

Stevenson-Carson School Enrollment Forecast

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Purpose of the Study

- ❖ Evaluate residential development trends
- ❖ Analyze factors that influence enrollment levels
- ❖ Incorporate Comprehensive Plan Population Forecast
- ❖ Provide student enrollment projections

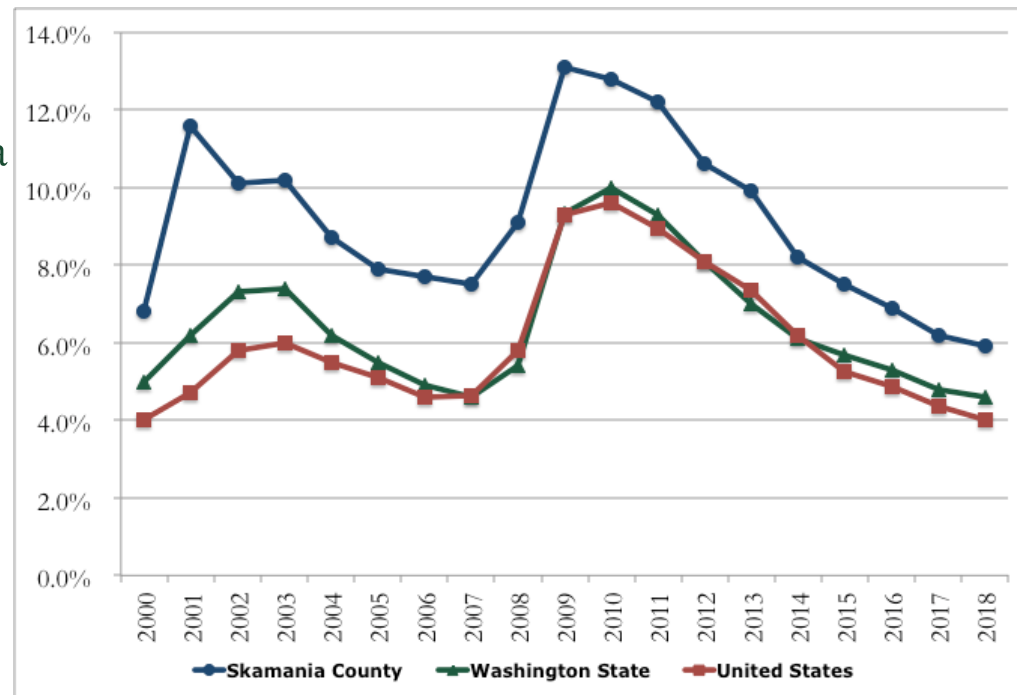
Influencing Factors

- ❖ School District Enrollments are Influenced by:
 - ✓ Local & Regional Economic Conditions
 - ✓ Local & State Land Use Policies
 - ✓ Residential Development Trends
 - ✓ Quality of Life
 - ✓ Family Age Population
 - ✓ Birth Rates
 - ✓ Alternative Education Programs

Economic Conditions

- ❖ Regional economic cycles closely follow statewide and national trends.
- ❖ Historically, Federal policy has had a significant influence on the local economy.
- ❖ Local residents tend to commute outside of Skamania County for employment.
- ❖ Skamania County tends to have unemployment rates averaging 40%-60% greater than Statewide and National rates.

Unemployment Rates (2000-2018)

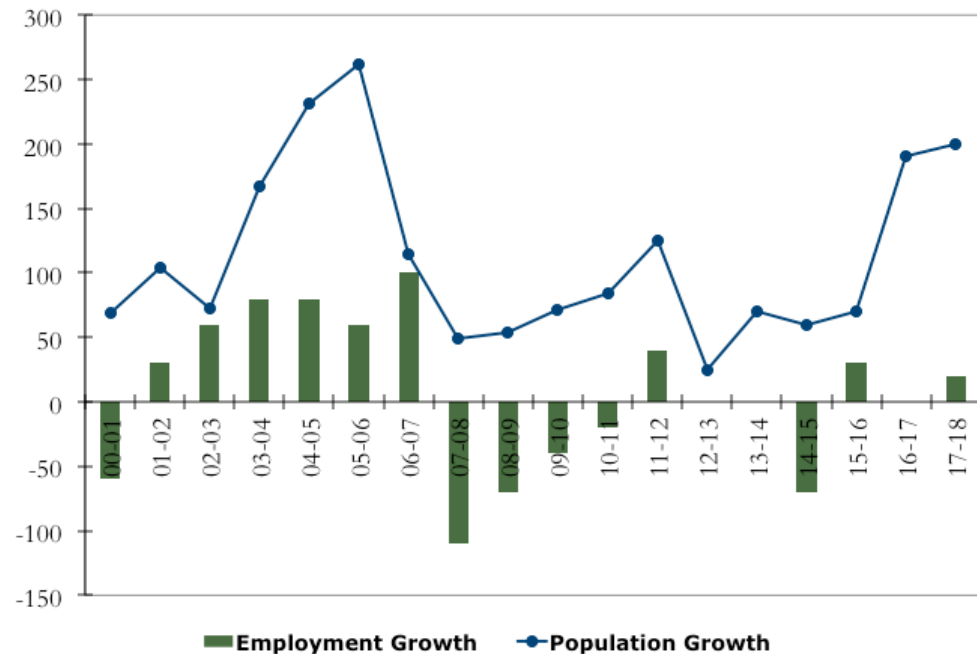


Source: Washington State Employment Security.

Economic Conditions Cont' d

- ❖ Traditionally, changes in population growth within Skamania County closely follow changes in employment, except in recent years.
- ❖ Population growth is becoming tied more to regional economic conditions.
- ❖ Employment adjustments are a direct result of changes in tourism and recreation.

Population & Employment Growth Trends

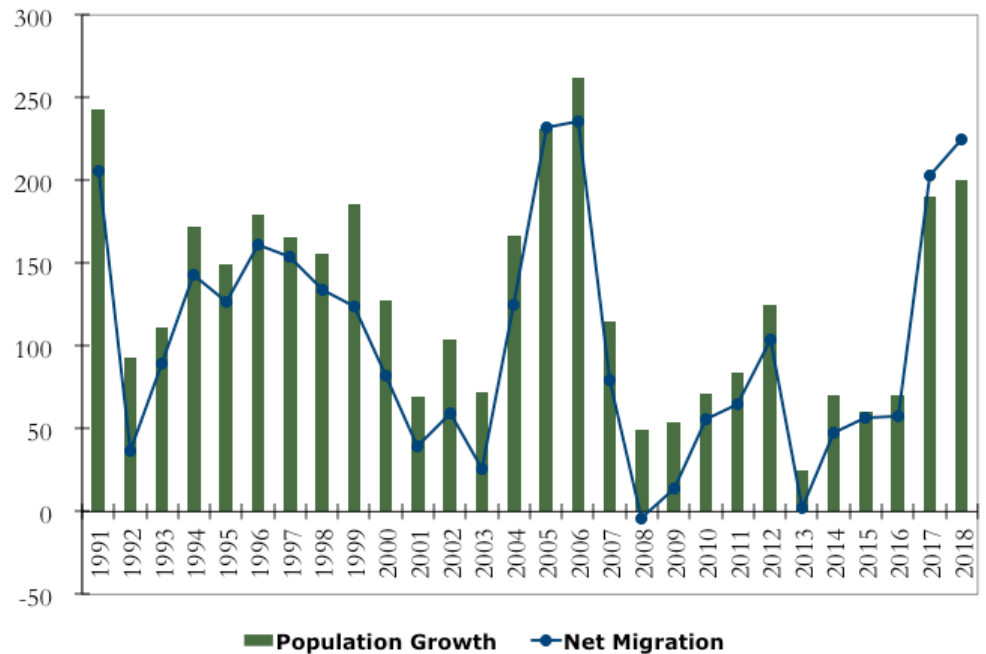


Source: Washington State Employment Security and Office of Financial Management.

Population Growth

- ❖ Population growth is driven primarily by new residents vs. internal growth.
- ❖ Historically, new residents moving in have accounted on average for 70% of population growth.
- ❖ Over the last two years internal natural growth has actually declined.

Skamania County Population Trends

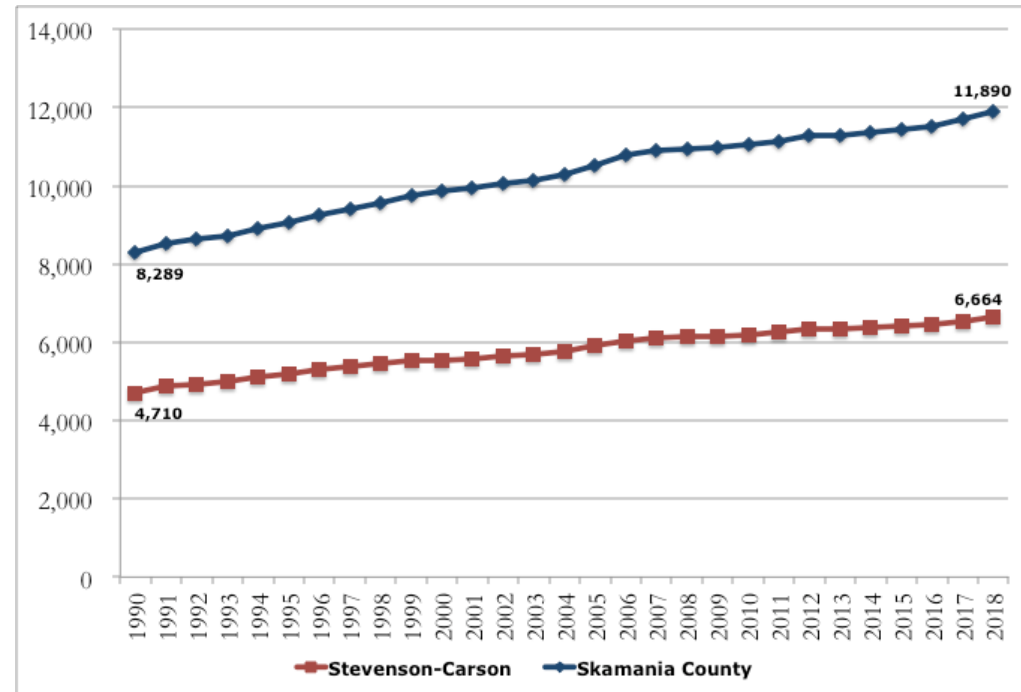


Source: Washington State Office of Financial Management.

Population Comparison

- ❖ Population trends within the Stevenson-Carson School District are *reflective* of countywide trends.
- ❖ Residents living within the School District account for 56% of all residents in the County.
- ❖ Annual population growth had been between 30-40 residents. In 2017 population growth tripled to 100 new residents and 116 in 2018.

School District vs. County Population Trends

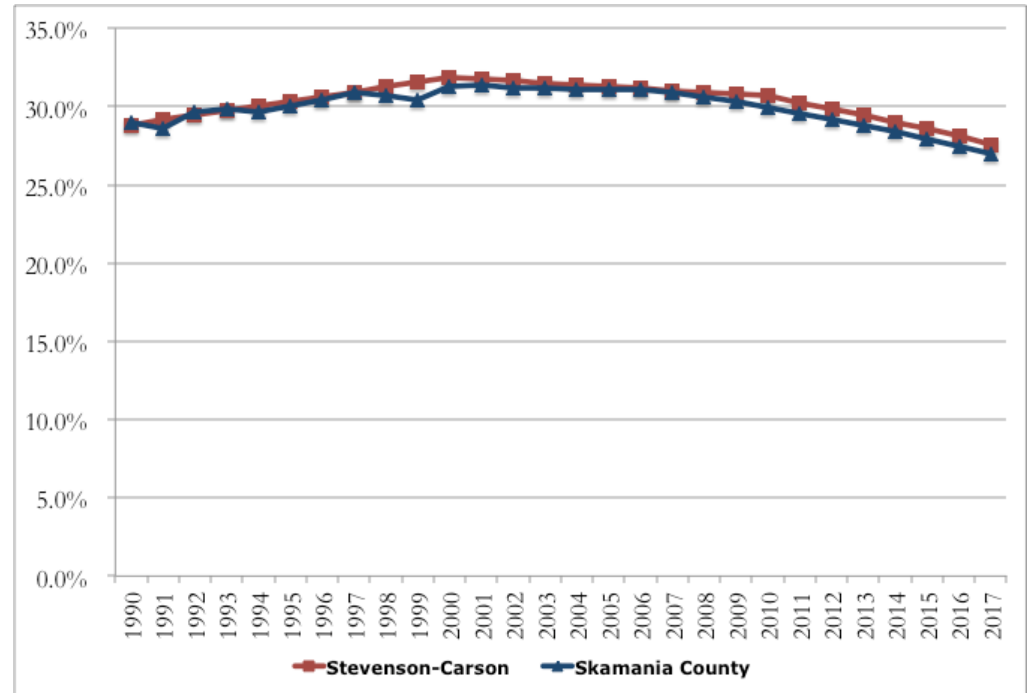


Source: Washington State Office of Financial Management.

School District Female Age Comparison

- ❖ Age composition, especially the number of women in the prime child bearing ages, has a significant effect on school enrollments.
 - ✓ Countywide, the proportion of the population that are women in their prime child bearing years had increased from 29 to 31% until 2001, but has steadily fallen to 27% by 2017.
 - ✓ The Stevenson-Carson School District has closely followed countywide trends.

Female Age Comparison (% of Total Pop)

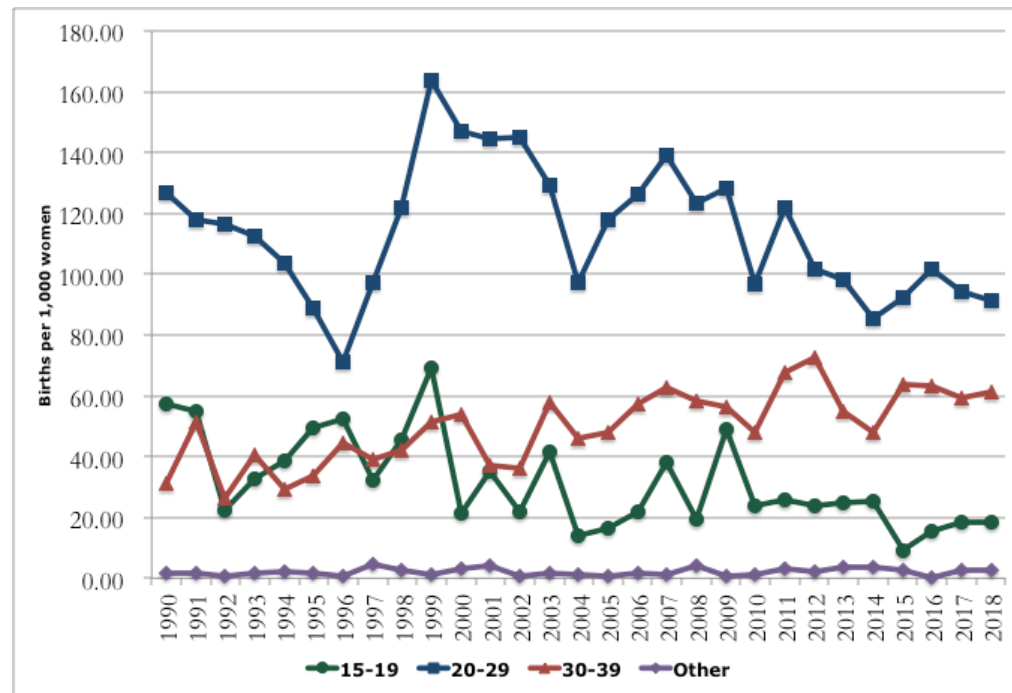


Source: U.S. Census and Washington State Office of Financial Management.

Countywide Birth Rates

- ❖ Women age 20-29 have the highest birth rate averaging between a high of 164 births per 1,000 women in their age group to a current 100 per 1,000.
- ❖ Teenage females (age 15-19) have fallen to a current rate of 15 per 1,000.
- ❖ Birth rates for women age 30-39 have increased from 31 to 63 births per 1,000.
- ❖ Women of other child bearing ages have 0-5 births per 1,000

Fertility Rate by Age of Mother

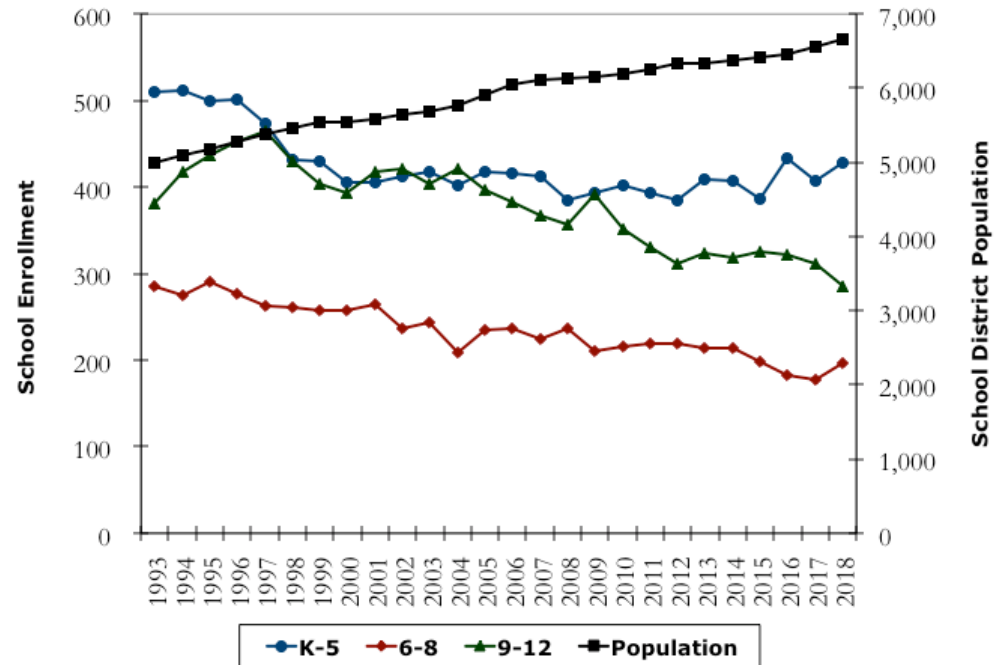


Source: Washington State Office of Financial Management and Department of Health.

Enrollment Trends

- ❖ Changes in enrollment have not followed population trends.
- ✓ K-5 declined rapidly between 1993 and 2000, appeared to plateau somewhat thereafter until 2016. Enrollment over last three years appears to be on the increase.
- ✓ Middle School has steadily declined since 1993, but experienced an uptick of 20 students in 2018, as a result of recent increases at K-5.
- ✓ High School enrollment continues to decline but is expected to rebound based upon trends within the lower grade levels.

Enrollment vs. Population Trends

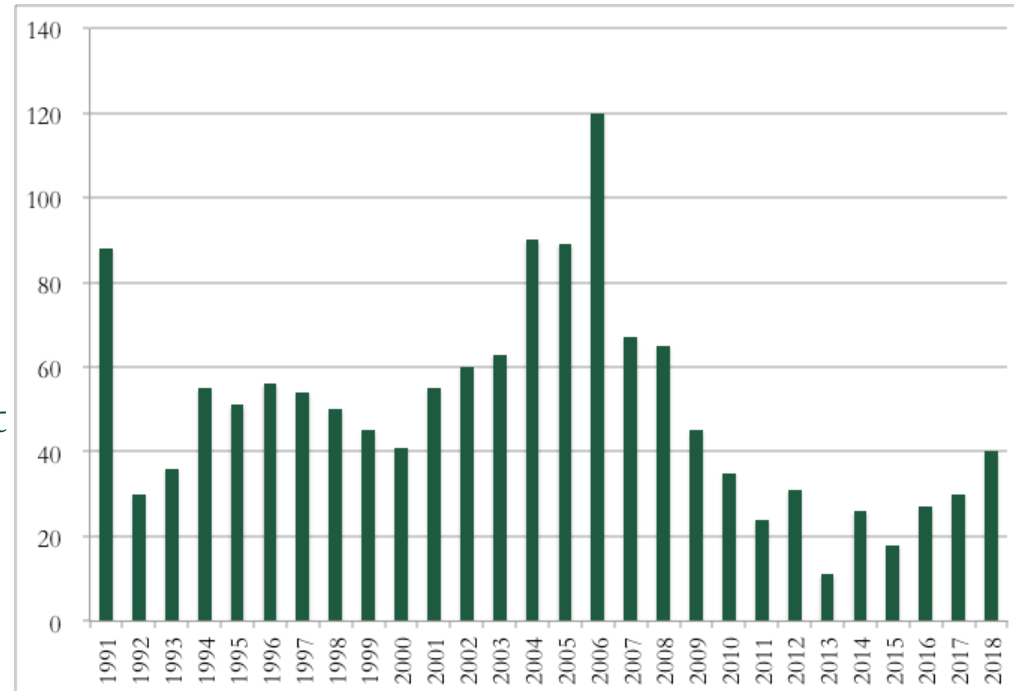


Source: Washington State Office of Financial Management and Stevenson-Carson School District.

Residential Development Patterns

- ❖ Over 1,400 units were constructed from 1991 to 2018.
- ❖ Approximately 120 housing units were constructed in 2006 (peak year).
- ❖ An average of 50 units were constructed per year over the last 28 years. Housing construction had been on the decline until 2014. The number of new units has been increasing over the last five years.

Housing Construction (1991-2018)



Source: Cascade Planning Group using information provided by US Census and Washington State Office of Financial Management.

Forecast Factors

- ❖ Factors Incorporated into the Forecast Model:
 - ✓ Local Population & Employment Forecasts
 - ✓ Comp Plan changes
 - ✓ Residential Development Patterns and Housing Capacity
 - ✓ Changing Demographics
 - ✓ Birth Rates (Kindergarten Forecast)
 - ✓ Historic Cohort Survival Rates (Grades 1-12 forecast)

Forecast Methodology

- ❖ Forecasting enrollment occurs through a multi-step process that examines local enrollment trends versus residential growth and changing demographics.
- ❖ Kindergarten enrollment is derived by applying age group birth rates from 5 years prior to current number of women within corresponding age group. An adjustment ratio is developed by comparing the projected kindergarteners with actual attendance. This ratio is used to adjust the future kindergarten estimates.
- ❖ Population is projected by multiplying the Washington State's OFM population forecast for Skamania County by school district average representation for last 10 years, as growth within the school district closely follows growth countywide. Forecasts are also compared to proposed changes in regards to long term land use plans.
- ❖ Enrollments in grades 1 through 12 are projected by analyzing changes in historic enrollment versus changes in historic population. A cohort survival rate is developed by creating a ratio between current year enrollment of a particular grade versus current year population and dividing it by the ratio of last year's enrollment in the prior grade to last years population. Cohort survival rates that are positive indicate enrollment within the school district is growing faster than population.

Major “Baseline” Forecast Assumptions

- ❖ Population is estimated to increase at a modest rate over the five years (60-70 new residents per year), but taper off longer term due to land development constraints.
- ❖ District will be attractive for families, but average household size on the aggregate will remain below 2.0 persons per household.
- ❖ Birth rates are tied to state forecasts for the local/Skamania County area.
- ❖ Apply experience-based average cohort survival rate for each grade.

Overall Results: Baseline enrollment up by only 165 students in 20 years (or 8 students per year). Fastest growth numerically is @ K-5 levels, but @ 6-8 grades in percentage terms. Enrollment in 2018 was initially forecast to remain at 2017 levels. However, enrollment increased by 16 students. Greatest difference was Kindergarten (17 more students than forecast) and 12th grade (10 fewer students). Other grades were relatively close.

“Baseline” Forecast by Grade

Grade	Actual	Baseline Enrollment Forecast																						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Kindergarten	63	61	55	57	60	61	61	68	68	77	78	78	78	79	77	84	84	77	78	87	81	79	73	71
First	75	65	62	56	58	61	62	62	69	69	78	79	79	79	80	78	85	85	78	79	88	82	80	74
Second	67	75	65	62	56	58	61	62	62	68	68	77	78	78	78	79	77	84	84	77	78	87	81	79
Third	66	66	73	63	61	55	56	59	60	60	66	66	75	76	76	76	77	75	82	82	75	76	84	79
Fourth	68	67	67	74	64	62	55	56	59	60	60	66	66	76	77	76	76	77	75	82	82	75	76	84
Fifth	69	73	71	71	78	68	66	58	59	62	63	63	70	70	80	81	80	80	81	79	86	86	79	80
Sixth	62	66	69	67	67	74	64	62	55	56	58	59	59	66	66	75	76	75	75	76	74	81	81	74
Seventh	62	64	68	71	69	69	76	66	64	57	58	60	61	61	68	68	77	78	77	77	78	76	83	83
Eighth	53	65	67	71	74	72	72	79	69	66	59	60	62	63	63	70	70	80	81	80	80	81	79	86
Ninth	85	59	72	74	78	82	79	79	87	76	73	65	66	68	69	69	77	77	88	89	88	88	89	87
Tenth	64	85	58	71	73	77	81	78	78	86	75	72	64	65	67	68	68	76	76	87	88	87	87	88
Eleventh	83	65	85	58	71	73	77	81	78	78	86	75	72	64	65	67	68	68	76	76	87	88	87	87
Twelfth	79	84	65	85	58	71	73	77	81	78	78	86	75	72	64	65	67	68	68	76	76	87	88	87
All Grades	896	895	877	880	867	883	883	887	889	893	900	906	905	917	930	956	982	1,000	1,019	1,047	1,061	1,073	1,067	1,059
K-5	408	407	393	383	377	365	361	365	377	396	413	429	446	458	468	474	479	478	478	486	490	485	473	467
6-8	177	195	204	209	210	215	212	207	188	179	175	179	182	190	197	213	223	233	233	233	232	238	243	243
9-12	311	293	280	288	280	303	310	315	324	318	312	298	277	269	265	269	280	289	308	328	339	350	351	349

Note: Forecasts may vary from actual conditions. Estimates are total headcount.

Source: Cascade Planning Group.



Major “High Growth” Forecast Assumptions

- ❖ Population is estimated to increase at a more robust pace than “baseline conditions”, assuming stronger residential growth in line with last couple of years. Population is expected to increase by 90-95 residents per year on average over the long term. Household sizes will increase modestly, reflecting attraction of families seeking rural lifestyle. Total district population is estimated at 8,740 by 2040.
- ❖ Continued attraction of families, following forecasted “Baseline” trends.
- ❖ Birth rates are held consistent with “Baseline” assumptions.
- ❖ Use average cohort survival rate for each grade.

Overall Results: Enrollment increases by 300 in 20 years (or 15 students per year). Fastest growth numerically is K-5 and percentage wise 6-8 levels.

“High Growth” Forecast by Grade

Grade	Actual	High Growth Enrollment Forecast																						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Kindergarten	63	61	56	61	64	66	66	73	73	85	85	86	86	88	85	92	93	87	88	97	91	90	82	79
First	75	65	64	59	62	65	67	67	74	74	86	86	87	87	89	86	93	94	88	89	98	92	91	83
Second	67	75	67	66	59	62	65	67	67	74	74	86	86	87	86	88	85	92	93	87	88	97	91	90
Third	66	66	75	67	64	58	61	63	65	65	72	72	84	84	85	84	86	83	90	90	85	86	94	89
Fourth	68	67	69	78	68	65	59	62	64	66	66	73	73	85	85	86	85	87	84	91	91	86	87	95
Fifth	69	73	73	75	83	72	69	63	66	68	70	70	77	77	90	90	91	90	92	89	96	96	91	92
Sixth	62	66	71	71	71	79	68	65	60	62	64	66	66	73	73	85	85	86	85	87	84	91	91	86
Seventh	62	64	70	75	73	73	82	70	67	62	64	66	68	68	75	75	88	88	89	87	90	86	94	94
Eighth	53	65	69	75	78	76	76	85	73	70	65	67	69	71	71	78	78	91	91	92	90	93	89	98
Ninth	85	59	74	78	83	86	84	84	94	81	77	72	74	76	78	78	86	86	100	100	101	99	102	98
Tenth	64	85	60	76	77	82	85	83	83	93	80	76	71	73	75	77	77	85	85	99	99	100	98	101
Eleventh	83	65	88	62	76	77	82	85	83	83	93	80	76	71	73	75	77	77	85	85	99	99	100	98
Twelfth	79	84	67	91	62	76	77	82	86	83	83	93	80	76	71	73	75	77	77	85	85	99	99	100
All Grades	896	895	903	934	920	937	941	949	955	966	979	993	997	1,016	1,036	1,067	1,099	1,123	1,147	1,178	1,197	1,214	1,209	1,203
K-5	408	407	404	406	400	388	387	395	409	432	453	473	493	508	520	526	533	533	535	543	549	547	536	528
6-8	177	195	210	221	222	228	226	220	200	194	193	199	203	212	219	238	251	265	265	266	264	270	274	278
9-12	311	293	289	307	298	321	328	334	346	340	333	321	301	296	297	303	315	325	347	369	384	397	399	397

Note: Forecasts may vary from actual conditions. Estimates are total headcount.

Source: Cascade Planning Group.

