data it is safe to assume this age specific migration trend will remain unchanged into the future. This pattern of migration shows most of the local out-migration occurring in the 18-to-24-year-old age group as young adults leave the area to go to college or move to other urbanized areas. The second group of out-migrants is those householders aged 70 and older who are downsizing their residences. Most of the non-college in-migration occurs in the 0-to-9 and 25-44 age groups (the bulk of which come from areas within 75 miles of the Shrewsbury Public Schools) primarily consisting of younger adults and their children.

As the Worcester County area is not currently contemplating any major expansions or contractions, the forecasts also assume that the current economic, political, social, and environmental factors, as well as the transportation and public works infrastructure (with a few notable exceptions) of the Shrewsbury Public Schools and its attendance areas will remain the same through the year 2031. Below is a list of assumptions and issues that are specific to the Shrewsbury Public Schools These issues have been used to modify the population forecast models to predict the impact of these factors more accurately on each area's population change.

Specifically, the forecasts for the Shrewsbury Public Schools assume that throughout the study period:

a. The national, state, or regional economy does not go into deep recession at any time during the 10 years of the forecasts; (Deep recession is defined as four consecutive quarters where the GDP contracts greater than 1% per quarter)

b. Interest rates have reached a historic low and will not fluctuate more than one percentage point in the short term; the interest rate for a 30-year fixed home mortgage stays below 4.5%;

c. The rate of mortgage approval stays at 2015-2020 levels and lenders do not return to "sub-prime" mortgage practices;

d. There are no additional restrictions placed on home mortgage lenders or additional bankruptcies of major credit providers;

e. The rate of housing foreclosures does not exceed 125% of the 2015-2020 average of Worcester County for any year in the forecasts;

f. All currently planned, platted, approved, and permitted housing developments are built out and completed by 2030. All new housing units constructed are occupied by 2031. Speculative new home construction plans are not included;

g. The average annual unemployment rates for the Worcester County and the Greater Boston Metropolitan Area will remain below 7.5% for the 10 years of the forecasts;

h. The intra-district student transfer policy remains

unchanged over the next 10 years;

i. The rate of students transferring out of the Shrewsbury Public Schools will remain at the 2015-16 to 2020-21 average;

j. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;

k. The state of Massachusetts does not change the current policy on open enrollment or school vouchers anytime in the next 10 years;

l. There will be no building moratorium within the district;

m. Businesses within the district and the Shrewsbury Public Schools area will remain viable;

n. There are no charter schools opened in the district anytime over the next 10 years;

o. The number of existing home sales in the district that are a result of "distress sales" (homes worth less than the current mortgage value) will not exceed 20% of total homes sales in the district for any given year;

p. Housing turnover rates (sale of existing homes in the district) will remain at their current levels. The majority of existing home sales are made by homeowners over the age of 60;

q. The district will have at least an average of 350 existing home sales per year for the next 10 years;

r. The district will have at least an average of 50 new single-family housing units constructed per year over the next 10 years;

s. Private school and home school attendance rates will remain constant;

t. The rate of foreclosures for commercial property remains at the 2015-2020 average for Worcester County.

If a major employer in the district or in the Worcester County or the Greater Boston Metropolitan Area (particularly in western parts of the metropolitan area) closes, reduces or expands its operations, the population forecasts would need to be adjusted to reflect the changes brought about by the change in economic and employment conditions. The same holds true for any type of natural disaster, major change in the local infrastructure (e.g., highway construction, water and sewer expansion, changes in zoning regulations etc.), a further economic downturn, any additional weakness in the housing market or any instance or situation that causes rapid and dramatic population changes that could not be foreseen at the time the forecasts were calculated.

The high proportion of high school graduates from the Shrewsbury Public Schools that attend college or move to urban areas outside of the district for employment is a significant demographic factor. Their departure is a major reason for the extremely high out-migration in the 18 to 24 age group and was taken into

account when calculating these forecasts. The out-migration of graduating high school seniors is expected to continue over the period of the forecasts and the rate of out-migration has been forecasted to remain the same over the life of the forecast series.

Finally, all demographic trends (i.e., births, deaths, and migration) are assumed to be linear in nature and annualized over the forecast period. For example, if 1,000 births are forecasted for a 5-year period, an equal number, or proportion of the births are assumed to occur every year, 200 per year. Actual year-to-year variations do and will occur, but overall year to year trends are expected to be constant.

METHODOLOGY

The population forecasts presented in this report are the result of using the Cohort-Component Method of population forecasting (Siegel, and Swanson, 2004: 561-601) (Smith et. al. 2004). As stated in the **INTRODUCTION**, the difference between a projection and a forecast is in the use of explicit judgment based upon the unique features of the area under study. Strictly speaking, a cohort projection refers to the future population that would result if a mathematical extrapolation of historical trends. Conversely, a cohort-component forecast refers to the future population that is expected because of a studied and purposeful selection of the components of change (i.e., births, deaths, and migration) and forecast models are developed to measure the impact of these changes in each specific geographic area.

Five sets of data are required to generate population and enrollment forecasts. These five data sets are:

a. a base-year population (here, the 2010 Census population for the Shrewsbury Public Schools and its attendance areas);

b. a set of age-specific fertility rates for the district to be used over the forecast period and its attendance areas;

c. a set of age-specific survival (mortality) rates for the district and its attendance areas;

d. a set of age-specific migration rates for the district and its attendance areas and;

e. the historical enrollment figures by grade.

The most significant and difficult aspect of producing enrollment forecasts is the generation of the population forecasts in which the school age population (and enrollment) is embedded. In turn, the most challenging aspect of generating the population forecasts is found in deriving the rates of change in fertility, mortality, and migration. From the standpoint of demographic analysis, the Shrewsbury Public Schools is classified as a "small area" population (as compared to the population of the state of Massachusetts or to that of the United States). Small area population forecasts are more complicated to calculate because local variations in fertility, mortality, and migration may be more irregular than those at the regional, state or national scale. Especially challenging is the

forecast of the migration rates for local areas, because changes in the area's socioeconomic characteristics can quickly change from past and current patterns (Peters and Larkin, 2002.)

The population forecasts for Shrewsbury Public Schools were calculated using a cohort-component method with the populations divided into male and female groups by five-year age cohorts that range from 0-to-4 years of age to 85 years of age and older (85+). Age- and sex-specific fertility, mortality, and migration models were constructed to specifically reflect the unique demographic characteristics of each of the attendance areas in the Shrewsbury Public Schools.

The enrollment forecasts were calculated using a modified average survivorship method. Average survivor rates (i.e., the proportion of students who progress from one grade level to the next given the average amount of net migration for that grade level) over the previous five years of year-to-year enrollment data were calculated for grades two through twelve. This procedure is used to identify specific grades where there are large numbers of students changing facilities for non-demographic factors, such as private school transfers or enrollment in special programs.

The survivorship rates were modified or adjusted to reflect the average rate of forecasted in and out migration of 5-to-9, 10-to-14 and 15-to-17-year-old cohorts to each of the attendance centers in Shrewsbury Public Schools for the period 2010 to 2015. These survivorship rates then were adjusted to reflect the forecasted changes in age-specific migration the district should experience over the next five years. These modified survivorship rates were used to project the enrollment of grades 2 through 12 for the period 2015 to 2020. The survivorship rates were adjusted again for the period 2020 to 2025 to reflect the predicted changes in the amount of age-specific migration in the district for the period.

The forecasted enrollments for kindergarten and first grade are derived from the 5-to-9-year-old population of the age-sex population forecast at the elementary attendance center district level. This procedure allows the changes in the incoming grade sizes to be factors of forecasted population change and not an extrapolation of previous class sizes. Given the potentially large amount of variation in kindergarten enrollment due to parental choice, changes in the state's minimum age requirement, and differing district policies on allowing children to start Kindergarten early, first grade enrollment is deemed to be a more accurate and reliable starting point for the forecasts. (McKibben, 1996) The level of the accuracy for both the population and enrollment forecasts at the school district level is estimated to be no more than +/-2.0% for the life of the forecasts.

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Appendix A: Supplemental Tables

Table 1: Forecasted Elementary Area Population Change, 2020 to 2030

	2020	2025	*2020-2025 Change*	2030	*2025-2030 Change*	*2020-2030 Change*
Coolidge	5,720	6,000	*4.9%*	6,250	*4.2%*	*9.3%*
Floral Street	9,620	9,970	*3.6%*	10,330	*3.6%*	*7.4%*
Beal	12,130	12,330	*1.6%*	12,500	*1.4%*	*3.1%*
Paton	5,610	5,770	*2.9%*	5,880	*1.9%*	*4.8%*
Spring Street	5,270	5,380	*2.1%*	5,510	*2.4%*	*4.6%*
District Total	**38,350**	**39,450**	***2.9%***	**40,470**	***2.6%***	***5.5%***

Table 2: Household Characteristics by Elementary Area, 2010 Census

	HH w/ Pop Under 18	% HH w/ Pop Under 18	Total Households	Household Population	Persons Per Household
Coolidge	671	31.6%	2,125	5,109	2.40
Floral Street	1,337	43.0%	3,111	8,385	2.69
Beal	1,591	35.4%	4,497	11,463	2.55
Paton	725	34.7%	2,087	5,331	2.55
Spring Street	773	48.2%	1,604	4,916	3.06
District Total	**5,097**	**38.0%**	**13,424**	**35,204**	**2.62**

Table 3: Householder Characteristics by Elementary Area, 2010 Census

	Percentage of Householders aged 35-54	Percentage of Householders aged 65+	Percentage of Householders who own homes
Coolidge	43.1%	20.2%	65.8%
Floral Street	50.8%	17.5%	61.9%
Beal	46.1%	23.7%	74.8%
Paton	42.3%	32.0%	81.5%
Spring Street	54.2%	20.3%	97.1%
District Total	**47.1%**	**22.6%**	**74.1%**

Table 4: Percentage of Households that are Single Person Households and Single Person Households that are over age 65 by Elementary Area, 2010 Census

	Percentage of Single Person Households	Percentage of Single Person Households and are 65+
Coolidge	30.7%	9.0%
Floral Street	24.6%	8.9%
Beal	25.6%	10.8%
Paton	27.0%	15.8%
Spring Street	10.3%	5.5%
District Total	**24.6%**	**10.2%**

Table 5: Elementary Enrollment (K-4), 2021, 2026, 2031

	2021	2026	*2021-2026 Change*	2031	*2026-2031 Change*	*2021-2031 Change*
Coolidge	255	263	*3.1%*	292	*11.0%*	*14.5%*
Floral Street	508	514	*1.2%*	510	*-0.8%*	*0.4%*
Beal	583	522	*-10.5%*	548	*5.0%*	*-6.0%*
Paton	312	284	*-9.0%*	318	*12.0%*	*1.9%*
Spring Street	297	270	*-9.1%*	303	*12.2%*	*2.0%*
District Total	**1,955**	**1,853**	***-5.2%***	**1,971**	***6.4%***	***0.8%***

Table 6: Age Under One to Age Ten Population Counts, by Year of Age, by Elementary Area: 2010 Census

	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Coolidge	60	48	53	62	49	75	56	69	68	60	75
Floral Street	117	94	106	149	127	147	153	146	141	142	153
Beal	125	110	139	138	152	155	153	149	172	170	167
Paton	54	47	74	60	80	85	78	83	77	80	96
Spring Street	33	51	56	54	69	75	81	78	96	94	97
District Total	**390**	**350**	**427**	**464**	**477**	**537**	**521**	**525**	**555**	**546**	**588**

Appendix B: Population Forecasts

Shrewsbury Public Schools Total Population

	2010	2015	2020	2025	2030
0-4	2051	1910	1900	1860	1900
5-9	2658	2310	2230	2140	2220
10-14	2780	2750	2400	2340	2290
15-19	2449	2490	2450	2110	2040
20-24	1509	1700	1670	1730	1360
25-29	1747	1670	1870	1830	1890
30-34	1983	2040	1980	2200	2160
35-39	2529	2420	2510	2410	2680
40-44	3118	2950	2890	2890	2780
45-49	3308	3120	2920	2890	2900
50-54	2792	3270	3070	2880	2860
55-59	2096	2730	3200	3020	2830
60-64	1770	2070	2680	3130	2940
65-69	1376	1620	1890	2440	2870
70-74	937	1330	1560	1810	2340
75-79	920	920	1290	1500	1730
80-84	791	880	830	1210	1410
85+	794	890	1010	1060	1270
Total	**35608**	**37070**	**38350**	**39450**	**40470**
Median Age	40.2	42.1	43.7	45.4	46.6
Births	1690	1680	1650	1610	
Deaths	1210	1360	1480	1770	
Natural Increase	480	320	170	-160	
Net Migration	930	1000	1000	1070	
Change	*1410*	*1320*	*1170*	*910*	

Differences between period Totals may not equal Change due to rounding.

Coolidge Elementary Total Population

	2010	2015	2020	2025	2030
0-4	278	300	270	290	290
5-9	325	300	320	340	360
10-14	332	340	320	340	370
15-19	281	290	300	300	320
20-24	263	240	250	250	250
25-29	328	280	260	270	280
30-34	408	370	330	300	310
35-39	421	490	460	370	360
40-44	442	500	580	510	430
45-49	403	440	500	580	500
50-54	377	400	430	490	560
55-59	325	370	390	420	490
60-64	264	320	360	380	410
65-69	189	240	290	330	350
70-74	132	180	230	280	320
75-79	128	130	180	230	260
80-84	112	120	120	170	210
85+	103	120	130	150	180
Total	**5109**	**5430**	**5720**	**6000**	**6250**
Median Age	39.0	41.1	43.0	45.3	46.6
Births	280	250	240	240	
Deaths	170	190	210	250	
Natural Increase	110	60	30	-10	
Net Migration	220	230	240	250	
Change	*330*	*290*	*270*	*240*	

Differences between period Totals may not equal Change due to rounding.

Floral Street Elementary Total Population

	2010	2015	2020	2025	2030
0-4	575	550	590	550	530
5-9	729	610	590	610	590
10-14	706	770	640	610	650
15-19	671	640	690	570	540
20-24	455	530	490	550	420
25-29	525	490	570	520	580
30-34	550	590	550	630	600
35-39	673	650	700	670	750
40-44	800	730	720	760	730
45-49	802	800	730	710	760
50-54	608	790	780	720	710
55-59	406	590	780	770	700
60-64	301	400	590	760	750
65-69	236	270	360	530	700
70-74	170	230	270	350	510
75-79	158	170	220	250	340
80-84	133	150	150	210	240
85+	198	190	200	200	230
Total	**8696**	**9150**	**9620**	**9970**	**10330**
Median Age	36.0	38.0	39.9	41.8	43.5
Births	510	550	510	490	
Deaths	250	270	300	360	
Natural Increase	260	280	210	130	
Net Migration	170	180	180	190	
Change	*430*	*460*	*390*	*320*	

Differences between period Totals may not equal Change due to rounding.

Beal Elementary Total Population

	2010	2015	2020	2025	2030
0-4	650	570	510	490	490
5-9	784	700	630	570	610
10-14	829	830	740	690	630
15-19	725	740	730	640	580
20-24	475	490	470	450	360
25-29	599	520	530	520	510
30-34	669	700	620	640	640
35-39	842	810	840	780	810
40-44	1028	980	960	1000	890
45-49	1097	1010	970	950	990
50-54	859	1080	1010	950	940
55-59	677	840	1060	980	940
60-64	587	670	820	1040	960
65-69	495	540	610	750	950
70-74	325	480	520	580	720
75-79	343	310	460	500	560
80-84	304	320	290	430	470
85+	239	300	360	370	450
Total	**11527**	**11890**	**12130**	**12330**	**12500**
Median Age	40.9	43.0	45.2	47.0	48.7
Births	520	480	460	430	
Deaths	410	470	500	600	
Natural Increase	110	10	-40	-170	
Net Migration	240	260	270	280	
Change	*350*	*270*	*230*	*110*	

Differences between period Totals may not equal Change due to rounding.

Paton Elementary Total Population

	2010	2015	2020	2025	2030
0-4	292	270	290	280	330
5-9	408	360	340	320	340
10-14	408	400	360	340	320
15-19	344	370	380	320	300
20-24	164	240	270	280	220
25-29	179	200	280	310	310
30-34	219	210	230	340	340
35-39	320	250	240	290	400
40-44	432	390	310	300	360
45-49	481	430	370	310	300
50-54	444	480	420	370	310
55-59	352	440	460	420	360
60-64	329	350	430	460	400
65-69	259	300	320	390	420
70-74	181	250	290	310	370
75-79	181	180	240	280	290
80-84	165	180	160	230	260
85+	202	210	220	220	250
Total	**5360**	**5510**	**5610**	**5770**	**5880**
Median Age	44.0	45.8	46.4	46.7	45.3
Births	210	220	250	260	
Deaths	240	260	270	310	
Natural Increase	-30	-40	-20	-50	
Net Migration	160	170	160	180	
Change	*130*	*130*	*140*	*130*	

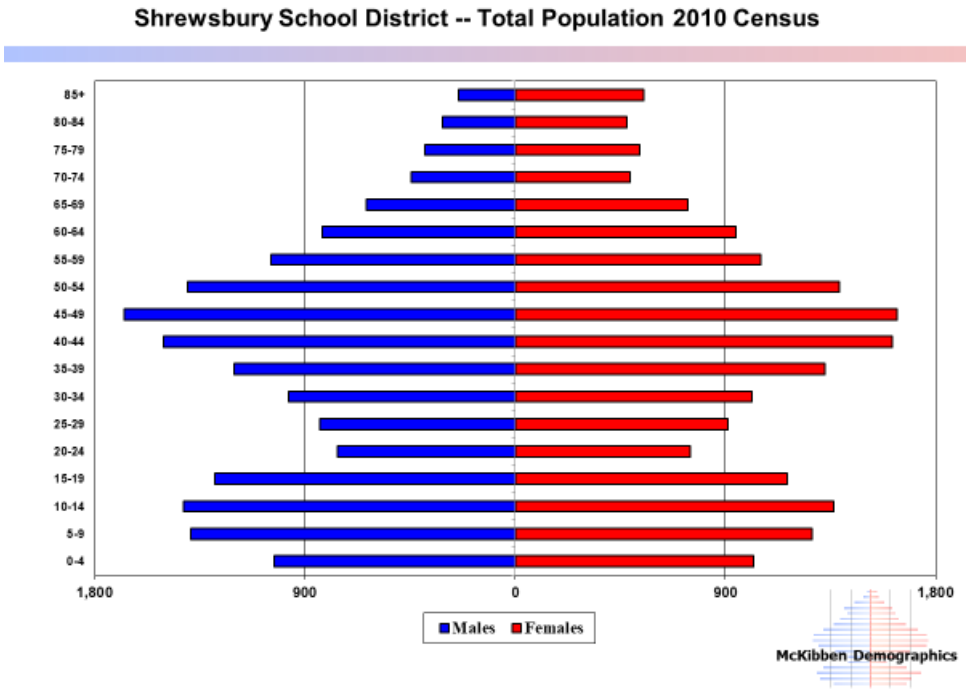
Differences between period Totals may not equal Change due to rounding.

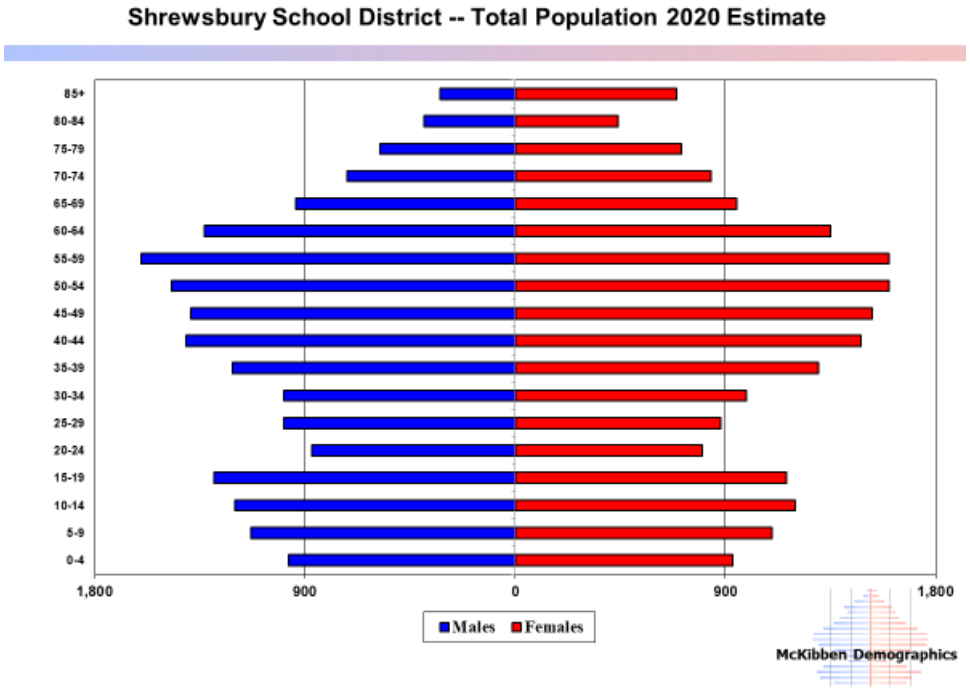
Spring Street Elementary Total Population

	2010	2015	2020	2025	2030
0-4	256	220	240	250	260
5-9	413	340	350	300	320
10-14	504	410	340	360	320
15-19	428	450	350	280	300
20-24	152	200	190	200	110
25-29	116	180	230	210	210
30-34	138	170	250	290	270
35-39	273	220	270	300	360
40-44	416	350	320	320	370
45-49	525	440	350	340	350
50-54	504	520	430	350	340
55-59	336	490	510	430	340
60-64	289	330	480	490	420
65-69	197	270	310	440	450
70-74	129	190	250	290	420
75-79	111	130	190	240	280
80-84	77	110	110	170	230
85+	52	70	100	120	160
Total	**4916**	**5090**	**5270**	**5380**	**5510**
Median Age	42.1	45.1	46.4	47.6	48.4
Births	170	180	190	190	
Deaths	140	170	200	250	
Natural Increase	30	10	-10	-60	
Net Migration	140	160	150	170	
Change	*170*	*170*	*140*	*110*	

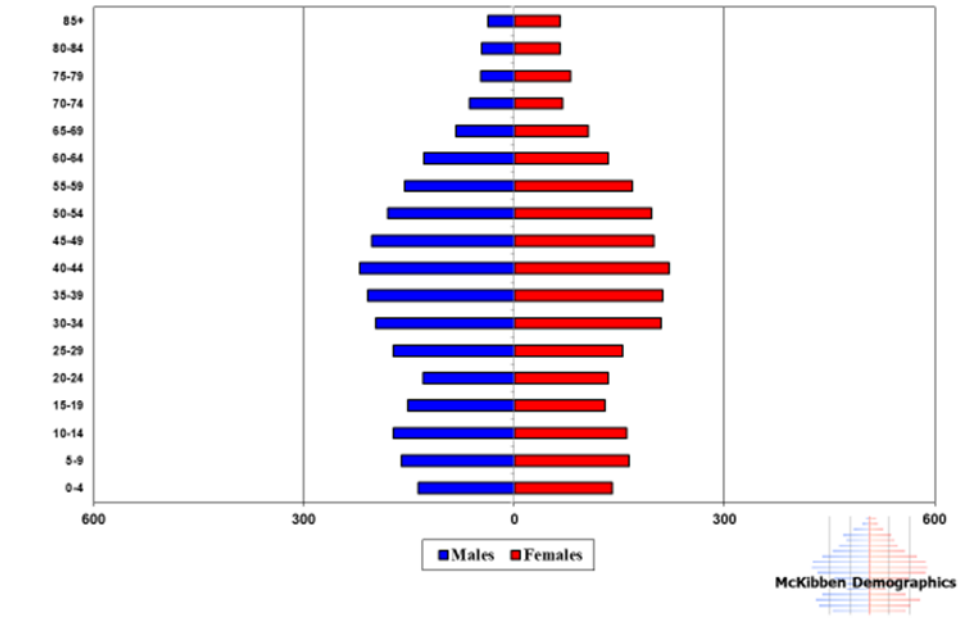
Differences between period Totals may not equal Change due to rounding.

Appendix C: Population Pyramids

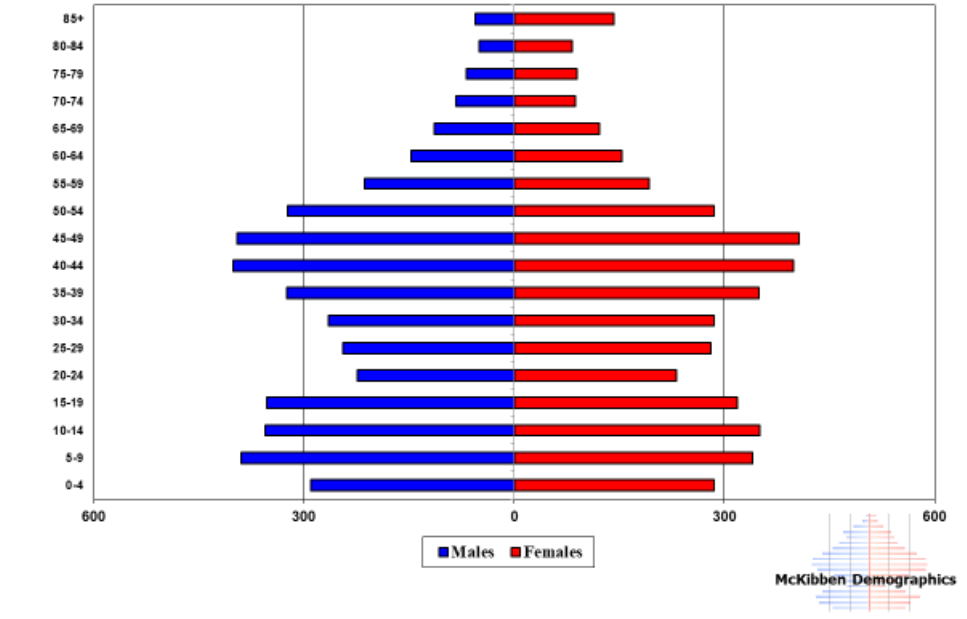




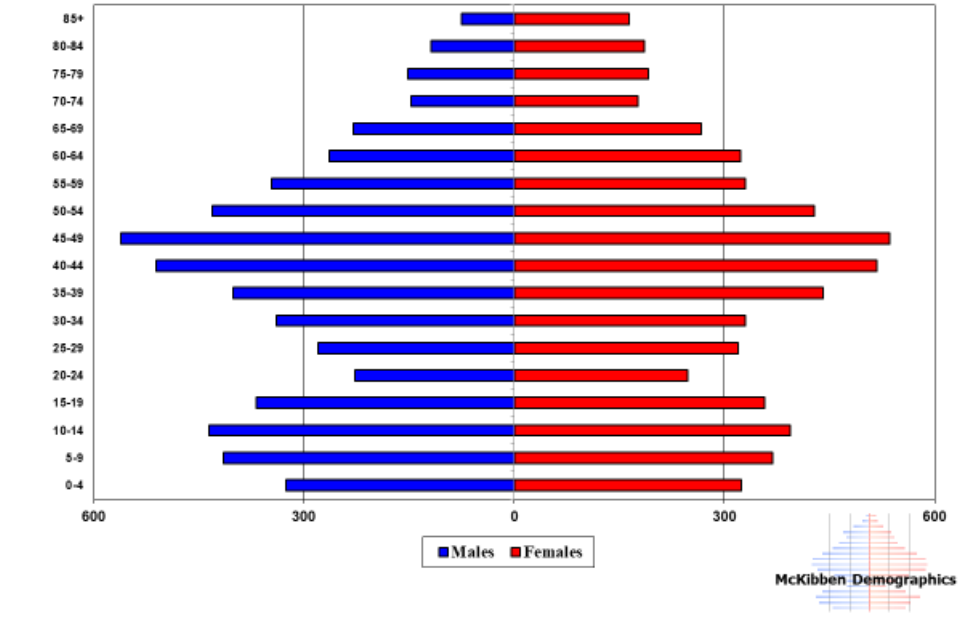
Coolidge Elementary -- Total Population 2010 Census



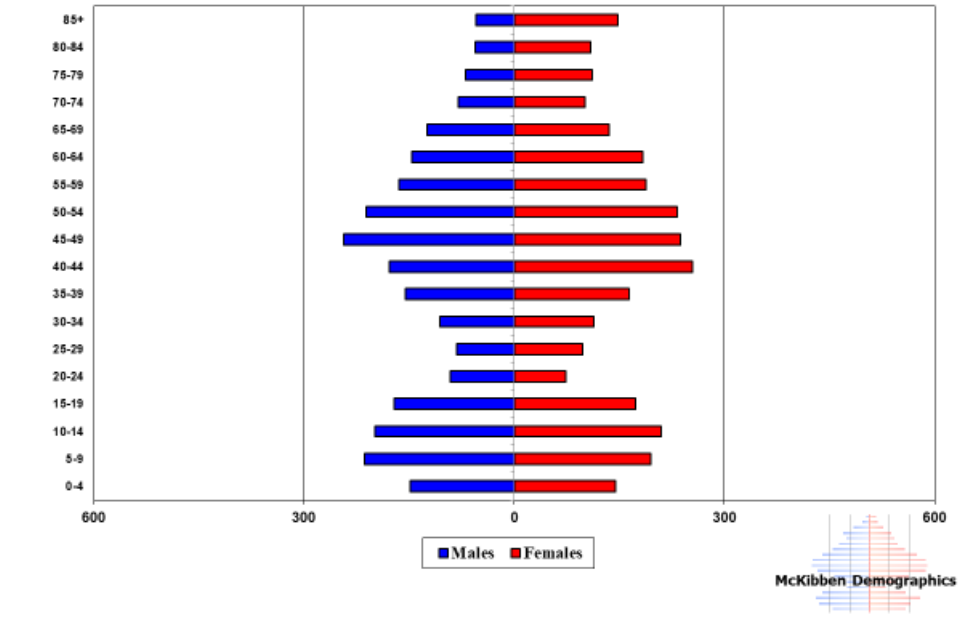
Floral Street Elementary -- Total Population 2010 Census

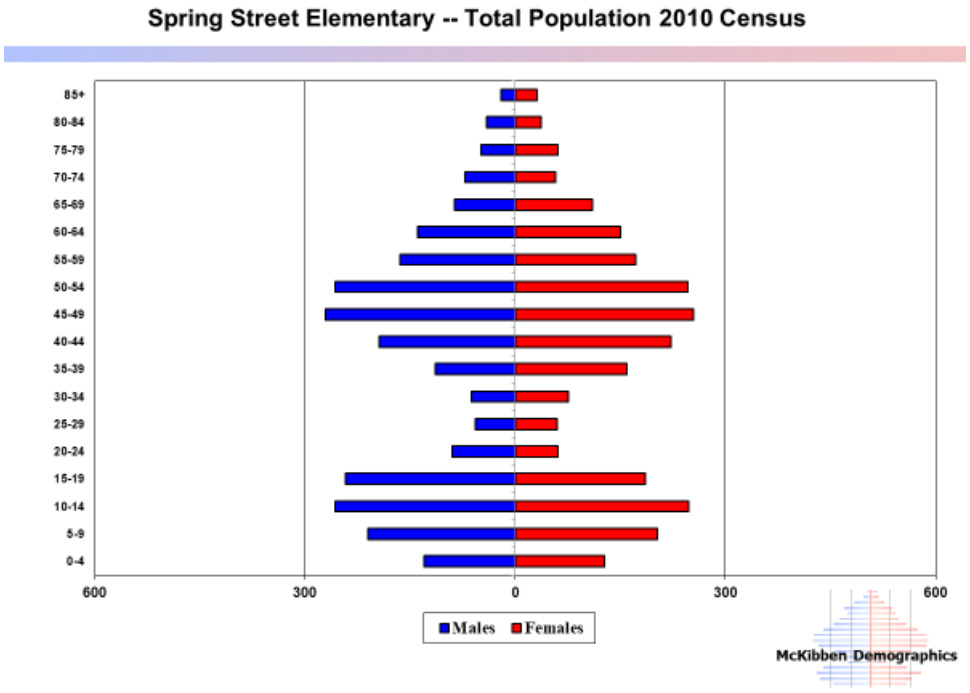


Beal Elementary -- Total Population 2010 Census



Paton Elementary -- Total Population 2010 Census




Spring Street Elementary -- Total Population 2010 Census
85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
600
300
0
300
600
Males
Females
McKibben Demographics

Appendix D: Enrollment Forecasts

Shrewsbury Public Schools: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
PK	242	230	110	164	242	242	242	242	242	242	242	242	242	242
K	350	359	287	343	349	341	339	342	351	355	361	365	372	382
1	421	431	407	339	372	359	360	358	361	364	369	375	379	386
2	450	440	434	417	351	384	371	372	368	371	374	379	390	394
3	452	469	430	429	429	361	395	382	381	377	380	383	392	404
4	494	459	484	427	442	443	373	407	392	391	387	390	396	405
Total: PK-4	**2409**	**2388**	**2152**	**2119**	**2185**	**2130**	**2080**	**2103**	**2095**	**2100**	**2113**	**2134**	**2171**	**2213**
5	490	497	473	483	457	451	452	380	419	404	403	399	402	408
6	468	504	491	469	497	464	458	459	390	429	414	413	409	412
Total: 5-6	**958**	**1001**	**964**	**952**	**954**	**915**	**910**	**839**	**809**	**833**	**817**	**812**	**811**	**820**
7	511	480	502	481	483	512	478	472	473	402	442	426	425	421
8	494	514	483	498	491	493	522	488	481	482	410	451	435	434
Total: 7-8	**1005**	**994**	**985**	**979**	**974**	**1005**	**1000**	**960**	**954**	**884**	**852**	**877**	**860**	**855**
9	460	467	459	459	488	481	483	512	483	476	477	406	446	431
10	446	467	480	450	457	486	479	481	509	481	474	475	404	444
11	500	452	470	464	448	455	484	477	479	506	479	472	473	402
12	428	499	464	461	462	446	453	482	475	477	503	477	470	471
SP	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Total: 9-SP	**1835**	**1885**	**1873**	**1835**	**1856**	**1869**	**1900**	**1953**	**1947**	**1941**	**1934**	**1831**	**1794**	**1749**
Total: PK-SP	**6207**	**6268**	**5974**	**5885**	**5969**	**5919**	**5890**	**5855**	**5805**	**5758**	**5716**	**5654**	**5636**	**5637**
Change		*61*	*-294*	*-89*	*84*	*-50*	*-29*	*-35*	*-50*	*-47*	*-42*	*-62*	*-18*	*1*
%-Change		*1.0%*	*-4.7%*	*-1.5%*	*1.4%*	*-0.8%*	*-0.5%*	*-0.6%*	*-0.9%*	*-0.8%*	*-0.7%*	*-1.1%*	*-0.3%*	*0.0%*
Total: PK-4	2409	2388	2152	2119	2185	2130	2080	2103	2095	2100	2113	2134	2171	2213
Change		*-21*	*-236*	*-33*	*66*	*-55*	*-50*	*23*	*-8*	*5*	*13*	*21*	*37*	*42*
%-Change		*-0.9%*	*-9.9%*	*-1.5%*	*3.1%*	*-2.5%*	*-2.3%*	*1.1%*	*-0.4%*	*0.2%*	*0.6%*	*1.0%*	*1.7%*	*1.9%*
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
Change		*43*	*-37*	*-12*	*2*	*-39*	*-5*	*-71*	*-30*	*24*	*-16*	*-5*	*-1*	*9*
%-Change		*4.5%*	*-3.7%*	*-1.2%*	*0.2%*	*-4.1%*	*-0.5%*	*-7.8%*	*-3.6%*	*3.0%*	*-1.9%*	*-0.6%*	*-0.1%*	*1.1%*
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
Change		*-11*	*-9*	*-6*	*-5*	*31*	*-5*	*-40*	*-6*	*-70*	*-32*	*25*	*-17*	*-5*
%-Change		*-1.1%*	*-0.9%*	*-0.6%*	*-0.5%*	*3.2%*	*-0.5%*	*-4.0%*	*-0.6%*	*-7.3%*	*-3.6%*	*2.9%*	*-1.9%*	*-0.6%*
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Change		*50*	*-12*	*-38*	*21*	*13*	*31*	*53*	*-6*	*-6*	*-7*	*-103*	*-37*	*-45*
%-Change		*2.7%*	*-0.6%*	*-2.0%*	*1.1%*	*0.7%*	*1.7%*	*2.8%*	*-0.3%*	*-0.3%*	*-0.4%*	*-5.3%*	*-2.0%*	*-2.5%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Coolidge Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	43	39	42	47	48	47	47	48	50	51	53	54	55	57
1	85	85	89	47	52	49	50	50	51	52	53	55	56	57
2	110	95	83	57	49	54	51	52	52	53	54	55	58	59
3	76	116	96	47	60	51	57	54	54	54	55	56	57	60
4	95	75	120	57	49	63	54	60	56	56	56	57	58	59
Total: K-4	**409**	**410**	**430**	**255**	**258**	**264**	**259**	**264**	**263**	**266**	**271**	**277**	**284**	**292**
Total: K-4	409	410	430	255	258	264	259	264	263	266	271	277	284	292
Change		*1*	*20*	*-175*	*3*	*6*	*-5*	*5*	*-1*	*3*	*5*	*6*	*7*	*8*
%-Change		*0.2%*	*4.9%*	*-41%*	*1.2%*	*2.3%*	*-1.9%*	*1.9%*	*-0.4%*	*1.1%*	*1.9%*	*2.2%*	*2.5%*	*2.8%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Floral Street Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	0	0	0	106	102	97	95	94	94	94	95	95	96	98
1	111	121	114	85	107	104	101	99	98	97	97	98	98	99
2	201	180	180	107	88	111	108	105	102	101	100	100	102	102
3	211	207	172	102	110	91	114	111	107	104	103	102	103	105
4	197	218	213	108	105	113	94	117	113	109	106	105	105	106
Total: K-4	**720**	**726**	**679**	**508**	**512**	**516**	**512**	**526**	**514**	**505**	**501**	**500**	**504**	**510**
Total: K-4	720	726	679	508	512	516	512	526	514	505	501	500	504	510
Change		*6*	*-47*	*-171*	*4*	*4*	*-4*	*14*	*-12*	*-9*	*-4*	*-1*	*4*	*6*
%-Change		*0.8%*	*-6.5%*	*-25%*	*0.8%*	*0.8%*	*-0.8%*	*2.7%*	*-2.3%*	*-1.8%*	*-0.8%*	*-0.2%*	*0.8%*	*1.2%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Beal Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	221	250	174	93	99	96	96	97	99	100	100	101	103	105
1	73	66	77	113	104	101	102	102	103	103	104	104	105	107
2	0	0	0	129	115	106	103	104	105	106	106	107	108	109
3	0	0	0	127	132	117	108	105	107	108	109	109	111	112
4	0	0	0	121	130	135	119	110	108	110	111	112	113	115
Total: K-4	**294**	**316**	**251**	**583**	**580**	**555**	**528**	**518**	**522**	**527**	**530**	**533**	**540**	**548**
Total: K-4	294	316	251	583	580	555	528	518	522	527	530	533	540	548
Change		*22*	*-65*	*332*	*-3*	*-25*	*-27*	*-10*	*4*	*5*	*3*	*3*	*7*	*8*
%-Change		*7.5%*	*-21%*	*132%*	*-0.5%*	*-4.3%*	*-4.9%*	*-1.9%*	*0.8%*	*1.0%*	*0.6%*	*0.6%*	*1.3%*	*1.5%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Spring Street Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	42	41	39	44	50	50	50	51	53	55	56	57	59	61
1	69	79	60	50	53	51	52	52	53	54	56	57	58	60
2	72	73	83	59	52	55	53	54	53	54	55	57	59	60
3	76	79	72	82	61	54	57	55	55	54	55	56	59	61
4	105	80	78	62	84	63	56	59	56	56	55	56	58	61
Total: K-4	**364**	**352**	**332**	**297**	**300**	**273**	**268**	**271**	**270**	**273**	**277**	**283**	**293**	**303**
Total: K-4	364	352	332	297	300	273	268	271	270	273	277	283	293	303
Change		*-12*	*-20*	*-35*	*3*	*-27*	*-5*	*3*	*-1*	*3*	*4*	*6*	*10*	*10*
%-Change		*-3.3%*	*-5.7%*	*-11%*	*1.0%*	*-9.0%*	*-1.8%*	*1.1%*	*-0.4%*	*1.1%*	*1.5%*	*2.2%*	*3.5%*	*3.4%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Paton Elementary: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K	44	29	32	53	50	51	51	52	55	55	57	58	59	61
1	83	80	67	44	56	54	55	55	56	58	59	61	62	63
2	67	92	88	65	47	58	56	57	56	57	59	60	63	64
3	89	67	90	71	66	48	59	57	58	57	58	60	62	66
4	97	86	73	79	74	69	50	61	59	60	59	60	62	64
Total: K-4	**380**	**354**	**350**	**312**	**293**	**280**	**271**	**282**	**284**	**287**	**292**	**299**	**308**	**318**
Total: K-4	380	354	350	312	293	280	271	282	284	287	292	299	308	318
Change		*-26*	*-4*	*-38*	*-19*	*-13*	*-9*	*11*	*2*	*3*	*5*	*7*	*9*	*10*
%-Change		*-6.8%*	*-1.1%*	*-11%*	*-6.1%*	*-4.4%*	*-3.2%*	*4.1%*	*0.7%*	*1.1%*	*1.7%*	*2.4%*	*3.0%*	*3.2%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Sherwood Middle School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
5	490	497	473	483	457	451	452	380	419	404	403	399	402	408
6	468	504	491	469	497	464	458	459	390	429	414	413	409	412
Total: 5-6	**958**	**1001**	**964**	**952**	**954**	**915**	**910**	**839**	**809**	**833**	**817**	**812**	**811**	**820**
Total: 5-6	958	1001	964	952	954	915	910	839	809	833	817	812	811	820
Change		*43*	*-37*	*-12*	*2*	*-39*	*-5*	*-71*	*-30*	*24*	*-16*	*-5*	*-1*	*9*
%-Change		*4.5%*	*-3.7%*	*-1.2%*	*0.2%*	*-4.1%*	*-0.5%*	*-7.8%*	*-3.6%*	*3.0%*	*-1.9%*	*-0.6%*	*-0.1%*	*1.1%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Oak Middle School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
7	511	480	502	481	483	512	478	472	473	402	442	426	425	421
8	494	514	483	498	491	493	522	488	481	482	410	451	435	434
Total: 7-8	**1005**	**994**	**985**	**979**	**974**	**1005**	**1000**	**960**	**954**	**884**	**852**	**877**	**860**	**855**
Total: 7-8	1005	994	985	979	974	1005	1000	960	954	884	852	877	860	855
Change		*-11*	*-9*	*-6*	*-5*	*31*	*-5*	*-40*	*-6*	*-70*	*-32*	*25*	*-17*	*-5*
%-Change		*-1.1%*	*-0.9%*	*-0.6%*	*-1.0%*	*3.2%*	*-0.5%*	*-4.0%*	*-0.6%*	*-7.3%*	*-3.6%*	*2.9%*	*-1.9%*	*-0.6%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.

Shrewsbury High School: Total Enrollment

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
9	460	467	459	459	488	481	483	512	483	476	477	406	446	431
10	446	467	480	450	457	486	479	481	509	481	474	475	404	444
11	500	452	470	464	448	455	484	477	479	506	479	472	473	402
12	428	499	464	461	462	446	453	482	475	477	503	477	470	471
SP	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Total: 9-SP	**1835**	**1885**	**1873**	**1835**	**1856**	**1869**	**1900**	**1953**	**1947**	**1941**	**1934**	**1831**	**1794**	**1749**
Total: 9-SP	1835	1885	1873	1835	1856	1869	1900	1953	1947	1941	1934	1831	1794	1749
Change		*50*	*-12*	*-38*	*21*	*13*	*31*	*53*	*-6*	*-6*	*-7*	*-103*	*-37*	*-45*
%-Change		*2.7%*	*-0.6%*	*-2.0%*	*1.1%*	*0.7%*	*1.7%*	*2.8%*	*-0.3%*	*-0.3%*	*-0.4%*	*-5.3%*	*-2.0%*	*-2.5%*

Blue cells are historical data; Red numbers are current enrollment; Orange cells are forecasted enrollment.