WESTFIELD WASHINGTON SCHOOLS
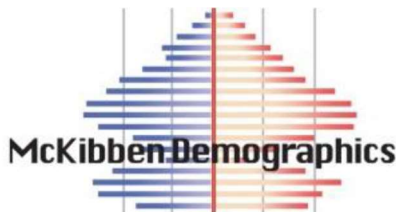
POPULATION AND ENROLLMENT FORECASTS, 2022-23 THROUGH 2031-32

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EXECUTIVE SUMMARY

1. The resident total fertility rate for the Westfield Washington Schools over the life of the forecasts is below replacement level. (1.86 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 increase over the next 10 years is the continued new home construction, the increasing number of elderly housing units turning over coupled with a sustained rate of in migration of young families.

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

6. The elementary enrollment will slowly increase over the next four years school years.

7. The median age of the district's population will increase from 36.7 in 2020 to 40.4 in 2030.

8. Even if the district continues to have a large 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 increase by 1,067 students, or 12.2%, between 2021-22 and 2026-27. Total enrollment will increase by 669 students, or 6.8%, 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 Westfield Washington Schools district. 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 Westfield Washington Schools district 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 Indiana 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 600 of the over 20,000 current households in the district would have been included. For comparison 1,700 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 Westfield Washington Schools district 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 1.86 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 Westfield Washington Schools district 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 170 lower than the average enrollment in grade one.

A close examination of data for the Westfield Washington Schools district 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 Westfield Washington Schools district (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 100 miles of the Westfield Washington Schools district) primarily consisting of younger adults and their children.

As the Hamilton 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 Westfield Washington Schools district 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 Westfield Washington Schools district 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 Westfield Washington Schools district 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 Hamilton County for any year in the forecasts;

f. All currently planned, platted, approved, and permitted housing developments are built out and completed by 2029. 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 Hamilton County and the Indianapolis 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 Westfield Washington Schools district 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 Indiana 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 Westfield Washington Schools district 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 800 existing home sales per year for the next five years and have an average of 1,000 sold per year after 2026;

r. The district will have at least an average of 1,100 new single-family home constructed per year over the next five years and average 700 per year after 2026;

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 Hamilton County.

    If a major employer in the district or in the Hamilton County or the Greater Indianapolis Metropolitan Area (particularly in northern 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 Westfield Washington Schools district 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 Westfield Washington Schools district 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 Westfield Washington Schools district is classified as a "small area" population (as compared to the population of the state of Indiana 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 Westfield Washington Schools district 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 Westfield Washington Schools district.

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 Westfield Washington Schools district 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.

REFERENCES

McKibben, J.
    The Impact of Policy Changes on
    Forecasting for School District.
    Population Research and Policy
    Review, Vol. 15, No. 5-6, December
1996

McKibben, J., M. Gann, and K. Faust.
    The Baby Boomlet's Role in Future
    College Enrollment. American
    Demographics, June 1999.

Peters, G. and R. Larkin
    Population Geography. 7th Edition.
    Dubuque, IA: Kendall Hunt
    Publishing. 2002.

Siegel, J. and D. Swanson
    The Methods and Materials of
    Demography: Second Edition,
    Academic Press: New York, New
    York. 2004.

Smith, S., J. Tayman and D. Swanson
    State and Local Population
    Projections, Academic Press, New
    York, New York. 2001.

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*
Carey Ridge	9,250	10,560	*14.2%*	11,790	*11.6%*	*27.5%*
Maple Glen	7,540	8,890	*17.9%*	10,070	*13.3%*	*33.6%*
Monon Trail	8,410	9,890	*17.6%*	11,050	*11.7%*	*31.4%*
Oak Trace	6,300	7,030	*11.6%*	7,760	*10.4%*	*23.2%*
Shamrock Springs	10,050	11,020	*9.7%*	11,930	*8.3%*	*18.7%*
Washington Woods	7,780	8,850	*13.8%*	9,760	*10.3%*	*25.4%*
District Total	49,330	56,240	*14.0%*	62,360	*10.9%*	*26.4%*

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
Carey Ridge	1,026	44.7%	2,295	6,334	2.76
Maple Glen	620	41.4%	1,498	3,951	2.64
Monon Trail	644	34.4%	1,874	4,802	2.56
Oak Trace	836	52.9%	1,580	4,595	2.91
Shamrock Springs	1,266	47.7%	2,654	7,917	2.98
Washington Woods	861	48.6%	1,771	5,147	2.91
District Total	5,252	45.0%	11,672	32,745	2.81

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
Carey Ridge	49.8%	9.5%	64.1%
Maple Glen	45.2%	13.0%	84.1%
Monon Trail	44.3%	21.3%	74.4%
Oak Trace	51.9%	11.3%	90.1%
Shamrock Springs	57.5%	9.4%	82.9%
Washington Woods	49.5%	11.1%	87.9%
District Total	50.3%	12.3%	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+
Carey Ridge	20.0%	2.7%
Maple Glen	19.9%	4.0%
Monon Trail	25.2%	10.4%
Oak Trace	18.6%	4.8%
Shamrock Springs	16.0%	2.8%
Washington Woods	16.6%	3.2%
District Total	19.2%	4.5%

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

	2021	2026	2021-2026 Change	2031	2026-2031 Change	2021-2031 Change
Carey Ridge	613	596	-2.8%	562	-5.7%	-8.3%
Maple Glen	594	597	0.5%	552	-7.5%	-7.1%
Monon Trail	524	597	13.9%	633	6.0%	20.8%
Oak Trace	487	463	-4.9%	450	-2.8%	-7.6%
Shamrock Springs	647	784	21.2%	799	1.9%	23.5%
Washington Woods	581	694	19.4%	685	-1.3%	17.9%
District Total	3,446	3,731	8.3%	3,681	-1.3%	6.8%

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
Carey Ridge	110	110	111	91	99	113	100	125	118	132	130
Maple Glen	66	79	92	93	98	86	86	83	72	66	53
Monon Trail	62	50	66	56	54	66	74	63	62	62	76
Oak Trace	94	112	113	99	119	103	110	87	92	96	101
Shamrock Springs	87	101	110	125	126	128	150	150	151	169	141
Washington Woods	82	94	107	80	92	90	92	103	113	97	101
District Total	501	545	599	544	588	585	611	610	608	621	602

Table 7: Westfield Washington Demographic Changes, 2010 - 2020

	2010	2020	Change
Number of Households	11,672	18,796	61%
Population	32,884	49,262	50%
Enrollment	6,198	8,737	41%
Mean Household Size	2.81	2.62	-7%

Appendix B: Population Forecasts

Westfield Washington Total Population

	2010	2015	2020	2025	2030
0-4	2777	3260	3570	3460	3480
5-9	3035	3580	4160	4450	4240
10-14	2832	3230	3700	4260	4550
15-19	2211	2480	2820	3360	3950
20-24	1372	1900	2010	2230	2600
25-29	2116	2560	3170	3030	3090
30-34	2555	3360	3680	4160	3870
35-39	2811	3810	4480	4620	4920
40-44	2814	3820	5040	5360	5380
45-49	2731	3190	4180	5270	5830
50-54	2234	2680	3160	4220	5260
55-59	1714	2170	2640	3080	4120
60-64	1342	1690	2140	2600	3040
65-69	880	1340	1650	2090	2520
70-74	535	760	1290	1600	2060
75-79	399	520	750	1240	1570
80-84	256	390	510	720	1220
85+	270	310	380	490	660
Total	**32884**	**41050**	**49330**	**56240**	**62360**
Median Age	34.1	35.2	36.7	38.4	40.4
Births		2380	2800	2840	2920
Deaths		520	670	860	1100
Natural Increase		1860	2130	1980	1820
Net Migration		6230	6180	5010	4300
Change		*8090*	*8310*	*6990*	*6120*

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

Carey Ridge Total Population

	2010	2015	2020	2025	2030
0-4	521	590	640	650	690
5-9	588	620	750	730	660
10-14	595	680	720	830	800
15-19	415	500	580	640	750
20-24	341	310	380	420	480
25-29	463	740	810	720	790
30-34	440	660	840	980	860
35-39	533	640	760	960	1050
40-44	555	730	860	840	1030
45-49	501	550	720	930	910
50-54	443	490	550	800	990
55-59	331	430	490	530	780
60-64	247	330	430	470	520
65-69	152	250	310	410	460
70-74	80	50	230	310	410
75-79	78	80	50	230	310
80-84	27	70	80	40	230
85+	24	30	50	70	70
Total	**6334**	**7750**	**9250**	**10560**	**11790**
Median Age	32.8	33.3	34.4	36.6	39.1
Births		490	600	600	620
Deaths		80	120	140	160
Natural Increase		410	480	460	460
Net Migration		1010	990	870	760
Change		*1420*	*1470*	*1330*	*1220*

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

Maple Glen Total Population

	2010	2015	2020	2025	2030
0-4	428	570	610	570	570
5-9	392	660	750	740	650
10-14	265	400	660	750	740
15-19	149	200	340	620	710
20-24	111	150	200	320	480
25-29	280	400	440	400	480
30-34	438	580	700	640	580
35-39	374	740	870	900	810
40-44	329	550	1020	1070	1070
45-49	242	330	540	1010	1230
50-54	236	240	330	540	1000
55-59	220	230	230	310	530
60-64	179	210	220	230	310
65-69	129	180	210	220	220
70-74	92	120	170	210	220
75-79	46	90	120	170	200
80-84	24	40	90	120	170
85+	20	30	40	70	100
Total	3953	5720	7540	8890	10070
Median Age	34.0	34.1	35.4	37.3	40.1
Births		330	430	460	470
Deaths		50	80	120	160
Natural Increase		280	350	340	310
Net Migration		1490	1470	1010	870
Change		*1770*	*1820*	*1350*	*1180*

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

Monon Trail Total Population

	2010	2015	2020	2025	2030
0-4	288	490	620	610	550
5-9	327	440	640	730	750
10-14	356	320	440	630	730
15-19	360	330	300	410	620
20-24	269	330	290	270	390
25-29	310	570	630	530	400
30-34	318	610	850	860	720
35-39	318	610	900	1090	1040
40-44	348	600	910	1130	1270
45-49	448	400	660	950	1160
50-54	382	440	390	660	930
55-59	312	370	430	390	640
60-64	254	310	370	430	390
65-69	186	250	300	360	420
70-74	116	180	250	290	350
75-79	107	110	180	230	290
80-84	92	110	110	180	230
85+	149	140	140	140	170
Total	**4939**	**6610**	**8410**	**9890**	**11050**
Median Age	38.8	36.8	37.4	39.2	41.3

	2015	2020	2025	2030
Births	340	470	490	470
Deaths	150	170	190	240
Natural Increase	190	300	300	230
Net Migration	1470	1490	1190	940
Change	*1660*	*1790*	*1490*	*1170*

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

Oak Trace Total Population

	2010	2015	2020	2025	2030
0-4	537	490	500	470	510
5-9	487	640	610	610	570
10-14	402	490	630	610	610
15-19	265	400	440	590	570
20-24	127	260	350	390	470
25-29	304	230	360	440	470
30-34	471	410	330	450	520
35-39	520	580	510	420	530
40-44	399	520	670	590	500
45-49	296	390	510	670	670
50-54	223	290	390	500	650
55-59	149	210	290	380	490
60-64	138	150	210	280	380
65-69	102	140	150	210	270
70-74	64	100	140	130	210
75-79	56	60	100	130	130
80-84	42	60	60	100	120
85+	17	30	50	60	90
Total	**4595**	**5450**	**6300**	**7030**	**7760**
Median Age	31.9	32.6	33.9	34.5	36.5
Births		390	420	400	450
Deaths		60	80	100	130
Natural Increase		330	340	300	320
Net Migration		520	500	450	420
Change		*850*	*840*	*750*	*740*

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

Shamrock Springs Total Population

	2010	2015	2020	2025	2030
0-4	548	610	670	670	690
5-9	747	670	750	870	870
10-14	790	750	670	750	870
15-19	661	720	670	600	680
20-24	303	590	560	530	480
25-29	343	300	570	630	590
30-34	398	500	450	710	740
35-39	582	560	640	580	830
40-44	772	740	700	770	700
45-49	862	920	880	690	770
50-54	652	850	910	870	680
55-59	500	640	830	890	850
60-64	346	490	630	820	880
65-69	173	340	480	610	800
70-74	106	170	330	470	600
75-79	56	110	160	320	460
80-84	44	60	100	160	310
85+	34	50	50	80	130
Total	**7917**	**9070**	**10050**	**11020**	**11930**
Median Age	36.5	38.5	40.3	41.1	41.5

	2015	2020	2025	2030
Births	420	450	470	510
Deaths	110	130	180	230
Natural Increase	310	320	290	280
Net Migration	780	740	680	590
Change	*1090*	*1060*	*970*	*870*

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

Washington Woods Total Population

	2010	2015	2020	2025	2030
0-4	455	510	530	490	470
5-9	495	550	660	770	740
10-14	424	590	580	690	800
15-19	362	330	490	500	620
20-24	221	260	230	300	300
25-29	417	320	360	310	360
30-34	490	600	510	520	450
35-39	485	680	800	670	660
40-44	411	680	880	960	810
45-49	382	600	870	1020	1090
50-54	298	370	590	850	1010
55-59	203	290	370	580	830
60-64	178	200	280	370	560
65-69	139	180	200	280	350
70-74	78	140	170	190	270
75-79	56	70	140	160	180
80-84	26	50	70	120	160
85+	27	30	50	70	100
Total	**5147**	**6450**	**7780**	**8850**	**9760**
Median Age	32.0	35.5	38.3	40.9	43.0
Births		410	430	420	400
Deaths		70	90	130	180
Natural Increase		340	340	290	220
Net Migration		960	990	810	720
Change		*1300*	*1330*	*1100*	*940*

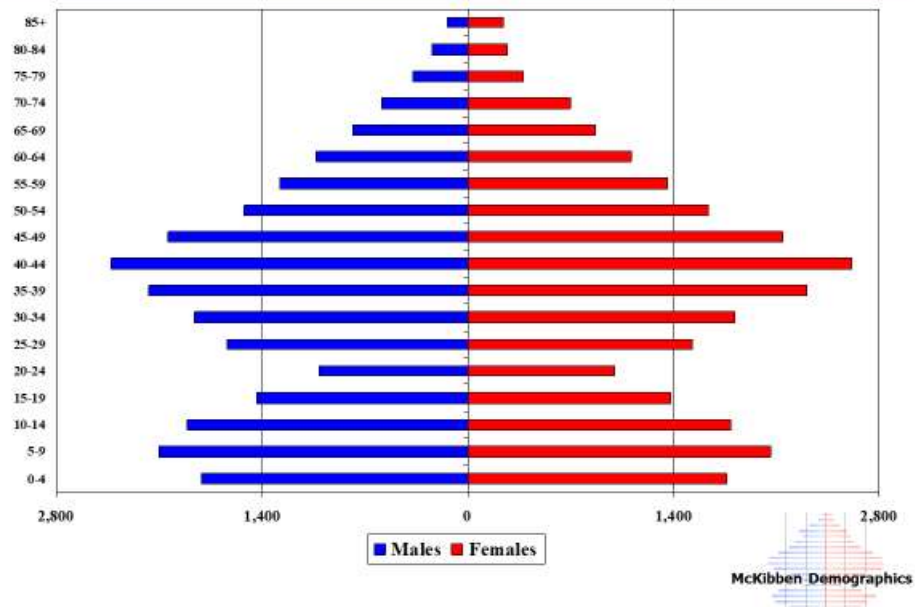*Differences between period Totals may not equal Change due to rounding.*

Appendix C: Population Pyramids

Westfield Washington Schools Total Population – 2010 Census
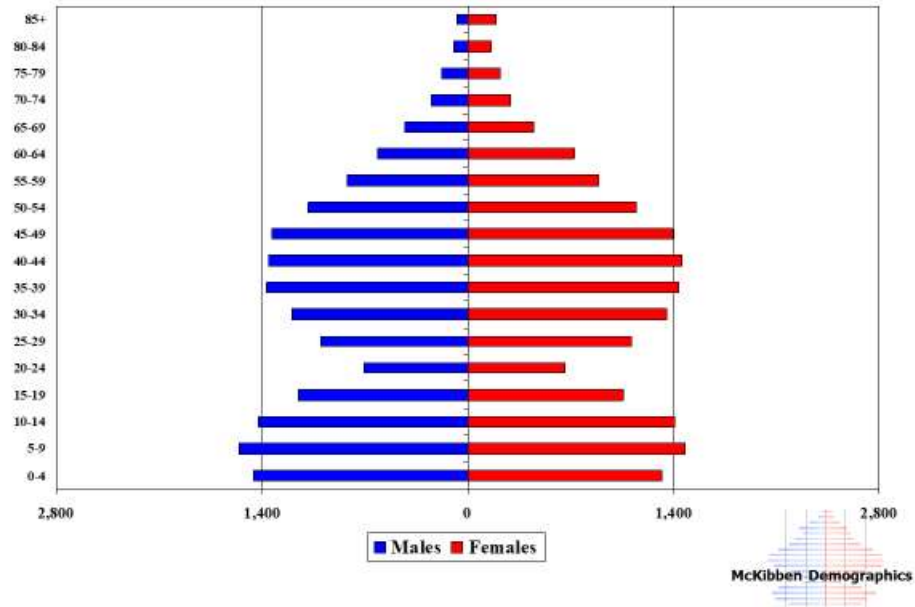
Westfield Washington Schools Total Population – 2020 Estimate

Appendix D: Enrollment Forecasts

Westfield Washington: 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	606	692	634	695	687	689	690	692	704	704	702	700	693	692
1	661	614	694	699	730	723	725	726	728	730	730	728	726	719
2	650	687	606	722	722	755	748	750	745	747	750	750	743	741
3	642	670	659	639	743	746	779	772	766	761	763	766	764	756
4	649	652	667	691	658	764	768	803	788	781	776	778	775	773
Total K-4	**3208**	**3315**	**3260**	**3446**	**3540**	**3677**	**3710**	**3743**	**3731**	**3723**	**3721**	**3722**	**3701**	**3681**
5	640	662	644	677	671	671	779	783	819	804	797	792	794	791
6	622	637	659	663	687	681	681	791	795	831	816	809	804	806
Total 5-6	**1262**	**1299**	**1303**	**1340**	**1358**	**1352**	**1460**	**1574**	**1614**	**1635**	**1613**	**1601**	**1598**	**1597**
7	619	646	640	680	683	708	701	701	815	819	856	840	833	828
8	592	635	642	649	694	697	722	715	715	831	835	873	857	850
Total: 7-8	**1211**	**1281**	**1282**	**1329**	**1377**	**1405**	**1423**	**1416**	**1530**	**1650**	**1691**	**1713**	**1690**	**1678**
9	668	621	650	673	675	722	725	751	744	744	864	868	908	891
10	574	669	630	646	670	672	718	721	747	740	740	860	864	903
11	561	576	665	629	643	667	669	714	717	743	736	736	856	860
12	533	562	564	663	626	640	664	666	710	713	739	732	732	852
13	12	12	6	11	11	11	11	11	11	11	11	11	11	11
Total: 9-13	**2348**	**2440**	**2515**	**2622**	**2625**	**2712**	**2787**	**2863**	**2929**	**2951**	**3090**	**3207**	**3371**	**3517**
Total K-13	**8029**	**8335**	**8360**	**8737**	**8900**	**9146**	**9380**	**9596**	**9804**	**9959**	**10115**	**10243**	**10360**	**10473**
Total K-13	8029	8335	8360	8737	8900	9146	9380	9596	9804	9959	10115	10243	10360	10473
Change		*306*	*25*	*377*	*163*	*246*	*234*	*216*	*208*	*155*	*156*	*128*	*117*	*113*
%-Change		*3.8%*	*0.3%*	*4.5%*	*1.9%*	*2.8%*	*2.6%*	*2.3%*	*2.2%*	*1.6%*	*1.6%*	*1.3%*	*1.1%*	*1.1%*
Total: K-4	3208	3315	3260	3446	3540	3677	3710	3743	3731	3723	3721	3722	3701	3681
Change		*107*	*-55*	*186*	*94*	*137*	*33*	*33*	*-12*	*-8*	*-2*	*1*	*-21*	*-20*
%-Change		*3.3%*	*-1.7%*	*5.7%*	*2.7%*	*3.9%*	*0.9%*	*0.9%*	*-0.3%*	*-0.2%*	*-0.1%*	*0.0%*	*-0.6%*	*-0.5%*
Total: 5-6	1262	1299	1303	1340	1358	1352	1460	1574	1614	1635	1613	1601	1598	1597
Change		*37*	*4*	*37*	*18*	*-6*	*108*	*114*	*40*	*21*	*-22*	*-12*	*-3*	*-1*
%-Change		*2.9%*	*0.3%*	*2.8%*	*1.3%*	*-0.4%*	*8.0%*	*7.8%*	*2.5%*	*1.3%*	*-1.3%*	*-0.7%*	*-0.2%*	*-0.1%*
Total: 7-8	1211	1281	1282	1329	1377	1405	1423	1416	1530	1650	1691	1713	1690	1678
Change		*70*	*1*	*47*	*48*	*28*	*18*	*-7*	*114*	*120*	*41*	*22*	*-23*	*-12*
%-Change		*5.8%*	*0.1%*	*3.7%*	*3.6%*	*2.0%*	*1.3%*	*-0.5%*	*8.1%*	*7.8%*	*2.5%*	*1.3%*	*-1.3%*	*-0.7%*
Total: 9-13	2348	2440	2515	2622	2625	2712	2787	2863	2929	2951	3090	3207	3371	3517
Change		*92*	*75*	*107*	*3*	*87*	*75*	*76*	*66*	*22*	*139*	*117*	*164*	*146*
%-Change		*3.9%*	*3.1%*	*4.3%*	*0.1%*	*3.3%*	*2.8%*	*2.7%*	*2.3%*	*0.8%*	*4.7%*	*3.8%*	*5.1%*	*4.3%*

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

Carey Ridge 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	127	116	107	127	114	113	112	111	112	111	109	108	107	106
1	109	121	121	115	129	119	118	117	116	115	114	112	111	110
2	116	133	117	121	117	132	121	120	118	117	116	115	113	112
3	116	113	124	127	125	121	136	125	122	120	119	118	117	115
4	126	121	117	123	131	129	125	140	128	124	122	121	120	119
Total: K-4	**594**	**604**	**586**	**613**	**616**	**614**	**612**	**613**	**596**	**587**	**580**	**574**	**568**	**562**
Total: K-4	594	604	586	613	616	614	612	613	596	587	580	574	568	562
Change		10	-18	27	3	-2	-2	1	-17	-9	-7	-6	-6	-6
%-Change		1.7%	-3.0%	4.6%	0.5%	-0.3%	-0.3%	0.2%	-2.8%	-1.5%	-1.2%	-1.0%	-1.0%	-1.1%

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

Maple Glen 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	110	130	113	122	119	119	117	115	116	114	112	110	108	109
1	127	112	126	122	124	123	123	121	119	118	116	114	112	110
2	111	117	101	132	121	123	122	122	119	117	116	114	112	110
3	116	116	112	100	133	122	124	123	121	118	116	115	113	111
4	123	113	111	118	101	134	123	125	122	120	117	115	114	112
Total: K-4	**587**	**588**	**563**	**594**	**598**	**621**	**609**	**606**	**597**	**587**	**577**	**568**	**559**	**552**
Total: K-4	587	588	563	594	598	621	609	606	597	587	577	568	559	552
Change		1	-25	31	4	23	-12	-3	-9	-10	-10	-9	-9	-7
%-Change		0.2%	-4.3%	5.5%	0.7%	3.8%	-1.9%	-0.5%	-1.5%	-1.7%	-1.7%	-1.6%	-1.6%	-1.3%

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

Monon Trail 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	93	118	97	96	102	104	106	109	113	115	117	119	118	117
1	103	92	114	108	107	109	111	113	116	118	120	122	124	123
2	103	109	93	122	114	113	116	118	119	122	124	126	127	129
3	119	104	102	93	128	120	119	122	123	124	127	129	130	131
4	87	118	107	105	97	133	125	124	126	127	128	131	132	133
Total: K-4	**505**	**541**	**513**	**524**	**548**	**579**	**577**	**586**	**597**	**606**	**616**	**627**	**631**	**633**
Total: K-4	505	541	513	524	548	579	577	586	597	606	616	627	631	633
Change		36	-28	11	24	31	-2	9	11	9	10	11	4	2
%-Change		7.1%	-5.2%	2.1%	4.6%	5.7%	-0.3%	1.6%	1.9%	1.5%	1.7%	1.8%	0.6%	0.3%

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

Oak Trace 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	96	114	89	91	90	89	89	88	89	88	88	87	87	88
1	104	97	110	92	93	93	92	92	91	91	90	90	89	89
2	134	102	94	109	93	94	94	93	93	92	92	91	91	90
3	118	133	95	93	110	94	95	95	94	94	93	93	92	92
4	119	118	126	102	94	111	95	96	96	95	95	94	92	91
Total: K-4	**571**	**564**	**514**	**487**	**480**	**481**	**465**	**464**	**463**	**460**	**458**	**455**	**451**	**450**
Total: K-4	571	564	514	487	480	481	465	464	463	460	458	455	451	450
Change		-7	-50	-27	-7	1	-16	-1	-1	-3	-2	-3	-4	-1
%-Change		-1.2%	-8.9%	-5.3%	-1.4%	0.2%	-3.3%	-0.2%	-0.2%	-0.6%	-0.4%	-0.7%	-0.9%	-0.2%

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

Shamrock Springs 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	88	104	117	129	133	134	135	137	141	143	144	145	143	143
1	105	93	109	140	144	145	146	147	149	150	152	153	154	152
2	88	109	105	120	151	156	157	158	157	159	161	163	162	163
3	89	99	120	127	127	160	165	166	166	165	167	169	170	168
4	94	98	103	131	132	132	166	172	171	171	170	172	172	173
Total: K-4	**464**	**503**	**554**	**647**	**687**	**727**	**769**	**780**	**784**	**788**	**794**	**802**	**801**	**799**
Total: K-4	464	503	554	647	687	727	769	780	784	788	794	802	801	799
Change		*39*	*51*	*93*	*40*	*40*	*42*	*11*	*4*	*4*	*6*	*8*	*-1*	*-2*
%-Change		*8.4%*	*10.1%*	*16.8%*	*6.2%*	*5.8%*	*5.8%*	*1.4%*	*0.5%*	*0.5%*	*0.8%*	*1.0%*	*-0.1%*	*-0.2%*

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

Washington Woods 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	92	110	111	130	129	130	131	132	133	133	132	131	130	129
1	113	99	114	122	133	134	135	136	137	138	138	137	136	135
2	98	117	96	118	126	137	138	139	139	140	141	141	138	137
3	84	105	106	99	120	129	140	141	140	140	141	142	142	139
4	100	84	103	112	103	125	134	146	145	144	144	145	145	145
Total: K-4	**487**	**515**	**530**	**581**	**611**	**655**	**678**	**694**	**694**	**695**	**696**	**696**	**691**	**685**
Total: K-4	487	515	530	581	611	655	678	694	694	695	696	696	691	685
Change		*28*	*15*	*51*	*30*	*44*	*23*	*16*	*0*	*1*	*1*	*0*	*-5*	*-6*
%-Change		*5.7%*	*2.9%*	*9.6%*	*5.2%*	*7.2%*	*3.5%*	*2.4%*	*0.0%*	*0.1%*	*0.1%*	*0.0%*	*-0.7%*	*-0.9%*

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

Westfield Intermediate: 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	640	662	644	677	671	671	779	783	819	804	797	792	794	791
6	622	637	659	663	687	681	681	791	795	831	816	809	804	806
Total: 5-6	**1262**	**1299**	**1303**	**1340**	**1358**	**1352**	**1460**	**1574**	**1614**	**1635**	**1613**	**1601**	**1598**	**1597**
Total: 5-6	1262	1299	1303	1340	1358	1352	1460	1574	1614	1635	1613	1601	1598	1597
Change		*37*	*4*	*37*	*18*	*-6*	*108*	*114*	*40*	*21*	*-22*	*-12*	*-3*	*-1*
%-Change		*2.9%*	*0.3%*	*2.8%*	*1.3%*	*-0.4%*	*8.0%*	*7.8%*	*2.5%*	*1.3%*	*-1.3%*	*-0.7%*	*-0.2%*	*-0.1%*

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

Westfield Junior 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
7	619	646	640	680	683	708	701	701	815	819	856	840	833	828
8	592	635	642	649	694	697	722	715	715	831	835	873	857	850
Total: 7-8	**1211**	**1281**	**1282**	**1329**	**1377**	**1405**	**1423**	**1416**	**1530**	**1650**	**1691**	**1713**	**1690**	**1678**
Total: 7-8	1211	1281	1282	1329	1377	1405	1423	1416	1530	1650	1691	1713	1690	1678
Change		70	1	47	48	28	18	-7	114	120	41	22	-23	-12
%-Change		5.8%	0.1%	3.7%	3.6%	2.0%	1.3%	-0.5%	8.1%	7.8%	2.5%	1.3%	-1.3%	-0.7%

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

Westfield 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	668	621	650	673	675	722	725	751	744	744	864	868	908	891
10	574	669	630	646	670	672	718	721	747	740	740	860	864	903
11	561	576	665	629	643	667	669	714	717	743	736	736	856	860
12	533	562	564	663	626	640	664	666	710	713	739	732	732	852
13	12	12	6	11	11	11	11	11	11	11	11	11	11	11
Total: 9-13	**2348**	**2440**	**2515**	**2622**	**2625**	**2712**	**2787**	**2863**	**2929**	**2951**	**3090**	**3207**	**3371**	**3517**
Total: 9-13	2348	2440	2515	2622	2625	2712	2787	2863	2929	2951	3090	3207	3371	3517
Change		92	75	107	3	87	75	76	66	22	139	117	164	146
%-Change		3.9%	3.1%	4.3%	0.1%	3.3%	2.8%	2.7%	2.3%	0.8%	4.7%	3.8%	5.1%	4.3%

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

Appendix E: Live vs. Attend

Westfield Elementary Schools—Where Students Live versus Where They Attend

Where K-4th Students Live

Where K-4th Students Attend		Carey Ridge	Maple Glen	Monon Trail	Oak Trace	Shamrock Springs	Washington Woods	Out of District	Unmatched	Live Out, Attend In (K-4)
		603	576	519	438	693	599	30	0	**261**
Carey Ridge Elementary	620	587	8	4	6	4	10	1		33
Maple Glen Elementary	596	2	543	6	7	26	4	8		53
Monon Trail Elementary	526	3	5	488	3	5	12	10		38
Oak Trace Elementary	486	3	7	7	416	44	6	3		70
Shamrock Springs Elementary	645	4	7	9	6	607	11	1		38
Washington Woods Elementary	585	4	6	5		7	556	7		29
Live In, Attend Out (K-4)	**231**	16	33	31	22	86	43			