Bainbridge Island School District Enrollment Trends and Projections

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Summary and Forecast Update October 2021

Introduction

The following is an update of the enrollment forecast that was completed for the Bainbridge Island School District in the Spring of 2017. A previous projection was completed in 2012. Enrollment in October 2020 was reasonably close to the projection that we completed in 2012 and slightly below the projected 2021 total from the 2017 report.

Similar to last time, the first part of the report provides an executive summary detailing the major findings and conclusions. The next part of the report presents detailed information about enrollment and demographic trends (births, population, and housing. The final section of the report provides detailed forecasts (low, medium, and high) along with some alternative forecasts that were created to guide our development of the final forecasts. We have also provided projections of total enrollment by school.

We should also note that there is more uncertainty than usual attached to the current forecasts because of the Covid-19. Although we do expect higher enrollments throughout the Puget Sound, once the pandemic is mostly contained, it is possible that some of the recent effects may be more permanent. Parents may make different decisions about where to live and where they send their children to school. It is possible that the pandemic could upend the regular enrollment patterns that have been present in the Puget Sound over the past decade. The reader should keep this in mind when reading this report.

- Enrollment in the Bainbridge Island School District has been relatively flat over the past decade, fluctuating up and down from year to year.
- Enrollment has been lower than expected in the District and the Puget Sound generally in 2020 and 2021 due to the Covid-19 pandemic. There appear to be many parents who are still hesitant to send their students back to the public schools.
- There is a strong relationship between housing development and enrollment in the District.
- Housing development slowed considerably in the District between 2010 and 2020 in comparison to the previous decade.
- Home sales in Bainbridge Island and Kitsap County generally, have improved since the period between 2007 and 2011 when the bursting of the housing bubble affected Districts throughout the Puget Sound.

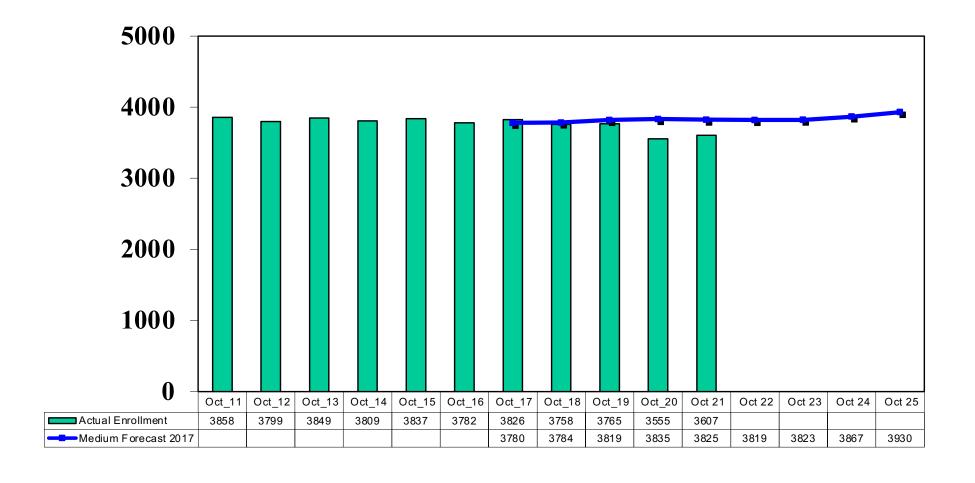
- Despite improving home sales in recent years, enrollment has remained relatively flat in the District, fluctuating within a narrow range.
- Part of the reason for less enrollment growth may be due to the price of homes in the District. Based on Kitsap County assessor's data, homes in Bainbridge Island are more expensive than any other District in the County. The number of K-12 students per house continues to drop.
- It is possible that over time the District could become a niche location for relatively affluent families looking for a house in the Puget Sound (similar to Mercer Island in King County). If this were to happen, the District could see numbers that approach the high forecast estimate presented in the later part of this report.
- The District also continues to see a net gain of transfers from other Districts which has kept enrollment higher than it might otherwise be.
- Births in Kitsap County have been relatively flat over the past decade. This has also contributed to lower-than-expected K-12 enrollment growth throughout the County.

- We are also starting to see a decline in births in the other three counties of the Puget Sound after a decade of higher births. Women are having fewer children and waiting longer to have children. These trends, if they continue, would lead to lower K-12 enrollment growth throughout the Puget Sound over the next decade.
- The pandemic has also led to lower enrollment growth trends throughout the Puget Sound. Over the past year the number of students pursuing home based instruction doubled across the Puget Sound.
- It is likely that some of these students will eventually return to the public schools. In Bainbridge Island this would likely increase the current enrollment by somewhere between 50-80 students.
- It is also possible that some of these students will not return, resulting in lower K-12 enrollment than expected throughout the Puget Sound.

- Looking ahead, we expect housing and population growth to be only slightly better in the coming decade than it was in the previous decade within the District boundary area.
- We also expect births in the County to remain relatively flat.
- We are assuming the net gain of transfers from other Districts will continue over the next decade.
- As a result of all these trends, we expect that the District will continue to see small fluctuations in enrollment up and down with enrollment staying within a fairly-narrow range over the next decade.
- It is possible that the District could see better than expected growth from recent homes sales over the next year or two.
- We have created low and high alternatives to our preferred population and housing forecast. Using these forecasts, we created low and high estimates of future enrollment in contrast to our medium range preferred projection.

- In addition to our low, medium, and high range forecasts based on enrollment trends, births, and projected housing development, we also created alternative forecasts of the District's enrollment based on a variety of methods. These forecasts were used to help us evaluate where enrollment might land over the next decade.
- There is more uncertainty than usual attached to the near-term forecast due to the impacts of the Covid-19 pandemic.
- Also, please remember that the longer range forecast out to ten years has a higher degree of uncertainty than the near-term forecast (3-5 years).
- These forecasts should be updated periodically to take advantage of new information.

Medium Range Forecast from 2017 Compared to Actual Enrollment



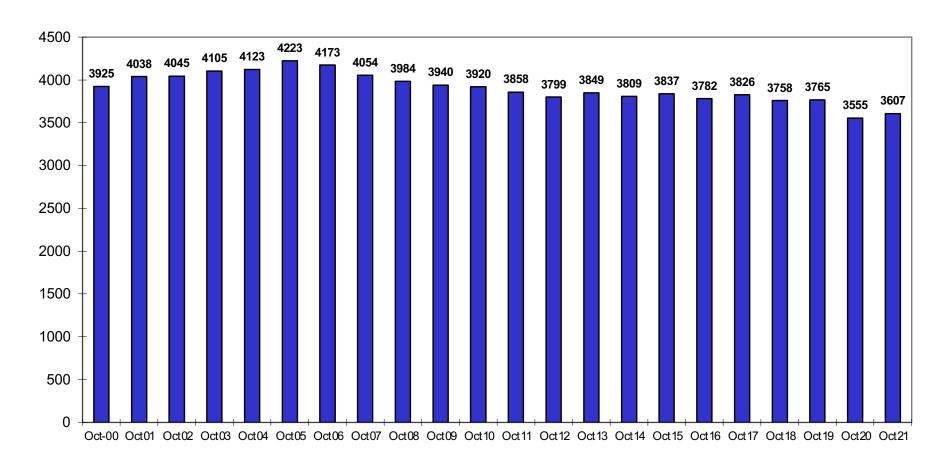
Enrollment Trends Bainbridge Island and the Region

Enrollment Trends

- Enrollment in the Bainbridge Island School District declined by 155 students between October 2010 and October 2019. Enrollment in October 2020 and 2021 is even lower due to the Covid-19 pandemic that has impacted the area.
- Bainbridge Island's share of the County K-12 public school market was at 10.5% in October 2019, only slightly lower than the 10.6% figure we saw back in October 2010. K-12 enrollment growth in Kitsap County has been must lower in the past decade than K-12 enrollment growth in other areas of the Puget Sound. The District enrollment mirrors this trend.
- We did some increases in K-12 enrollment in various Kitsap County School Districts between 2015 and 2019, prior to the onset of the pandemic.
- Although there were some initial declines in enrollment between 2010 and 2012 in the District, enrollment has been relatively flat since 2012, fluctuating up and down from year to year.
- The District sees a net gain of about 90-100 students annually from transfers. The number of students transferring in from other districts exceeds the number transferring out.

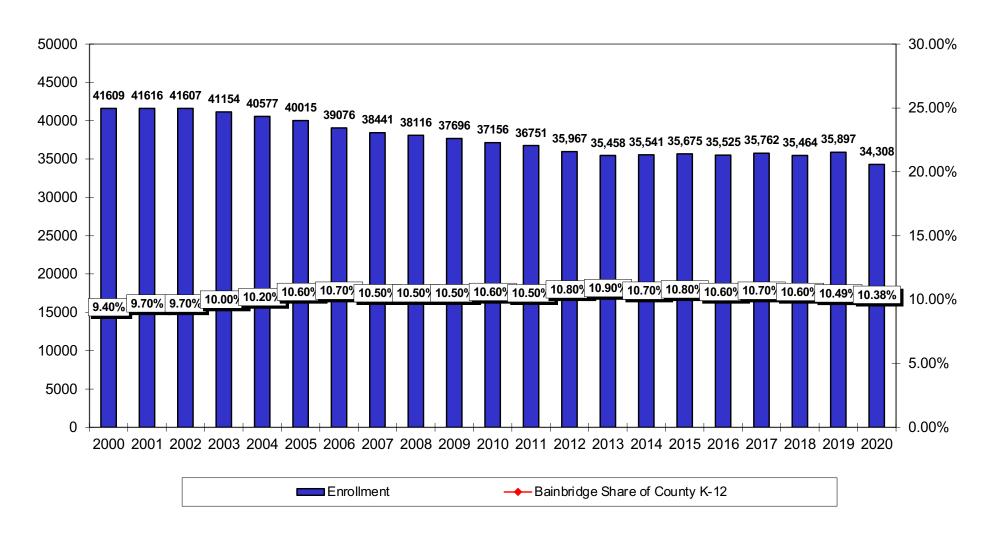
Bainbridge Island Enrollment Trend

October Enrollment P223
Excludes Students Who are Enrolled ONLY in Running Start



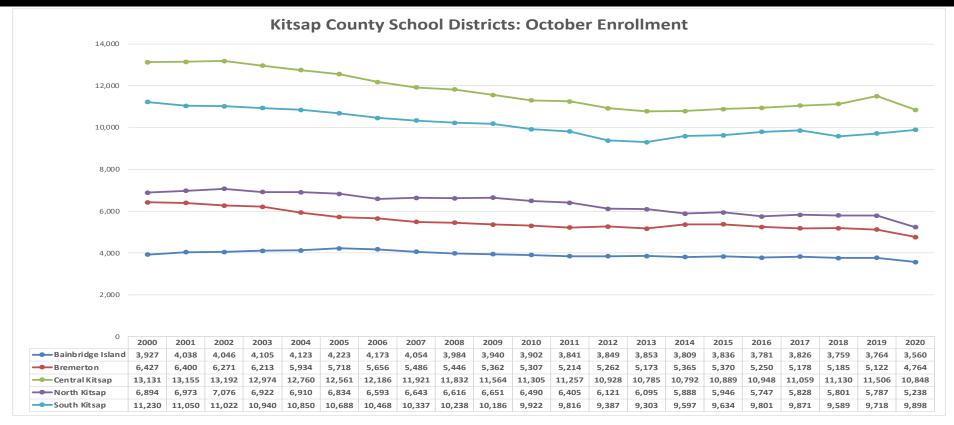
K-12 Public School Enrollment in Kitsap County and Bainbridge Island Market Share

October Enrollment P223

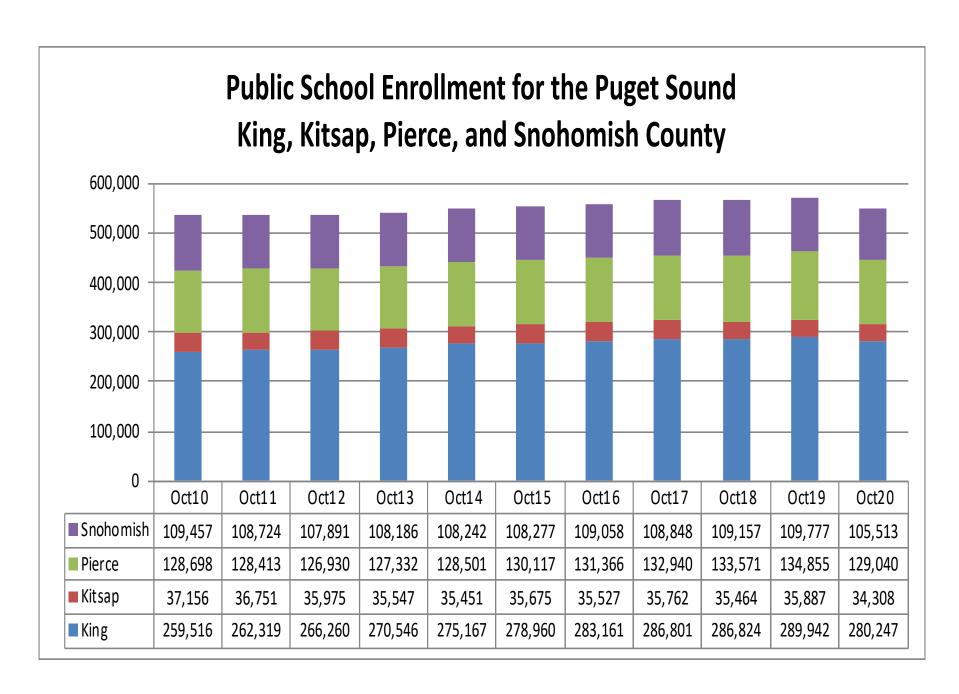


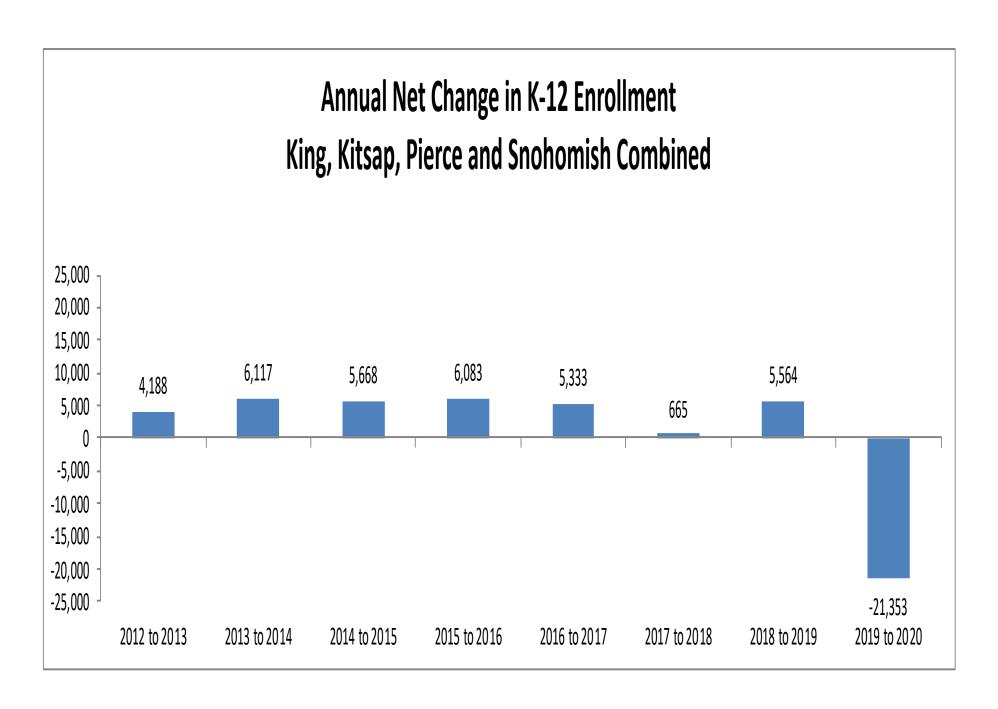
K-12 Enrollment Trends for School Districts in Kitsap County

Bremerton's numbers include the Skills Center



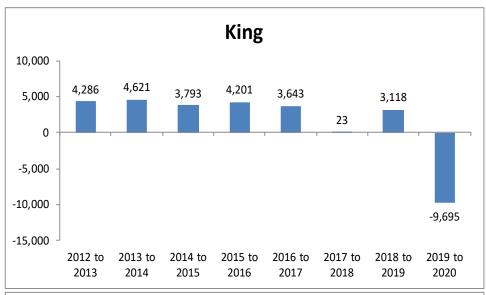
	2000		2010		2020	
	<u>Enroll</u>	<u>%</u>	<u>Enroll</u>	<u>%</u>	<u>Enroll</u>	%
Bainbridge	3,927	9.4%	3902	10.6%	3560	10.4%
Bremerton	6,427	15.4%	5307	14.4%	4764	13.9%
Central Kitsap	13,131	31.6%	11305	30.6%	10848	31.6%
North Kitsap	6,894	16.6%	6490	17.6%	5238	15.3%
South Kitsap	11,230	27.0%	9922	26.9%	9898	28.9%
Total	41,609	100.0%	36,926	100.0%	34,308	100.0%

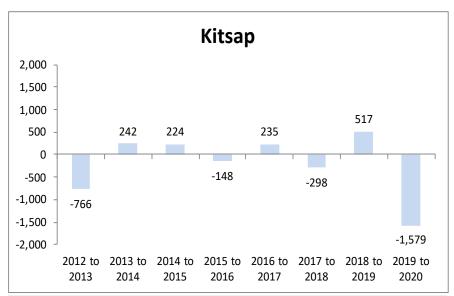


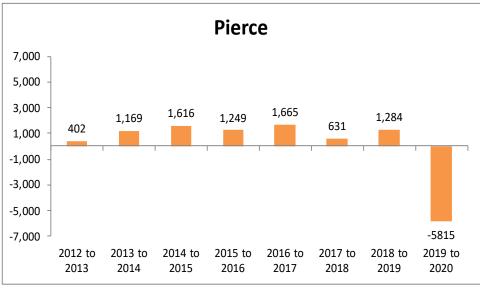


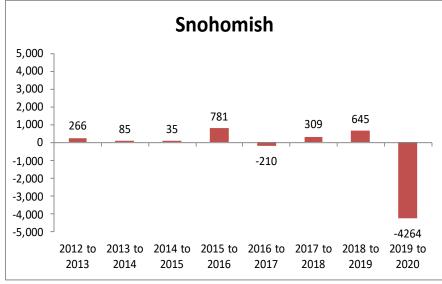
Annual Net Change in Enrollment by County Since 2012

(Numbers may have changed since the original reporting date)









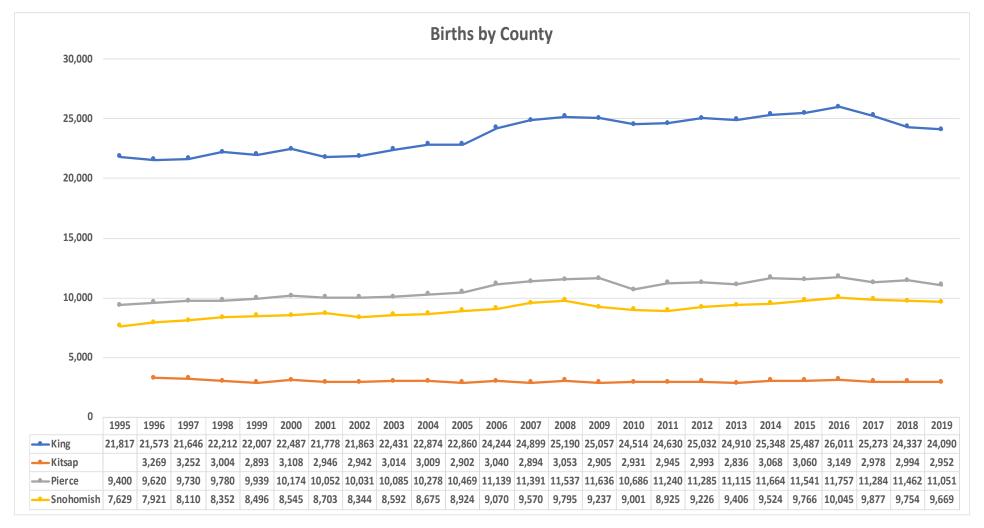
Birth Trends

Birth Trends

- Births in Kitsap County have remained relatively flat over the past fifteen years, with births each year just below or just above the 3,000 mark.
- This is in stark contrast to the other three counties of the Puget Sound where births began trending higher between 2006 and 2017. Since 2017, however, births in the other three counties of the Puget Sound have been declining.
- At both the national and local level, women are having fewer children and waiting longer to have children. These trends, if they continue, will result in lower enrollment gains in the Puget Sound K-12 population over the next decade.
- Women in Kitsap County have higher fertility rates than the other three counties of the Puget Sound, but lower growth of females 20-35 years old has kept the birth trends flat.
- In our last forecast, we expected births in Kitsap County to trend up some over time. Given recent population growth trends and lower fertility rates, we expect births to remain relatively flat and possibly even decline some in the coming years.

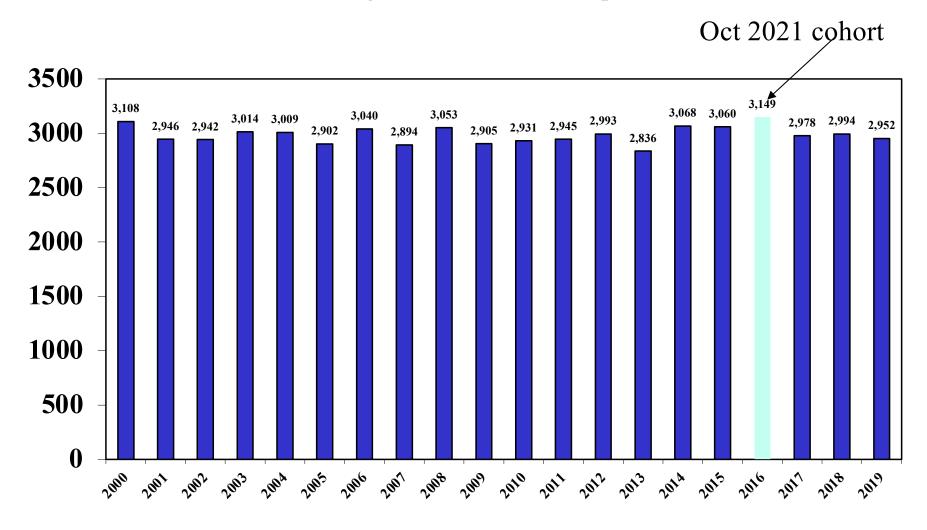
Births by Puget Sound Counties 1995-2019

Source: State of Washington Department of Health Birth Files



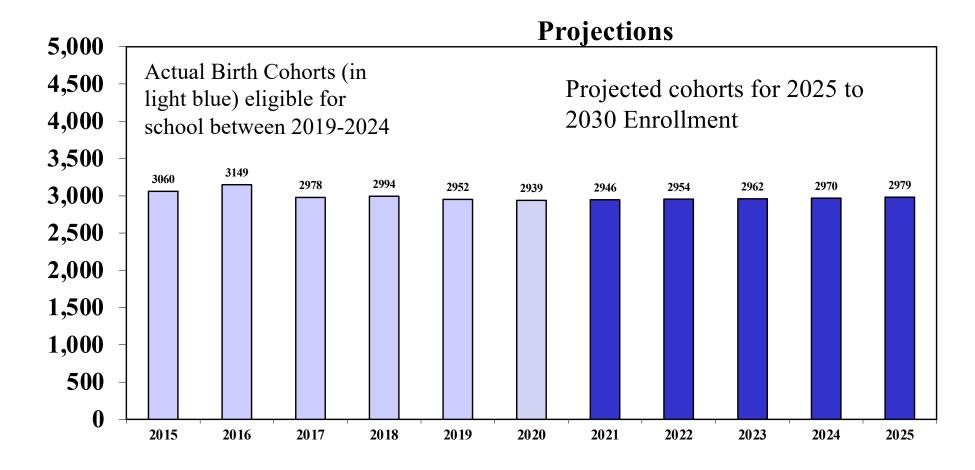
Kitsap County Births

Source: Washington State Health Department



Kitsap County Birth Projections

(Based on the Average of 2016 to 2018 Fertility Rates and Projected Growth in Females in Their Child-Bearing Years Using the OFM Medium Range Population Forecast)

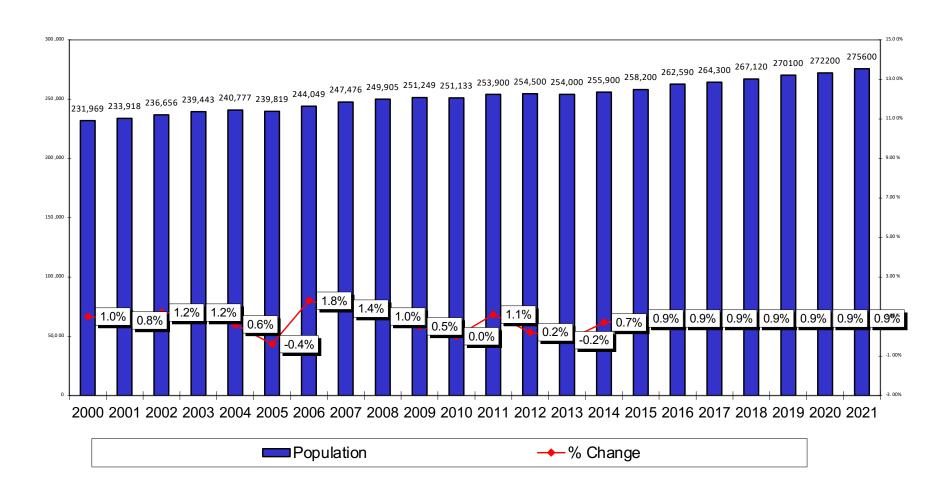


Population Trends

Population Trends

- The population of Kitsap County grew at a lower rate than expected over the past decade in comparison to the Medium Range Growth Forecast from the State of Washington (Office of Financial Management).
- The population of the Bainbridge Island School District has grown at about the same rate as the overall County over the past decade. Population in the District makes up about 9% of the County population.
- Population growth in the District between the 2010 and 2020 Census was lower than the growth we saw in the previous decade. The same was true for North Kitsap.
- We created low, medium, and high range population forecasts of the District's population to guide us in developing our forecast models. These models were based on consideration of housing and population forecasts available from the Puget Sound Regional Council, as well as information about recent and planned housing development obtained from New Home Trends and Zonda research.

Kitsap County Population Estimates Source: OFM State of Washington

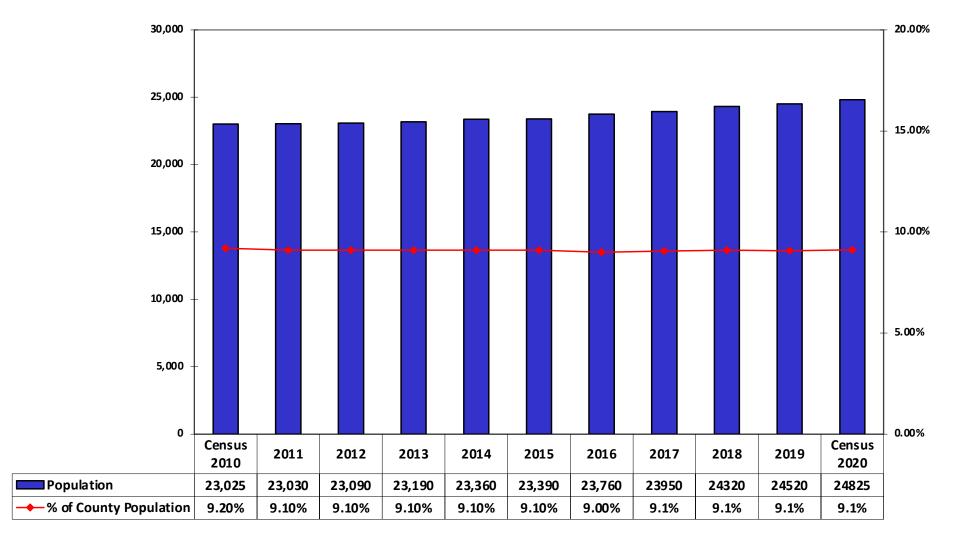


Population by School District Source: U.S. Census Data

Population by School District				Population Added	Population Added	Percent Increase	
	Census 2000	<u>Census 2010</u>	<u>Census 2020</u>	2000 to 2010	2010 to 2020	2000 to 2010	2010 to 2020
Bainbridge	20,308	23,025	24,825	2,717	1,800	13.4%	7.8%
Bremerton	44,205	44,966	49,959	761	4,993	1.7%	11.1%
Central Kitsap	66,434	68,814	73,849	2,380	5,035	3.6%	7.3%
North Kitsap	39,567	45,966	50,742	6,399	4,776	16.2%	10.4%
South Kitsap	<u>61,155</u>	<u>68,017</u>	<u>75,885</u>	<u>6,862</u>	<u>7,868</u>	<u>11.2%</u>	<u>11.6%</u>
	231,669	250,788	275,260	19,119	24,472	8.3%	9.8%

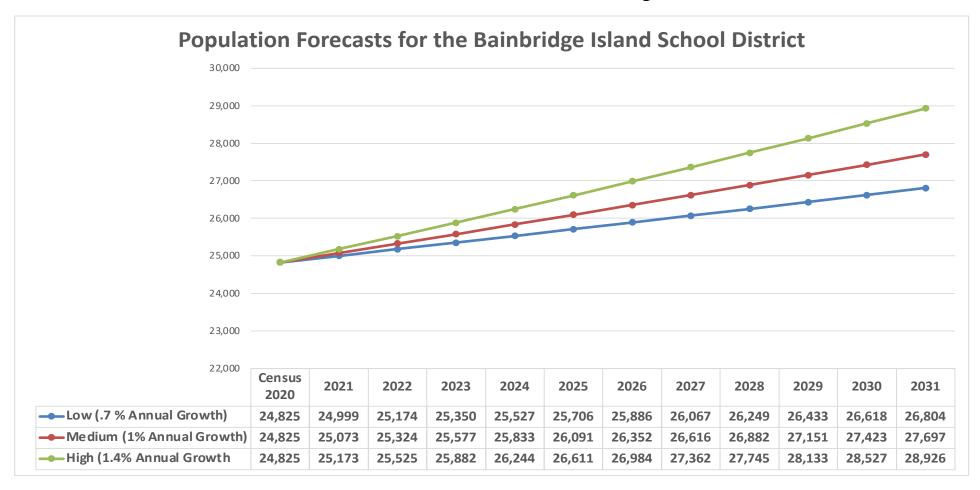
Bainbridge Island School District Population

Census and State Estimates



Bainbridge Island School District Resident Population Forecasts

Alternative Forecasts Based on Different Assumptions About Growth.



The Medium Range Preferred Forecast is Consistent with Projected Growth for the Area from the Puget Sound Regional Council.

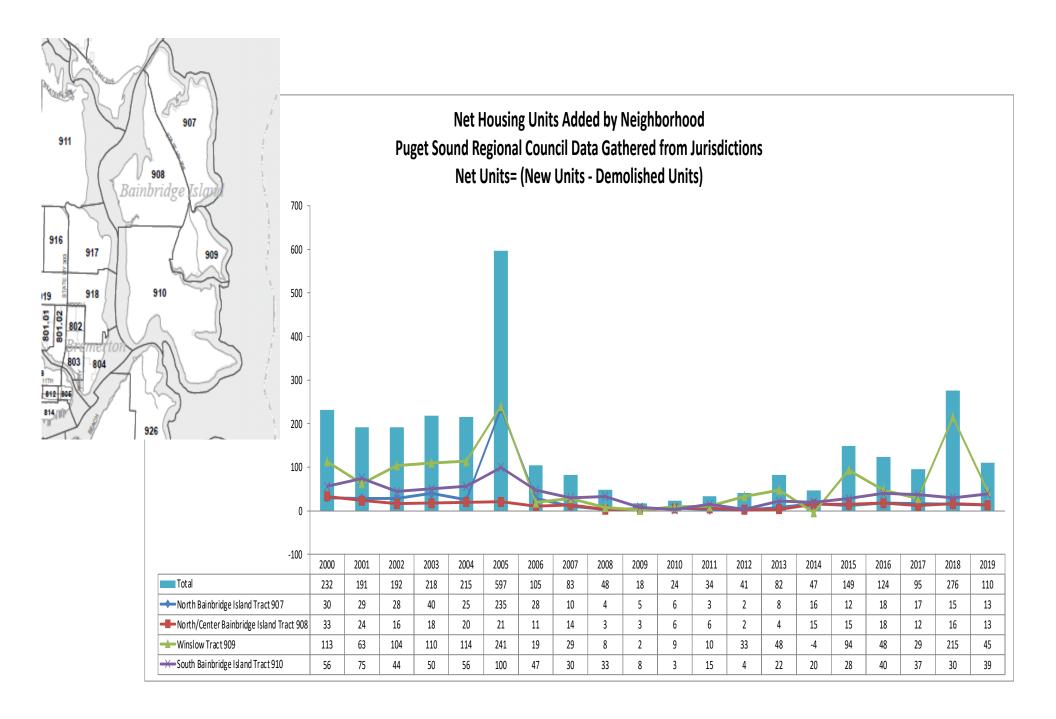
Housing Trends

Housing Trends

- Housing development over the past decade was lower than the trends we saw in the previous decade. According to the latest Census data the District added 667 units to its housing stock. This is well below the 2,069 units that were added in the previous decade.
- There is strong relationship between the number of housing units developed in the District and the amount of enrollment growth the District sees. We have used information about this relationship to help us develop our forecasts.
- The number of new units recently permitted or planned for future development in Bainbridge Island is lower than what we see in the other Districts in Kitsap County.
- Home sales in the District improved between 2012 and 2020 in comparison to the trends we saw between 2007 and 2011 when the home prices and sales were declining. Sales have trended down some since 2017, most likely due to lower available inventory and increasing prices.

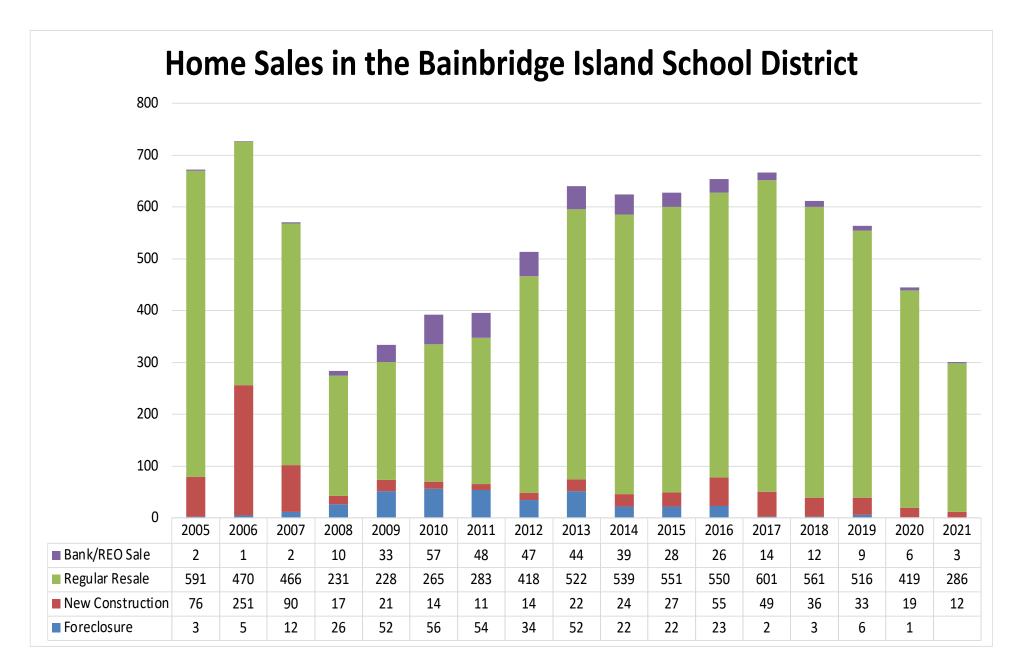
Housing Trends

- We expect new home development to be slightly higher in the next decade than what we saw in the previous decade. This is based on information from the Puget Sound Regional Council that predicts slightly better population and housing growth in the coming decade and based on recent home construction data from Zonda research.
- We should note, however, that the number of K-12 public school students per house continues to drop. In 2000 there were 46 public school students for every 100 homes in the District.
- In recent years, this number has dropped to 33 students per 100 homes. If these trends continue, we would expect there to be about 31 students for every 100 units by the time we reach 2030.
- We have used estimates of the number of students we expect per house to help us develop the enrollment forecasts presented in later sections of this report.



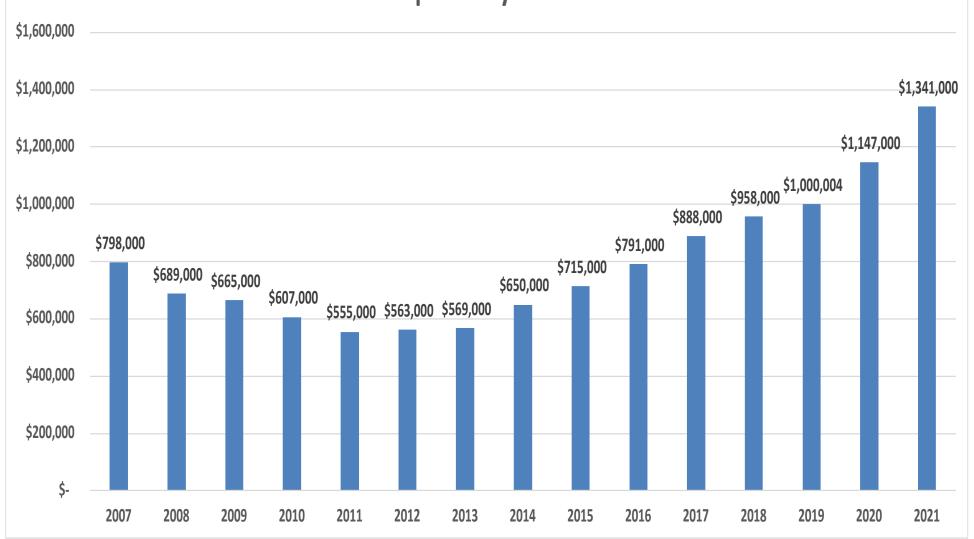
Housing Development by School District

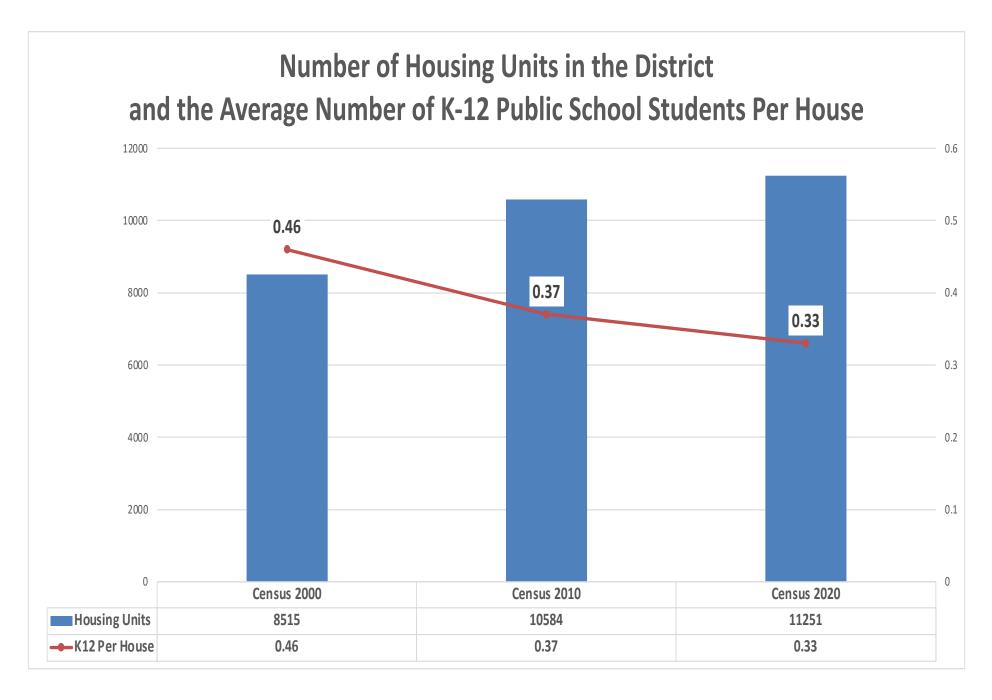
Housing Units by School District				Units Added	<u>Units Added</u>	% Increase	% Increase
_	Census 2000	<u>Census 2010</u>	<u>Census 2020</u>	2000 to 2010	2010 to 2020	2000 to 2010	2010 to 2020
Bainbridge	8515	10,584	11,251	2,069	667	24.3%	6.3%
Bremerton	19,928	20,689	21,606	761	917	3.8%	4.4%
Central Kitsap	24222	27,704	28,468	3,482	764	14.4%	2.8%
North Kitsap	16411	20,472	21,952	4,061	1,480	24.7%	7.2%
South Kitsap	23428	<u>27,736</u>	<u>29,807</u>	4,308	<u>2,071</u>	<u>18.4%</u>	<u>7.5%</u>
Total	92,504	107,185	113,084	14,681	5,899	15.9%	5.5%



2021 Data is Through September 2021

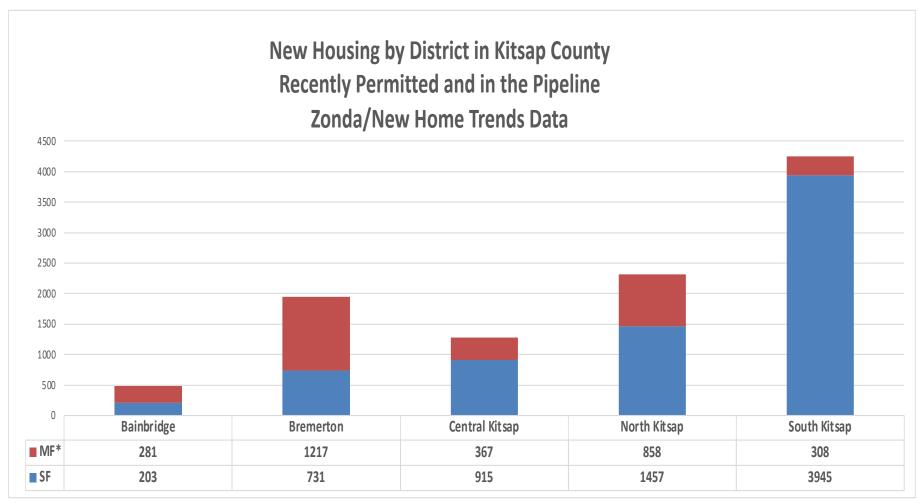




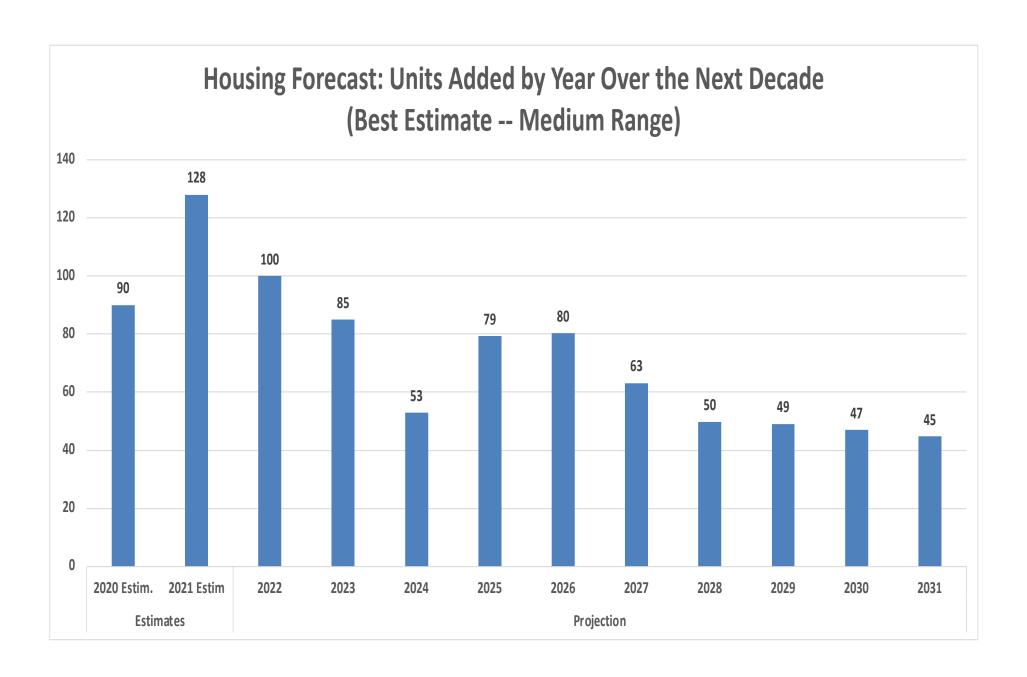


Future Housing Development by Kitsap County School District

Source: Zonda Research/New Home Trends

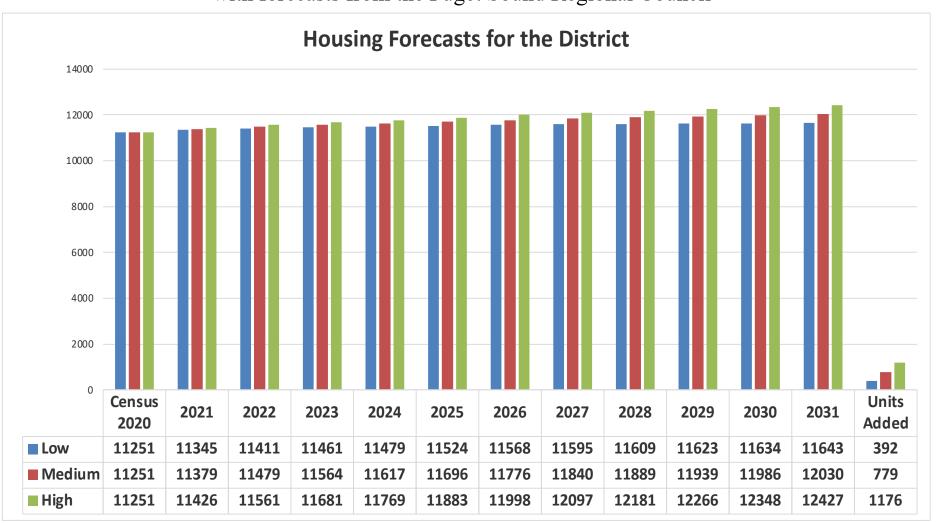


Note: Townhome developments are coded as multi-family for this table.



Housing Forecasts for the District Low, Medium, and High

The average household size in the 2020 Census was 2.21 residents per house. The number is expected to rise to about 2.30 residents per house by 2030, consistent with forecasts from the Puget Sound Regional Council



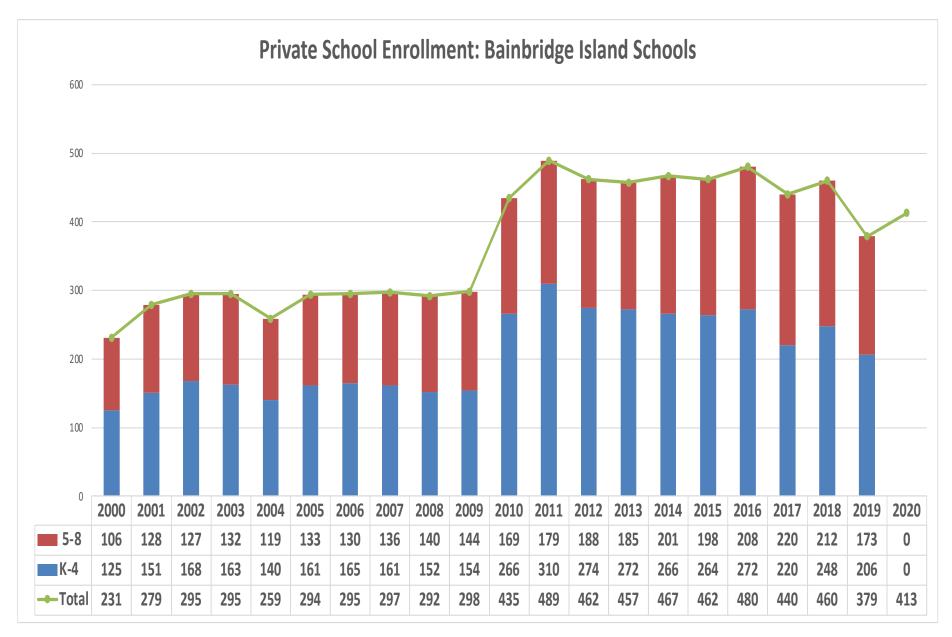
Private and Home School Trends

Private and Home School Trends

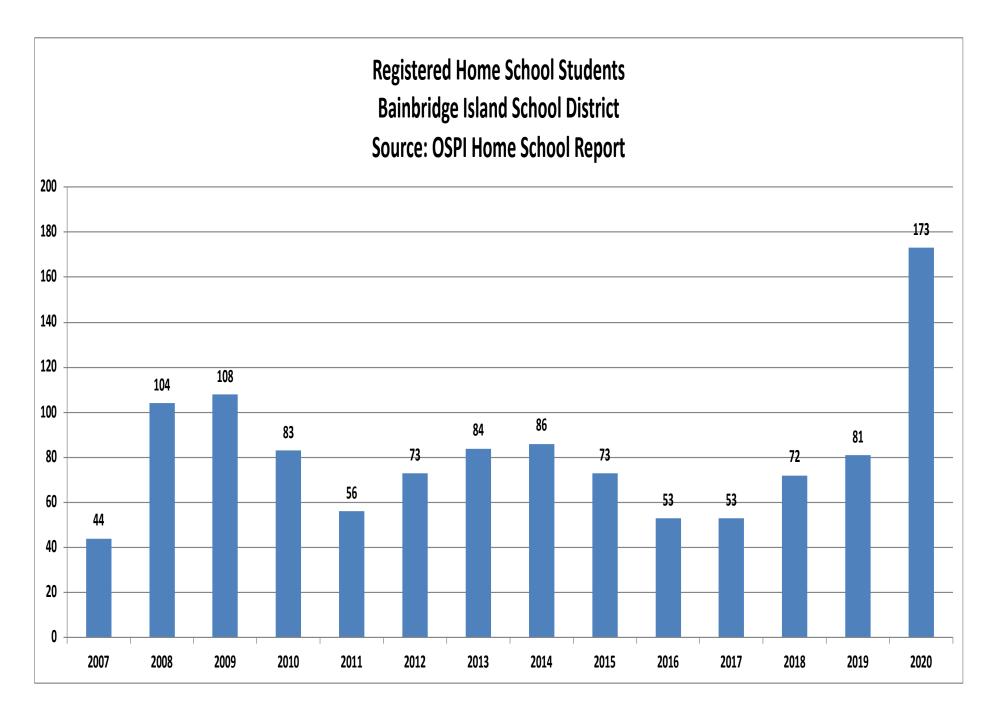
- Private school enrollment in Bainbridge Island shows a relatively flat trend between 2010 and 2019.
- Private school enrollment in Bainbridge Island was up slightly in 2020 compared to 2019, but still below the enrollment we saw in 2018.
- There is no compelling evidence that the District saw any substantial loss of students to the private schools between 2010 and 2019. We cannot track specific students, however, so this conclusion is based solely on the fact that the percentage of students in the public and private schools in the District boundary area has not changed much over the past decade.
- It is important to point out that private schools in the District may also enroll students from other districts in Kitsap County or the broader Puget Sound. We cannot track specific students and where they come from.

Private and Home School Trends

- The number of students receiving home-based-instruction in the Bainbridge Island School District fluctuated up and down between 2010 and 2019 within a narrow range.
- The number of home-based-instruction students increased dramatically in 2020 with the onset of the pandemic. This trend occurred throughout the Puget Sound.
- Some of these students will likely return to school in the 2021-2022 school year or in subsequent years, once we are past the pandemic.
- It is also possible that some parents will make different decisions about their child's education and not return to the public schools after the pandemic is contained.



Grade Level Breakout Was not Available for 2020



Forecasts

Alternative Projections Based on Different Models

- Before creating our final forecast model, we created a set of alternative forecasts based on different methods. Some of the alternative forecasts (like the cohort models) consider births and enrollment trends by grade. Other forecasts predict the total enrollment based only on housing. A description of each forecast is provided below.
- Three and Six Year Cohort Models: These models show what might happen if the average of the grade level enrollment trends for the past three and six year periods were to continue. These models can be good if you believe that the most recent trends (e.g., the most recent three years) will not change much in future years. They are less reliable when future demographic trends look different from the recent past. For these models we used the period between 2017 and 2019 for the three-year model and 2014 to 2019 for the six-year model.
- Cohort Models Adjusted for Changes in Population Growth: These models use the three-year cohort forecast adjusted for projected changes in population growth over time, using the low, medium and high range population forecasts.

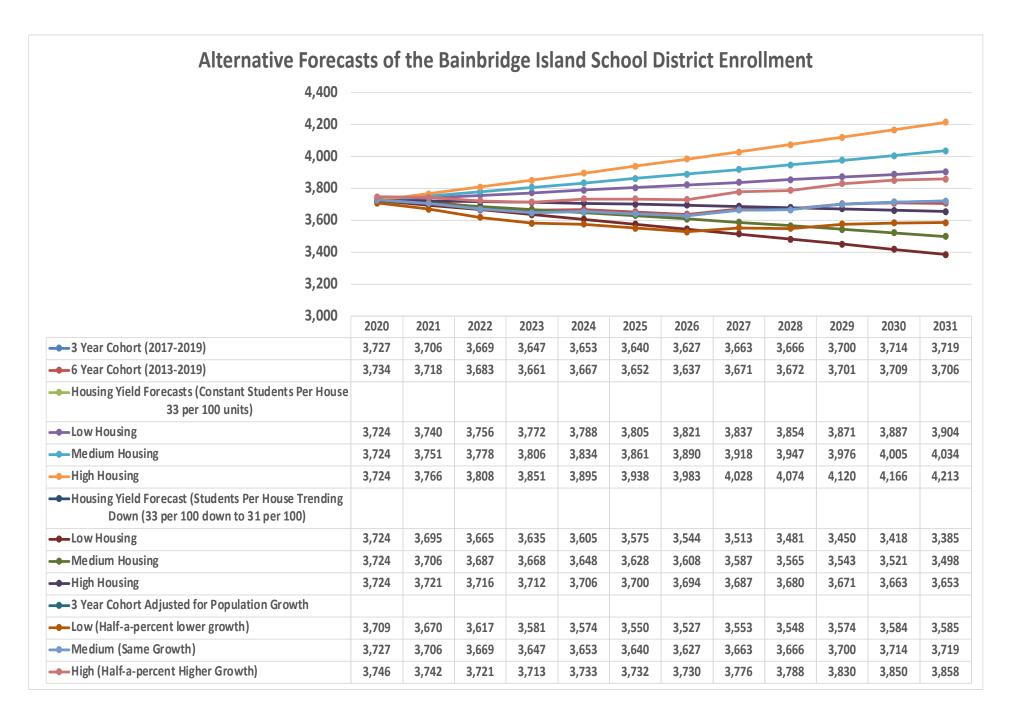
Alternative Projections Based on Different Models

- Housing Yield Forecasts: These models apply the number of K-12 public school students per house to the low, medium, and high range housing forecasts to get an estimate of the future K-12 population. We used two models. One assumes that the number of students per house remains similar to recent estimates (33 students per 100 homes in 2019). The other assumes this number trends down over time consistent with recent trends (trending down to 30 students per 100 homes by 2030).
- Results: The results of these different models are shown on the following pages. In general, the average of multiple forecasts is often a better indicator of the future than any one forecast. Our final forecast numbers were adjusted for predicted growth and gains in housing and population so that they would correspond relatively close to the low, medium, and high range options we landed on in 2031. They will differ from these numbers, of course, because our main models consider the size of each year's kindergarten and graduating class as well as information about how students roll up through the grades. The final models should, however, be close to these estimates.

Alternative Forecasts Based on Different Methods

E	Estimate E	Estimate F	Projection									
Cohort Models*	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u> 2025</u>	<u> 2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	2030	<u>2031</u>
3 Year Cohort (2017-2019)	3,727	3,706	3,669	3,647	3,653	3,640	3,627	3,663	3,666	3,700	3,714	3,719
6 Year Cohort (2013-2019)	3,734	3,718	3,683	3,661	3,667	3,652	3,637	3,671	3,672	3,701	3,709	3,706
Housing Yield Forecasts (Constant Students Per H	louse 33 _l	per 100 uı	nits)									
Low Housing	3,724	3,740	3,756	3,772	3,788	3,805	3,821	3,837	3,854	3,871	3,887	3,904
Medium Housing	3,724	3,751	3,778	3,806	3,834	3,861	3,890	3,918	3,947	3,976	4,005	4,034
High Housing	3,724	3,766	3,808	3,851	3,895	3,938	3,983	4,028	4,074	4,120	4,166	4,213
Housing Yield Forecast (Students Per House Trend	ding Dowr	n (33 per 1	00 down	to 31 per	100)							
Low Housing	3,724	3,695	3,665	3,635	3,605	3,575	3,544	3,513	3,481	3,450	3,418	3,385
Medium Housing	3,724	3,706	3,687	3,668	3,648	3,628	3,608	3,587	3,565	3,543	3,521	3,498
High Housing	3,724	3,721	3,716	3,712	3,706	3,700	3,694	3,687	3,680	3,671	3,663	3,653
3 Year Cohort Adjusted for Population Growth												
Low (Half-a-percent lower than Medium)	3,709	3,670	3,617	3,581	3,574	3,550	3,527	3,553	3,548	3,574	3,584	3,585
Medium (1% Annual growth)	3,727	3,706	3,669	3,647	3,653	3,640	3,627	3,663	3,666	3,700	3,714	3,719
High (Half-a-percent Higher then Medium)	3,746	3,742	3,721	3,713	3,733	3,732	3,730	3,776	3,788	3,830	3,850	3,858
Average of All Methods	3,726	3,720	3,706	3,699	3,705	3,702	3,699	3,718	3,722	3,740	3,748	3,752

^{*}For the Cohort Models we used data through 2019, ignoring 2020 due to the special circustances. This is why 2020 is presented here as a forecast rather than an actual enrollment number.



Final Enrollment Projections Methods and Assumptions

An enrollment forecast is based on assumptions and mathematical calculations that convert these assumptions into numbers. The previous sections have identified a number of assumptions about births, grade level enrollment trends, population, and housing growth that are likely to impact the district in the coming years. This section describes the specific assumptions that guided the development of the forecasts.

The final forecasts in this document were based on consideration of several factors:

The size of future birth cohorts and the projected share of that cohort that is likely to enroll in Bainbridge Island kindergartens.

Average grade-to-grade growth as students progress through the grades.

Predicted changes in the K-12 population based on alternative housing and population forecasts for the District.

All of the models assume that the net gain of transfer students from other school districts will remain relatively constant.

Forecast Assumptions Summarized

Low Forecast

- Birth-to-K Ratio averages 7.00% over the course of the forecast
- A gain of about 1,800 residents over a decade
- About 400 new housing units will be added in the next decade.

Medium Forecast

- Birth-to-K ratio averages 7.17% over the course of the forecast
- A gain of about 2,600 residents over a decade.
- About 800 new housing units will be added in the next decade.

High Forecast

- Birth-to-K ratio is assumed to be 7.31%.
- A gain of about 3,700 residents over a decade
- About 1,200 new housing units will be added in the next decade.

Methods and Assumptions

Births and Kindergarten Enrollment

Both county and Bainbridge Island births were used to project kindergarten. The number of county births is known through 2019 which means we can predict kindergarten enrollment based on actual births out to 2024. Beyond that point births were projected based on the most recent fertility rates for the county and the forecast of the number of women likely to reach their childbearing years over time, using the medium range county forecast from the State. We also used births in Bainbridge Island. On average city births make up about 4% of the births in the county. We assumed this would remain constant going forward.

Projecting Kindergarten Enrollment

Kindergarten enrollments were projected using birth-to-k ratios. The birth-to-k ratio compares the kindergarten enrollment each year to births five years prior to that year. The District's birth-to-k ratio has averaged about seven and half percent of county births between 2017 and 2019 when full-day kindergarten was implemented everywhere. The projection model uses the three year-average birth-to-k ratio for both the Bainbridge Island and the County to predict future enrollment, taking an average of the two estimates.

Continuing Grades

Projecting Grades 1-12

The forecasts at grades 1-12 were based on grade level cohort ratios which predict the net gain and/or loss in enrollment as students progress from one grade to the next. For this analysis we used the average rate from 2017 to 2019 which reflects the most recent years prior to the onset of Covid. The models on page 46 show the different cohort forecasts (three and six years).

We adjusted the final numbers for projected changes in housing and population growth (next page) to reflect where we believe enrollment will land using the models we presented earlier as a guide. The enrollment at each grade level was multiplied by the appropriate cohort ratio to project enrollment forward and then adjusted for projected changes in population and housing growth over time.

Adjustments for Housing and Population

Adjustments for Population Growth

The cohort model shows what might happen if the current trends were to continue indefinitely into the future, with some adjustments for projected changes in the birth trends over time. We also need to consider the effect of additional population and housing growth in Bainbridge Island and the County, especially changes in the K-12 population.

Our previous models based on population and housing provide us with alternative estimates of where enrollment might land in the future. The low, medium, and high range estimates presented here are based on different assumptions about future housing and population growth. In general, our estimates here should be reasonably close to the alternative estimates presented earlier. They will differ to some degree, however, because they consider the size of each year's kindergarten and graduating class, as well as information about how students progress through the grades (see Appendix A).

For our medium range forecast we tried to estimate when various housing projects might occur over the next five years adjusting each year for the expected timing of different projects. For the low and high forecast, we adjusted these number slightly lower or higher in order to conform to our low and high range housing forecasts. Forecasts from 2026 to 2031 consider projected population growth and how many houses might be needed to accommodate the population in the low, medium, and high range population forecasts.

Considerations

The medium range forecast is the recommended forecast over the course of the forecast period (2022 to 2031). All the other Districts in Kitsap County are projected to have more new housing construction and stronger population growth than Bainbridge Island. Bainbridge Island, does benefit, however, from a net gain of transfers from other Districts. This has tended to keep enrollment relatively stable in the period prior to the onset of Covid. We do expect slightly more housing units to be added to the District's housing stock in the coming decade, compared to the previous decade.

Homes in the District are relatively expensive when compared to many other places in Kitsap County. We did NOT find a strong correlation between the recent uptick in home sales and enrollment changes, suggesting that many of these homes may have been purchased by families without children. It is also possible that some of the homes were purchased by families with preschool age children and the District will see growth from these homes in future years.

Home school enrollment impacted Bainbridge Island and most other Districts in 2020 due to onset of the Covid-19 virus. It is conceivable that most of those students (perhaps 50-80) will return once the virus is under better control. But it is also possible that some losses to home schooling will be more permanent (at least for a few years) as parents make different decisions about how to educate their children.

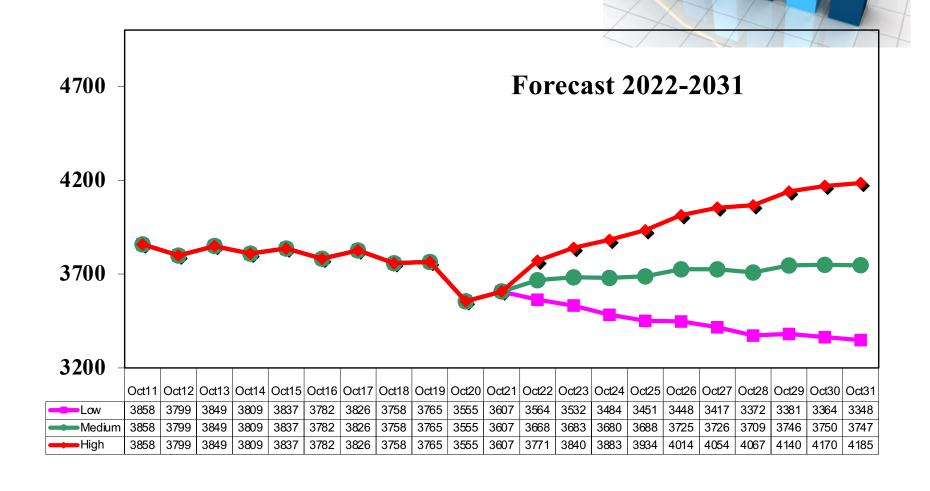
Considerations

In our last forecast, we assumed that births in the County and the City would trend up over time. Recent birth and population trends have cast doubt on this assumption. Although we have seen strong growth in the number of women in their child-bearing years, throughout the Puget Sound, women are having fewer children (based on recent fertility rates) and waiting longer to have them. This suggests that we could see fewer K-12 students in the coming decade than we were expecting when completing the last forecast in 2017.

The low and high range forecasts show what might happen if housing and population growth in the next decade were to be lower or higher than the estimates that are assumed in the medium range model. Given the uncertainty of predicting future enrollment, the District should consider what steps might be taken if enrollment were to trend closer to the low or high projection model. In addition, the District should periodically update this forecast to take account of new enrollment and demographic information.

It is also perfectly reasonable to think that in some years enrollment will fluctuate above or below the medium range forecast number but remain in a narrow range over time that is consistent with the estimated growth over the next decade. One year of enrollment is NOT an adequate test of the accuracy of the forecast model.

Low, Medium and High District Forecasts



Bainbridge Island Enrollment History

Birth History

Birth Year	2005	2006	2007	2008	2009	2010	<u>2011</u>	2012	2013	<u>2014</u>	2015	<u>2016</u>
County Births	2902	3,040	2894	3053	2905	2931	2,945	2,993	2,836	3,068	3,060	3,149
Birth-to-k ratio	7.20%	6.88%	7.46%	6.91%	5.85%	7.16%	6.79%	7.18%	7.90%	7.40%	6.70%	6.29%
Bainbridge Island Births	136	161	132	135	110	115	93	99	116	142	122	113
% of County Births	4.7%	5.3%	4.6%	4.4%	3.8%	3.9%	3.2%	3.3%	4.1%	4.6%	4.0%	3.6%

Enrollment History (Excludes Full-Time Running Start)

Grd	Oct10	Oct11	Oct12	Oct13	Oct14	Oct15	Oct16	Oct17	Oct18	Oct19	Oct20	Oct21
K	209	209	216	211	170	210	200	215	224	227	205	198
1	264	238	230	242	258	199	224	223	230	234	211	229
2	282	266	246	245	248	270	208	251	228	240	225	238
3	280	282	283	279	259	262	275	229	264	234	219	247
4	266	292	308	296	287	267	261	288	236	269	227	247
5	286	269	303	326	313	311	282	285	296	251	272	250
6	284	292	256	291	312	326	314	279	287	295	251	281
7	296	289	308	284	316	319	333	312	282	301	285	265
8	300	305	297	324	280	316	331	341	312	289	310	290
9	353	345	362	343	367	337	364	386	382	360	322	345
10	384	356	341	367	348	371	339	374	384	388	348	334
11	374	347	327	327	337	331	337	316	343	343	352	322
12	<u>342</u>	<u>368</u>	<u>322</u>	<u>314</u>	<u>314</u>	<u>318</u>	<u>314</u>	<u>327</u>	<u>290</u>	<u>334</u>	<u>328</u>	<u>361</u>
	3920	3858	3799	3849	3809	3837	3782	3826	3758	3765	3555	3607
Change	-20	-62	-59	50	-40	28	-55	44	-68	7	-210	52
% Change	-0.5%	-1.6%	-1.5%	1.3%	-1.0%	0.7%	-1.4%	1.2%	-1.8%	0.2%	-5.6%	1.5%
K-4	1301	1287	1283	1273	1222	1208	1168	1206	1182	1204	1087	1159
5-8	1166	1155	1164	1225	1221	1272	1260	1217	1177	1136	1118	1086
9-12	1453	1416	1352	1351	1366	1357	1354	1403	1399	1425	1350	1362

Enrollment Projections

Low Range Forec	ast		F	Projected Births							
Birth Yr	2017	<u>2018</u>	2019	2020	2021	2022	2023	2024	2025	2026	
Births	2978	2994	2952	2939	2946	2954	2962	2970	2979	2970	
K % of Cohort	6.98%	7.11%	7.05%	6.98%	6.99%	6.90%	7.00%	7.01%	6.99%	6.98%	
Bainbridge Island Births	122	123	121	120	121	121	121	122	122	122	
% of County Births	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	

	Oct22	Oct23	Oct24	Oct25	Oct26	Oct27	Oct28	Oct29	Oct30	<u>Oct31</u>
K	208	213	208	205	206	207	207	208	208	210
1	236	221	225	223	219	217	218	219	219	220
2	242	248	230	237	235	227	225	228	227	228
3	251	253	257	242	249	243	235	234	236	236
4	256	258	257	265	250	253	247	240	238	241
5	258	270	270	271	281	261	265	260	251	250
6	247	258	267	269	272	277	258	263	257	249
7	291	254	262	273	278	276	282	264	267	262
8	272	296	256	265	279	279	278	285	266	269
9	335	311	335	292	305	316	316	317	323	302
10	352	339	311	338	297	305	316	318	317	324
11	306	319	305	281	308	266	274	285	286	286
12	<u>310</u>	<u> 292</u>	<u>301</u>	<u>290</u>	<u> 269</u>	<u> 290</u>	<u>251</u>	<u> 260</u>	<u> 269</u>	<u>271</u>
	3564	3532	3484	3451	3448	3417	3372	3381	3364	3348
Change	-43	-32	-48	-33	-3	-31	-45	9	-17	-16
Percent	-1.2%	-0.9%	-1.4%	-0.9%	-0.1%	-0.9%	-1.3%	0.3%	-0.5%	-0.5%
K-4	1193	1193	1177	1172	1159	1147	1132	1129	1128	1135
5-8	1068	1078	1055	1078	1110	1093	1083	1072	1041	1030
9-12	1303	1261	1252	1201	1179	1177	1157	1180	1195	1183

Enrollment Projections

Medium Range Fo	recast	•	F	Projecte	d Births					
Birth Yr	2017	2018	<u>2019</u>	2020	2021	2022	2023	2024	2025	2026
Births	2978	2994	2952	2939	2946	2954	2962	2970	2979	2970
K % of Cohort	7.22%	7.28%	7.22%	7.15%	7.13%	7.05%	7.17%	7.17%	7.15%	7.13%
Bainbridge Island Births	122	123	121	120	121	121	121	122	122	122
% of County Births	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%

	Oct22	Oct23	Oct24	Oct25	Oct26	Oct27	Oct28	Oct29	Oct30	<u>Oct31</u>
K	215	218	213	210	210	211	211	212	213	214
1	236	232	233	231	228	224	226	227	227	229
2	250	251	245	249	247	240	236	240	239	240
3	259	266	264	262	266	259	253	250	253	252
4	264	270	275	277	275	274	267	263	258	262
5	266	283	287	294	298	291	291	285	279	275
6	255	270	284	290	300	299	292	294	286	281
7	300	266	279	295	304	309	309	303	303	296
8	280	309	272	287	306	310	316	317	310	310
9	345	325	355	315	335	351	357	365	365	358
10	363	354	330	363	325	340	357	364	371	372
11	315	334	323	303	336	296	310	327	332	339
12	<u>320</u>	<u> 305</u>	<u>320</u>	<u>312</u>	<u> 295</u>	<u>322</u>	<u>284</u>	<u> 299</u>	<u>314</u>	<u>319</u>
	3668	3683	3680	3688	3725	3726	3709	3746	3750	3747
Change	61	15	-3	8	37	1	-17	37	4	-3
Percent	1.7%	0.4%	-0.1%	0.2%	1.0%	0.0%	-0.5%	1.0%	0.1%	-0.1%
K-4	1224	1237	1230	1229	1226	1208	1193	1192	1190	1197
5-8	1101	1128	1122	1166	1208	1209	1208	1199	1178	1162
9-12	1343	1318	1328	1293	1291	1309	1308	1355	1382	1388

Enrollment Projections High Range Forecast

Projected	Births
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Birth Yr	<u>2017</u>	2018	2019	2020	2021	2022	2023	2024	2025	2026
Births	2978	2994	2952	2939	2946	2954	2962	2970	2979	2970
K % of Cohort	7.42%	7.41%	7.35%	7.28%	7.26%	7.17%	7.32%	7.30%	7.28%	7.27%
Bainbridge Island Births	122	123	121	120	121	121	121	122	122	122
% of County Births	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%

	Oct22	Oct23	Oct24	Oct25	Oct26	Oct27	Oct28	Oct29	Oct30	<u>Oct31</u>
K	221	222	217	214	214	215	216	216	217	218
1	236	242	241	239	236	232	234	236	235	236
2	257	255	259	262	260	252	248	252	253	252
3	267	277	272	281	284	277	269	266	269	271
4	272	283	290	289	299	297	290	283	279	283
5	274	296	305	315	316	322	320	314	305	302
6	262	282	302	313	326	321	328	328	320	312
7	309	277	295	319	333	341	336	345	344	336
8	289	324	287	308	336	345	354	350	358	358
9	356	341	378	337	365	392	403	415	409	419
10	374	371	352	392	353	376	404	418	428	423
11	325	350	344	328	368	326	348	376	387	397
12	<u>329</u>	<u>320</u>	<u>341</u>	<u>337</u>	<u>324</u>	<u>358</u>	<u>317</u>	<u>341</u>	<u> 366</u>	<u>378</u>
	3771	3840	3883	3934	4014	4054	4067	4140	4170	4185
Change	164	69	43	51	80	40	13	73	30	15
Percent	4.5%	1.8%	1.1%	1.3%	2.0%	1.0%	0.3%	1.8%	0.7%	0.4%
K-4	1253	1279	1279	1285	1293	1273	1257	1253	1253	1260
5-8	1134	1179	1189	1255	1311	1329	1338	1337	1327	1308
9-12	1384	1382	1415	1394	1410	1452	1472	1550	1590	1617

In addition to the district forecasts, enrollment projections by school were also created. These forecasts were based on the trends by grade level at individual schools and projected changes based on housing development currently in the pipeline as well as population growth forecasts from the Puget Sound Regional Council.

We used data from New Home Trends and Zonda Research to gather future housing data for the different service areas for the K-4 schools. We then estimated how many students might come from new housing developments assuming about 20 student per 100 multi-family units and 55 students per 100 single family units. These are consistent with the averages for a variety of Districts across the Puget Sound. The point of these calculations was to help us allocate where future K-12 growth might come from.

We used the housing data and enrollment trends to project for the first four years of the forecast period (2022 to 2025) when we expect most of the current housing pipeline to be complete. The longer-range projections beyond 2025 assume that these trends will continue. Long term school projections should be used with caution because the numbers used for estimating the trends by school and grade are small. With small number is sometimes hard to distinguish between random fluctuations and actual trends.

Methods and Assumptions

K-4 Schools

Enrollment at the main elementary schools was projected based on each school's average share of the District kindergarten enrollment between 2017 and 2019 (Before Covid). At the continuing grades, the enrollment was based on the average net change in enrollment as student progress from one grade to the next during this same time period. The numbers were then adjusted based on how much additional growth might come from new housing or population growth. The final numbers were balanced to the District low, medium, and high range District projections providing three alternatives.

Intermediate and Secondary Schools

For the intermediate and secondary schools, enrollment was projected by considering each school's average share of the District enrollment at each entry grade between 2017 and 2019. This average was multiplied by the projected District total at each grade to create a forecast of enrollment by grade at each school. At the other grades the students were rolled up based on the average net change that we see from grade to grade (similar to the K-4 schools). Once again, the final numbers were balanced to the low, medium and high range District projections

Methods and Assumptions

District Options: Mosaic and Odyssey

The two option or choice schools were projected using a slightly different methodology. We projected the entry grades based on each school's average share of that grade over the past few years. For the other grades we mostly rolled the kids up and balanced out the numbers so the enrollment from year to year would stay at its current level. There were some grades (like 7th grade at Odyssey) where there is a distinct growth trend. We accommodated that trend and others like it.

There may be other considerations with these schools that might impact their future enrollment (e.g., if they were to expand or contract). Both schools have seen their enrollment grow since the last forecast. The assumption of the forecast is that these schools will remain at approximately the same level over the course of the forecast.

Some Considerations

School projections beyond a few years are less reliable than district forecasts by grade level, because the school numbers are much smaller. With small numbers it is sometimes difficult to discern distinct grade level trends. Small changes in enrollment could occur because of random events (a large number of families leaving in a specific year, or two families with multiple siblings leaving all at once) and may not adequately reflect a real trend.

It is also frequently true that as schools become larger or smaller the sheer size of a school can affect parent decisions about what they want for their child. A school that becomes overcrowded or under-enrolled will sometime undergo a perception change in which parents decide that the school is no longer appropriate for their child. And this, in turn, can affect future enrollment trends at that school.

Projection Summary by School (2022-2030 LOW Projection)

				Pr	ojections									
	Oct18	Oct19	Oct20	Oct21	Oct22	Oct23	<u>Oct24</u>	<u>Oct25</u>	<u>Oct26</u>	Oct27	<u>Oct28</u>	Oct29	Oct30	Oct31
Blakely	326	345	270	332	339	339	321	323	318	315	312	312	312	314
Ordway	363	386	321	346	377	378	391	385	378	367	359	355	355	357
Wilkes	349	337	309	317	310	310	303	306	309	309	307	307	307	308
Mosaic	60	57	97	97	89	92	88	87	88	87	86	86	85	85
Odyssey	154	189	205	191	195	190	187	185	186	184	183	182	180	180
Sakai	540	477	455	463	445	465	473	476	487	474	461	461	448	440
WMS	551	535	524	482	493	484	455	475	491	490	494	485	470	469
BHS	1291	1336	1257	1263	1207	1168	1160	1113	1092	1091	1072	1093	1107	1096
Eagle Harbor	108	87	95	96	95	92	91	87	86	86	84	86	87	86
Student Services	<u>17</u>	<u>15</u>	<u>24</u>	<u>16</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>13</u>	<u>13</u>
Totals	3759	3764	3557	3603	3564	3532	3484	3451	3448	3417	3372	3381	3364	3348

May not add to exact total due to rounding

Projection Summary by School (2022-2030 Medium Projection)

				Pr	ojections									
	<u>Oct18</u>	<u>Oct19</u>	Oct20	<u>Oct21</u>	Oct22	Oct23	Oct24	<u>Oct25</u>	Oct26	Oct27	Oct28	Oct29	Oct30	Oct31
Blakely	326	345	270	332	348	351	336	339	336	331	329	330	329	331
Ordway	363	386	321	346	387	392	409	404	400	387	379	375	374	376
Wilkes	349	337	309	317	318	322	317	320	326	326	324	324	324	325
Mosaic	60	57	97	97	92	96	93	93	94	94	93	93	93	92
Odyssey	154	189	205	191	200	198	197	197	199	199	198	198	196	196
Sakai	540	477	455	463	459	487	503	515	527	520	514	510	498	490
WMS	551	535	524	482	508	506	484	514	538	546	552	547	541	535
BHS	1291	1336	1257	1263	1244	1221	1231	1198	1196	1213	1212	1256	1281	1286
Eagle Harbor	108	87	95	96	98	96	97	94	94	95	95	98	100	101
Student Services	<u>17</u>	<u>15</u>	<u>24</u>	<u>16</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>
Totals	3759	3764	3557	3603	3668	3683	3680	3688	3725	3726	3709	3746	3750	3747

May not add to exact total due to rounding

Projection Summary by School (2022-2030 HIGH Projection)

				Pr	ojections									
	<u>Oct18</u>	<u>Oct19</u>	Oct20	Oct21	Oct22	Oct23	Oct24	<u>Oct25</u>	<u>Oct26</u>	Oct27	<u>Oct28</u>	<u>Oct29</u>	<u>Oct30</u>	<u>Oct31</u>
Blakely	326	345	270	332	356	363	349	354	354	349	346	347	346	348
Ordway	363	386	321	346	396	405	425	422	422	408	399	394	394	396
Wilkes	349	337	309	317	326	333	329	335	344	343	341	341	341	342
Mosaic	60	57	97	97	94	99	98	98	100	101	100	100	100	100
Odyssey	154	189	205	191	205	206	207	209	213	214	214	214	214	213
Sakai	540	477	455	463	472	509	535	553	566	567	571	566	551	541
WMS	551	535	524	482	524	529	511	554	590	605	609	613	620	613
BHS	1291	1336	1257	1263	1282	1280	1311	1292	1306	1345	1364	1436	1473	1498
Eagle Harbor	108	87	95	96	101	101	103	101	103	106	107	113	116	118
Student Services	<u>17</u>	<u>15</u>	<u>24</u>	<u>16</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>16</u>
Totals	3759	3764	3557	3603	3771	3840	3883	3934	4014	4054	4067	4140	4170	4185

May not add to exact total due to rounding

Appendix A Enrollment Patterns Bainbridge Island School District

Enrollment Patterns

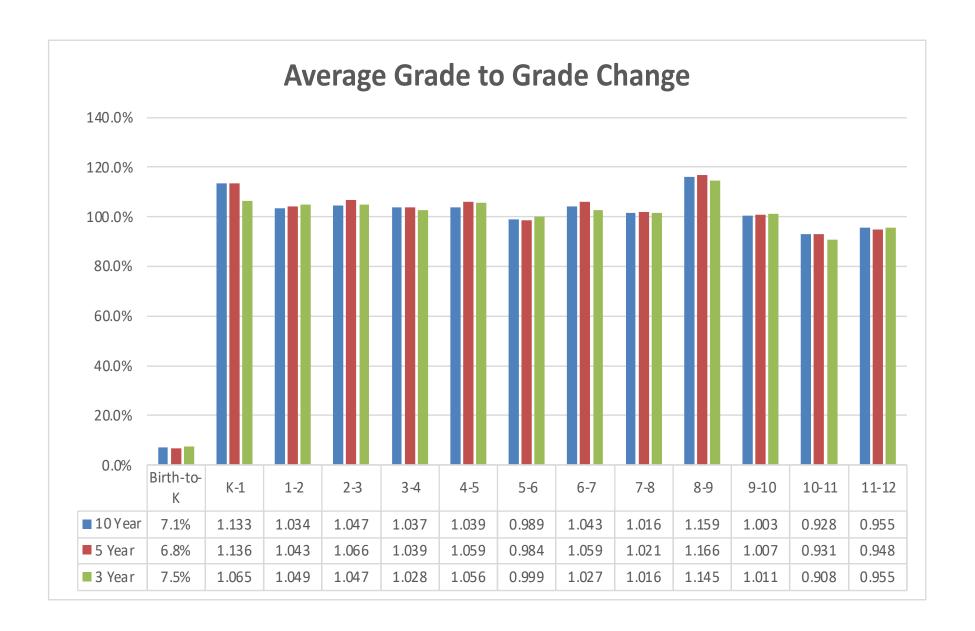
- Over the course of a year many families with children move into a District and many families move out. We capture this kind of information by using a cohort or grade progression ratio which shows us the net gain or loss of children at each grade.
- To create the ratio you divide the specific enrollment at a specific grade in a given year (say second grade) by the enrollment at the previous grade for the previous year (first grade). A rate greater than one indicates a net gain of children (more families moving in than out) while a rate less than one indicates a net loss (more families moving out than in).
- In Bainbridge Island the cohort ratios at most grades are greater than one, indicating that the number of families with children moving into the District over the course of a year is generally greater than the number of families with children moving out.
- One exception to this pattern is the transition of 5th graders into 6th grade where the District often sees a net loss. It may be that more families opt to move at this transition into a more traditional K-5, 6-8, 9-12 District.

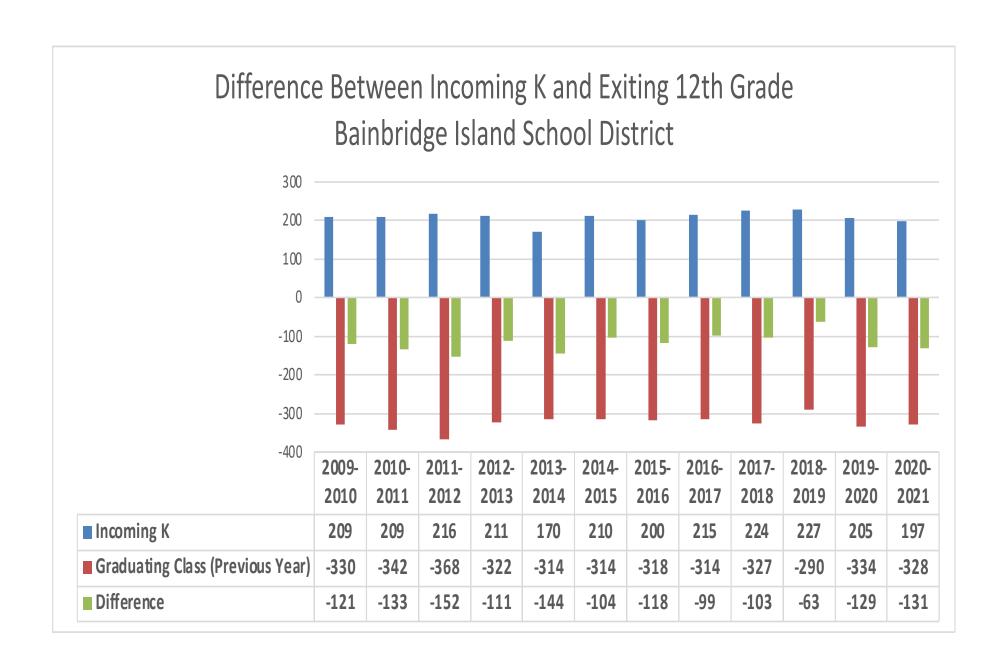
Enrollment Patterns

- The District also typically sees a net loss at the 10th to 11th and 11th to 12th transitions. This is most likely due to dropouts, and/or more students opting to attend Full Time Running Start.
- There is a significant net gain of students at the high school level in the 9th and 10th grades. Even with net losses at the other grades, the high school graduating classes have been about 100 students or more larger than the next year's entering kindergarten class (because the birth cohorts have remained flat) over the past decade. This creates a "downward pull" on enrollment.
- For enrollment to grow, the District must see bigger kindergarten classes, or a bigger net gain of students at the other grades from new or existing housing.
- Cohort ratios are available for every grade except Kindergarten where there is no previous entry grade.
- For Kindergarten we typically compare the enrollment in a given year to births five years prior (a birth-to-k ratio). This tells us the District's market share at kindergarten.

Enrollment Patterns

- On average the District enrolls about 7% of the County kindergarten market (kids born five years prior). This average was slightly higher between 2017 and 2019 when full-day-kindergarten was added to all schools.
- This rate dropped some during the recent pandemic.
- It also will fluctuate from year to year based on shifts and changes in home sales and new home construction.
- We can also use local births as a predictor, like the births in Bainbridge Island specifically, as an additional predictor at kindergarten.
- The present model uses County births and births in Bainbridge Island together to help predict future kindergarten enrollment.





Consultant Background and Experience

Dr. Kendrick was the demographer for the Seattle Public schools from 1990 to 1997. In that capacity he provided enrollment projections to facilitate staffing and facilities planning and helped with the management of the student assignment system. He also provided analysis of the relationship between demographics and test scores.

Since 1997 he has worked as a consultant providing demographic analysis and enrollment projections for local school districts. Over the past 20 years his clients have included the following Districts: Auburn, Bainbridge Island, Bellingham, Bellevue, Bethel, Bremerton, Central Kitsap, Edmonds, Enumclaw, Federal Way, Marysville, Mercer Island, Monroe, North Kitsap, Olympia, Renton, Seattle, South Kitsap, Shoreline, Snoqualmie Valley, Sumner, and Tukwila. He also does annual enrollment projection work for the Everett, Highline, Mukilteo, Northshore, Puyallup, and Tacoma School Districts. He has worked in all four counties of the Puget Sound and is familiar with the different trends and patterns across the region.