### Mercer Island School District Enrollment Trends, Demographics, and Projections

### Prepared by

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### Introduction

Public school enrollment in the four-county Puget Sound region (King, Kitsap, Pierce, and Snohomish Counties) is still about 23,000 students below where it was in October 2019 prior to the start of the pandemic. In King County, enrollment is about 13,000 less than what it was before the pandemic. At this point it is reasonable to assume that not all of the students who were out of school due to the pandemic are likely to return. Some may have moved, and others may be pursuing educational options outside of the public schools (private schools, home schooling, or virtual schools). There is also ample evidence that families who are moving around or new to the region are tending to settle in the outlying regions of the Puget Sound. The world has changed since Covid.

Enrollment trends in the Mercer Island School District have mirrored those of the region. Enrollment dropped substantially in October 2020 and has not yet recovered to the previous level. Although kindergarten enrollment in the District appears to have recovered in the past year, a look at migration data suggests that some of the students who left during the pandemic may not be returning. So what does the future look like?

The purpose of this report and analysis is to provided an updated enrollment forecast for the District. The next section presents an executive summary of our findings. Following this section, we provide detailed information about enrollment trends, a look at future demographic trends (births, population, and housing), and finally, our forecast estimates for the future.

- Enrollment in the four-county Puget Sound region is still about 23,000 students less than what it was in October 2019 prior to the onset of the pandemic.
- King County enrollment is still about 13,000 students below where it was prior to the pandemic.
- At this point it is reasonable to assume that not all the students that were out of school due to the pandemic are likely to return. Some may have moved, while others are likely pursuing educational options outside of the schools.
- The trends in Mercer Island are similar to those we are seeing in the rest of the County and the region.
- It does look like Mercer Island's kindergarten population has recovered some this year, but a look at migration data suggests that the District lost a large number of students during the pandemic and, so far at least, they have not returned. Our best estimates suggest that there was a net loss of 200 to 250 students due to the pandemic. Enrollment is currently about 200 students less than what it would have been without the pandemic.

- Although the pandemic has clearly impacted enrollment, there are other demographic trends at play as well.
- Births, for example, have been declining in King County since 2016. Women are having fewer children and waiting longer to have children, especially in King County. Although births trends are better in the outlying counties, the trends in King County tend to impact the entire region because of its large population.
- Population growth in King County and the region has also slowed in the past few years in comparison to the trends we saw between 2012 and 2019 when Amazon and many other employers were hiring at a rapid pace.
- We have also seen a slow down in home sales over the past year, and there is at least some possibility that the region and the county might slip into a recession sometime this year.

- Perhaps most striking, are the recent population estimates for Washington State from the Census Bureau. The data shows a net loss due to domestic migration. More people are moving out to other states than are moving IN from other states. Population still grew over the past year because because births exceeded deaths, and the region continues to attract people from other countries.
- Looking at enrollment specifically, recent data suggests that families that are moving around or new to the region are landing in the outlying regions of the Puget Sound. Enrollment growth in the past two years has been concentrated in the outlying regions of King County (Auburn, Enumclaw, and Tahoma, for example), and in selected areas in Pierce and Kitsap County. Areas closest to the urban job centers have continued to see declines in enrollment since the pandemic or very modest increases.
- The decline in births, coupled with the latest population forecasts from the State suggest that K-12 enrollment in the County will grow at a slower rate over the next decade and may decline in some years. This is in sharp contrast to the trends we saw between 2012 and 2019 when population growth was strong and the birth cohorts eligible for school were larger.

- In the near term we expect Mercer Island's enrollment to decline some due to fewer home sales over the past year and the small number of new developments that are in the housing pipeline.
- The kindergarten cohorts that are eligible for school over the next few years are also smaller and will likely result in smaller kindergarten populations in the District over the next few years.
- We are predicting that births will eventually return to a more "normal" level in the near future resulting in better kindergarten enrollment in the latter part of the forecast. If this does not happen if fertility rates continue to decline– we could see declines in enrollment continuing indefinitely
- The District generally sees a net gain in enrollment at most of its continuing grades as more families move in than move out. Although this pattern was impacted by the pandemic, the past years shows a return to a more normal trend.
- As we move further out we expect more new housing developments and greater population growth in the region and the City.

- It is important to note that Mercer Island does not grow unless it gets an influx of new families at the continuing grades. The graduating class in a given years it typically about 50 to 150 students larger than the incoming kindergarten class. Unless the District sees growth at its other grades, enrollment declines.
- Our preferred forecast shows the District declining between now and 2026 and then growing after that period due to a slight rise in the number of births and better population growth and housing.
- We have created low and high estimates as well showing what might happen if population and housing growth were to be lower or higher than what we have assumed in our preferred model.
- We also created a variety of alternative forecasts based on different methods. Our final preferred forecast is close to the average of these estimates. As a general rule, the average of several forecast is better than any single forecast. There is no foolproof method for predicting the future.
- These forecasts should be updated periodically to take advantage of new demographic and enrollment information. As the recent pandemic showed, critical events can impact trends.

- The next section presents detailed information about enrollment prior to, and after the pandemic for the region and then for Mercer Island.
- After this, we look at future demographic trends (births, population, and housing) to see how they might impact enrollment.
- The final section presents a set of alternative forecasts based on different methods along with our preferred forecast by grade. We also provide low and high alternatives to our preferred forecast.

## Enrollment in the Region Pre and Post-Pandemic

# Enrollment Trends in the Region

- As noted in the introduction and the executive summary, enrollment in the region has not returned to the level it was at prior to the pandemic.
- Over the past year, there was a net gain of 370 students in King County, a net gain of 661 students in Pierce County, a net loss of 170 students in Snohomish and a net loss of 551 students in Kitsap County. The Kitsap County figure is somewhat misleading since the Connections Academy virtual school closed over the past year. Most of the students in that school came from areas outside the Puget Sound. If we exclude that school from our estimates, Kitsap County has seen net gains of about 300 students a year over the past two years.
- Kindergarten enrollment continues to be lower than expected in all the counties, and while we have seen some gains at the other grades, enrollment in all four counties is still below where it was in October 2019.
- At this point it is reasonable to assume that not all the students who were out of school due to Covid will return. Some may have moved, and others may be pursuing educational options outside of the schools.

# Enrollment Trends in the Region

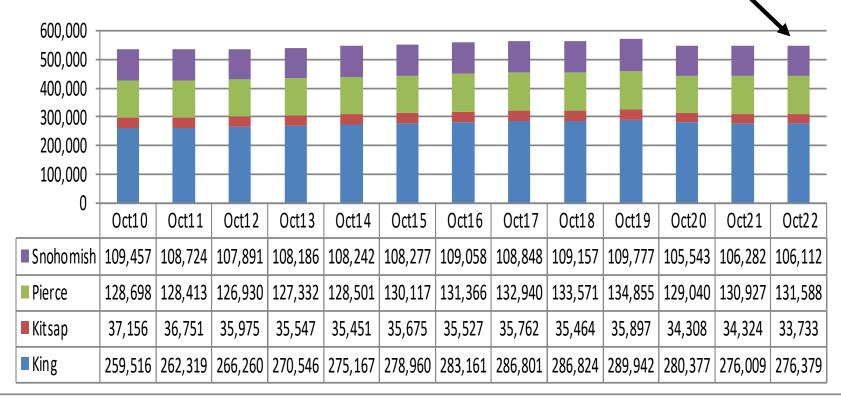
- Although private school enrollment did increase in selected areas, the data from 2021 (the latest year we have) suggests that private school enrollment in King County is about the same as it was in 2018.
- Home-based instruction did increase in almost every District during the pandemic. We have also heard anecdotal stories of parents starting home-schooling networks, and we know of at least two districts in which these networks are still operating.
- Most of the evidence we have points to families moving out of the Puget Sound region at a greater pace than usual. This is also supported by the latest Census data which shows net loss of residents in Washington State due to domestic migration (more people moved OUT to other states than moved IN from other states).
- Most of the enrollment growth in King County over the past two years is concentrated in the outlying regions of the County (e.g., Auburn, Enumclaw, and Tahoma), where new housing is more available and affordable. We expect this trend to continue in the near future.

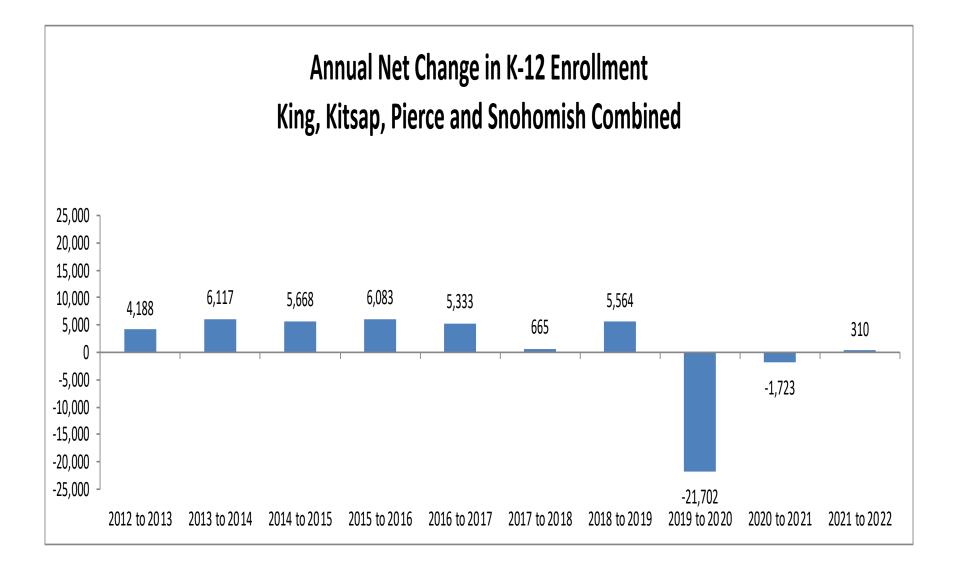
#### **Puget Sound Enrollment Trends (Four County Region)**

Enrollment in the four-county region is still down by about 23,000 students since the pandemic

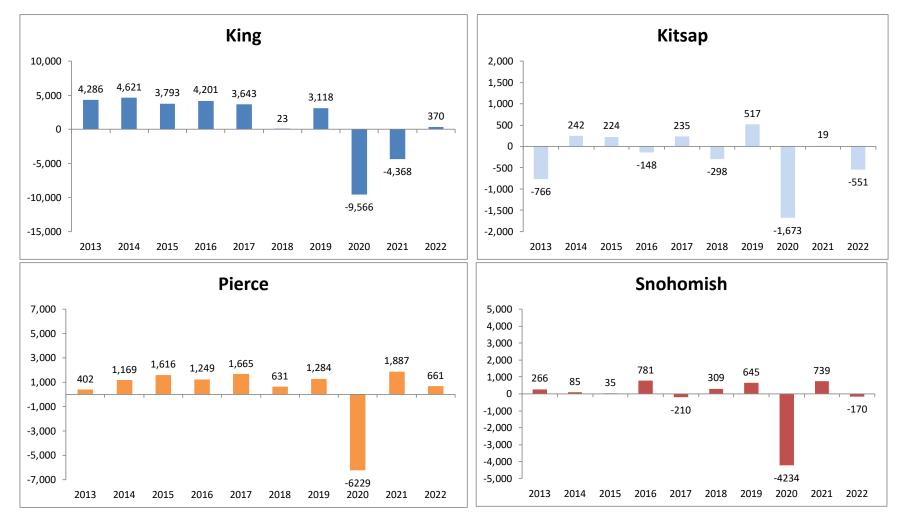


King, Kitsap, Pierce, and Snohomish County





# **Annual Net Change in Enrollment by County Since 2012** (Numbers may have changed since the original reporting date)



### **King County Public School Districts P223**

#### **October Enrollment Trends**

					Change Oct21	Change Oct19
King County Districts	Oct 2019	Oct 2020	<u>Oct 2021</u>	Oct 2022	to Oct22	to Oct22
Auburn	16,906	16,194	16,601	17,061	460	155
Bellevue	20,323	19,496	18,750	18,353	-397	-1,970
Enumclaw	4,104	3,951	4,046	4,236	190	132
Federal Way	21,624	20,609	20,175	20,436	261	-1,188
Highline	18,189	17,745	17,476	17,341	-135	-848
Issaquah	20,470	19,442	18,905	18,902	-3	-1,568
Kent	25,913	24,587	24,153	24,481	328	-1,432
Lake Washington	31,106	30,648	30,553	30,423	-130	-683
Mercer Island	4,387	4,125	4,007	4,012	5	-375
Northshore	22,943	22,686	22,419	22,320	-99	-623
Renton	15,176	14,922	14,595	14,387	-208	-789
Riverview	3,268	3,001	2,983	3,035	52	-233
Seattle	53,628	52,383	50,192	50,065	-127	-3,563
Shoreline	9,604	9,271	9,078	9,150	72	-454
Skykomish	51	48	38	35	-3	-16
Snoqualmie	7,021	6,704	6,965	6,897	-68	-124
Tahoma	8,846	8,415	8,621	8,831	210	-15
Tukwila	2,758	2,650	2,529	2,511	-18	-247
Vashon Island	1,469	1,439	1,465	1,475	10	6
LW Technical	204	175	166	165	-1	-39
Renton Technical	1	1	0	0	0	-1
CHARTER SCHOOLS						
Summit Atlas	344	453	479	458	-21	114
Rainier Prep	350	346	327	334	7	-16
Summit Sierra	507	379	314	232	-82	-275
Rainier Valley Leadership Academy (Green Dot)	378	162	161	145	-16	-233
Impact Salish Elementary		130	300	351	51	351
Impact Public Schools	283	415	607	594	-13	311
Ashe	90	0	0	0	0	-90
Why Not You Academy			<u>104</u>	<u>149</u>	45	149
Total	289,943	280,377	276,009	276,379		-13,564
Change		-9,566	-4,368	370		

### **Pierce County Public School Districts P223**

#### **October Enrollment Trends**

					Change Oct21	Change Oct19
Pierce County	<u>Oct 2019</u>	Oct 2020	Oct 2021	Oct 2022	to Oct22	to Oct22
Bethel	19959	19810	20061	20175	114	216
Carbonado	183	185	179	180	1	-3
Clover Park	12729	11762	11980	11748	-232	-981
Dieringer	1531	1359	1364	1405	41	-126
Eatonville	1917	1792	1889	1905	16	-12
Fife	3802	3680	3672	3793	121	-9
Franklin Pierce	7774	7490	7374	7287	-87	-487
Orting	2692	2517	2605	2715	110	23
Peninsula	9145	8301	8490	8734	244	-411
Puyallup	22840	21835	22046	22507	461	-333
Steilacoom	3286	3035	3068	3033	-35	-253
Sumner	9837	9460	9837	10019	182	182
Tacoma	28202	27141	27108	26627	-481	-1575
University Place	5545	5482	5463	5442	-21	-103
White River	3912	3802	4104	4199	95	287
Bates Tech	399	343	402	495	93	96
Chief Leschi	546	561	597	600	3	54
CP Tech	366	289	236	229	-7	-137
CHARTER SCHOOLS					0	0
Summit Olympus	190	196	180	157	-23	-33
Soar Acadmey	144	0	0	0	0	-144
Green Dot Destiny	270	0	0	0	0	-270
Impact Commencement Bay			272	338	66	338
Total	135269	129040	130927	131588		-3681
Change		-6229	1887	661		

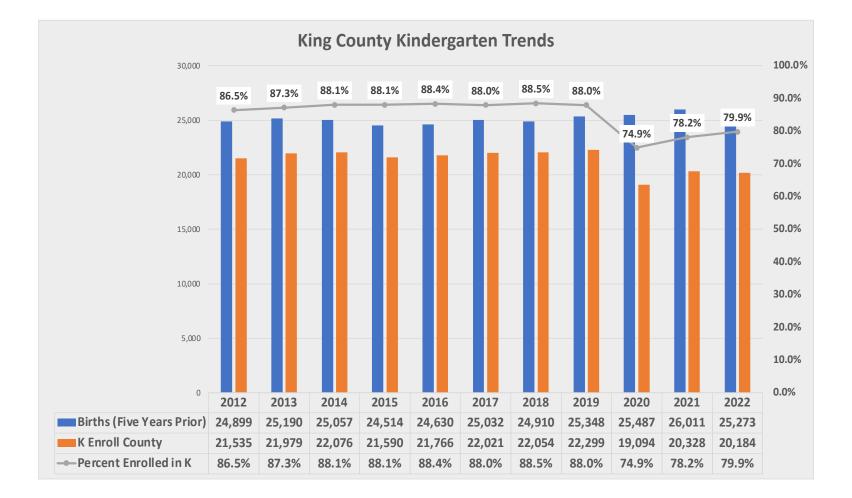
#### Snohomish County Public School Districts P223 October Enrollment Trends

					Change Oct21	Change Oct19
Snohomish	Oct 2019	Oct 2020	Oct 2021	Oct 2022	to Oct22	to Oct22
Arlington	5,671	5,276	5,344	5,442	98	-229
Darrington	424	397	407	426	19	2
Edmonds	20,494	20,013	19,917	19,690	-227	-804
Everett	20,170	19,539	19,633	19,578	-55	-592
Granite Falls	1,997	2,018	2,117	2,233	116	236
Index	31	28	24	21	-3	-10
Lake Stevens	9,255	8,882	9,345	9,360	15	105
Lakewood	2,514	2,477	2,586	2,586	0	72
Marysville	10,201	9,825	9,901	9,812	-89	-389
Monroe	6,577	6,066	5,881	5 <i>,</i> 586	-295	-991
Mukilteo (Includes Skills Center)	16,034	15,445	15,355	15,354	-1	-680
Snohomish	9,746	9,179	9,257	9,270	13	-476
Stanwood	4,682	4,521	4,560	4,705	145	23
Sultan	<u>1,981</u>	<u>1,877</u>	<u>1,955</u>	<u>2,049</u>	94	68
Total	109,777	105,543	106,282	106,112		-3,665
Change		-4,234	739	-170		

#### Kitsap County Public School Districts P223 October Enrollment Trends

					Change Oct21	Change Oct19
Kitsap County	Oct 2019	Oct 2020	Oct 2021	Oct 2022	to Oct22	to Oct22
Bainbridge Island	3,764	3,560	3,607	3,521	-86	-243
Bremerton	5,122	4,764	4,729	4,674	-55	-448
Central Kitsap	11,590	10,848	11,059	10,939	-120	-651
North Kitsap	5,787	5,238	5,354	5,256	-98	-531
South Kitsap	9,491	8,719	8,715	8,940	225	-551
SK Connections Academy	227	1,179	860		-860	-227
Catalyst Public Schools (Charter)				443	443	443
Total	35,981	34,308	34,324	33,773		-2,208
Change		-1,673	16	-551		

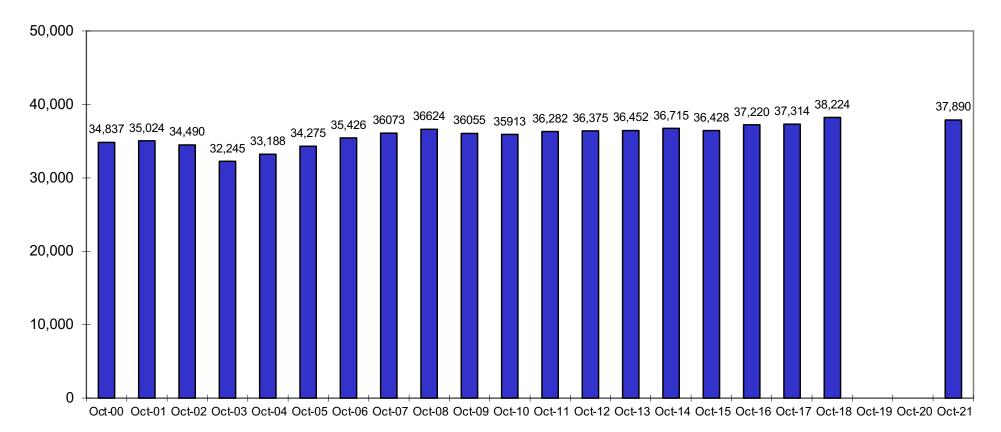
### Kindergarten Enrollment Trends King County Public Schools



### Private School Enrollment

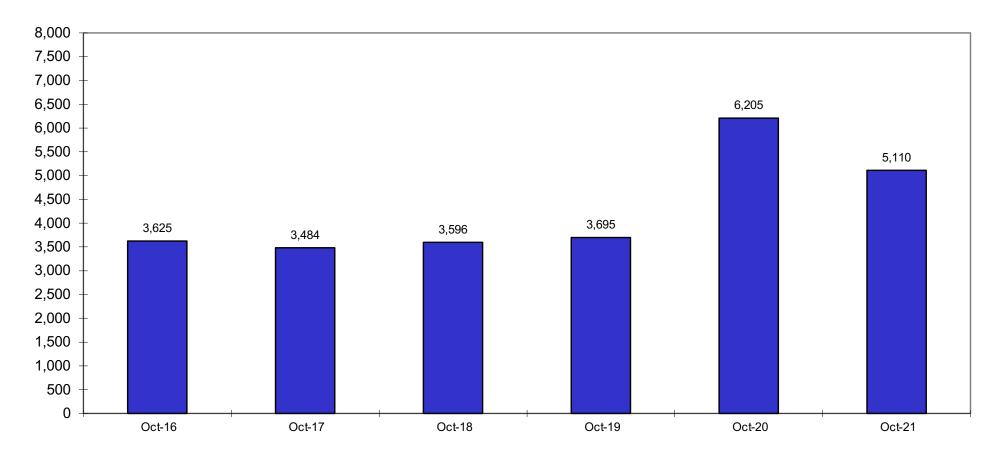
#### **King County K-12 ONLY**

Washington State Board of Education and OSPI Reporting Data for 2019 and 2020 was not available for all schools so we did not report it.



### Home-Based Instruction

#### **King County Districts Combined** OSPI Home-Based Instruction Reports



## Mercer Island Enrollment Trends

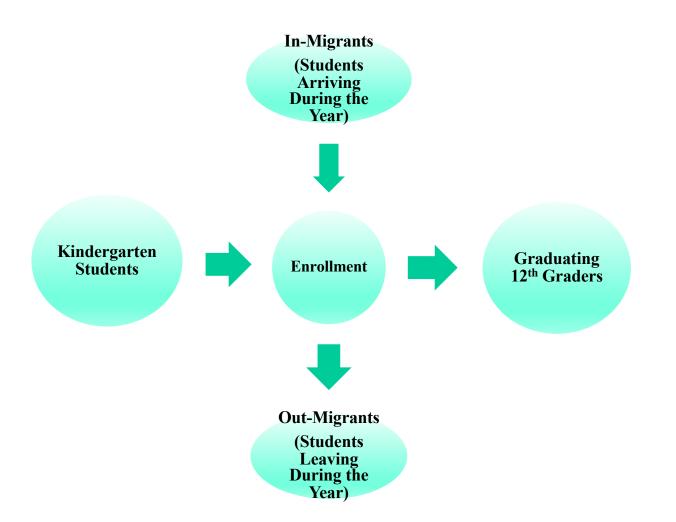
### Enrollment Trends

- The enrollment trends in Mercer Island have mirrored those of the region during the pandemic. Enrollment dropped dramatically in 2020 and has not yet returned to its previous level.
- Kindergarten enrollment shows some signs of recovery in 2022. At the other grades, the District experienced a large net loss in 2020 and 2021 due to families with children moving out. There is no indication at this time that these families will return in the future.
- Private school enrollment on the Island did show a gain of over 200 students between 2020 and 2021. Part of this is due to the fact that the private catholic school (Saint Monica) did not report any enrollment in 2020 (they may have been operating virtually). But this school also shows a substantial increase in enrollment between 2019 and 2021 of well over 100 students. We do not know how many of these students might have come from the Mercer Island public schools.
- There is little evidence that home schooling had a big impact on Mercer Island's enrollment during the pandemic. The home-based instruction reports for Mercer Island show a small increase in home-based instruction in 2020 (about 50 students versus the typical average of about 30).

### Enrollment Trends

- Taking into account the trends at Kindergarten and the continuing grades, it appears that enrollment in the District has stabilized some over the past year. We do not expect big net losses of families due to Covid to continue going forward.
- What happens from this point forward will depend mostly on the demographic trends that drive enrollment. We will look at those in the next sections.

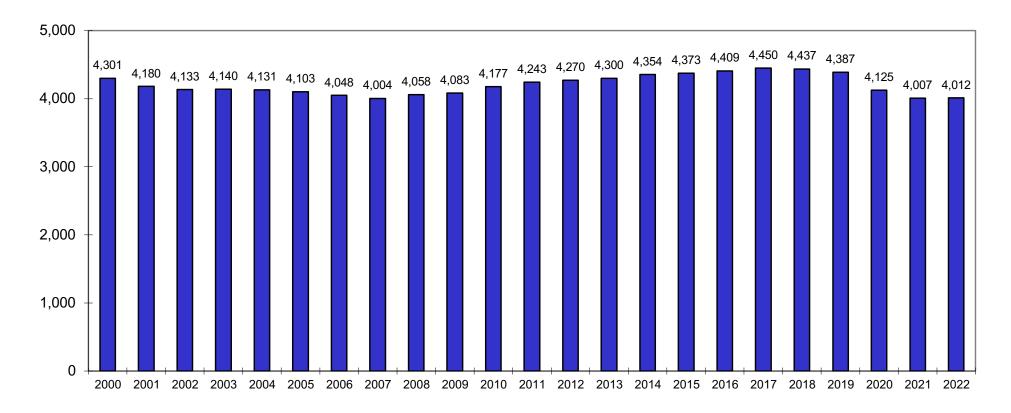
#### **The Dynamics of Enrollment**



Trends and Projections -- Jan 2023<sup>25</sup>

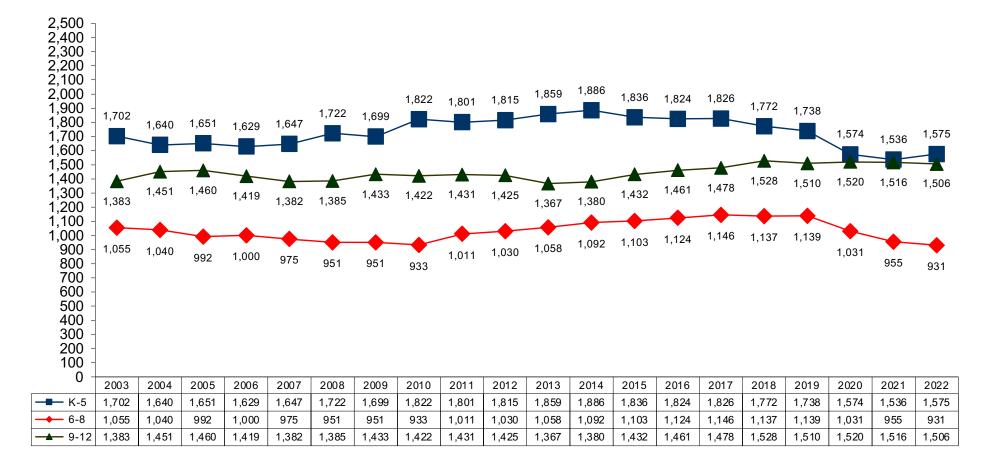
### District Enrollment Trend

P223 Enrollment (October) Does Not Include Full-Time Running Start Students or Students Enrolled in Open Doors

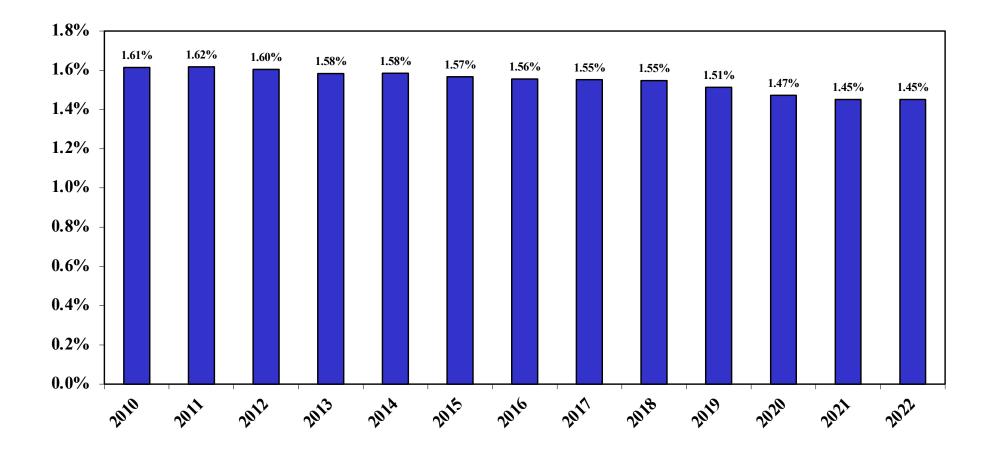


## Mercer Island Enrollment by Level October Headcount

(Excludes Running Start Only Students)



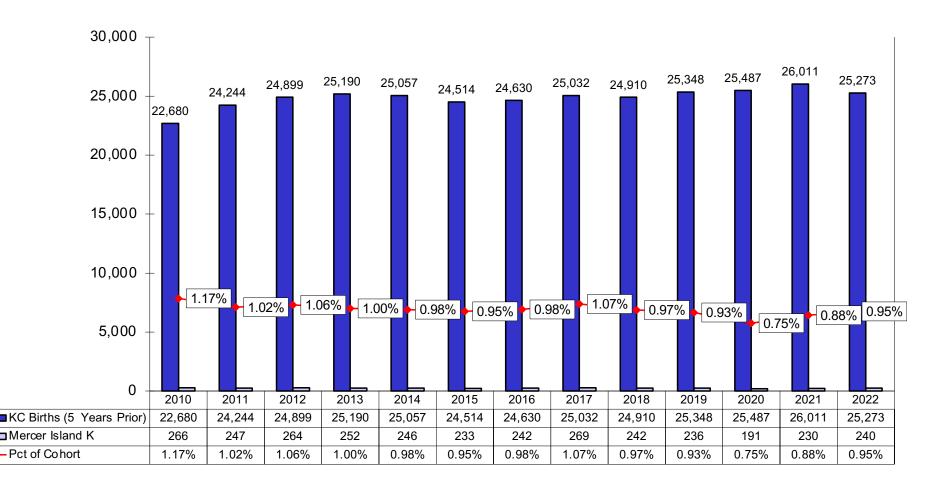
### Mercer Island Share of County K-12 Public School Enrollment



Trends and Projections -- Jan 2023

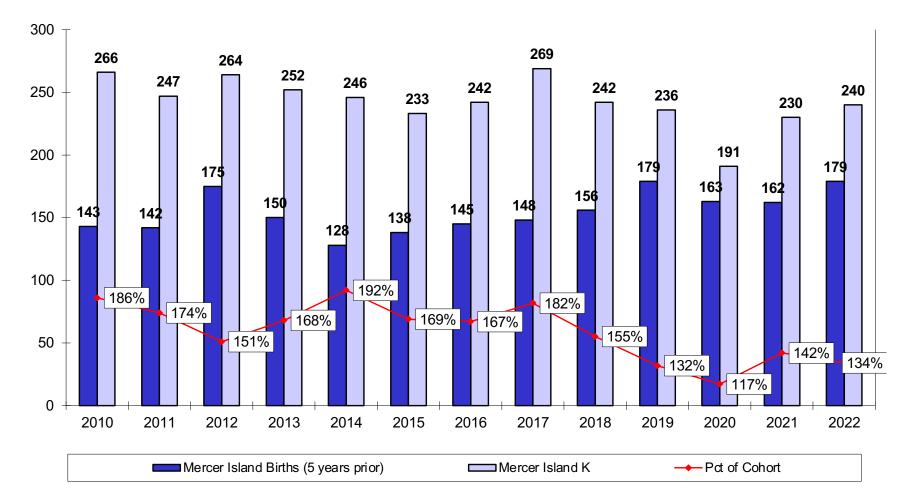
### Mercer Island

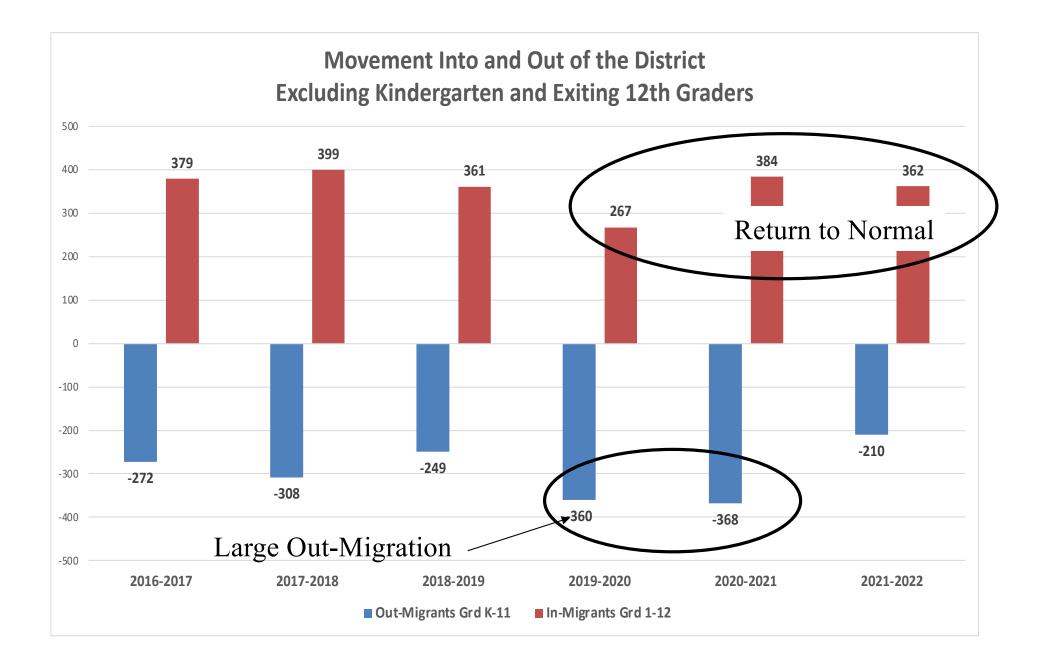
### K Enrollment as a Percent of King County Births



### Mercer Island

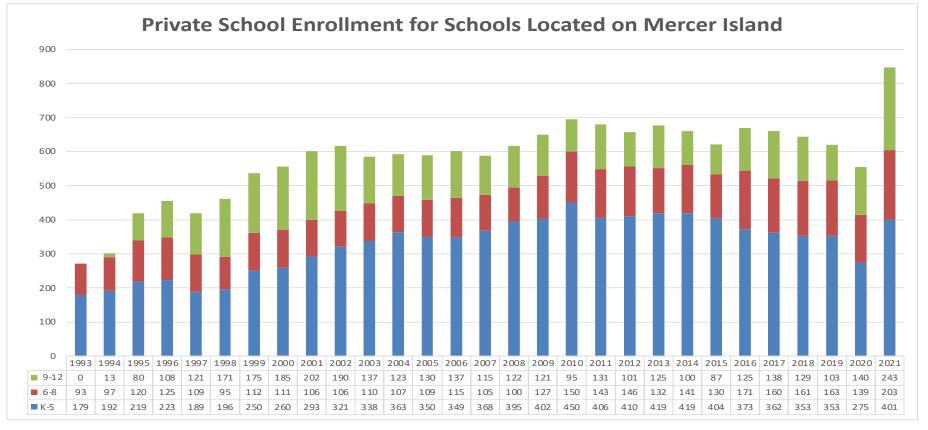
### K Enrollment as a Percent of City Births





### Enrollment for Private Schools Located in Mercer Island's Service Area

Washington State Board of Education and OSPI Reporting



Saint Monica Catholic school reported no enrollment in the State reports for 2020. In 2021 the school reported about 100 students more than they had in 2019 which accounts for most, though not all, of the increase that we see in 2021.

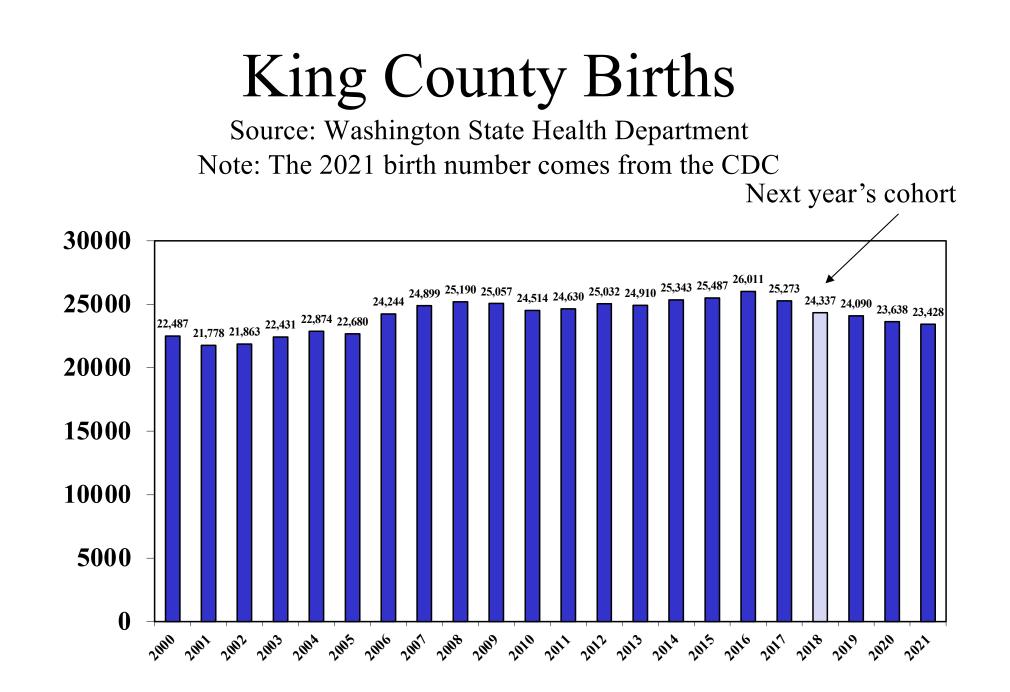
## Demographics Past and Future

Births, Population, and Housing

## Births and Enrollment

#### **Key Points and Highlights**

- There were 23,428 births in King County in 2021 (CDC). This is the fifth straight year that births have declined in the County.
- There are two reasons for this recent trend. Population growth has slowed among the 20 to 35year-old age group especially in the past year. Second, and more importantly, fertility rates have dropped; women in the county are having fewer children and waiting longer to have children.
- Our update of our long-range county forecast shows less growth than in past years due to the smaller birth cohorts.
- Mercer Island's share of the County and City kindergarten cohort declined some during the pandemic but appears to have recovered this year.
- Mercer Island's kindergarten population is typically 50 to 100 students larger than the number of births on the Island. This District continues to see an influx of families with pre-school age children moving onto the Island prior to their children reaching school age. Kindergarten enrollment is likely to be smaller in the near future, however, due to the smaller cohorts that will be eligible for school.

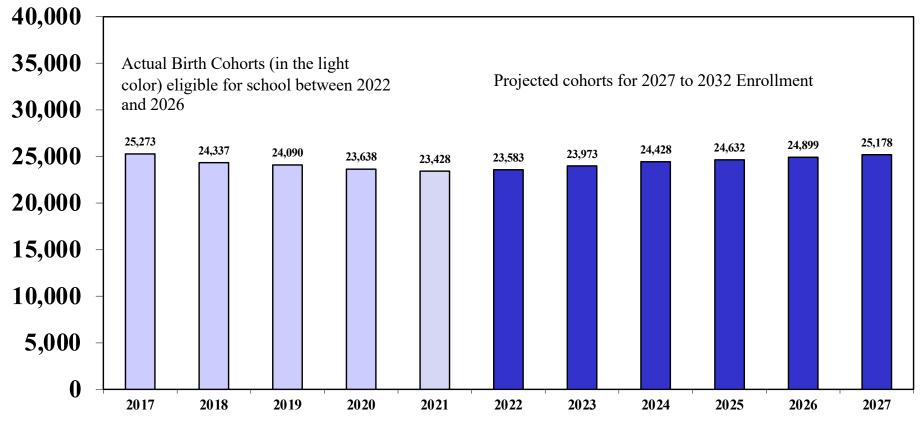


Trends and Projections -- Jan 2023

### King County Birth Projections

(Based on the Average the Fertility Rates for the Past Two Years and Projected Growth in Females in Their Child-Bearing Years Using the OFM Medium Range Population Forecast)

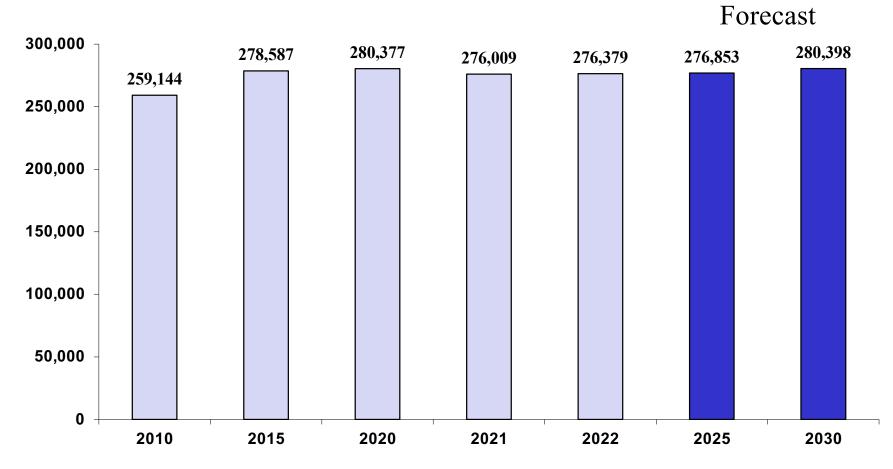
Projections



Trends and Projections -- Jan 2023

### Forecast of the King County K-12 Population

Using Cohort Survival, Actual Births, Birth Forecasts and Projected Changes in Population Growth During Certain Time Periods



# **Population Trends**

# **Population Trends**

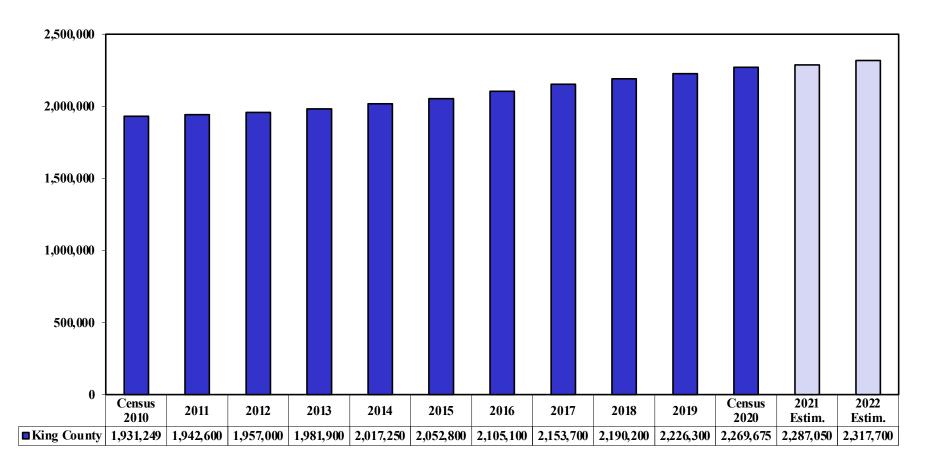
- King County population growth over the past decade exceeded the forecasts produced by the Office of Financial Management for the State of Washington. However, growth in the County appears to have slowed since 2018. Based on State estimates the County population grew by just over 17,000 residents between 2020 and 2021.
- The latest Census estimates shows a net loss for the State of Washington in 2022 due to domestic migration. More people moved OUT of Washington to other states than moved IN from other states. The population of the State still grew, however, because births exceeded the number of deaths, and the State saw an increase in the migration from other countries.
- The most recent forecasts from the State predict that the population of King County will grow at a slower rate in the coming decade than what we saw in the previous decade.
- The best estimates from the Puget Sound Regional Council's land use forecast indicate that Mercer Island will grow by about half-a-percent annually between now and 2032.
- The latest population estimates for the school district from OFM indicate that the District may have seen a net loss in population between 2021 and 2022.

# **Population Trends**

- Our preferred population forecast uses the assumed growth rates from the PSRC and applies them to the latest population estimate for the District to create a ten year forecast. We also created low and high alternatives to this forecast.
- Our preferred medium range forecast aligns well with the City's comprehensive plan and the PSRC's forecasts for the City of Mercer Island.
- Based on this population forecast and our forecast of County births we created an enrollment forecast for the District (see the forecast section of this report). This forecast, along with several others based on different methods, was used to help us calibrate our final forecast estimates.

## King County Population

Source: Office of Financial Management of the State of Washington and Census Data Pre-Census Estimates, Census Count, and Recent Estimates

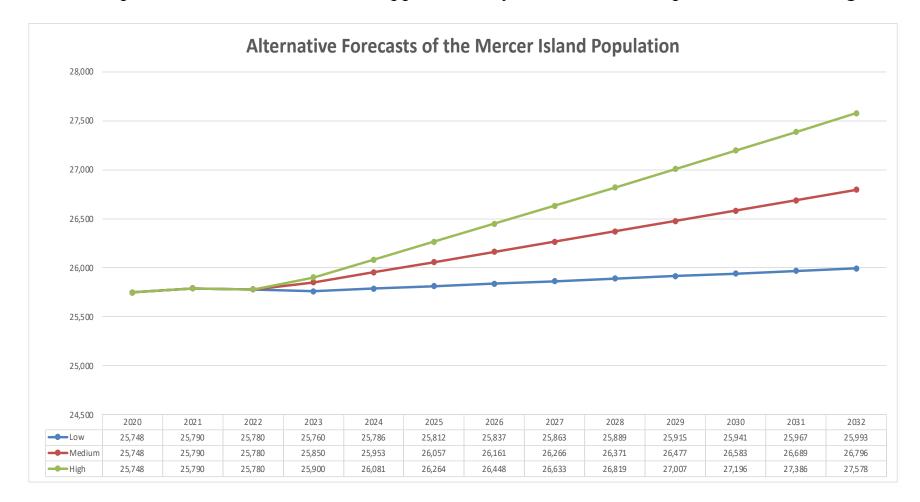


### Population History Mercer Island and the County

Population Trends (County &	District)		OFM Estim	<u>ates</u>
	<u>2010</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
King County	1,931,249	2,269,675	2,287,050	2,317,700
Mercer Island	22,699	25,748	25,790	25,780
% of County Population	1.18%	1.13%	1.13%	1.11%
County	Change	338,426	17,375	30,650
	% Change	17.5%	0.8%	1.3%
	Annual %	1.8%	0.8%	1.3%
Mercer Island	Change	3,049	42	-10
	% Change	13.4%	0.2%	0.0%
	Annual %	1.3%	0.2%	0.0%

### Mercer Island Resident Population Forecasts

Alternative Forecasts Based on Different Assumptions About Growth. The Medium Range Forecast is Based on the Puget Sound Regional Council's Land Use Forecast which corresponds closely to the City of Mercer Island's Comprehensive Plan Assumptions. The low and high forecasts provide alternatives that are approximately three-tenths of a percent lower or higher.



# Housing Trends

# Housing Trends

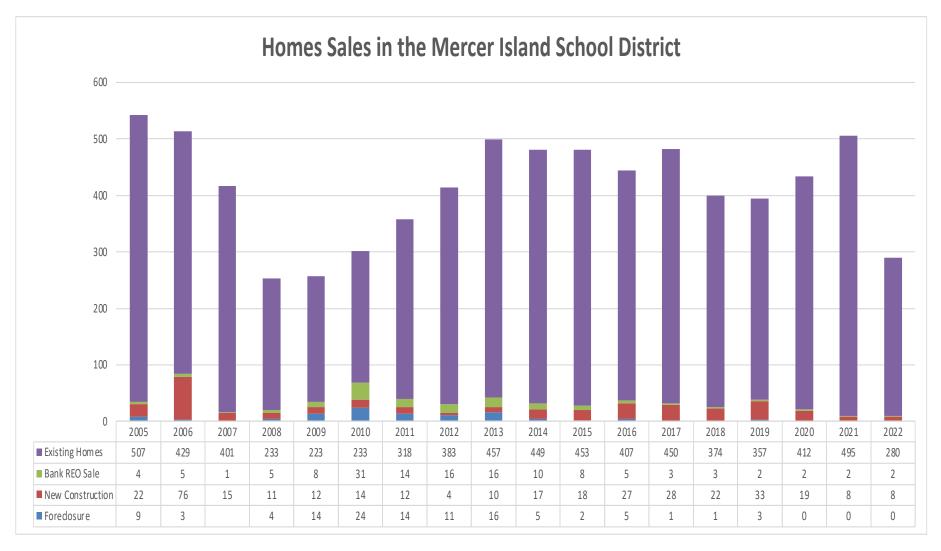
- Home sales in Mercer Island were much lower in 2022 than in 2021, reflecting the trends we are seeing throughout the Puget Sound.
- There were 640 housing units added to the District's housing stock between the 2010 and 2020 Census period. This is lower than the number that were added in the previous decade, and we expect even fewer to be added between 2020 and 2030.
- Our preferred forecast predicts that approximately 500 units will be added to the District's housing stock between now and 2032. We are expecting the bulk of additional housing development to occur between roughly 2025 and 2032. In the near term we do not expect the addition of a lot of units, with the exception of demolitions and rebuilds. This assessment is based on what we see in the housing pipeline currently.
- Based on our reading of the City comprehensive plan and the PSRC documents we expect some increase in multi-family housing units, relative to single family over time (especially with the high forecast estimate). But it is likely that single family units will still make up between 65%-70% of the City's housing stock. Development around the light rail line is expected to include some multi-family housing.

# Housing Trends

• Based on 2020 Census data there are approximately 39 students for every 100 housing units in the District. This is a decline from 2010. In the next section of this report we have used an estimate of the number of students we expect to be enrolled from each house to create some forecasts of future enrollment, using our preferred housing forecast.

### Home Sales in Mercer Island

Compiled from Public and Private Sources



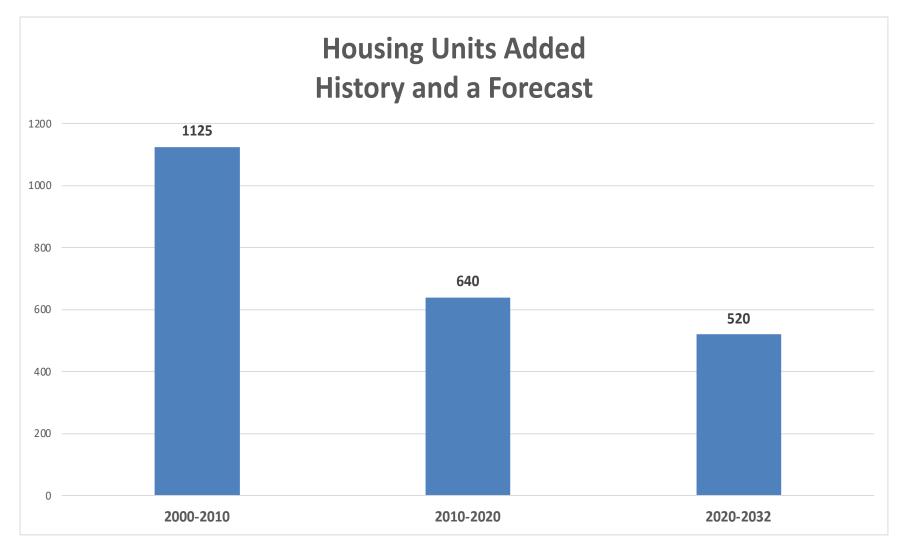
### Housing in the District History and Forecast

Based on Recent Census Data, Pipeline Data, Permit Data and the PSRC's Land Use Forecast



### Housing Units Added History and Forecast

Based on Recent Census Data, Pipeline Data, Permit Data and the PSRC's Land Use Forecast



Trends and Projections -- Jan 2023

#### K-12 Public School Students Per House by School District

#### P223 October Enrollment

				Students Per	Students Per
			<u>Census 2020</u>	House Using 2019	House Using 2020
District	<u>2019</u>	<u>2020</u>	<u>Housing Units</u>	<u>Enrollment</u>	<u>Enrollment</u>
Auburn	16,906	16,194	36,938	46	44
Bellevue	20,323	19,496	64,201	32	30
Enumclaw	4,104	3,951	11,248	36	35
Federal Way	21,624	20,609	53,676	40	38
Highline	18,189	17,745	54,457	33	33
Issaquah	20,470	19,442	45,586	45	43
Kent	25,913	24,587	65,070	40	38
Lake Washington	31,106	30,648	88,089	35	35
Mercer Island	4,387	4,125	10,570	42	39
Northshore	22,943	22,686	58,758	39	39
Renton	15,176	14,922	53,189	29	28
Riverview	3,268	3,001	8,200	40	37
Seattle	53 <i>,</i> 628	52,383	368,831	15	14
Shoreline	9,604	9,271	29,575	32	31
Skykomish	51	48	621	8	8
Snoqualmie	7,021	6,704	15,288	46	44
Tahoma	8,846	8,415	15,206	58	55
Tukwila	2,758	2,650	8,332	33	32
Vashon Island	1,469	1,439	5,636	26	26

The students per house is calculated for both 2019 and 2020 since 2020 enrollment may have been artificially low due to the pandemic. (Rounded Estimates)

# **Enrollment Projections**

# **Alternative Projections**

- Before creating our final forecast models 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 <u>only</u> based on housing, population and births. A description of each forecast is provided below.
- Three, Five, and Ten-year Cohort Models: These models show what might happen if the average of the grade level enrollment trends for the past three, five, and ten year period were to continue into the future. These models can be good if you believe that the most recent trends will not change much in future years. They are less reliable when future demographic trends look different from the recent past.
- Linear Models Based on County Births and Local Population: These models use the number of County births, and projected births along with the medium range population forecast for Mercer Island to predict future enrollment Generally the higher the births and the population the higher the enrollment since these two indicators are highly correlated with enrollment. This is not universally true, however, especially if population consists mostly of young singles, or older childless couples. This model gives a good view of where enrollment might be currently if the pandemic had not happened.

### Alternative Projections Based on Different Models

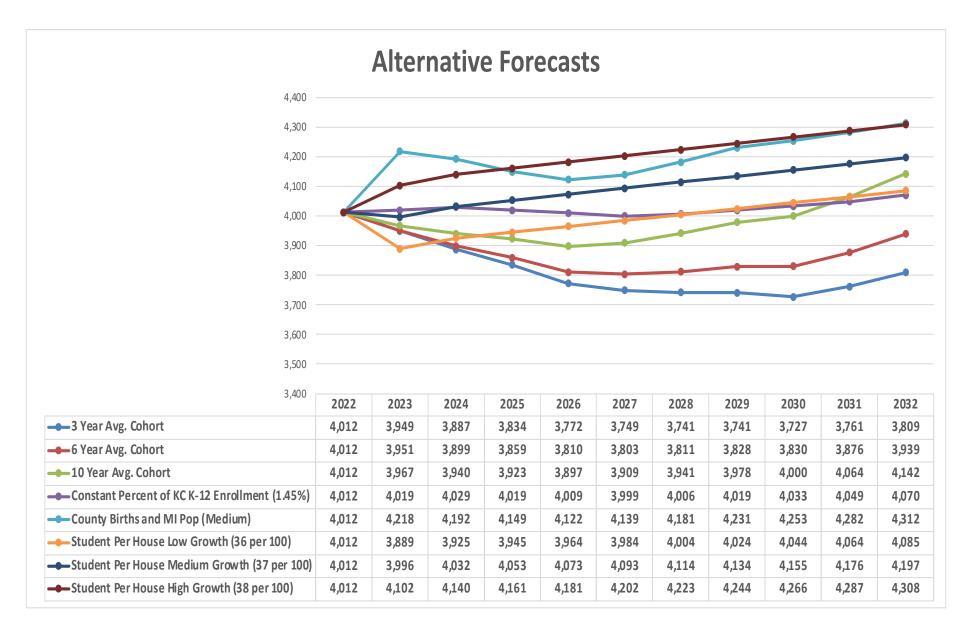
- **Percent of County K-12:** This model uses the District's current share of the County K-12 public school population and assumes it will remain constant over the course of the forecast. This percentage applied to our King County K-12 public school forecast (page 37) yields a forecast for the District.
- **Housing Yield Forecasts:** These models apply the number of K-12 public school students per house to the alternative projected totals of future housing units in the District. These models assume that the number of students per house remains relatively stable over the course of the forecast. This is a reasonable assumption for the initial years of the forecast though it is possible that the number of students per house could change in future years based on the specific combination of housing types (multi-family versus single family) and/or based on changes in the percentage of the population that is school age. We used three different estimates of the number of students per house, a low number (37 per 100 units) a medium number (38) and a high number (39).
- **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.

#### Forecast Estimates Using a Variety of Methods

	F	orecasts									
Cohort Forecasts* (Excluding 2020)	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
3 Year Avg. Cohort	4,012	3,949	3,887	3,834	3,772	3,749	3,741	3,741	3,727	3,761	3,809
6 Year Avg. Cohort	4,012	3,951	3,899	3,859	3,810	3,803	3,811	3,828	3,830	3,876	3,939
10 Year Avg. Cohort	4,012	3,967	3,940	3,923	3,897	3,909	3,941	3,978	4,000	4,064	4,142
Constant Percent of KC K-12 Enrollment (1.45%)	4,012	4,019	4,029	4,019	4,009	3,999	4,006	4,019	4,033	4,049	4,070
Linear Models (Based on Total Enrollment Only 20 \	/ear Histor	y)									
County Births and MI Pop (Medium)	4,012	4,218	4,192	4,149	4,122	4,139	4,181	4,231	4,253	4,282	4,312
Students Per House Forecast (Based on our preferred	I housing fo	orecast)									
Student Per House Low Growth (36 per 100)	4,012	3,889	3,925	3,945	3,964	3,984	4,004	4,024	4,044	4,064	4,085
Student Per House Medium Growth (37 per 100)	4,012	3,996	4,032	4,053	4,073	4,093	4,114	4,134	4,155	4,176	4,197
Student Per House High Growth (38 per 100)	4,012	4,102	4,140	4,161	4,181	4,202	4,223	4,244	4,266	4,287	4,308
	4,012	4,011	4,005	3,993	3,979	3,985	4,003	4,025	4,038	4,070	4,108

\*Kindergarten enrollment in the cohort forecasts is based on the District's average share of the County birth cohort (K enrollment compared to births) for the past three, six, and ten years, multiplied by actual and projected birth cohorts expected to enroll between 2023 and 2032

#### Graph of Alternative Forecasts



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

٦

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

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

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

The overall size of the King County K-12 public school population.

### Methods and Assumptions

#### **Births and Kindergarten Enrollment**

Both county and city births were used to project kindergarten. The number of county births is known through 2021 which means we can predict kindergarten enrollment based on actual births out to 2026. 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. Births for the city of Mercer Island are known through 2018. Births on Mercer Island beyond 2018 were predicted based on the correlation between city and county births. On average city births make up about six-tenths of a percent of the births in the county. This trend has been relatively consistent over the past decade.

#### **Projecting Kindergarten Enrollment**

Kindergarten enrollments were projected using birth-to-k ratios. The birth-to-k ratio compares the kindergarten enrollment in a given year to births five years prior to that year. The District's birth-to-k ratio has averaged about one percent of county births over the past decade. The District's share of city births is greater than 100% since there are families with preschool age children who move to Mercer Island before their children reach kindergarten age. The projection model uses the six year average birth-to-k ratio for both the city and the county to predict future enrollment (excluding 2020), taking an average of the two estimates. This method was deemed reasonable since the number of city births is very small and does not always capture the larger birth trends that are likely to affect K-12 enrollment in the county. We also know from our linear models that County births together with projected population totals for Mercer Island in a typical year are highly correlated with K-12 enrollment.

### **Continuing Grades**

#### **Projecting Grades 1-12**

The forecasts at grades one to twelve 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. The trends from the past three and four years were considered, however, we used a six year rate that exclude 2020, since it appears that the large net losses from Covid have ended and the District is returning to the pattern that was in place prior to the onset of the pandemic. 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 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. What we also need to consider, however, is the effect of additional population and housing growth in Mercer Island and the county, especially growth in the K-12 population.

Our previous models based on population and housing provide us with alternative estimates of future enrollment. We applied growth factors to our forecasts to simulate the effects of low, medium and high growth rates. In other words, we tried to get our forecast to align as closely as possible with the low, medium, and high range estimates provided in the alternative forecast section of this report. The numbers will differ to some degree, of course, because they take into account the size of each year's graduating class and each year's entering kindergarten, as well as the way in which students roll up through the grades. The final numbers in all of the models are close to the low, medium, and high range estimates from the earlier models.

The medium range forecast shows the District declining some over the next several years and then growing in the latter part of the decade as population and housing growth picks up some. Our best estimates suggest that the District saw a net loss of about 200 to 250 students due to the pandemic and that many of these families will not be returning. The model reported here shows a similar trend over time to the model we developed in 2019, but with a starting point of about 200 fewer students.

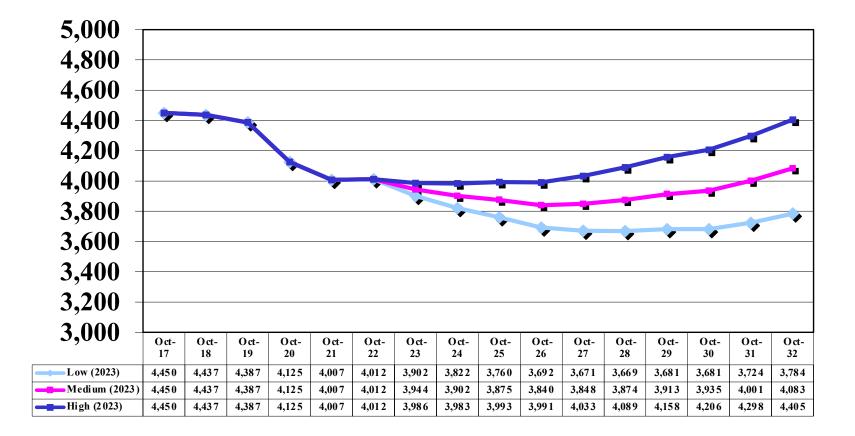
## Considerations

The low and high forecasts show what might happen if housing and population growth were to be lower or higher than what is assumed in the medium range forecast. Enrollments may well decline more than expected over the next few years (similar to the low forecast) if homes sales continue to slow and the region continues to experience lower population growth. This is especially true if we see very little new construction and lower than average turnover of existing homes on Mercer Island. On the other hand, if home prices were to drop dramatically over the next year or two this could lead to enrollment gains as more families would be able to afford a house on Mercer Island. It is important to remember that the Seattle area is much more affluent and has a higher median household income now than it did twenty years ago. In the years after the housing bubble burst (2008-2011) many affluent areas in the region saw a higher turnover of existing homes because prices had dropped dramatically, making them affordable to a larger population of buyers.

Finally, these forecasts assume that changes in enrollment are equal from year to year. In reality enrollment may grow a lot in one year, a little in another, decline in another year and stay at the same level in the following year. The actual growth in a given year may vary from the averages assumed over the different periods of the forecast.

### Mercer Island District Forecast Alternative Forecasts 2023-2032

Based on Grade Level Trends and Alternative Projections of Population and Housing



## Appendix A

Final Forecast Numbers Headcount Forecasts by Grade Level

#### October Enrollment History: 2000 to 2022

Mercer Island (October Headcount Enrollment)

Births	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Mercer Island Births	140	130	167	136	121	155	132	150	126	156	143	142	175	150	128	138	145	148	156	179	163	162	179
King County Births	21817	21573	21646	22212	22007	22487	21778	21863	22,431	22874	22680	24244	24,899	25190	25057	24514	24,630	25,032	24,910	25,348	25,487	26,011	25,273
K Enroll as % of Cnty	1.20%	1.11%	1.05%	1.05%	0.95%	1.11%	1.14%	1.06%	1.13%	1.00%	1.17%	1.02%	1.06%	1.00%	0.98%	0.95%	0.98%	1.07%	0.97%	0.93%	0.75%	0.88%	0.95%
K Enroll as a % of City	186%	184%	136%	171%	172%	161%	188%	155%	202%	147%	186%	174%	151%	168%	192%	169%	167%	182%	155%	132%	117%	142%	134%
City % of County Cohort	0.64%	0.60%	0.77%	0.61%	0.55%	0.69%	0.61%	0.69%	0.56%	0.68%	0.63%	0.59%	0.70%	0.60%	0.51%	0.56%	0.59%	0.59%	0.63%	0.71%	0.64%	0.62%	0.71%
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
K	261	239	227	233	208	250	248	232	254	229	266	247	264	252	246	233	242	269	242	236	191	230	240
1	259	276	257	257	260	224	283	276	267	283	280	294	277	298	287	273	256	280	296	259	240	244	262
2	306	277	291	276	259	274	227	294	294	280	304	294	311	297	317	305	298	261	293	302	251	229	267
3	330	309	276	308	282	266	290	255	306	311	305	305	310	336	317	343	324	313	276	303	298	250	239
4	314	330	309	297	330	292	275	311	281	316	339	320	331	337	361	326	356	336	321	307	295	299	262
5	360	318	332	331	301	345	306	279	320	280	328	341	322	339	358	356	348	367	344	331	299	284	305
6	362	356	316	349	341	301	353	298	282	347	282	343	362	338	360	378	363	371	382	358	310	296	298
7	350	364	368	325	359	339	304	369	304	290	346	311	348	370	358	369	398	367	371	388	344	314	306
8	349	352	369	381	340	352	343	308	365	314	305	357	320	350	374	356	363	408	384	393	377	345	327
9	343	347	354	351	392	344	343	334	336	383	320	337	362	332	364	398	368	368	403	386	392	365	372
10	350	335	343	360	355	387	346	337	341	350	393	335	339	364	333	368	412	367	368	407	380	385	366
11	340	334	343	333	364	363	379	342	348	357	358	407	336	342	364	332	361	403	360	364	382	375	385
12	<u>377</u>	<u>343</u>	<u>348</u>	<u>339</u>	<u>340</u>	<u>366</u>	<u>351</u>	<u>369</u>	<u>360</u>	<u>343</u>	<u>351</u>	<u>352</u>	<u>388</u>	<u>329</u>	<u>319</u>	334	<u>320</u>	340	<u>397</u>	<u>353</u>	<u>366</u>	<u>391</u>	<u>383</u>
Tot	4,301	4,180	4,133	4,140	4,131	4,103	4,048	4,004	4,058	4,083	4,177	4,243	4,270	4,284	4,358	4,371	4,409	4,450	4,437	4,387	4,125	4,007	4,012
Change	93	-121	-47	7	-9	-28	-55	-44	54	25	94	66	27	14	74	13	38	41	-13	-50	-262	-118	5
Ũ					-								0.6%	0.3%	1.7%	0.3%	0.9%	0.9%					0.40/
	2.2%	-2.8%	-1.1%	0.2%	-0.2%	-0.7%	-1.3%	-1.1%	1.3%	0.6%	2.3%	1.6%	0.0%	0.3 /0	1.1 /0	0.3%	0.9%	0.9%	-0.3%	-1.1%	-6.0%	-2.9%	0.1%
K-5		-2.8% 1749		0.2% 1702																			
K-5 6-8	2.2% 1830 1061		<u>-1.1%</u> 1692 1053		-0.2% 1640 1040	-0.7% 1651 992	-1.3% 1629 1000	-1.1% 1647 975	1.3% 1722 951	0.6% 1699 951	2.3% 1822 933	1.6% 1801 1011	1815 1030	1859 1058	1886	1836 1103	1824 1124	1826 1146	-0.3% 1772 1137	-1.1% 1738 1139	-6.0% 1574 1031	<u>-2.9%</u> 1536 955	0.1% 1575 931

#### Low Range Forecast

								I	Projecte	d Births	;			
					<u>2018</u>	<u>2019</u>	2020	2021	<u>2022</u>	2023	2024	2025	<u>2026</u>	<u>2027</u>
6	year Trends	at Kinderga	arten (Excluding 2020)	City Births	146	145	142	141	141	144	147	148	149	151
	<u>Median</u>	<u>SD+1</u>	<u>SD-1</u>	Cnty Births	24,337	24,090	23,638	23,428	23,583	23,973	24,428	24,632	24,899	25,178
% County	0.98%	1.03%	0.93%	% County	0.93%	0.94%	0.94%	0.94%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%
% City	152%	173%	131%	% City	155%	156%	156%	157%	158%	158%	158%	158%	159%	159%
City % of County	0.60%	0.66%	0.53%											

#### Recent Cohort Rates Rollup

		Rate	Adjustment	s for Popula	ation Housing	g Growth												
<u>3 Year</u>	<u>4 Year</u>	<u>Used</u>	<u>2023</u>	<u>2024</u>	<u>2025-30</u>	<u>2031-32</u>	<u>Private</u>		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
0.92%	0.93%	0.97%	0.985	0.990	0.990	1.005	1.000	K	227	226	222	221	223	227	231	233	237	239
1.162	1.147	1.140	0.960	0.986	0.988	0.993	1.000	1	263	255	254	250	249	252	256	262	264	268
1.023	1.029	1.038	0.990	0.995	0.994	0.997	1.000	2	269	271	263	262	258	257	261	265	271	273
1.025	1.033	1.041	0.990	0.995	0.994	0.997	1.000	3	275	279	281	272	272	267	266	271	275	281
1.055	1.047	1.044	0.990	0.995	0.994	0.997	1.000	4	247	286	289	291	283	282	278	277	282	286
1.005	1.009	1.023	0.990	0.995	0.994	0.997	1.000	5	265	251	290	294	296	288	288	283	283	287
1.027	1.030	1.034	0.990	0.995	0.994	0.997	1.000	6	312	273	258	299	303	305	297	297	292	291
1.021	1.016	1.021	0.990	0.995	0.994	0.997	1.000	7	301	317	277	262	303	307	311	302	302	297
1.035	1.037	1.026	0.990	0.995	0.994	0.997	1.000	8	311	308	324	283	268	310	315	318	309	309
1.017	1.010	1.014	0.990	0.995	0.994	0.997	1.000	9	328	314	310	326	285	270	313	318	321	313
0.998	0.999	1.005	0.990	0.995	0.994	0.997	1.000	10	370	328	313	310	326	285	271	314	319	322
0.992	0.989	0.986	0.990	0.995	0.994	0.997	1.000	11	357	363	322	307	304	320	280	266	308	313
1.008	1.003	0.986	0.990	0.995	0.994	0.997	1.000	12	<u>376</u>	<u>351</u>	<u>356</u>	<u>315</u>	<u>301</u>	<u>298</u>	<u>315</u>	<u>276</u>	<u>262</u>	<u>303</u>
								Tot	3902	3822	3760	3692	3671	3669	3681	3681	3724	3784
								Change	-110	-81	-62	-67	-21	-2	13	0	43	60
								Percent	-2.7%	-2.1%	-1.6%	-1.8%	-0.6%	-0.1%	0.3%	0.0%	1.2%	1.6%
								K-5	1,546	1,568	1,599	1,590	1,580	1,573	1,580	1,591	1,611	1,635

6-8

9-12 1,431 1,356 1,301 1,259 1,217 1,174 1,179 1,174 1,210 1,251

#### Medium Range Forecast

·								I	Projecte	d Births	;			
					<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	2025	<u>2026</u>	<u>2027</u>
6	<u>6 year Trends at Kindergarten (Excluding 2020)</u> Median SD+1 SD-1			City Births	146	145	142	141	141	144	147	148	149	151
	Median	<u>SD+1</u>	<u>SD-1</u>	Cnty Births	24,337	24,090	23,638	23,428	23,583	23,973	24,428	24,632	24,899	25,178
% County	0.98%	1.03%	0.93%	% County	0.95%	0.96%	0.96%	0.96%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%
% City	152%	173%	131%	% City	159%	159%	159%	160%	161%	161%	161%	161%	162%	162%
City % of County	0.60%	0.66%	0.53%											

#### Recent Cohort Rates Rollup

		<u>Rate</u>	Adjustment	s for Popula	ation Housing	g Growth												
<u>3 Year</u>	<u>4 Year</u>	<u>Used</u>	<u>2023</u>	<u>2024</u>	<u>2025-30</u>	<u>2031-32</u>	<u>Private</u>		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
0.92%	0.93%	0.97%	1.005	1.010	1.010	1.025	1.000	K	232	230	226	225	228	232	236	238	242	244
1.162	1.147	1.140	0.970	0.996	0.998	1.003	1.000	1	266	263	262	257	256	260	264	270	272	276
1.023	1.029	1.038	1.000	1.005	1.004	1.007	1.000	2	272	277	274	273	268	267	272	276	282	284
1.025	1.033	1.041	1.000	1.005	1.004	1.007	1.000	3	278	284	289	286	286	281	280	285	289	296
1.055	1.047	1.044	1.000	1.005	1.004	1.007	1.000	4	250	292	298	303	300	300	295	294	299	304
1.005	1.009	1.023	1.000	1.005	1.004	1.007	1.000	5	268	256	299	306	312	309	309	304	303	308
1.027	1.030	1.034	1.000	1.005	1.004	1.007	1.000	6	316	279	266	311	318	324	322	322	316	316
1.021	1.016	1.021	1.000	1.005	1.004	1.007	1.000	7	304	324	286	273	319	326	333	331	331	325
1.035	1.037	1.026	1.000	1.005	1.004	1.007	1.000	8	314	314	334	294	282	329	337	344	342	342
1.017	1.010	1.014	1.000	1.005	1.004	1.007	1.000	9	332	320	320	340	300	287	336	345	352	349
0.998	0.999	1.005	1.000	1.005	1.004	1.007	1.000	10	374	335	323	322	343	303	291	340	349	356
0.992	0.989	0.986	1.000	1.005	1.004	1.007	1.000	11	361	370	332	320	320	340	301	288	338	346
1.008	1.003	0.986	1.000	1.005	1.004	1.007	1.000	12	<u>380</u>	<u>358</u>	<u>367</u>	<u>328</u>	<u>317</u>	<u>317</u>	<u>338</u>	<u>299</u>	<u>286</u>	<u>335</u>
								Tot	3944	3902	3875	3840	3848	3874	3913	3935	4001	4083
								Change	-68	-42	-27	-36	9	26	39	22	66	82
								Percent	-1.7%	-1.1%	-0.7%	-0.9%	0.2%	0.7%	1.0%	0.6%	1.7%	2.0%

	1.1 /0	1.170	0.1 /0	0.070	0.2/0	0.1 /0	1.0 /0	0.070	1.1 /0	2.070
K-5	1,564	1,603	1,649	1,651	1,650	1,648	1,656	1,667	1,688	1,713
6-8	934	916	886	878	919	980	992	997	989	983
9-12	1,446	1,383	1,341	1,310	1,279	1,247	1,265	1,272	1,325	1,387

#### High Range Forecast

					<u>2018</u>	<u>2019</u>	<u>2020</u>	2021	2022	<u>2023</u>	2024	2025	<u>2026</u>	<u>2027</u>
6	year Trends	at Kinderg	arten (Excluding 2020)	City Births	146	145	142	141	141	144	147	148	149	151
	<u>Median</u>	<u>SD+1</u>	<u>SD-1</u>	Cnty Births	24,337	24,090	23,638	23,428	23,583	23,973	24,428	24,632	24,899	25,178
% County	0.98%	1.03%	0.93%	% County	0.97%	0.98%	0.98%	0.98%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
% City	152%	173%	131%	% City	162%	163%	163%	163%	164%	164%	164%	164%	165%	165%
City % of County	0.60%	0.66%	0.53%											

**Projected Births** 

#### Recent Cohort Rates Rollup

		<u>Rate</u>	Adjustment	s for Popula	ation Housing	g Growth												
<u>3 Year</u>	<u>4 Year</u>	<u>Used</u>	<u>2023</u>	<u>2024</u>	<u>2025-30</u>	<u>2031-32</u>	<u>Private</u>		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
0.92%	0.93%	0.97%	1.025	1.030	1.030	1.046	1.000	K	236	235	231	230	232	236	241	243	246	249
1.162	1.147	1.140	0.980	1.006	1.008	1.013	1.000	1	268	271	270	265	264	268	272	278	280	285
1.023	1.029	1.038	1.010	1.015	1.014	1.017	1.000	2	275	282	285	284	279	278	283	287	293	296
1.025	1.033	1.041	1.010	1.015	1.014	1.017	1.000	3	281	290	298	301	300	295	294	299	304	311
1.055	1.047	1.044	1.010	1.015	1.014	1.017	1.000	4	252	297	307	316	319	318	313	313	318	323
1.005	1.009	1.023	1.010	1.015	1.014	1.017	1.000	5	271	262	308	318	328	331	331	326	325	330
1.027	1.030	1.034	1.010	1.015	1.014	1.017	1.000	6	319	284	274	324	334	344	348	348	343	342
1.021	1.016	1.021	1.010	1.015	1.014	1.017	1.000	7	307	330	294	284	335	347	357	362	362	356
1.035	1.037	1.026	1.010	1.015	1.014	1.017	1.000	8	317	320	344	306	296	349	362	373	378	377
1.017	1.010	1.014	1.010	1.015	1.014	1.017	1.000	9	335	327	329	354	315	305	360	373	385	390
0.998	0.999	1.005	1.010	1.015	1.014	1.017	1.000	10	377	342	333	336	361	322	311	368	381	393
0.992	0.989	0.986	1.010	1.015	1.014	1.017	1.000	11	364	378	342	333	336	361	322	312	369	382
1.008	1.003	0.986	1.010	1.015	1.014	1.017	1.000	12	<u>383</u>	<u>365</u>	<u>378</u>	<u>342</u>	<u>333</u>	<u>336</u>	<u>362</u>	<u>323</u>	<u>313</u>	<u>370</u>
								Tot	3986	3983	3993	3991	4033	4089	4158	4206	4298	4405
								Change	-26	-3	10	-2	41	57	68	48	92	107
								Percent	-0.7%	-0.1%	0.3%	-0.1%	1.0%	1.4%	1.7%	1.2%	2.2%	2.5%

Trends and Projections -- Jan 2023

966 1,040 1,067 1,083 1,082 1,075

к-5 1,582 1,637 1,699 1,714 1,722 1,726 1,734 1,745 1,767 1,794

9-12 1,460 1,411 1,381 1,363 1,345 1,323 1,356 1,377 1,449 1,536

6-8

943

935

912

914

#### **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 23 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, 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.

