

FRANKLIN PUBLIC SCHOOLS:

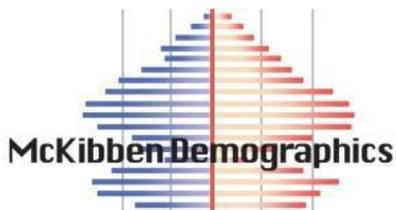
**POPULATION AND ENROLLMENT FORECASTS,
2020-21 THROUGH 2029-30**

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EXECUTIVE SUMMARY

1. The resident total fertility rate for the Franklin Public Schools over the life of the forecasts is below replacement level. (1.63 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 five 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 five 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 slowly decrease over the next five school years, then start to rise after 2024-25.
7. The median age of the district's population will increase from 38.4 in 2010 to 45.7 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 639 students, or -12.6%, between 2019-20 and 2024-25. Total enrollment will increase by 28 students, or 0.6%, from 2024-25 to 2029-30.

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 more accurately predict likely changes. 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 Franklin 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 Franklin Public Schools provided enrollments by grade and attendance center for the school years 2014-2015 to 2019-2020. Birth and death data for the years 2000 through 2017 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 2016. 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 11,000 current households in the district would have been included. For comparison 1,500 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 migration, the 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 to be 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 Franklin Public Schools as well as most other areas of the state during the previous 20 years, the rate of this decline in the district has been forecasted to increase slightly 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 2029. 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 child bearing 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 1.63 for the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered to be 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 insufficient to maintain the current level of population and enrollment within the Franklin Public Schools over the course of the forecast period.

A close examination of data for the Franklin 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 Franklin 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

local in-migration occurs in the 0-to-9 and 25-44 age groups (the bulk of the which come from areas within 75 miles of the Franklin Public Schools) primarily consisting of younger adults and their children.

As the Norfolk 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 Franklin Public Schools and its attendance areas will remain the same through the year 2029. Below is a list of assumptions and issues that are specific to the Franklin Public Schools. These issues have been used to modify the population forecast models to more accurately predict the impact of these factors on each area's population change.

Specifically, the forecasts for the Franklin 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 5.0%;
- c. The rate of mortgage approval stays at 2015-2019 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 2015-2019 average of Norfolk County for any year in the forecasts;
- f. All currently planned, platted, approved and permitted housing developments are built out and completed by 2028. All housing units constructed are occupied by 2029;
- g. The district has at least 275 existing single-family home sales annually between 2019 and 2029;
- h. The unemployment rates for the Norfolk County and the Boston Metropolitan Area will remain below 6.0% for the 10 years of the forecasts;
- i. The intra district student transfer policy remains unchanged over the next 10 years;
- j. The rate of students transferring into and out of the Franklin Public Schools will remain at the 2015-16 to 2019-20 average;
- k. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;

- l. There will be no building moratorium within the district;
- m. The State of Massachusetts does not change any of its current laws regarding inter-district transfers, school vouchers or charter schools;
- n. No new charter schools open in the district or surrounding area in the next 10 years;
- o. Businesses within the district and the Franklin Public Schools area will remain viable;
- p. 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;
- q. 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 home owners over the age of 60;
- r. Private school and home school attendance rates will remain constant;
- s. The rate of foreclosures for commercial property remains at the 2014-2018 average for Norfolk County;

If a major employer in the district or in the Greater Boston Metropolitan Area (and particularly in the western

suburbs) 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 Franklin 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 (and enrollment that would result if a mathematical extrapolation of historical trends remains unchanged.

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 Franklin Public Schools and its attendance areas);
- b. a set of age-specific fertility rates for the district to be used over the forecast period for the district and each of the attendance areas;
- c. a set of age-specific survival (mortality) rates for the district and the 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 Franklin 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 Franklin 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 Franklin 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 Franklin 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 $\pm 2.0\%$ for the life of the forecasts.

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Appendix A: Supplemental Tables

Table 1: Forecasted Elementary Area Population Change, 2010 to 2020

	2010	2015	2010-2015 Change	2020	2015-2020 Change	2010-2020 Change
Davis Thayer	5,323	5,440	2.2%	5,580	2.6%	4.8%
Jefferson	4,597	4,700	2.2%	4,800	2.1%	4.4%
Keller	5,221	5,300	1.5%	5,400	1.9%	3.4%
Kennedy	4,818	4,950	2.7%	5,080	2.6%	5.4%
Oak Street	5,952	6,080	2.2%	6,120	0.7%	2.8%
Parmenter	5,725	5,790	1.1%	5,820	0.5%	1.7%
District Total	31,635	32,260	2.0%	32,800	1.7%	3.7%

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
Davis Thayer	660	37.1%	1,778	4,513	2.54
Jefferson	738	48.2%	1,532	4,597	3.00
Keller	924	59.1%	1,564	5,221	3.34
Kennedy	784	50.8%	1,543	4,818	3.12
Oak Street	876	39.2%	2,235	5,952	2.66
Parmenter	765	32.6%	2,345	5,660	2.41
District Total	4,746	43.2%	10,995	30,760	2.80

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
Davis Thayer	51.0%	16.3%	63.5%
Jefferson	58.7%	13.8%	80.9%
Keller	64.7%	11.2%	97.8%
Kennedy	58.5%	14.0%	96.9%
Oak Street	50.1%	19.6%	88.7%
Parmenter	44.9%	23.7%	59.2%
District Total	53.6%	17.1%	79.7%

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+
Davis Thayer	27.2%	7.5%
Jefferson	16.6%	4.7%
Keller	7.4%	3.1%
Kennedy	10.4%	3.6%
Oak Street	23.7%	9.1%
Parmenter	31.5%	12.6%
District Total	20.8%	7.4%

Table 5: Elementary Enrollment (K-5), 2019, 2024, 2029

	2019	2024	2019-2024 Change	2029	2024-2029 Change	2019-2029 Change
Davis Thayer	227	241	6.2%	269	11.6%	18.5%
Jefferson	346	286	-17.3%	336	17.5%	-2.9%
Keller	346	276	-20.2%	308	11.6%	-11.0%
Kennedy	351	247	-29.6%	294	19.0%	-16.2%
Oak Street	359	380	5.8%	402	5.8%	12.0%
Parmenter	345	379	9.9%	399	5.3%	15.7%
District Total	1,974	1,809	-8.4%	2,008	11.0%	1.7%

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
Davis Thayer	43	54	73	53	61	72	63	74	68	72	69
Jefferson	40	38	46	64	50	90	78	78	77	93	97
Keller	59	59	71	90	101	116	98	118	139	108	127
Kennedy	43	48	66	54	84	86	84	80	89	95	101
Oak Street	72	68	78	87	76	102	83	96	96	81	88
Parmenter	61	60	65	84	79	73	99	78	92	80	86
District Total	318	327	399	433	452	538	506	524	560	530	567

Table 7: Comparison of District Resident Enrollment by Grade with 2010 Census Counts by Age, 2014-2019

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	11 years	12 years	13 years
Franklin Public Schools Total	318	327	399	433	452	538	506	524	560	530	567	551	568	540
2019 Enrollment	329	349	385	415	433	435	432	447	429					
	103.5%	106.7%	96.5%	95.8%	95.8%	80.9%	85.4%	85.3%	76.6%					
2018 Enrollment	338	349	376	407	431	451	445	438	437	424				
	106.3%	106.7%	94.2%	94.0%	95.4%	83.8%	87.9%	83.6%	78.0%	80.0%				
2017 Enrollment	316	328	359	403	435	446	470	452	437	423	467			
	99.4%	100.3%	90.0%	93.1%	96.2%	82.9%	92.9%	86.3%	78.0%	79.8%	82.4%			
2016 Enrollment	318	327	350	404	427	448	468	474	436	424	470	404		
	100.0%	100.0%	87.7%	93.3%	94.5%	83.3%	92.5%	90.5%	77.9%	80.0%	82.9%	73.3%		
2015 Enrollment	312	330	347	401	424	434	472	469	461	430	474	408	411	
	98.1%	100.9%	87.0%	92.6%	93.8%	80.7%	93.3%	89.5%	82.3%	81.1%	83.6%	74.0%	72.4%	
2014 Enrollment		324	347	409	434	435	467	464	464	455	480	404	416	397
		91.1%	91.6%	98.5%	92.9%	95.0%	88.3%	86.1%	94.6%	89.0%	90.9%	82.8%	83.3%	82.1%

Grade 1 in Red

Appendix B: Population Forecasts

Franklin Public Schools Total Population

	2010	2015	2020	2025	2030
0-4	1,929	1,440	1,440	1,480	1,570
5-9	2,658	2,120	1,810	1,710	1,880
10-14	2,811	2,750	2,240	1,940	1,850
15-19	2,673	3,020	2,930	2,390	2,030
20-24	1,506	1,550	1,650	1,620	1,350
25-29	1,296	1,450	1,460	1,590	1,570
30-34	1,446	1,540	1,700	1,790	1,920
35-39	2,212	1,680	1,810	2,020	2,110
40-44	2,835	2,360	1,920	2,060	2,240
45-49	3,185	2,820	2,410	1,970	2,080
50-54	2,743	3,140	2,790	2,390	1,940
55-59	1,942	2,690	3,080	2,730	2,350
60-64	1,422	1,880	2,590	2,970	2,620
65-69	926	1,330	1,740	2,420	2,590
70-74	659	900	1,280	1,660	2,220
75-79	561	610	820	1,160	1,420
80-84	425	520	570	780	1,100
85+	406	460	560	610	770
Total	31,635	32,260	32,800	33,290	33,610
Median Age	38.4	41.2	43.5	45.1	45.7
Births	1,140	1,160	1,160	1,140	1,140
Deaths	810	930	1,080	1,280	1,280
Natural Increase	330	230	80	-140	-140
Net Migration	300	340	370	420	420
Change	630	570	450	280	280

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

Davis Thayer Elementary Total Population

	2010	2015	2020	2025	2030
0-4	284	210	220	220	220
5-9	349	280	230	250	270
10-14	335	370	300	250	270
15-19	783	790	820	750	700
20-24	542	530	530	560	500
25-29	289	320	310	310	340
30-34	259	300	330	320	320
35-39	328	270	300	330	330
40-44	412	330	280	320	350
45-49	447	410	330	270	310
50-54	389	440	400	330	270
55-59	257	380	440	390	320
60-64	209	250	370	420	380
65-69	146	200	220	330	370
70-74	99	140	200	190	300
75-79	71	90	130	180	160
80-84	58	60	90	130	170
85+	66	70	80	90	120
Total	5,323	5,440	5,580	5,640	5,700
Median Age	31.5	33.7	35.8	37.4	38.5
Births	190	200	190	190	190
Deaths	120	130	160	190	190
Natural Increase	70	70	30	0	0
Net Migration	50	50	50	50	50
Change	120	120	80	50	50

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

Jefferson Elementary Total Population

	2010	2015	2020	2025	2030
0-4	239	180	200	180	200
5-9	416	340	300	280	320
10-14	537	420	360	320	290
15-19	348	480	360	300	240
20-24	178	150	180	150	120
25-29	161	210	180	220	180
30-34	144	210	270	240	280
35-39	269	200	280	340	310
40-44	493	310	280	330	390
45-49	485	490	330	280	330
50-54	454	480	480	330	280
55-59	328	450	470	470	320
60-64	186	320	430	450	460
65-69	132	170	290	410	400
70-74	66	120	150	290	370
75-79	57	60	110	140	230
80-84	52	50	60	100	130
85+	51	60	70	60	90
Total	4,597	4,700	4,800	4,890	4,940
Median Age	40.1	42.6	44.8	46.5	47.1
Births	150	170	160	150	
Deaths	110	120	140	180	
Natural Increase	40	50	20	-30	
Net Migration	50	60	60	70	
Change	90	110	80	40	

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

Helen Keller Elementary Total Population

	2010	2015	2020	2025	2030
0-4	380	260	230	260	300
5-9	579	400	320	260	300
10-14	564	600	420	350	280
15-19	410	500	530	350	260
20-24	152	200	220	240	210
25-29	142	170	220	240	260
30-34	204	190	220	280	290
35-39	399	240	240	280	340
40-44	550	430	300	300	330
45-49	569	560	480	350	330
50-54	476	560	560	470	340
55-59	287	460	550	540	470
60-64	204	280	450	530	500
65-69	104	190	260	430	450
70-74	86	100	190	260	390
75-79	66	80	90	180	210
80-84	29	60	70	90	170
85+	19	20	50	60	80
Total	5,221	5,300	5,400	5,470	5,510
Median Age	37.3	41.0	45.0	47.5	47.8
Births	140	130	150	150	
Deaths	90	120	150	180	
Natural Increase	50	10	0	-30	
Net Migration	50	60	60	70	
Change	100	70	60	40	

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

J.F. Kennedy Elementary Total Population

	2010	2015	2020	2025	2030
0-4	295	230	220	250	260
5-9	434	320	300	230	260
10-14	481	460	340	330	270
15-19	375	430	400	280	260
20-24	182	200	220	180	140
25-29	150	210	240	240	210
30-34	202	210	270	320	320
35-39	334	260	270	350	420
40-44	447	370	320	350	400
45-49	543	440	360	330	350
50-54	458	540	440	360	320
55-59	302	450	520	430	350
60-64	229	290	430	510	420
65-69	121	210	280	410	410
70-74	91	120	210	270	360
75-79	84	80	110	200	250
80-84	63	80	80	100	190
85+	30	50	70	80	100
Total	4,818	4,950	5,080	5,220	5,290
Median Age	39.4	42.1	44.4	46.2	46.5
Births	180	200	200	190	
Deaths	110	140	160	190	
Natural Increase	70	60	40	0	
Net Migration	60	70	80	90	
Change	130	130	120	90	

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

Oak Street Elementary Total Population

	2010	2015	2020	2025	2030
0-4	382	270	260	270	280
5-9	458	420	350	360	380
10-14	471	470	440	370	390
15-19	424	430	430	390	310
20-24	202	220	230	220	170
25-29	240	250	240	250	250
30-34	326	300	300	320	340
35-39	463	380	370	390	380
40-44	474	500	410	410	440
45-49	615	470	490	410	410
50-54	523	610	460	490	400
55-59	395	510	590	460	480
60-64	320	380	490	570	440
65-69	200	300	350	440	520
70-74	155	200	280	310	410
75-79	123	150	180	230	260
80-84	88	120	130	170	220
85+	93	100	120	140	180
Total	5,952	6,080	6,120	6,200	6,260
Median Age	40.1	43.0	45.3	46.5	47.3
Births	230	220	230	220	
Deaths	170	190	230	260	
Natural Increase	60	30	0	-40	
Net Migration	50	50	60	70	
Change	110	80	60	30	

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

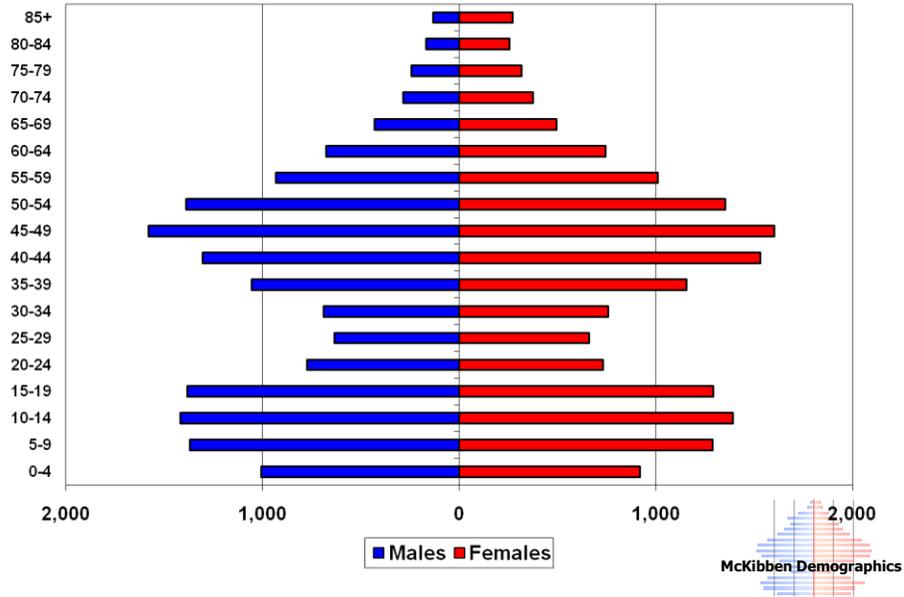
Parmenter Elementary Total Population

	2010	2015	2020	2025	2030
0-4	349	290	310	300	310
5-9	422	360	310	330	350
10-14	423	430	380	320	350
15-19	334	390	390	320	260
20-24	250	250	270	270	210
25-29	314	290	270	330	330
30-34	312	330	310	310	370
35-39	419	330	350	330	330
40-44	459	420	330	350	330
45-49	526	450	420	330	350
50-54	443	510	450	410	330
55-59	372	440	510	440	410
60-64	273	360	420	490	420
65-69	224	260	340	400	440
70-74	161	220	250	340	390
75-79	161	150	200	230	310
80-84	135	150	140	190	220
85+	148	160	170	180	200
Total	5,725	5,790	5,820	5,870	5,910
Median Age	40.4	42.7	44.8	46.1	46.6
Births	250	240	230	240	
Deaths	210	230	240	280	
Natural Increase	40	10	-10	-40	
Net Migration	40	50	60	70	
Change	80	60	50	30	

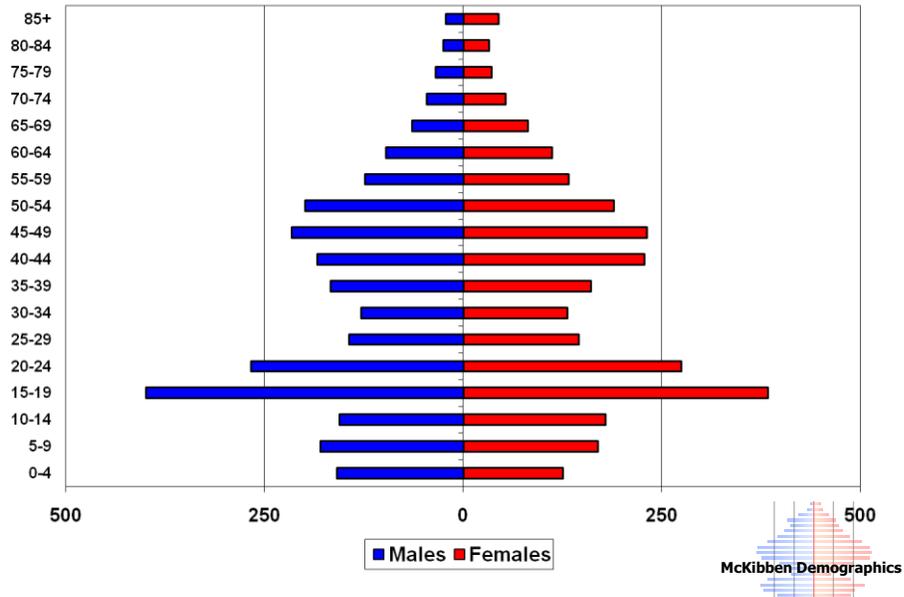
Differences between period Totals may not equal Change due to rounding.

Appendix C: Population Pyramids

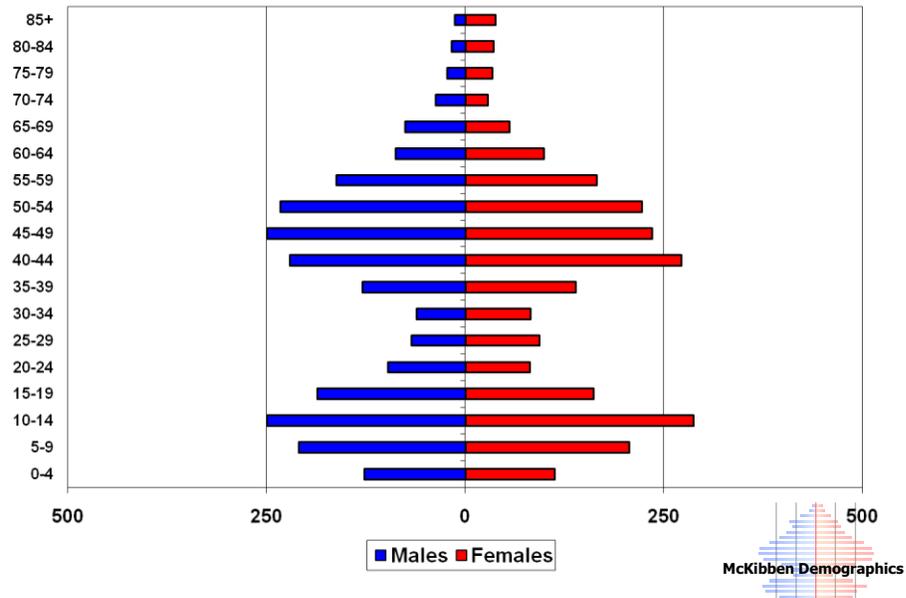
Franklin District Total Population Census 2010



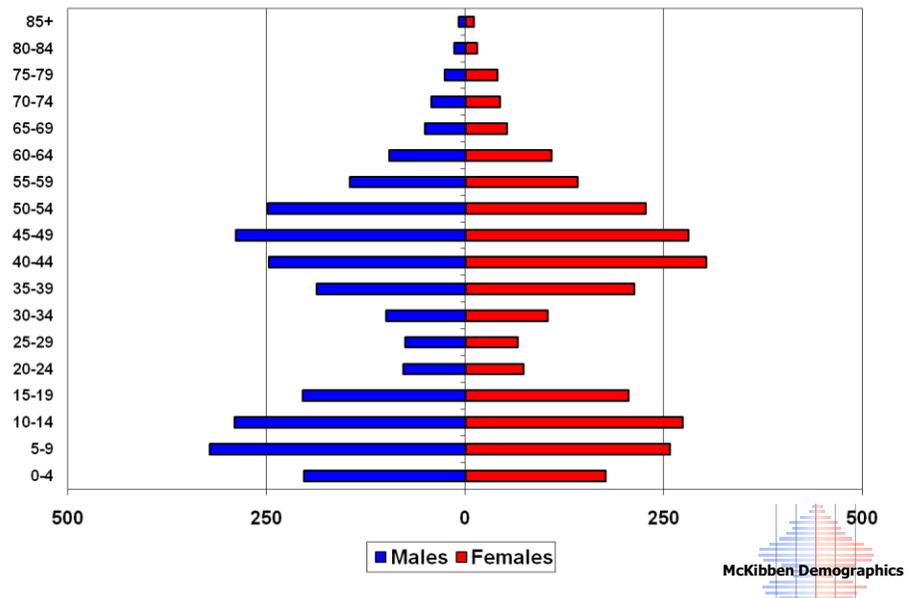
Davis Thayer Elementary Total Population Census 2010



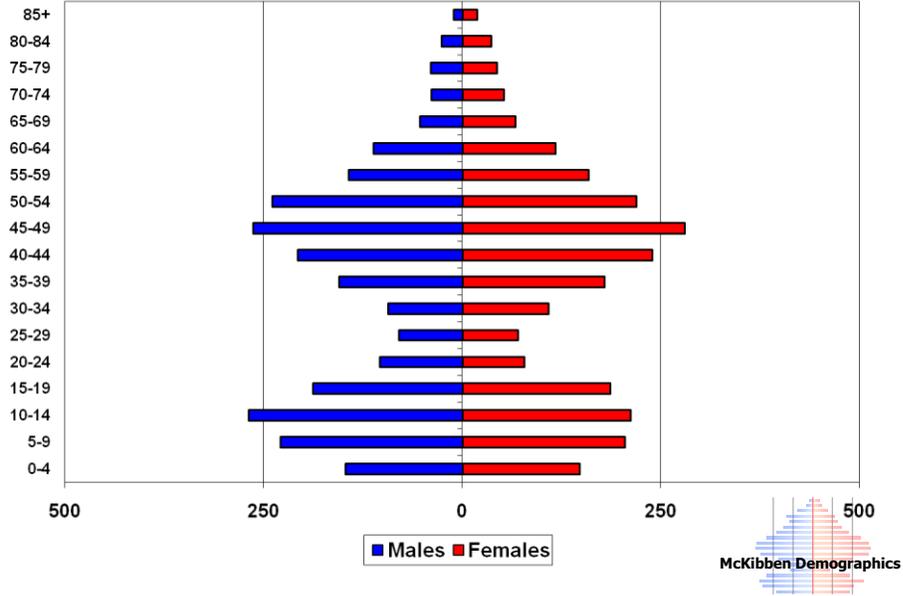
Jefferson Elementary Total Population Census 2010



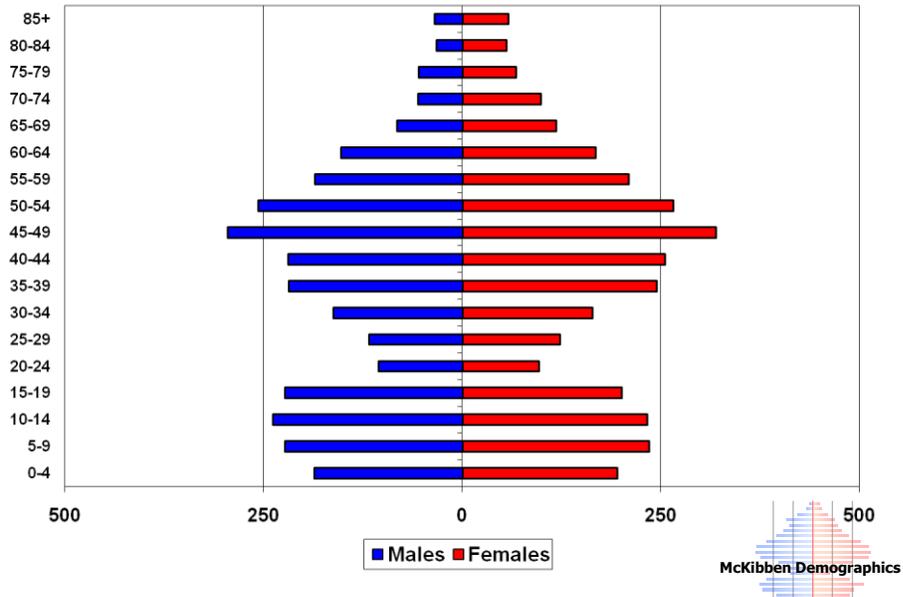
Keller Elementary Total Population Census 2010



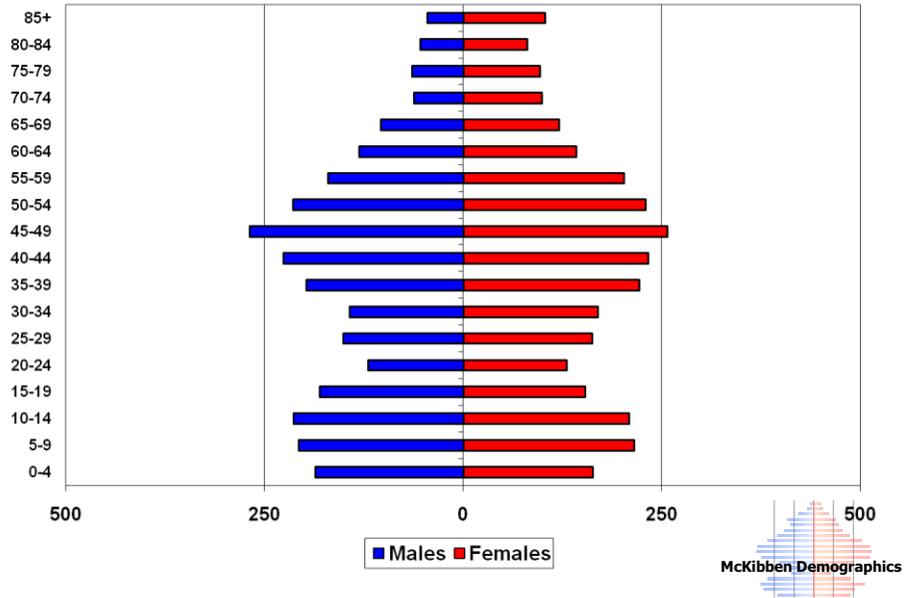
Kennedy Elementary Total Population Census 2010



Oak Street Elementary Total Population Census 2010



Parmenter Elementary Total Population Census 2010



Appendix D: Enrollment Forecasts

Franklin Public Schools Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
PK	131	104	107	111	111	111	111	111	111	111	111	111	111	111
K	326	307	314	285	286	290	293	298	302	314	318	326	329	322
1	318	336	327	325	294	297	302	305	310	314	320	324	332	335
2	327	316	349	337	325	291	295	300	303	315	319	325	329	336
3	350	328	338	349	341	328	294	298	303	312	324	328	334	337
4	404	359	349	329	348	340	327	293	297	309	318	330	334	339
5	427	403	376	349	330	349	341	328	294	303	315	324	336	339
Total: K-5	2283	2153	2160	2085	2035	2006	1963	1933	1920	1978	2025	2068	2105	2119
6	448	435	407	385	357	337	356	349	335	304	314	327	336	345
7	468	446	431	415	388	359	340	359	351	340	309	319	332	342
8	474	470	451	433	419	391	362	343	362	358	347	315	325	338
Total: 6-8	1390	1351	1289	1233	1164	1087	1058	1051	1048	1002	970	961	993	1025
9	436	452	445	435	420	406	379	351	333	355	351	340	309	319
10	424	437	438	432	428	414	400	373	346	328	350	346	335	304
11	470	423	437	447	434	430	416	402	375	348	330	352	348	337
12	404	467	424	429	445	432	428	414	400	373	346	328	350	346
SP	5	8	5	8	8	8	8	8	8	8	8	8	8	8
Total: 9-12	1739	1787	1749	1751	1735	1690	1631	1548	1462	1412	1385	1374	1350	1314
Total: K-12	5412	5291	5198	5069	4934	4783	4652	4532	4430	4392	4380	4403	4448	4458
Total: K-12	5412	5291	5198	5069	4934	4783	4652	4532	4430	4392	4380	4403	4448	4458
Change		-121	-93	-129	-135	-151	-131	-120	-102	-38	-12	23	45	10
%-Change		-2.2%	-1.8%	-2.5%	-2.7%	-3.1%	-2.7%	-2.6%	-2.3%	-0.9%	-0.3%	0.5%	1.0%	0.2%
Total: K-5	2283	2153	2160	2085	2035	2006	1963	1933	1920	1978	2025	2068	2105	2119
Change		-130	7	-75	-50	-29	-43	-30	-13	58	47	43	37	14
%-Change		-5.7%	0.3%	-3.5%	-2.4%	-1.4%	-2.1%	-1.5%	-0.7%	3.0%	2.4%	2.1%	1.8%	0.7%
Total: 6-8	1390	1351	1289	1233	1164	1087	1058	1051	1048	1002	970	961	993	1025
Change		-39	-62	-56	-69	-77	-29	-7	-3	-46	-32	-9	32	32
%-Change		-2.8%	-4.6%	-4.3%	-5.6%	-6.6%	-2.7%	-0.7%	-0.3%	-4.4%	-3.2%	-0.9%	3.3%	3.2%
Total: 9-12	1739	1787	1749	1751	1735	1690	1631	1548	1462	1412	1385	1374	1350	1314
Change		48	-38	2	-16	-45	-59	-83	-86	-50	-27	-11	-24	-36
%-Change		2.8%	-2.1%	0.1%	-0.9%	-2.6%	-3.5%	-5.1%	-5.6%	-3.4%	-1.9%	-0.8%	-1.7%	-2.7%

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

Davis Thayer Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
K	44	28	50	41	40	41	41	42	42	44	45	46	46	45
1	32	44	28	53	42	42	43	43	44	44	45	46	47	47
2	40	33	41	23	50	39	39	40	40	42	42	43	44	45
3	46	37	36	39	23	49	38	38	39	40	42	42	43	44
4	44	48	39	35	39	23	49	38	38	40	41	43	43	44
5	66	41	50	36	35	39	23	49	38	39	41	42	44	44
Total K-5	272	231	244	227	229	233	233	250	241	249	256	262	267	269
Total K-5	272	231	244	227	229	233	233	250	241	249	256	262	267	269
Change		-41	13	-17	2	4	0	17	-9	8	7	6	5	2
% Change		-15.1%	5.6%	-7.0%	0.9%	1.7%	0.0%	7.3%	-3.6%	3.3%	2.8%	2.3%	1.9%	0.7%

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

Helen Keller Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
K	68	50	51	46	44	44	45	45	46	47	48	49	50	49
1	76	67	54	49	47	46	46	47	47	48	48	49	50	51
2	51	74	66	53	48	46	45	45	46	48	49	49	50	51
3	71	53	80	67	54	49	47	46	46	48	50	51	51	52
4	82	73	59	75	66	53	48	46	45	47	49	51	52	52
5	65	85	77	56	75	66	53	48	46	46	48	50	52	53
Total K-5	413	402	387	346	334	304	284	277	276	284	292	299	305	308
Total K-5	413	402	387	346	334	304	284	277	276	284	292	299	305	308
Change		-11	-15	-41	-12	-30	-20	-7	-1	8	8	7	6	3
% Change		-2.7%	-3.7%	-10.6%	-3.5%	-9.0%	-6.6%	-2.5%	-0.4%	2.9%	2.8%	2.4%	2.0%	1.0%

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

J.F. Kennedy Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
K	54	66	50	36	37	38	39	40	42	44	45	47	48	47
1	63	62	68	54	38	39	40	41	42	44	45	46	48	49
2	55	63	67	73	55	39	40	41	42	44	46	47	48	50
3	53	57	65	65	74	56	40	41	42	44	46	48	49	49
4	63	55	60	61	64	73	55	39	40	43	45	47	49	50
5	72	64	55	62	61	64	73	55	39	41	44	46	48	49
Total K-5	360	367	365	351	329	309	287	257	247	260	271	281	290	294
Total K-5	360	367	365	351	329	309	287	257	247	260	271	281	290	294
Change		7	-2	-14	-22	-20	-22	-30	-10	13	11	10	9	4
% Change		1.9%	-0.5%	-3.8%	-6.3%	-6.1%	-7.1%	-10.5%	-3.9%	5.3%	4.2%	3.7%	3.2%	1.4%

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

Jefferson Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
K	33	59	56	39	42	43	44	45	46	49	50	52	53	52
1	51	38	61	59	41	44	45	46	47	48	50	51	53	54
2	63	54	44	71	63	43	47	48	49	51	52	54	55	57
3	57	62	57	46	72	64	44	48	49	51	53	54	56	57
4	64	59	69	59	47	73	65	45	49	51	53	55	56	58
5	61	64	62	72	60	48	74	66	46	51	53	55	57	58
Total K-5	329	336	349	346	325	315	319	298	286	301	311	321	330	336
Total K-5	329	336	349	346	325	315	319	298	286	301	311	321	330	336
Change		7	13	-3	-21	-10	4	-21	-12	15	10	10	9	6
% Change		2.1%	3.9%	-0.9%	-6.1%	-3.1%	1.3%	-6.6%	-4.0%	5.2%	3.3%	3.2%	2.8%	1.8%

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

Oak Street Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
K	62	58	54	60	60	60	60	61	61	64	64	65	65	64
1	49	61	65	59	62	62	63	63	64	64	65	65	66	66
2	57	44	68	68	60	63	63	64	64	66	66	67	67	67
3	71	58	45	68	68	60	63	63	64	65	67	67	68	68
4	94	73	57	48	69	69	61	64	64	66	67	69	69	69
5	80	96	80	56	47	68	68	60	63	63	65	66	68	68
Total K-5	413	390	369	359	366	382	378	375	380	388	394	399	403	402
Total K-5	413	390	369	359	366	382	378	375	380	388	394	399	403	402
Change		-23	-21	-10	7	16	-4	-3	5	8	6	5	4	-1
% Change		-5.6%	-5.4%	-2.7%	1.9%	4.4%	-1.0%	-0.8%	1.3%	2.1%	1.5%	1.3%	1.0%	-0.2%

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

Parmenter Elementary: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
K	65	46	53	63	63	64	64	65	65	66	66	67	67	65
1	47	64	51	51	64	64	65	65	66	66	67	67	68	68
2	61	48	63	49	49	61	61	62	62	64	64	65	65	66
3	52	61	55	64	50	50	62	62	63	64	66	66	67	67
4	57	51	65	51	63	49	49	61	61	62	63	65	65	66
5	83	53	52	67	52	64	50	50	62	63	64	65	67	67
Total K-5	365	323	339	345	341	352	351	365	379	385	390	395	399	399
Total K-5	365	323	339	345	341	352	351	365	379	385	390	395	399	399
Change		-42	16	6	-4	11	-1	14	14	6	5	5	4	0
% Change		-11.5%	5.0%	1.8%	-1.2%	3.2%	-0.3%	4.0%	3.8%	1.6%	1.3%	1.3%	1.0%	0.0%

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

Annie Sullivan Middle School: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
6	158	130	122	130	94	112	107	78	99	87	88	93	96	99
7	154	159	127	122	131	94	113	108	78	100	88	89	94	97
8	152	157	158	130	123	132	95	114	109	80	103	90	91	96
Total: 6-8	464	446	407	382	348	338	315	300	286	267	279	272	281	292
Total: 6-8	464	446	407	382	348	338	315	300	286	267	279	272	281	292
Change		-18	-39	-25	-34	-10	-23	-15	-14	-19	12	-7	9	11
% Change		-3.9%	-8.7%	-6.1%	-8.9%	-2.9%	-6.8%	-4.8%	-4.7%	-6.6%	4.5%	-2.5%	3.3%	3.9%

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

Horace Mann Middle School: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
6	153	152	164	133	120	110	134	143	117	105	107	112	115	118
7	157	151	149	167	134	121	111	135	144	119	107	109	114	117
8	156	161	155	150	169	135	122	112	136	147	121	109	111	116
Total: 6-8	466	464	468	450	423	366	367	390	397	371	335	330	340	351
Total: 6-8	466	464	468	450	423	366	367	390	397	371	335	330	340	351
Change		-2	4	-18	-27	-57	1	23	7	-26	-36	-5	10	11
% Change		-0.4%	0.9%	-3.8%	-6.0%	-13.5%	0.3%	6.3%	1.8%	-6.5%	-9.7%	-1.5%	3.0%	3.2%

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

Remington Middle School: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26-	2026-27	2027-28	2028-29	2029-30
6	137	153	121	122	143	115	115	128	119	112	119	122	125	128
7	157	136	155	126	123	144	116	116	129	121	114	121	124	128
8	166	152	138	153	127	124	145	117	117	131	123	116	123	126
Total: 6-8	460	441	414	401	393	383	376	361	365	364	356	359	372	382
Total: 6-8	460	441	414	401	393	383	376	361	365	364	356	359	372	382
Change		-19	-27	-13	-8	-10	-7	-15	4	-1	-8	3	13	10
% Change		-4.1%	-6.1%	-3.1%	-2.0%	-2.5%	-1.8%	-4.0%	1.1%	-0.3%	-2.2%	0.8%	3.6%	2.7%

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

Franklin High School: Total Enrollment

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
9	436	452	445	435	420	406	379	351	333	355	351	340	309	319
10	424	437	438	432	428	414	400	373	346	328	350	346	335	304
11	470	423	437	447	434	430	416	402	375	348	330	352	348	337
12	404	467	424	429	445	432	428	414	400	373	346	328	350	346
Total: 9-12	1734	1779	1744	1743	1727	1682	1623	1540	1454	1404	1377	1366	1342	1306
Total: 9-12	1734	1779	1744	1743	1727	1682	1623	1540	1454	1404	1377	1366	1342	1306
Change		45	-35	-1	-16	-45	-59	-83	-86	-50	-27	-11	-24	-36
% Change		2.6%	-2.0%	-0.1%	-0.9%	-2.6%	-3.5%	-5.1%	-5.6%	-3.4%	-1.9%	-0.8%	-1.8%	-2.7%

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