

Mercer Island School District

Demographic Trends and District Projections

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Introduction

Mercer Island is located between the Seattle and Bellevue metropolitan areas just off the I-90 bridge that connects Seattle to the eastside. The island is self-contained and provides an easy commute east and west. The population on the island is estimated to be just over 22,000. The median home value on the Island is generally higher than the average for the county and for the city of Seattle.

Enrollment in the Mercer Island school district has fluctuated up and down over the years in relation to shifts in national and local demographic trends. Although new housing stock has been added to the island over the past 2 decades the majority of the neighborhoods are well-established. Enrollment in the school district is heavily influenced by up and down cycles in the number of annual births in the region and by shifting population trends.

The ability of the island to attract families with children is a major influence on enrollment. Over the past 2 decades the number of residents with children moving onto Mercer Island has exceeded the number of families with children moving away. In recent years, however, the graduating classes have tended to be large compared to the incoming kindergarten cohort, and have exerted a downward pull on enrollment. Although some of this loss has been made up by new residents moving into the district, this growth has not been enough to offset the overall decline in enrollment. Since the 1990's the District's share of the county population has declined. This decline has

Introduction

leveled off in recent years but is likely to continue to some degree over the next decade. The decline in Mercer Island's share of the county population is correlated with a decline in its share of the county K-12 school population. Thus, even in years where enrollment has increased, the District's share of overall enrollment in the region has tended to decline. This trend is also expected to stay in place over the next decade.

Looking forward, the best estimates at this time suggest that enrollment will continue to be relatively flat (with modest increases and decreases) through at least 2011. Between 2012 and 2020 it is projected that the K-12 population in the region will increase due to a marked increase in births. This trend will be similar to what happened in the 1990's as enrollment in King County increased by approximately 30,000 students. The gain between 2010 and 2020 is expected to be somewhat less than this, with the greatest potential for growth occurring between 2015 and 2020. Although Mercer Island may enroll a smaller share of the K-12 population over time, the sheer increase in the size of this population means that the District will likely see enrollment increases between 2010 and 2020.

The following sections of this report provide more detail about enrollment trends in the District and provide a detailed discussion of the demographic trends that are likely to affect future enrollment. The final section provides an enrollment forecast by grade level for the District.

Enrollment

Mercer Island and the Region

For the most part the enrollment trend in Mercer Island has mirrored the national and regional trends. Enrollment in the district declined rapidly in the 1970's and 1980's as the large population of baby boomers reached the graduation stage. In the late 1980's and the 1990's the children of baby boomers began to enroll in public schools leading to another upward surge in enrollment. In recent years this cohort has worked its way to graduation and enrollment growth has tended to slow or decline in Mercer Island and many of the other districts in the Puget Sound. Between 1990 and 2000, enrollment in King County public schools increased by almost 30,000 students. Since 2000 enrollment in the county has increased by only 5,768 students.

Mercer Island's enrollment increased by over a 1000 students between 1990 and 2000. Since 2000 overall enrollment has declined by just under 300 and for the most part enrollment has been flat (neither growing much or declining much) over the past several years.

A closer examination of the District's enrollment indicates that during the 1990's boom the District enrolled just over 1% of the county birth cohort. This percentage did not change much between 1990 and 2000, indicating that the District share of the "boomer children cohort" did not typically show up at kindergarten. In general the District saw larger net gains as student progressed through the grades. In other words, many of the families with children tended to show up in Mercer Island schools sometime after Kindergarten. This pattern can be seen most clearly by examining the District's grade level cohort rates. A cohort rate is a shorthand

Enrollment

Mercer Island and the Region

indicator of how much enrollment changes as student progress through the grades. Over the course of a year, some students will stay in the District, other will move, and still others will move into the District from someplace else. By comparing the enrollment at a particular grade in a particular year (say 1st grade) to the enrollment from the prior grade and the prior year (kindergarten) you can get some indication of whether there is a net gain or loss from families moving into and out of the district. This cohort ratio (e.g., divide 1st grade enrollment in 2008 by the kindergarten enrollment in 2007) provides a quick indication of what is happening within the District. A ratio greater than 1 indicates that more families are moving in than moving out. A number less than 1 indicates that more families are moving out than moving in.

An examination of the cohort ratios for elementary, middle, and high schools between 1991 and 2008 indicate that in general these ratios tend to be greater than one. The district has more families with children moving in than moving out over the course of the year. There are a few years in the past 8 in which the ratios have been less than 1 at the junior high and high school level indicating a net loss of children at certain grades. But the most typical pattern shows a net gain.

So what does this mean? For the past 2 decades the number of families with children opting to live in Mercer Island and attend the schools has been greater than the number leaving. So why has enrollment been flat or declining since 2000? The simple answer is that the recent graduating classes (the children of baby boomers) have tended to be larger than the incoming kindergarten classes. Since 2000 the exiting graduating class has typically been about 120

Enrollment

Mercer Island and the Region

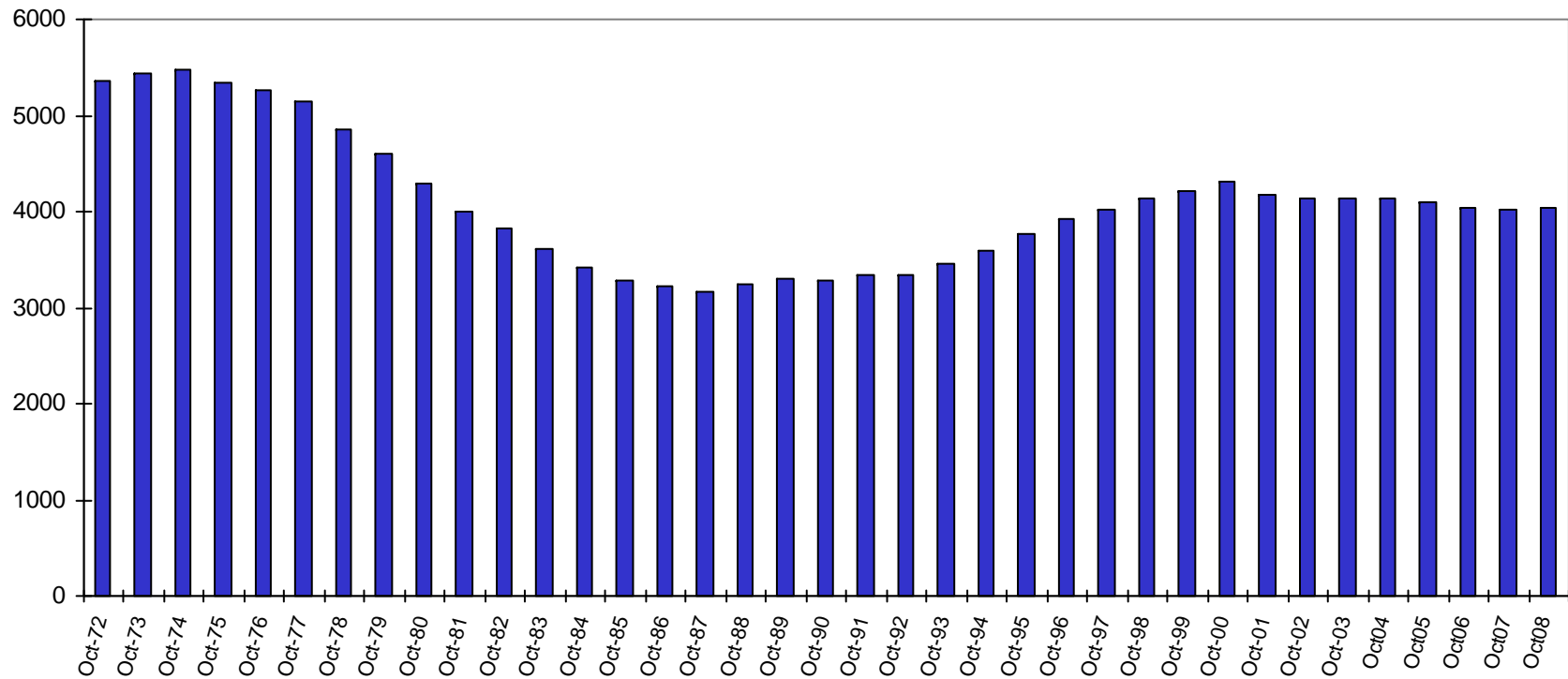
students larger than the following year's kindergarten class. Some of this difference is made up by growth at the other grades, but in some years, this growth is not enough to make up for this difference. Enrollment grew between 2007 and 2008 because the net loss due to the difference in exiting and entering cohorts (existing 12th graders versus entering kindergarteners) was made up for by a net gain of 150 students at the other grades (More families moved in than moved out at the other grades).

Over the next decade it is likely that the incoming kindergarten cohorts will range between 240 and 280, slightly larger than those that have been seen over the past 8 years. This modest increase is expected due to a predicted increase in births. As these cohorts age there will be more K-12 children in the population. The slightly larger kindergarten classes, combined with an increase in the K-12 population overall (after several years of larger birth cohorts), should result in future enrollment gains in the District. The question that must be answered is what share of future K-12 enrollment will be enrolled in Mercer Island. In order to answer this question we have to look at predicted increases in births, projected gains in the population and the K-12 population for the District and other factors that might influence this number (e.g., private schools). The next sections deal with these demographic trends and their potential influence on enrollment.

Mercer Island Enrollment Trend

1991-2008 October P223 Enrollment

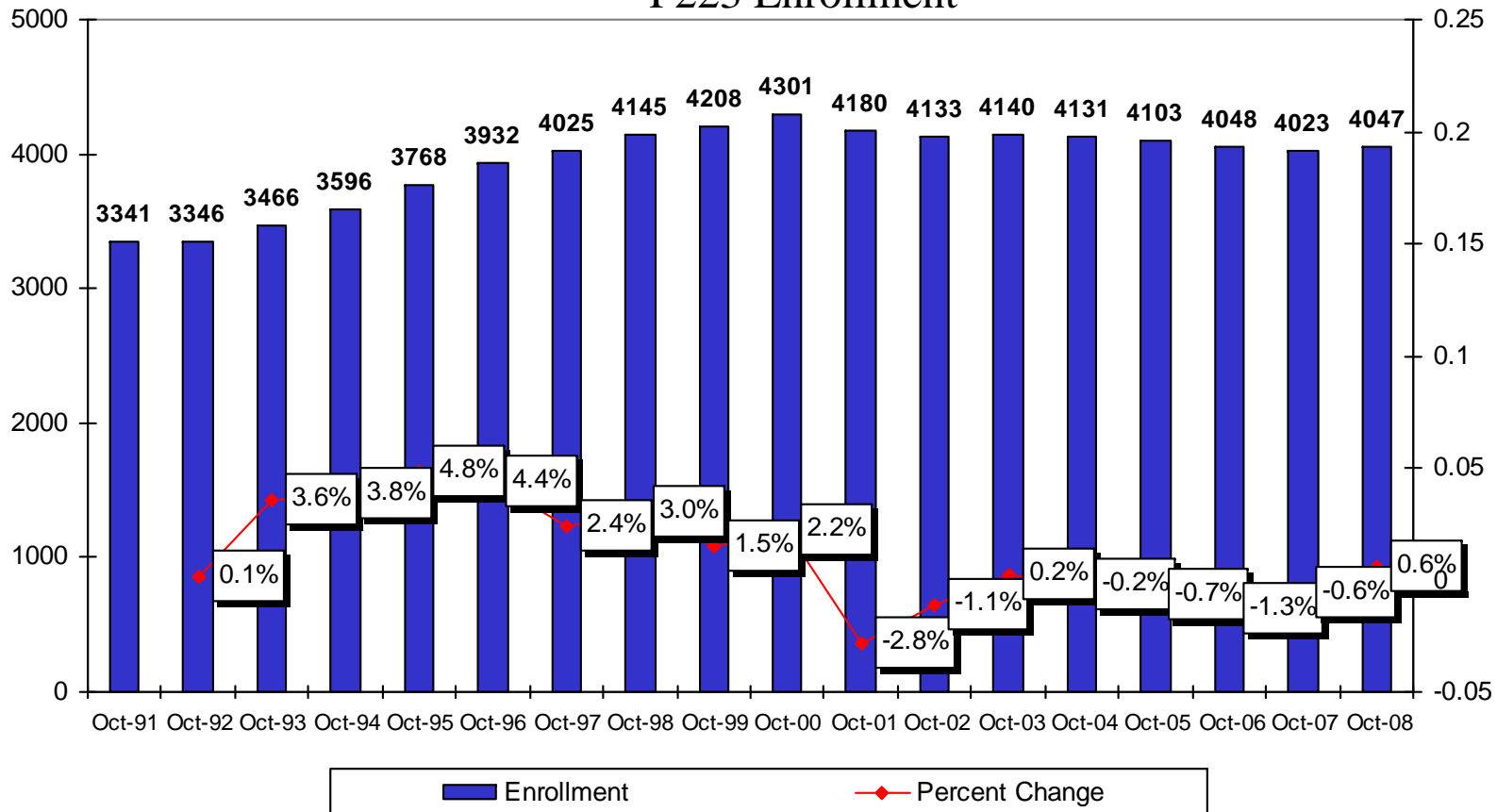
1972-1990 P105 State of Washington



District Enrollment Trend

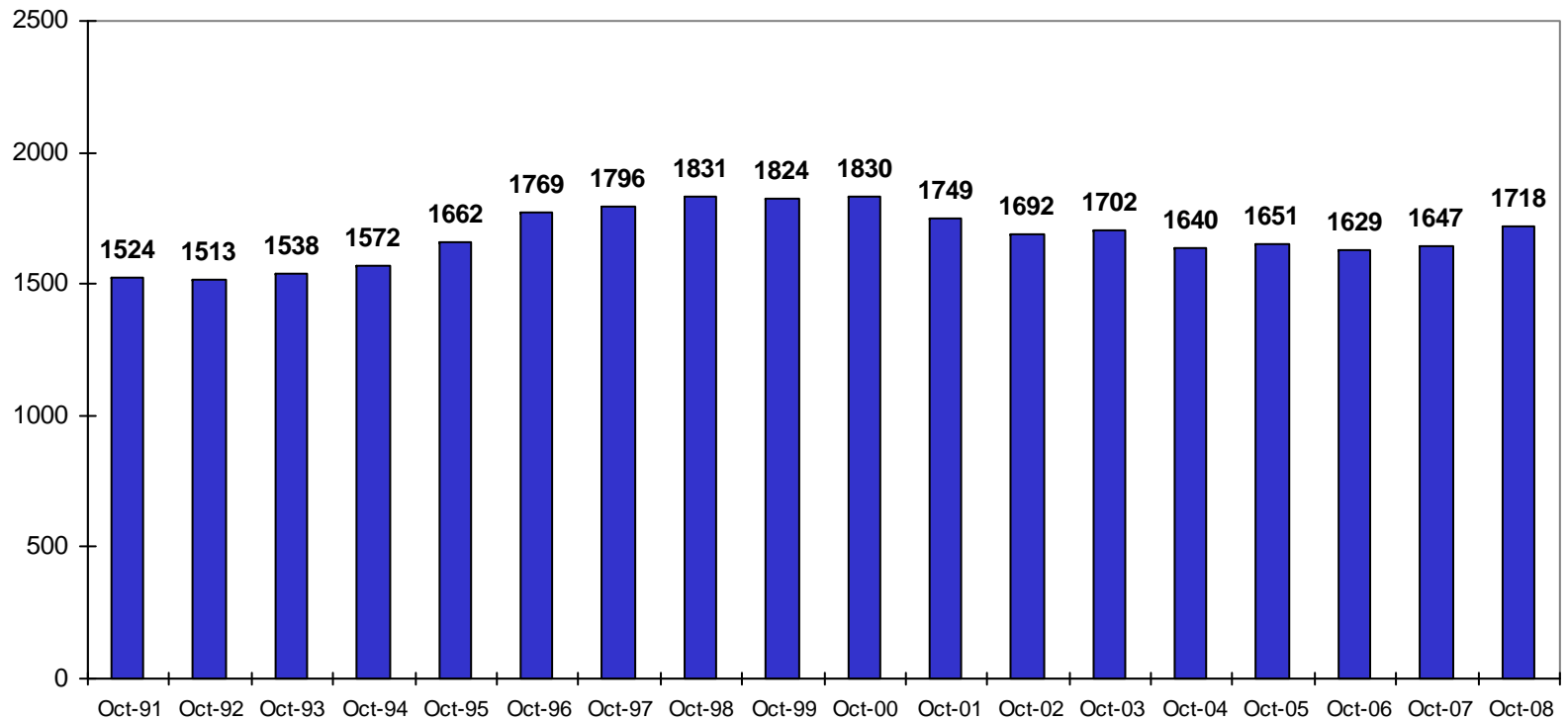
1991-2008

P223 Enrollment



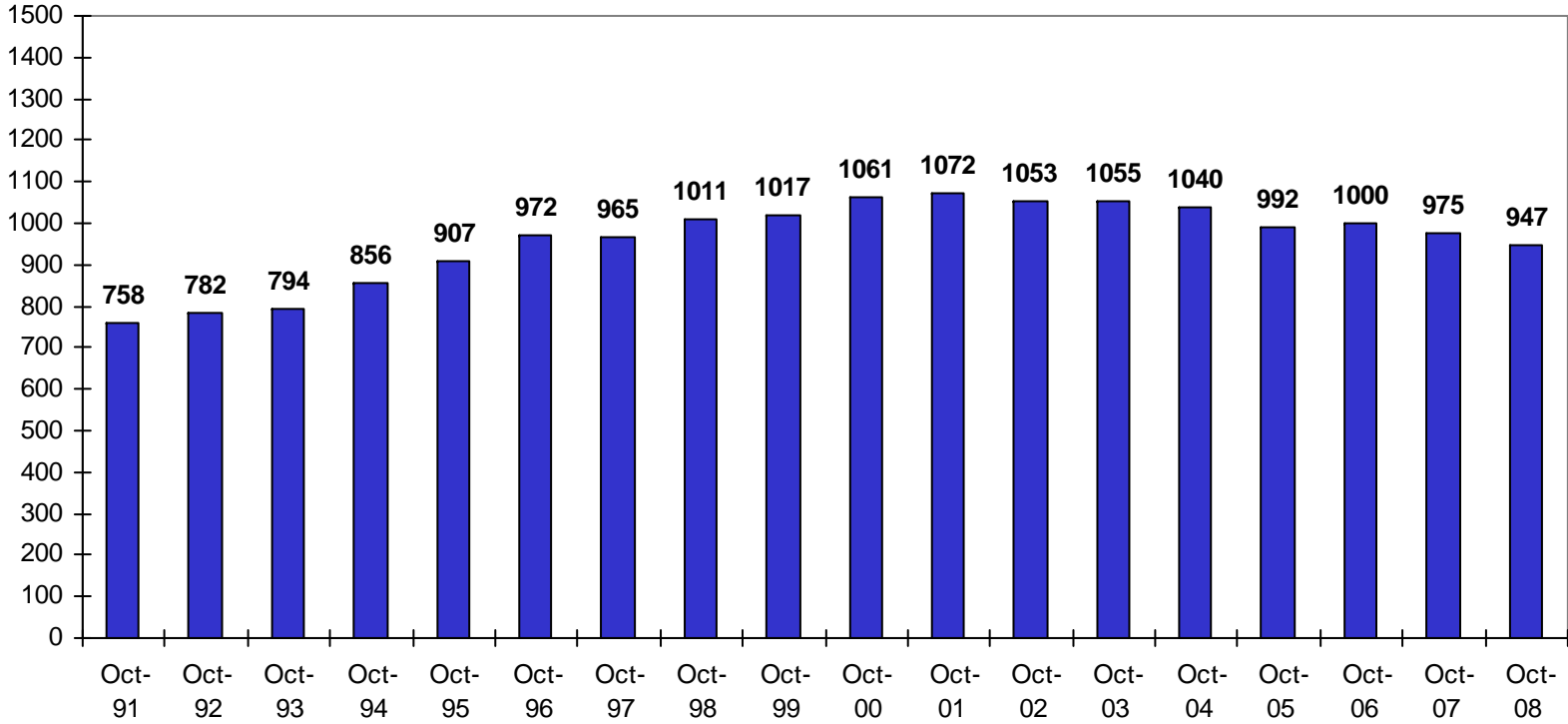
Elementary Enrollment Trend

Mercer Island District



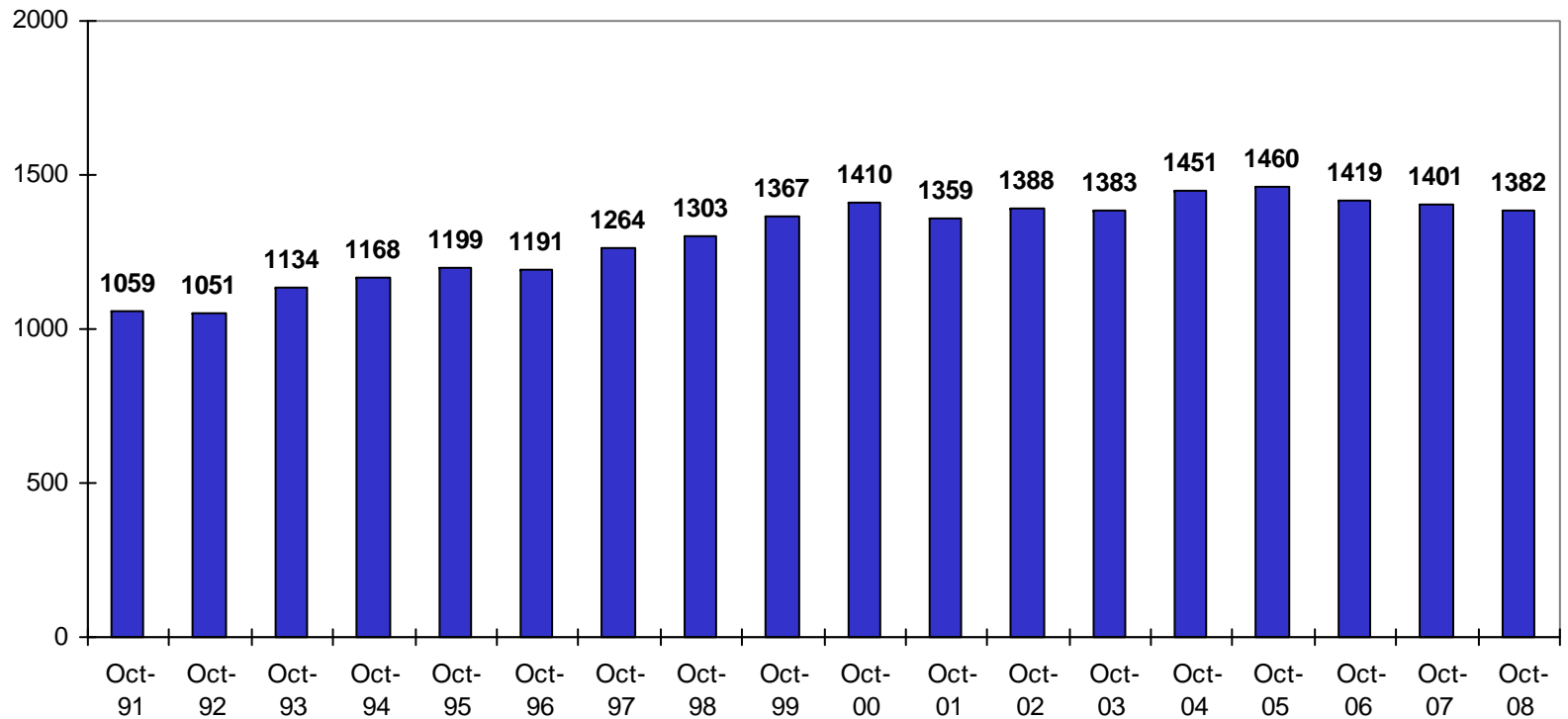
Middle School Enrollment Trend

Mercer Island School District



High School Enrollment Trend

Mercer Island School District (Grades 9-12)



Grade Progression Rate Example

- Rates for Different Grade Levels:
 - Elementary: K-4 moves into Grades 1-5
 - Middle schools: Grades 5-7 move into 6-8
 - High school: Grades 8-11 move into 9-12
 - A ratio greater than 1 indicates a net gain from families moving in over the course of a year; less than 1 indicates a net loss (more moving out than moving in).

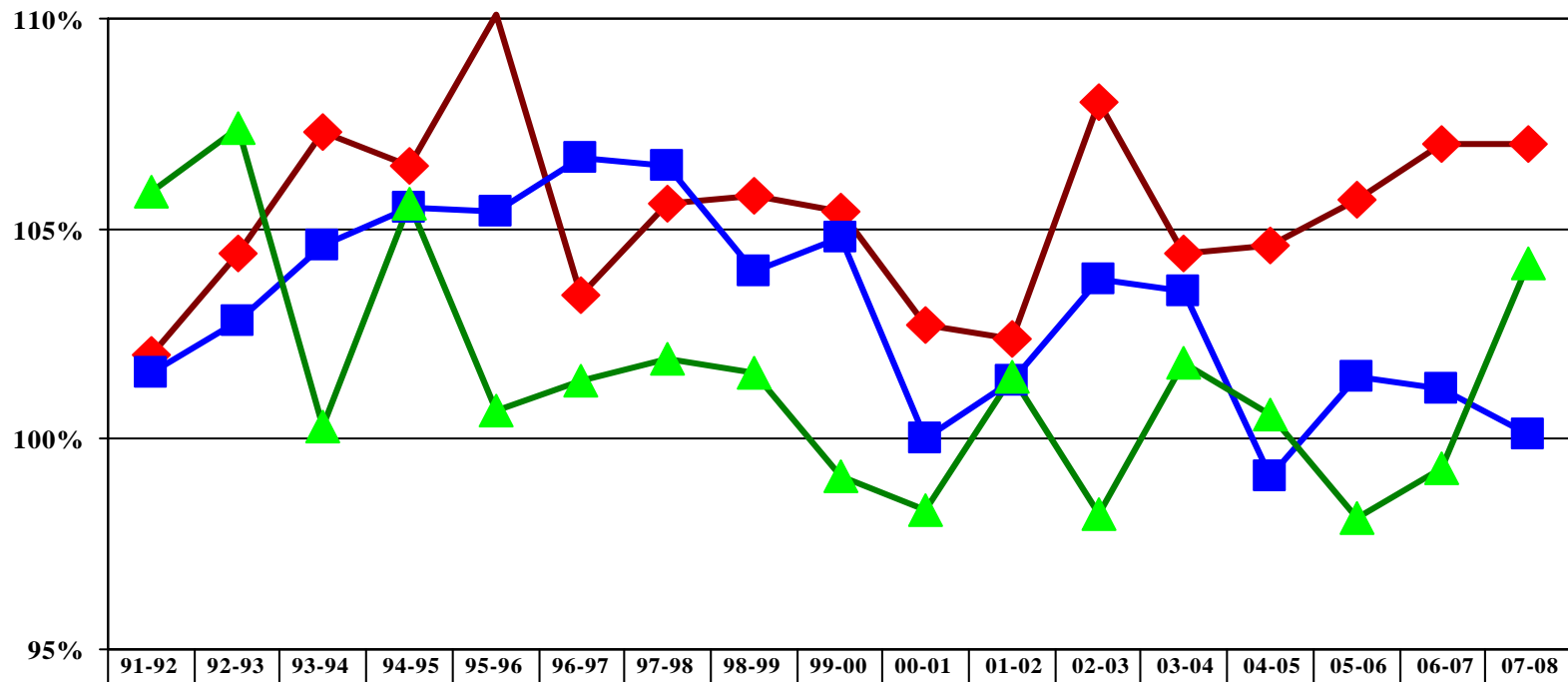
Grade	<u>2007</u>	<u>2008</u>
K	232	254
1	276	270
2	294	290
3	255	305
4	311	281
5	<u>279</u>	<u>318</u>
	3654	3726

K-4 Total	Gr1-5 Total	<u>Ratio</u>
1368	1464	107%

Grade Progression Rates

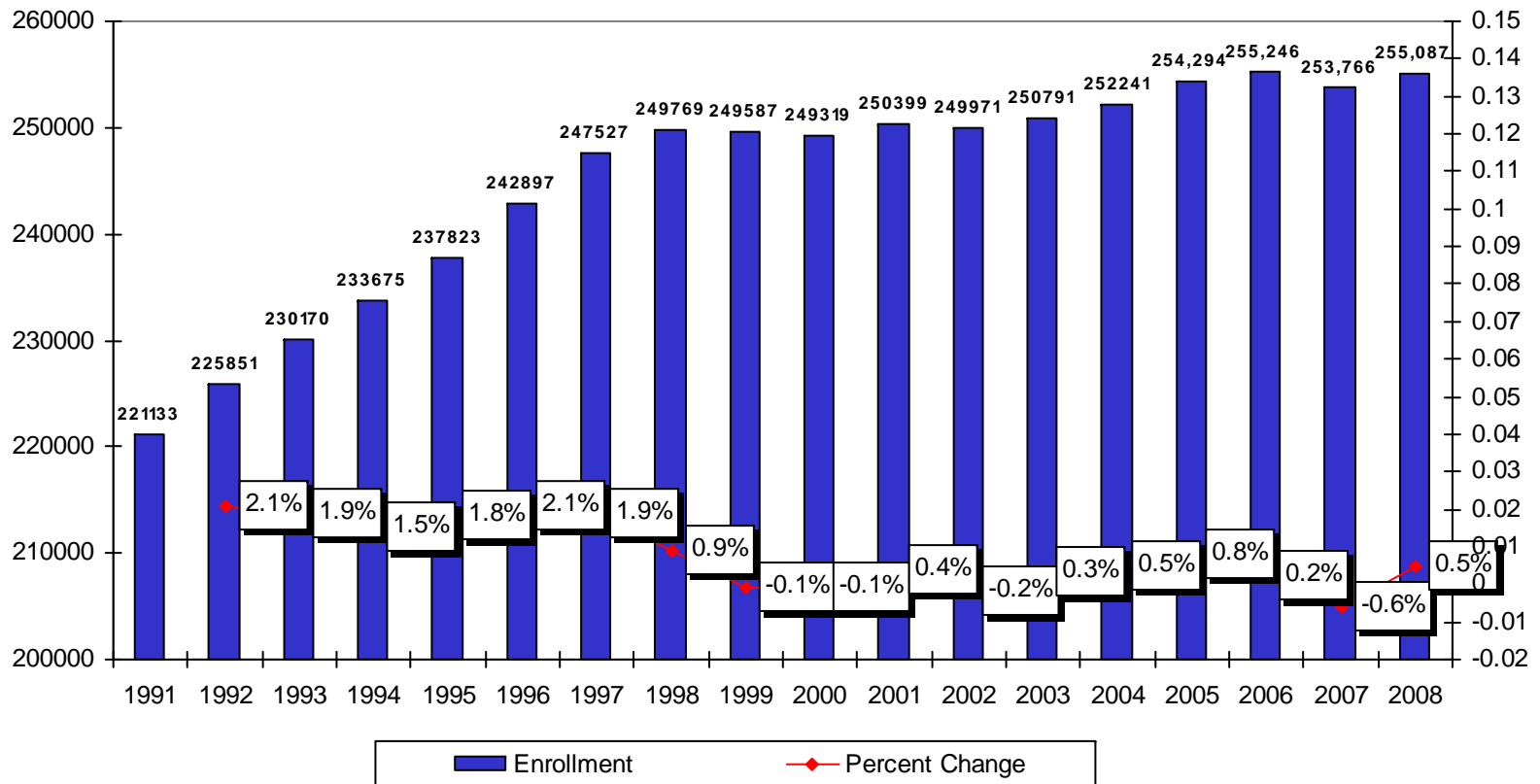
Elementary, Middle and High

Mercer Island Public Schools

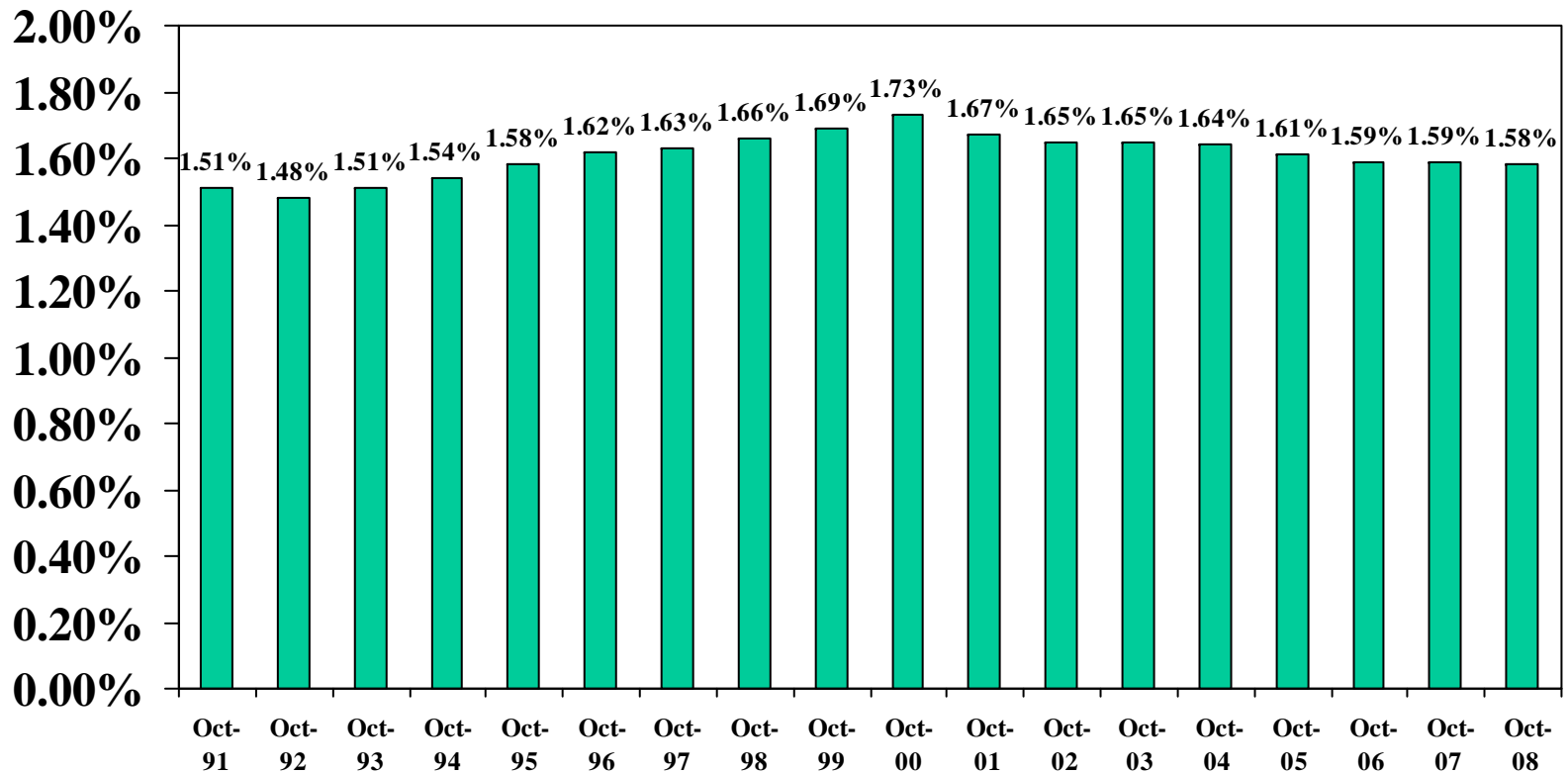


K-4 into 1-5	1.02	1.044	1.073	1.065	1.101	1.034	1.056	1.058	1.054	1.027	1.024	1.08	1.044	1.046	1.057	1.07	1.07
5-7 into 6-8	1.016	1.028	1.046	1.055	1.054	1.067	1.065	1.04	1.048	1	1.014	1.038	1.035	0.991	1.015	1.012	1.001
8-11 into 9-12	1.059	1.074	1.003	1.056	1.007	1.014	1.019	1.016	0.991	0.983	1.015	0.982	1.018	1.006	0.981	0.993	1.042

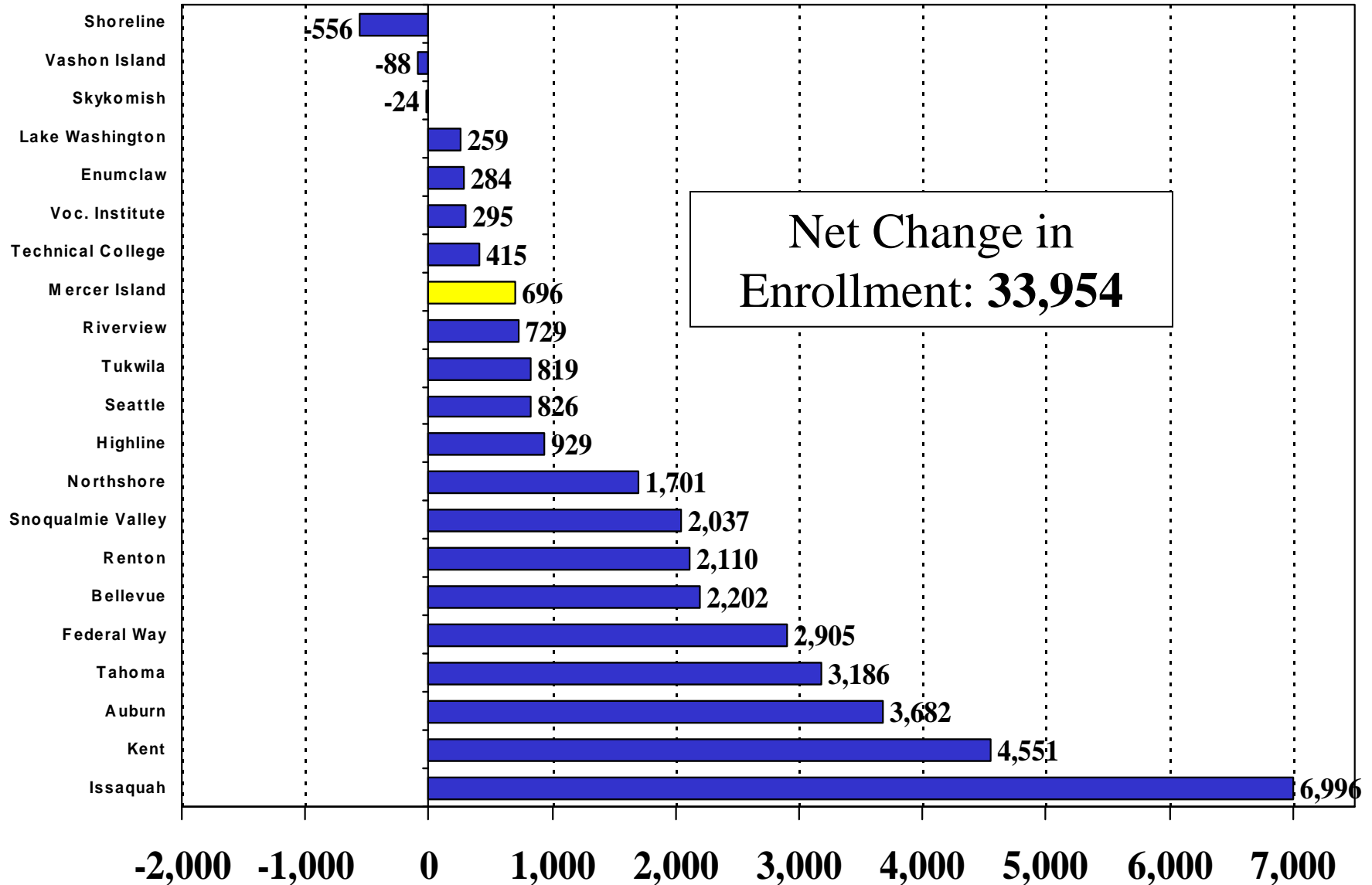
King County Public Schools Enrollment Trend



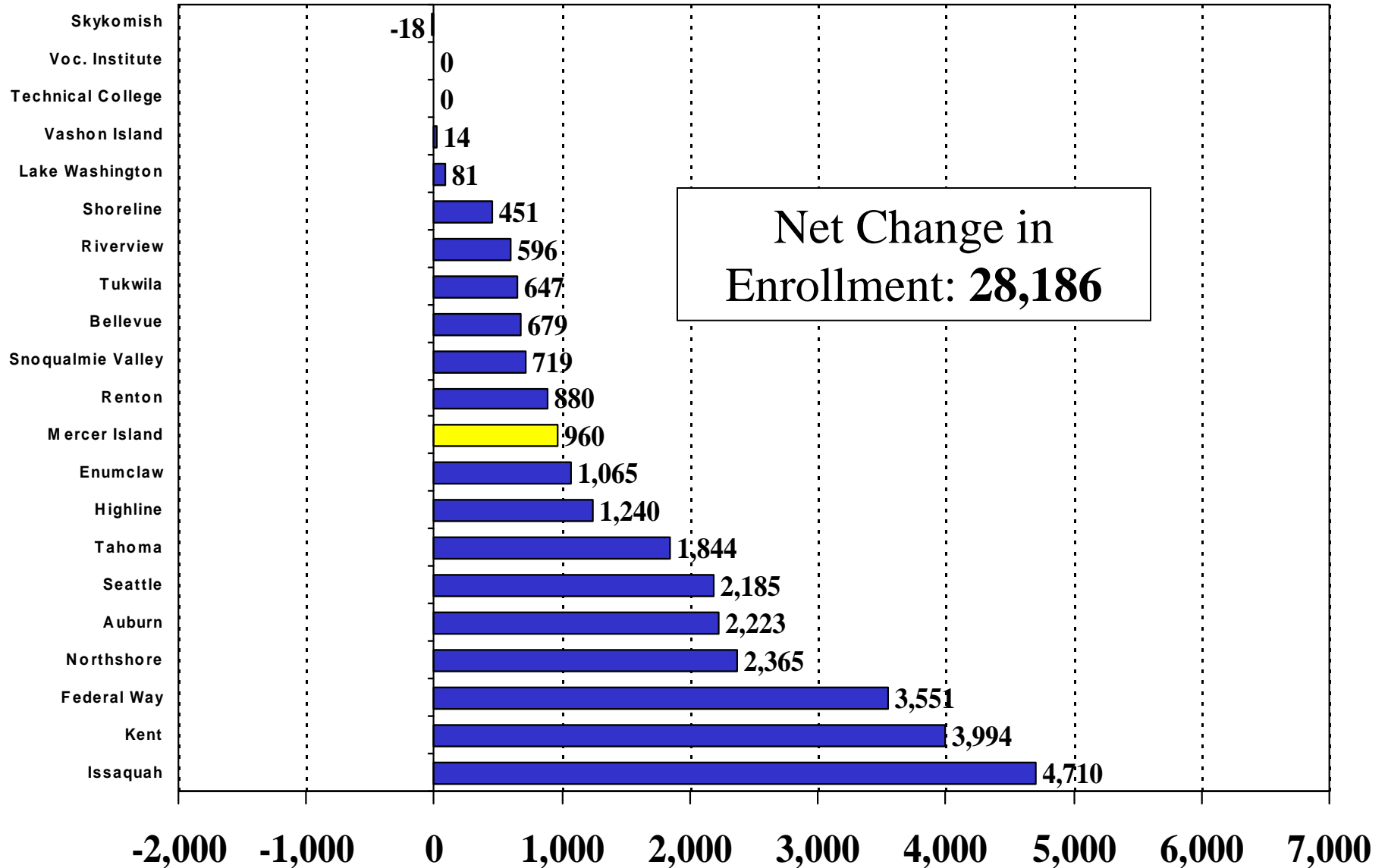
Mercer Island's Share of County K-12 Public School Enrollment



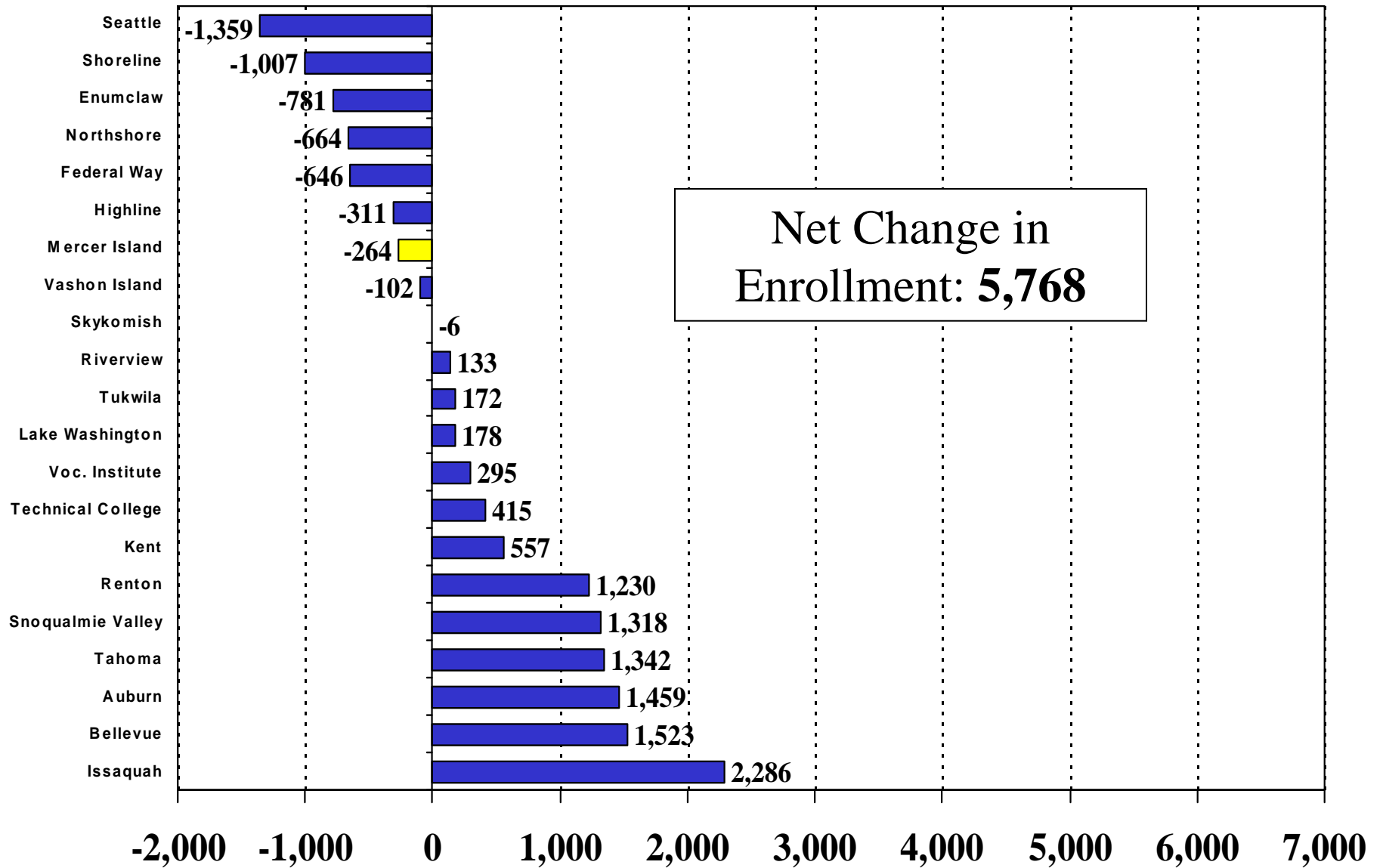
King County Districts: Change in Enrollment *1991 - 2008*



King County Districts: Change in Enrollment *1991 - 2000*



King County Districts: Change in Enrollment 2000-2008

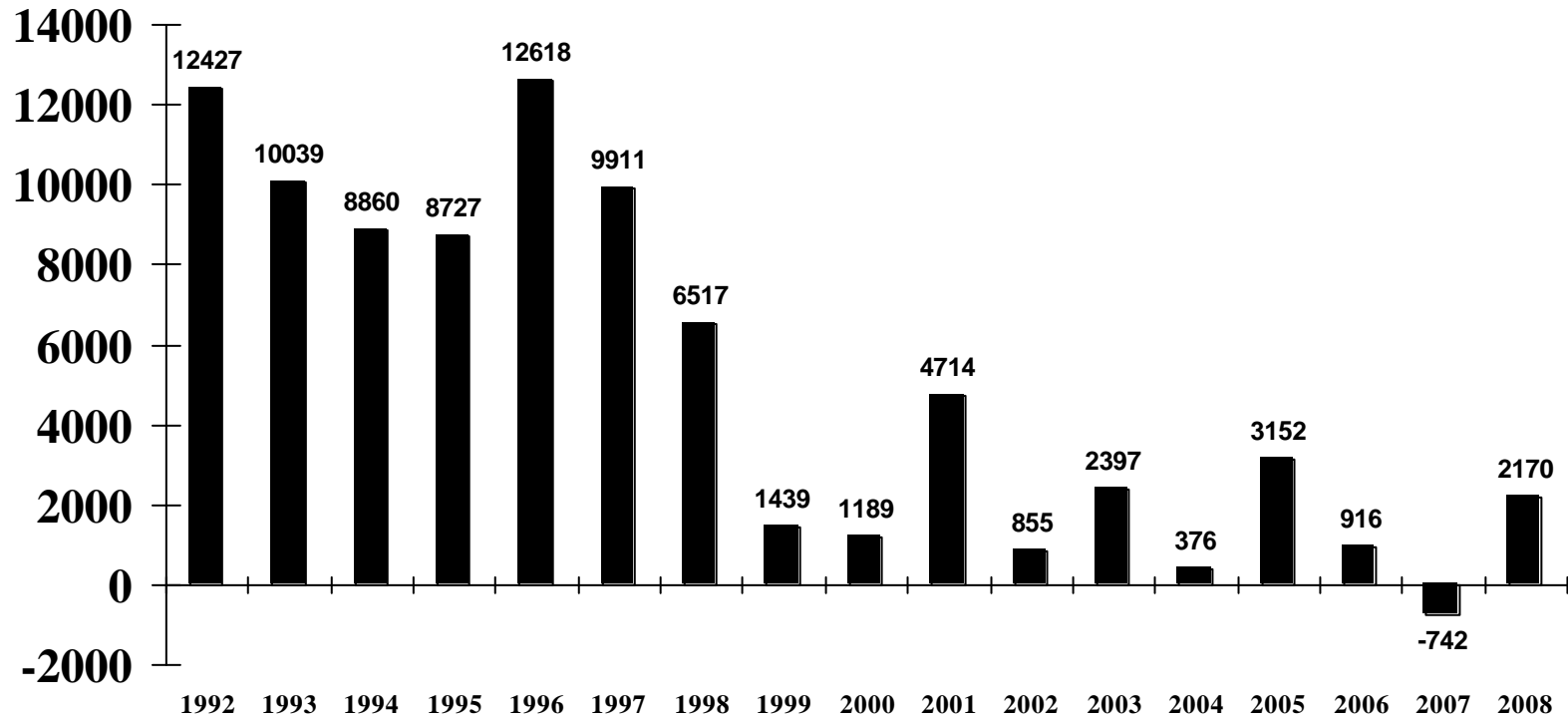


Puget Sound Public School Enrollment

Net Change in Enrollment

King, Kitsap, Pierce, & Snohomish Combined

Source: OSPI P223 Enrollment Reports



Demographic Trends Affecting Enrollment

Births, Population Growth, and
Housing

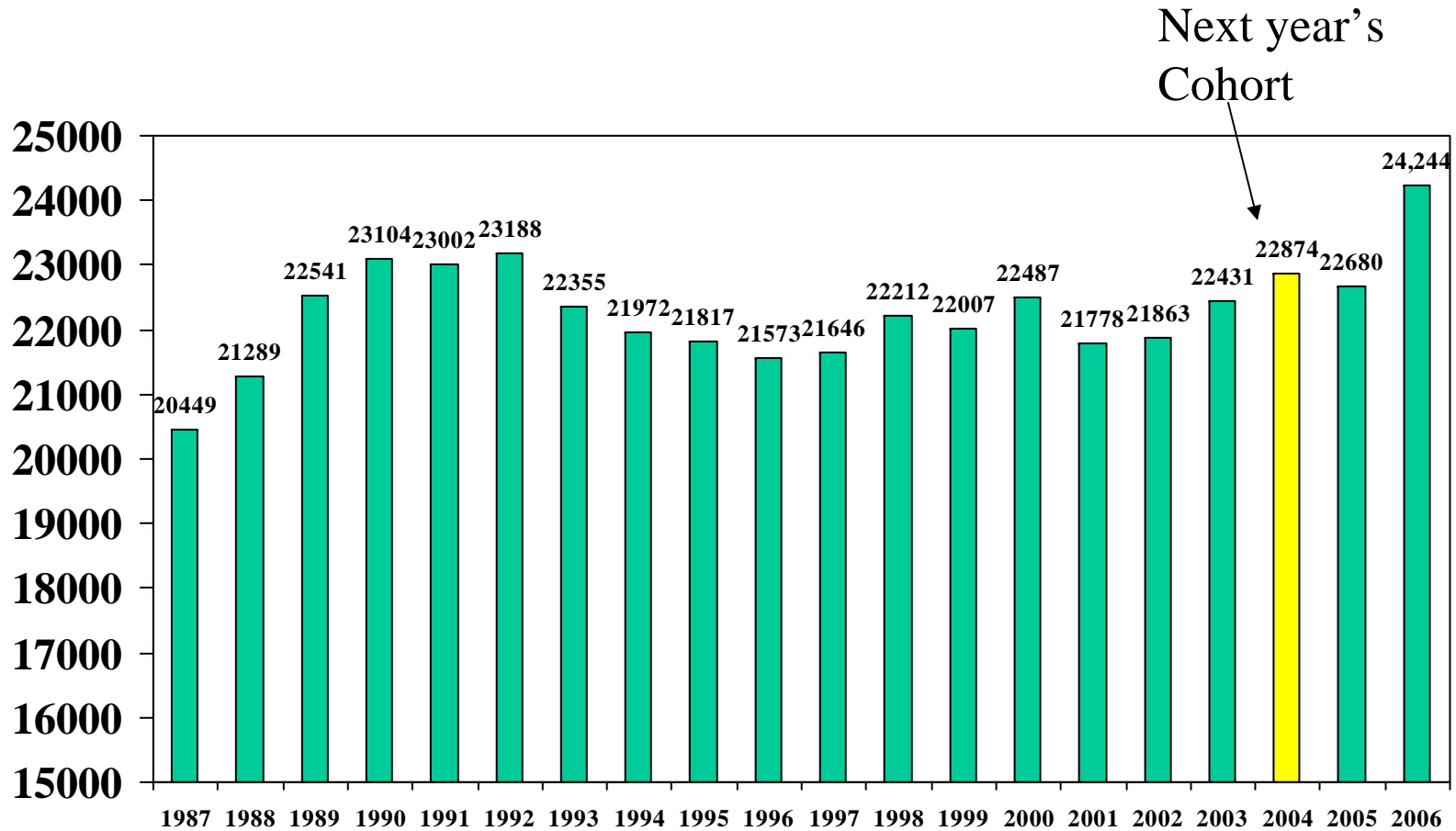
Birth Trends and Enrollment

Births in King County increased gradually from the mid 1980's into the early 1990's reaching a peak in 1993. Between 1993 and 2000 the number of births in a given year tended to be 1000 or more lower than in the peak years. This small decline in births over a period of 5-6 years resulted in smaller net gains in elementary enrollment in the county and smaller net gains in overall enrollment over the past decade.

Since 2003 births have trended to just above 22,000 annually. In 2006 the number of births in the county reached 24,244 which is higher than the peak years in the early 1990's. There were also a record number of births nationally in 2006. Between now and 2020 the number of births both locally and nationally is predicted to rise resulting in a rise in the K-12 enrollment between 2012 and 2025. The State of Washington is predicting an increase of approximately 160,000 in the Age 5-19 population statewide between 2015 and 2025 due primarily to an increase in births. This compares to the gain of approximately 250,000 that was seen when the children of baby boomers reached the school age in the 1990's. These trends suggest that elementary enrollment and K-12 enrollment generally should start to increase between 2012 and 2020 as the larger birth cohorts become eligible for school.

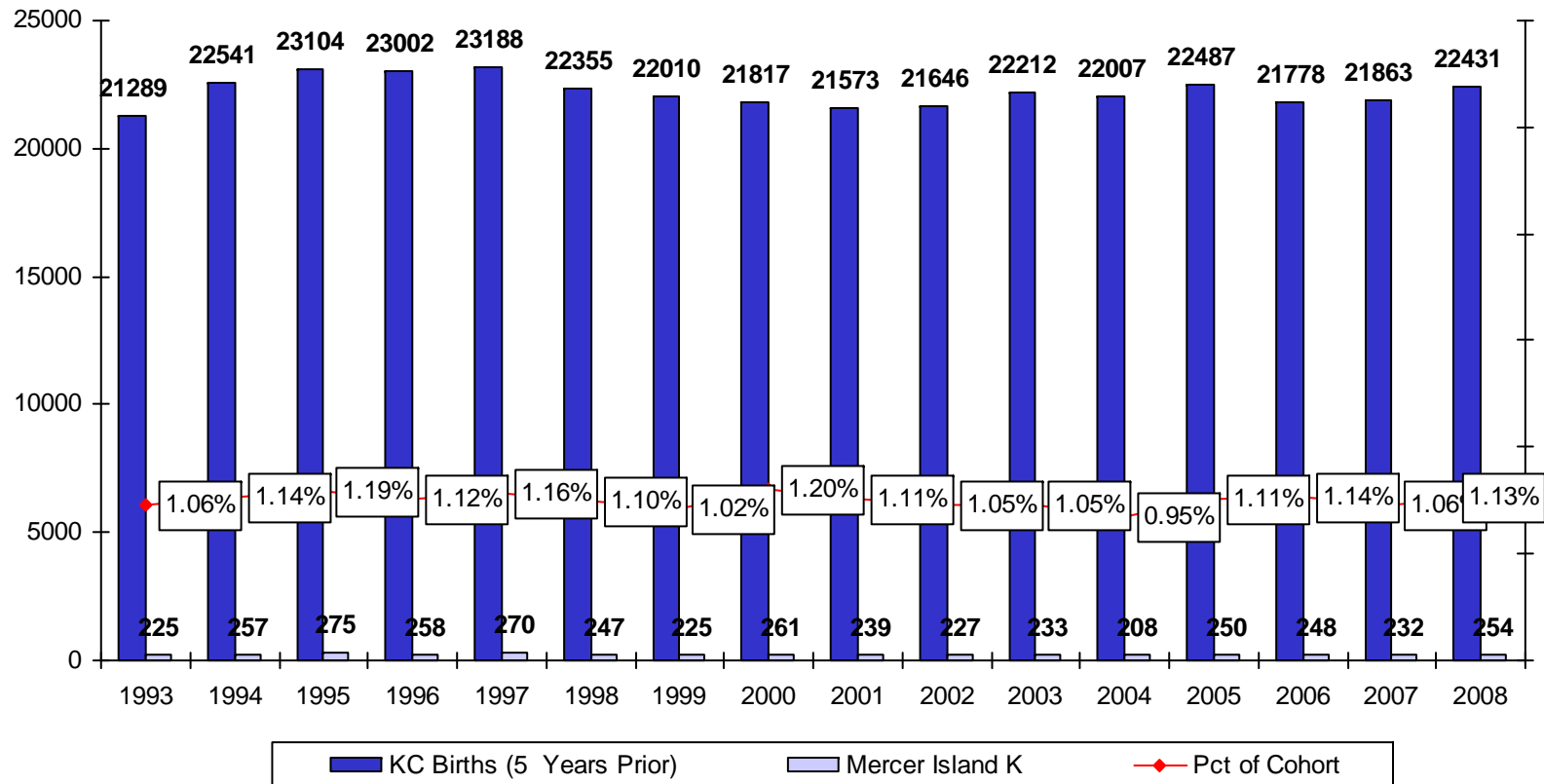
Mercer Island typically enrolls just over 1% of the county birth cohort on an annual basis. This trend has been relatively consistent for the past two decades and there is no reason to think that it will change dramatically in the near term, given the District's expected share of future population growth in the county. Over time, the District's kindergarten and elementary enrollment should start to increase due to the expected increase in births.

King County Births



Mercer Island

K Enrollment as a Percent of King County Births



Population Growth

The population of King County has been growing by just over 1% annually over the past decade. The current population for the county is estimated to be just under 1.9 million. It is projected that the county population will grow to over 2 million residents by 2015 and to over 2.1 million by 2020.

The population of the Mercer Island school district has been growing at a much slower pace than the overall county. Estimates from the Office of Financial Management for the State of Washington indicate that the population in the district has grown from 22,036 in the 2000 Census to 22,650 in 2008. This represents an annual growth rate of 3 tenths of a percentage point, well below the pace for the county. And in some years the population has actually declined. Mercer Island's share of the county population has also been dropping consistently since the 1990's.

Data from the Puget Sound Regional council projects that the population of the District could increase to just under 25,000 residents by 2020. Much of this growth is projected to come from greater housing density (apartments, condominiums, and town homes) While good for overall growth this type of housing is not always conducive to K-12 enrollment growth. In addition, the District's share of the overall county population is expected to continue to decline over time, although not as much as it did in the period between 1990 and 2008.

Since 2000, the decline in Mercer Island's share of the county population growth is correlated

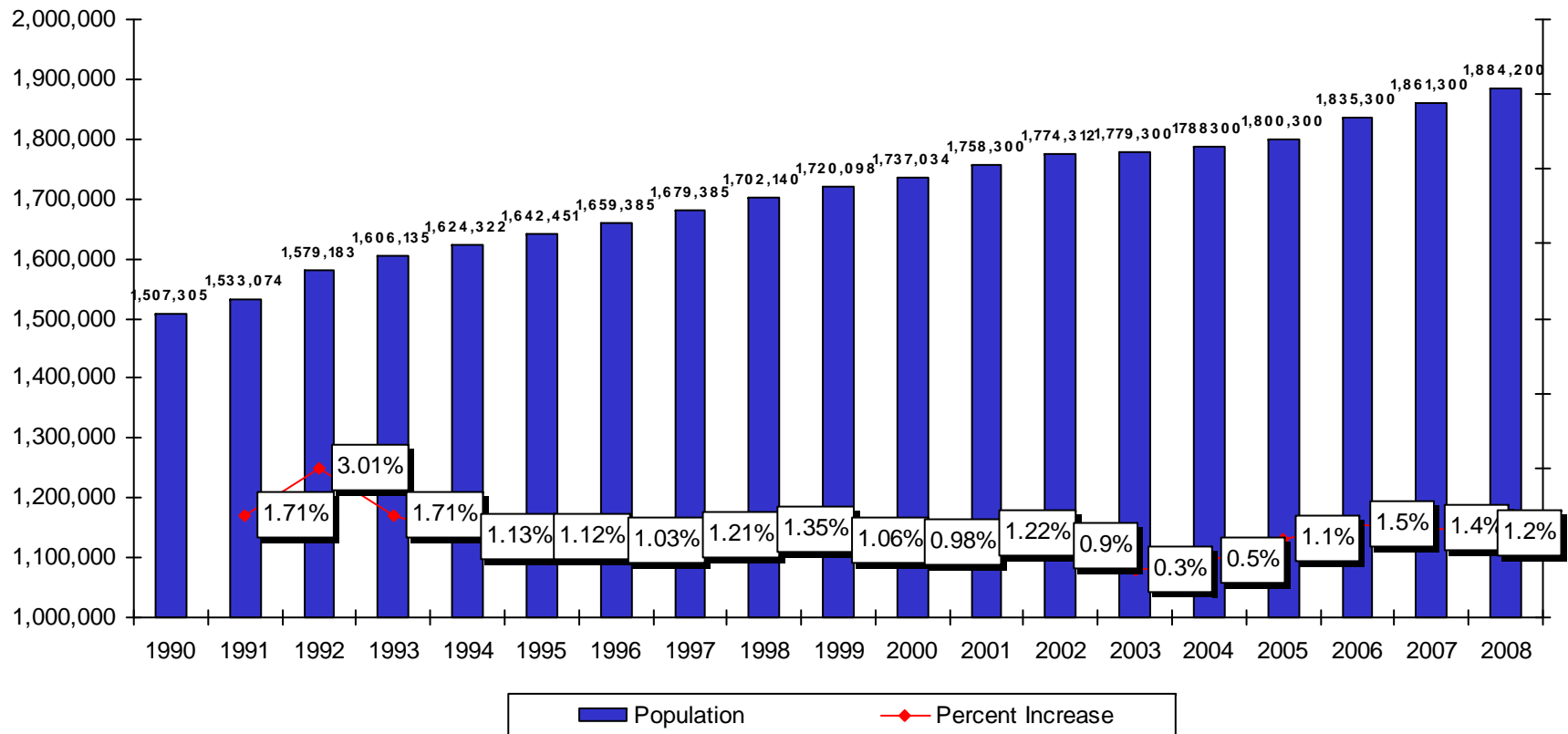
Population Growth

with a decline in the school district's share of the county K-12 public school population. In the 1990's, when the cohorts entering school were growing, Mercer Island increased its share of the county K-12 population. Since 2000, as those cohorts have gotten smaller, the District has seen its share of the county K-12 population decline. This trend is likely to stay in place over the next 3-5 years.

As the larger birth cohorts become eligible for school between 2012 and 2015 it is possible that the District will start to see its share of the county K-12 population increase, similar to what was seen in the 1990's. However, it is important to keep in mind that the growth in K-12 population between now and 2025 is expected to be less than what was seen in the 1990's. Between 1990 and 2000, the District saw its K-12 population increase by 1000 students. Since the future growth in the K-12 population is projected to be smaller than it was in the 1990's it is likely that any gain that the District sees from this growth will also be smaller. Instead of a 1000 student gain, the District is more likely to see a 500-600 student gain between now and 2020, and a gain of another 200-300 students between 2020 and 2025. Exact estimates and the methodology for these calculations are presented in later sections of this report.

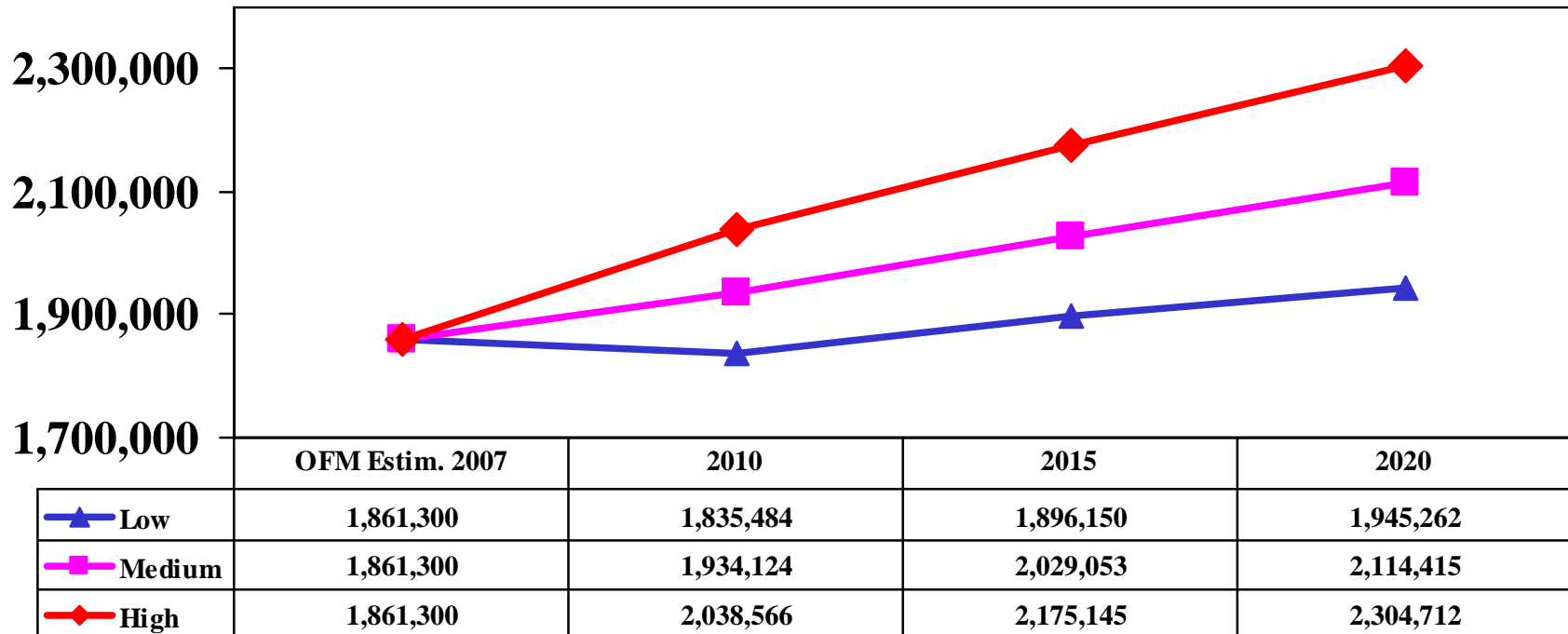
King County Population Estimates

Source: OFM State of Washington



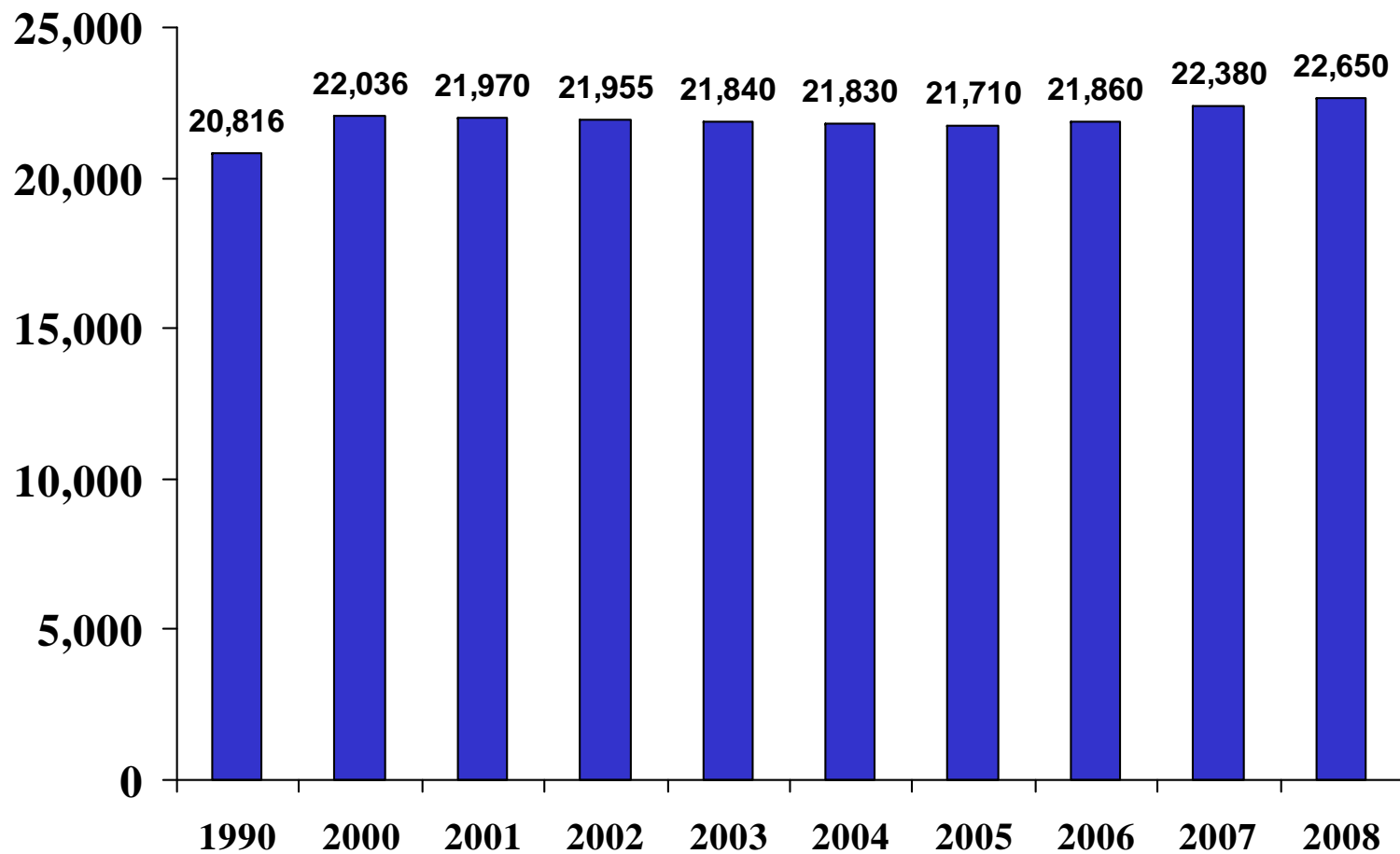
OFM 2007 County Population Forecast (King County)

Low, Medium, and High Population Forecasts
 Source: OFM State of Washington 2007 Forecast



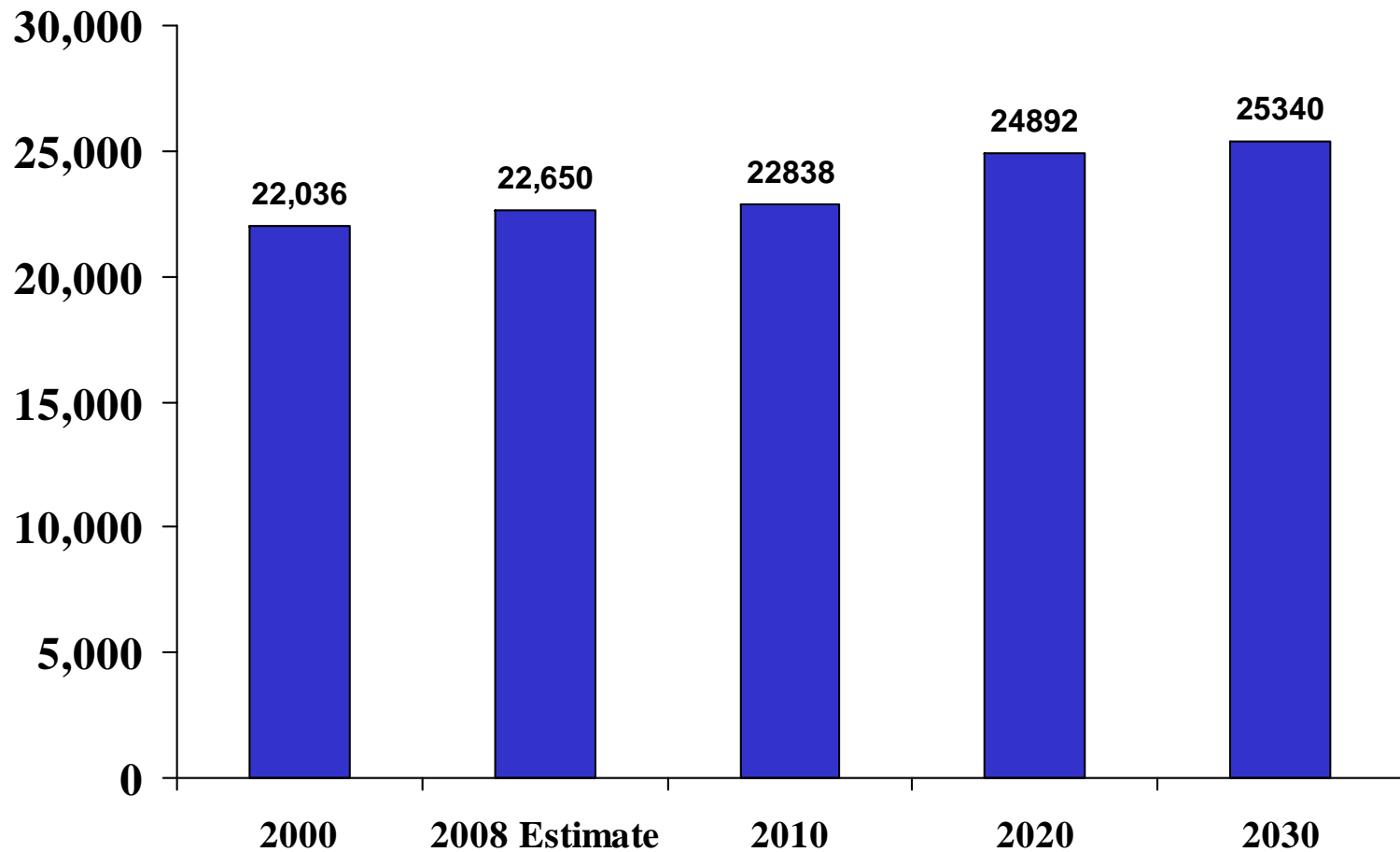
Mercer Island Population Estimates

Source: Census and OFM



Mercer Island Population Forecast

Source: Puget Sound Regional Council Population Forecast for Neighborhoods



Housing Growth and Enrollment

The number of housing units on Mercer Island has increased from 8,806 in the 2000 census to just over 9300 in 2008. This estimate comes from the Puget Sound Regional Council and King County Growth reports. Much of the growth has come in the form of additional multi-family housing. There has been a limited amount of single family development. Data from New Home Trends shows no single family developments planned for Mercer Island in the coming years and a limited number of multi-family projects. Approximately 78% of the housing units in the district are single family according to estimates from the King County Growth report. Consistent with the emphasis on greater density this percentage is expected to drop to 74% by 2020 (Source: Puget Sound Regional Council population forecast).

New housing is not likely to have much of an influence on future enrollment. There will likely be some growth from new apartments, town homes and other multifamily units, but the majority of the growth is likely to emerge from births in existing households and turnover in housing as families with children move in and out of the District. As noted in the introduction, the District continues to see a net gain of families with children across various grade levels. This indicates that the number of families with K-12 children moving into the district continues to be larger than the number of families moving out. This combined with projected increases in births over time should result in future growth in the K-12 population.

Private School Enrollment

Although private schools are not part of the overall demographic trends affecting enrollment they can have an influence on enrollment by siphoning students away from the public schools. Private school enrollment in King County has grown since 1980's but in recent years, private school enrollment has seen a slowing growth rate consistent with the slowing growth rate in the public schools.

There is no way to track with certainty the number of students who exit the public schools for private schools. At best, one can look at enrollment in private schools compared to the enrollment in public schools in a given area. Based on this comparison it is possible to determine if the percentage of students attending private schools has increased or decreased over time. It is important to keep in mind, however, that many of the students attending private school may not reside within the district's boundaries, and even if they do, it is not reasonable to assume that these families chose private schools after considering the public schools. Many private schools serve natural constituencies that are based on religious beliefs (e.g., Catholics), learning styles (Montessori) and even affluence. Nevertheless, the comparison of public and private school enrollment in an area can provide the basis for estimating the effect of private schools on future enrollment.

Private School Enrollment

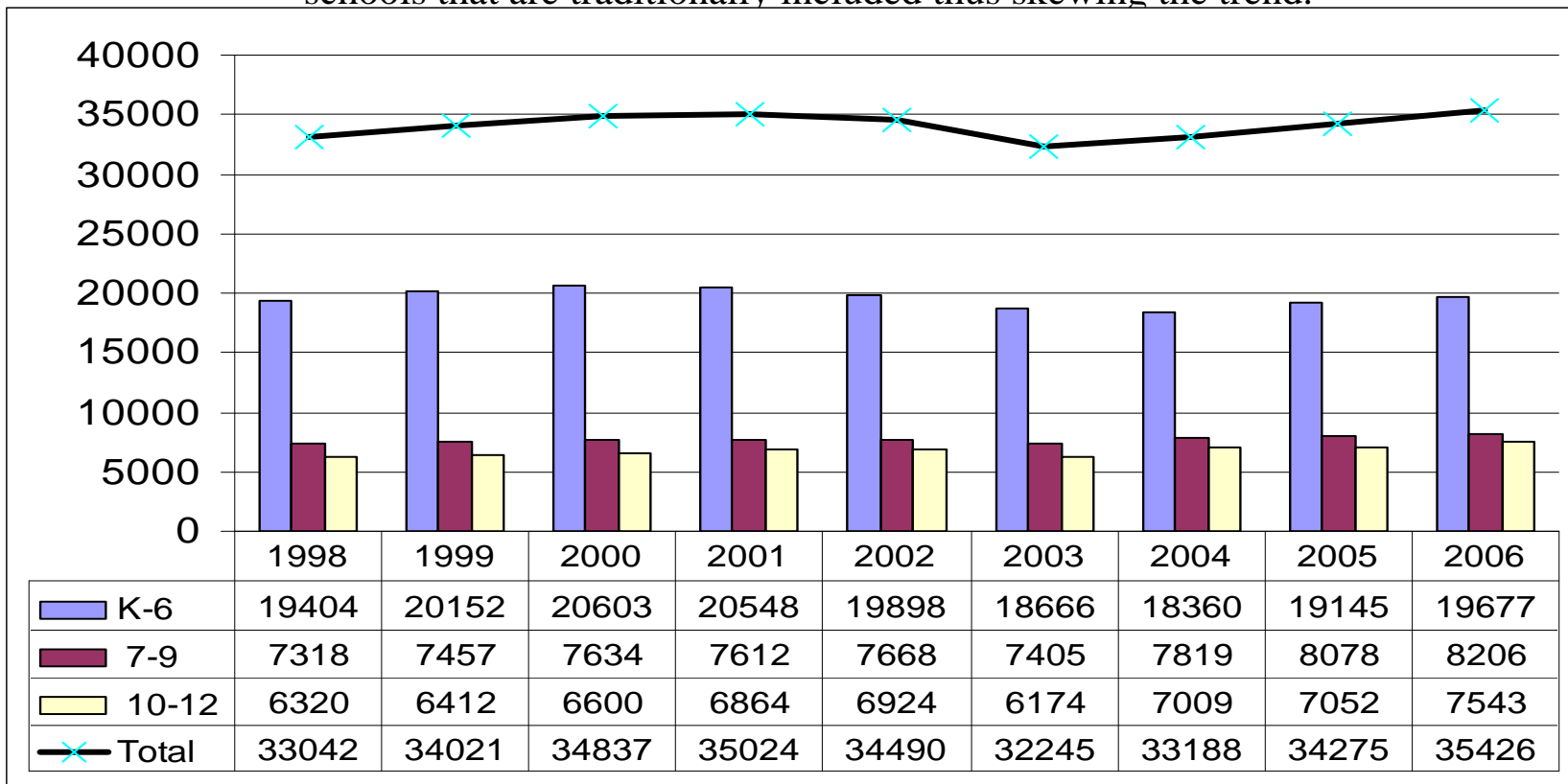
Private school enrollment for schools located in Mercer Island has increased from 286 students in 1993 to 642 students in 2006 (later data is not yet available). Beginning in 1994, some of the schools in the area began to serve high school students resulting in greater enrollment gains over time. Since 2001 private school enrollment in Mercer Island has remained flat, fluctuating just above or just below the 600 student mark.

If we look at the percentage of students enrolled in public versus private school in Mercer Island (based solely on enrollment data), over time the share of the students in public schools has declined from 93% in 1993 to 87% in 2008. Since 1995 (after private high schools grades were added) the percentage has declined from 90% to 87%. This represents a decline in “market share” of approximately 3% over an 11 year period (1995 to 2006). If this were to continue to 2020, the share of students enrolled in the public schools in Mercer Island would decline to about 84% by 2020. This represents a relatively small effect on enrollment (3-tenths of a percentage point annually) over time and suggests that the market for both public and private schools is relatively stable.

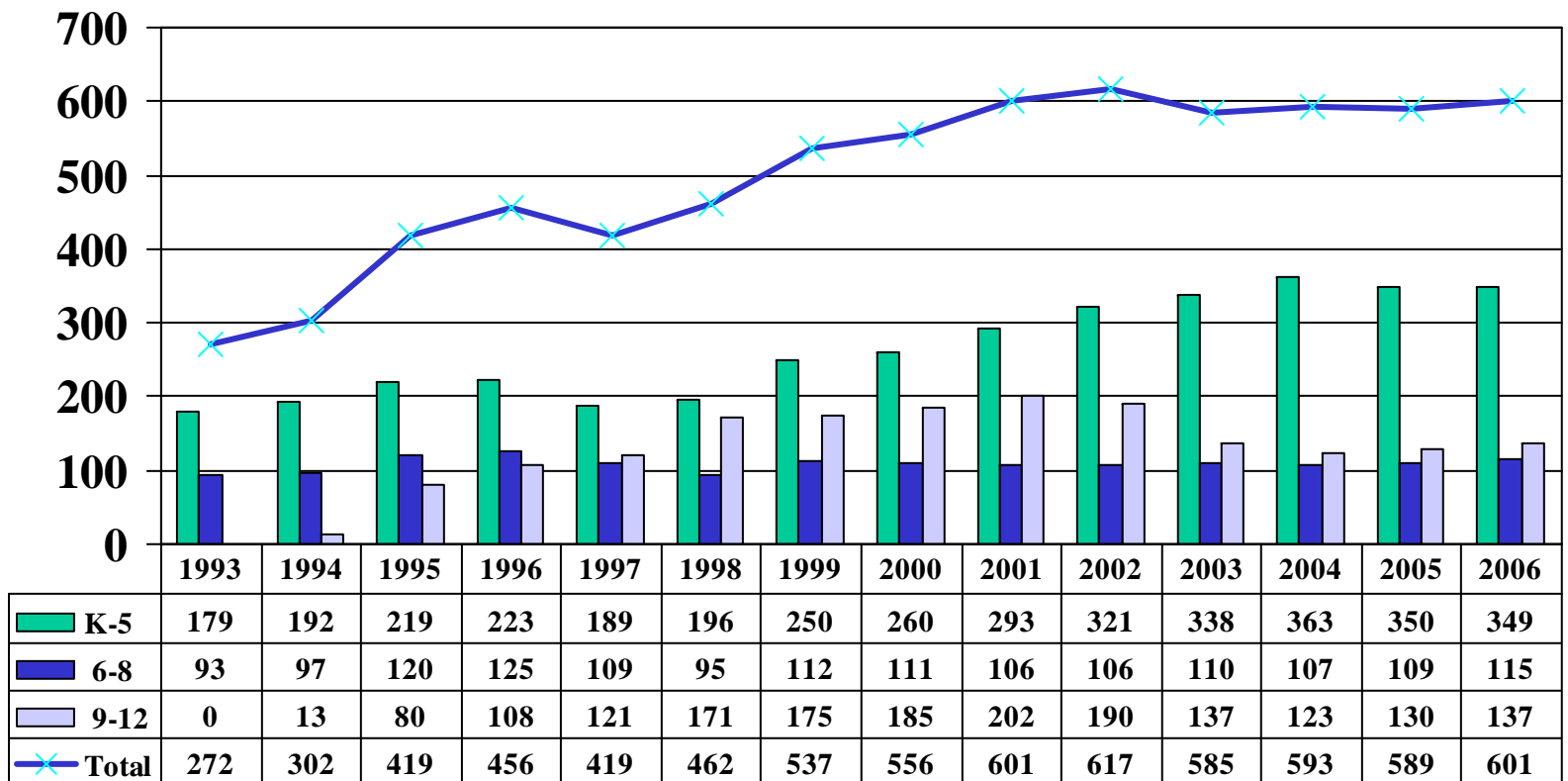
Again, it is important to reiterate that there is no evidence of a massive exodus from public to private schools in Mercer Island. The two populations may well be mutually exclusive. Nevertheless, these numbers provide a way to estimate the effect of private schools on future public enrollments. In general, the effect is expected to be small.

Private School Enrollment King County K-12

Note: 2003 and 2004 Private school data from OSPI was missing schools that are traditionally included thus skewing the trend.



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



Enrollment Projections

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, housing, and population 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 for the District was based on a consideration of several factors:

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 and the District's future share of that growth.

The effect of private schools on enrollment.

Enrollment Projections

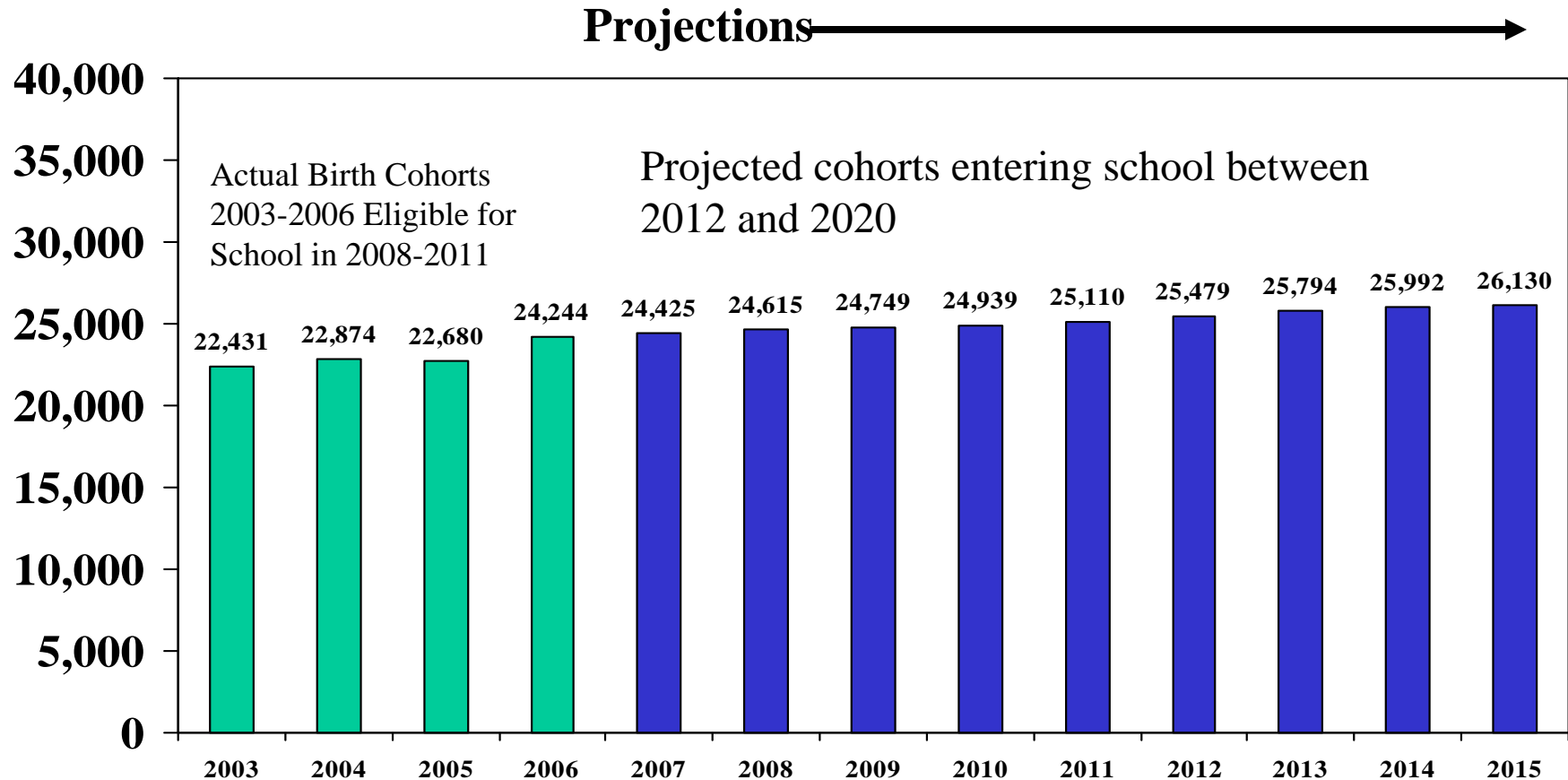
Birth Cohorts and Kindergarten

As previously noted births are expected to increase over the next decade resulting in an increase in the K-12 population. The chart on page 38 shows the projected births for King County between 2007 and 2020. These projections were based on the assumption that the county birth rate trend will match the trend projected by the State of Washington. The rate for each year was multiplied by the projected population for the county (OFM medium forecast) and divided by 1000 to get the rate (birth rates indicate the number of births per 1000 in the population). These students will impact enrollment between 2012 and 2025.

Based on the data from the past 2 decades it is reasonable to assume that the District will continue to enroll just over 1% of this cohort annually. In general the District's share of the cohort has remained constant, because the District population has remained relatively constant over time. The District's share of this cohort is projected to increase by a very small amount between 2015 and 2020 consistent with the time period when K-12 enrollment is likely to be the strongest. This prediction is consistent with the trend that was seen between 1990 and 2000, the last time that there was substantial growth in the K-12 population.

King County Birth Projections

Based on OFM Intermediate Forecast Adjusted for Recent Population Estimates



Enrollment Projections

Average Grade-to-Grade Growth

The average grade-to-grade ratios (e.g., cohort ratios) are used in the model to allocate the enrollment by grade level. As previously noted, more families move out than move in at the continuing grades over the course of a year, resulting in a net gain in enrollment at most grades. The number of students per grade tends to range between 250 and 350. These are relatively small numbers for estimating grade ratios and small variations from year to year can provide a misleading view of the trend. For this reason some of the grade levels were grouped together (e.g., Grades 1-4 rolling up into Grades 2-5) in order to provide a more stable estimate and the same ratio was used at each grade. The grades that were treated separately were 1st grade (because similar to kindergarten it is an entry grade for some students), and 5th and 9th grade because these are transition grades. The other grade levels were group together as elementary rollup (Grades 1-4 rolling up into Grades 2-5), middle school rollup (Grades 6-7 rolling up into grades 7-8) and the high school rollup (Grades 9-11 rolling up to grades 1-12). In all cases a 6 year weighted average was used that takes into account low and high growth years, thus providing a reasonable measure of “average growth”.

Enrollment Projections

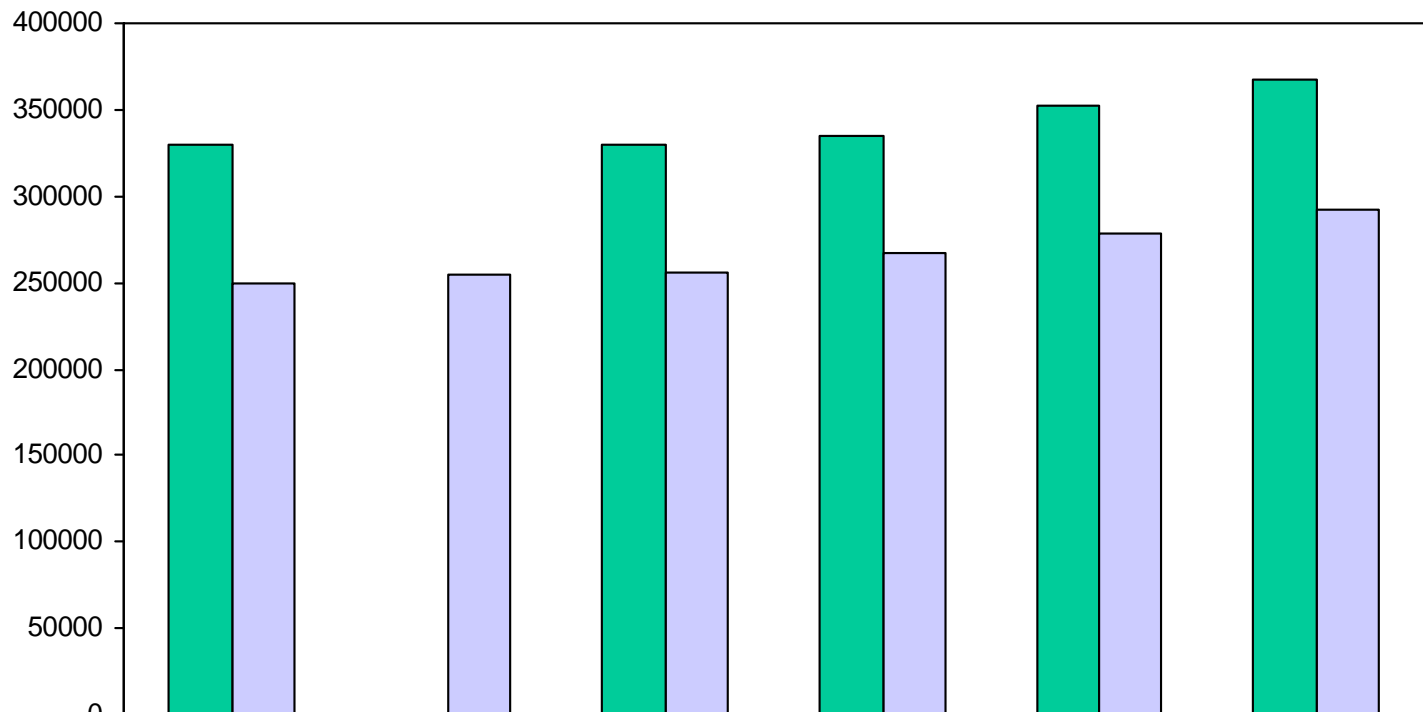
K-12 Population Growth Factor

In addition to the cohort ratios a K-12 population growth factor was used to account for projected increases in the K-12 population over time. This additional growth was assumed to be relatively small for 2009 and 2010. Larger growth factors were used for the period between 2010 and 2015 and even larger factor was used for the period between 2015 and 2025. These factors come from an analysis of the projected growth in the K-12 population based on forecasts of the Age 5-19 population provided by the State of Washington. They also come from an analysis of how much of the future growth in the K-12 population is likely to occur in Mercer Island. The chart on page 41 shows the projected change in the K-12 public school population over time, in relationship to the projected change in the Age 5-19 population. This is based on an analysis of the relationship between these two populations. The Age 5-19 forecast was produced by the Office of Financial Management of the State of Washington in 2007.

Currently the Mercer Island school district accounts for 1.58% of the county K-12 public school population. It is assumed that this percentage will decline slightly to 2015 (1.57%) and then rise gradually to just over 1.6% by 2020, with the corresponding increase in the K-12 population. Although Mercer Island's **share** of the K-12 population is projected to decline through 2015 enrollment will still increase some during this time due to the projected increase in the K-12 population.

Forecast of King County K-12 Public School Enrollment Based on the Age 5-19 Forecast

County Age 5-19 Forecast Produced by OFM for Growth Management (2007)



	2000 Census	2008 Estimate	2010	2015	2020	2025
Age 5-19 OFM Forecast	329415		330124	334648	352217	367346
County Public School K-12	249,319	255,087	255,495	266,792	278,338	292,039

Enrollment Projections

Private Schools

Based on historical data it is assumed that the District will lose a small proportion of the projected K-12 enrollment to private schools (either those located in the District or in other areas). Over the next 2 years there is assumed to be no additional losses due to private schools, especially because of the worsening economy. Between 2011 and 2020 it is assumed that the loss to private schools will be about 8-10 students annually across all grades. This is well below the average that is likely to be seen across all of King County.

Forecast: 2009-2020

Enrollment is projected to grow over time due to an increase in births and the subsequent growth in the K-12 population. Between now and 2012 enrollment is likely to remain just above 4000. Between 2012 and 2020 enrollment is projected to increase as larger birth cohorts enter the schools. After several years of successively larger birth cohorts, the size of the K-12 population will begin to increase at a faster rate resulting in even larger enrollment gains between 2015 and 2020 and continuing out to 2025.

The district is projected to gain 604 students between now and 2020. The period between 2015 and 2025 represents the peak time period for enrollment gains, so it is likely that the District will continue to see enrollment gains beyond 2020. The projected gain of approximately 600 students between now and 2020 compares to the gain of 1000 students that was seen in the 1990's. The projected increase in the K-12 population in the county over the next decade is expected to be somewhat less than what was seen in the 1990's so it is reasonable to assume that the enrollment gain in the District will also be less.

Looking beyond 2020, it is estimated that the District could gain an additional 300 students between 2020 and 2025. This estimate is based on the assumption that the trend that is in place between 2015 and 2020 will continue for an additional 5 years.

Forecast: 2009-2020

Low, Medium and High

In addition to the main estimate of enrollment lower and higher range estimates were calculated to show what would happen if the District were to enroll a lower or higher share of the future K-12 enrollment. These estimates assume that in a given year the district share of the K-12 enrollment could be lower or higher than the recommended projection by about half-a-percent at each grade.

The various estimates suggest that enrollment will trend somewhere between 4500 and 4800 by 2020. Although 300 students seems like a large difference this represents a difference of about 20 students in a given year or just under 2 students per grade. In other words if the district were to enroll 2 more students per grade annually than is assumed in the medium forecast the enrollment would trend toward 4819. And if the district enrolled 2 fewer kids per grade annually it would trend toward 4490. The medium range forecast of 4651 represents a reasonable midpoint between these 2 estimates.

All of the forecasts assumes that elementary enrollment will grow more over time than enrollment at middle and high school. This is consistent with the assumption of larger birth cohorts over time. Middle high school enrollments will grow more between 2015 and 2020 as the larger elementary cohorts reach the secondary level. Detailed numbers for all the forecasts are provided at the end of this report.

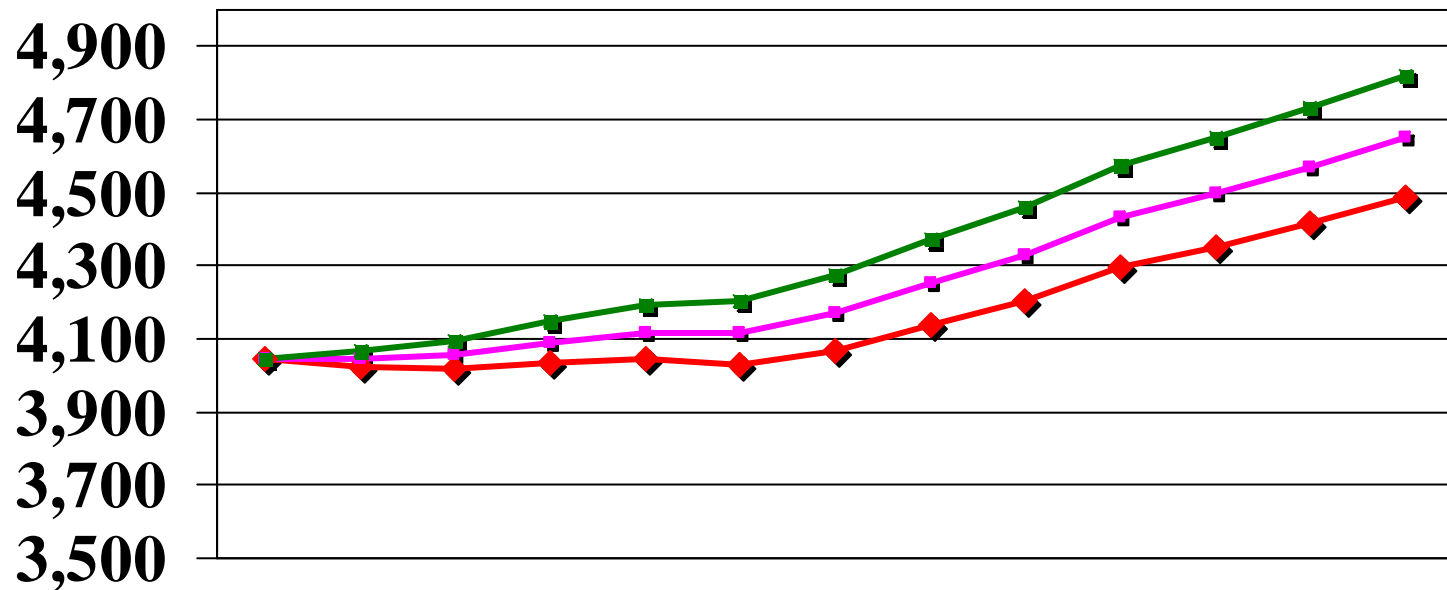
Cautionary Notes

The long range 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 recommended forecast assumes a certain amount of growth between now and 2015 and between 2015 and 2020. But the actual growth in a given year may vary from the averages assumed over the course of the forecast.

It is also important to remember that these forecasts are based on the best information available at this point in time. Demographic conditions could change, and/or the assumptions guiding the forecasts could turn out to be wrong.

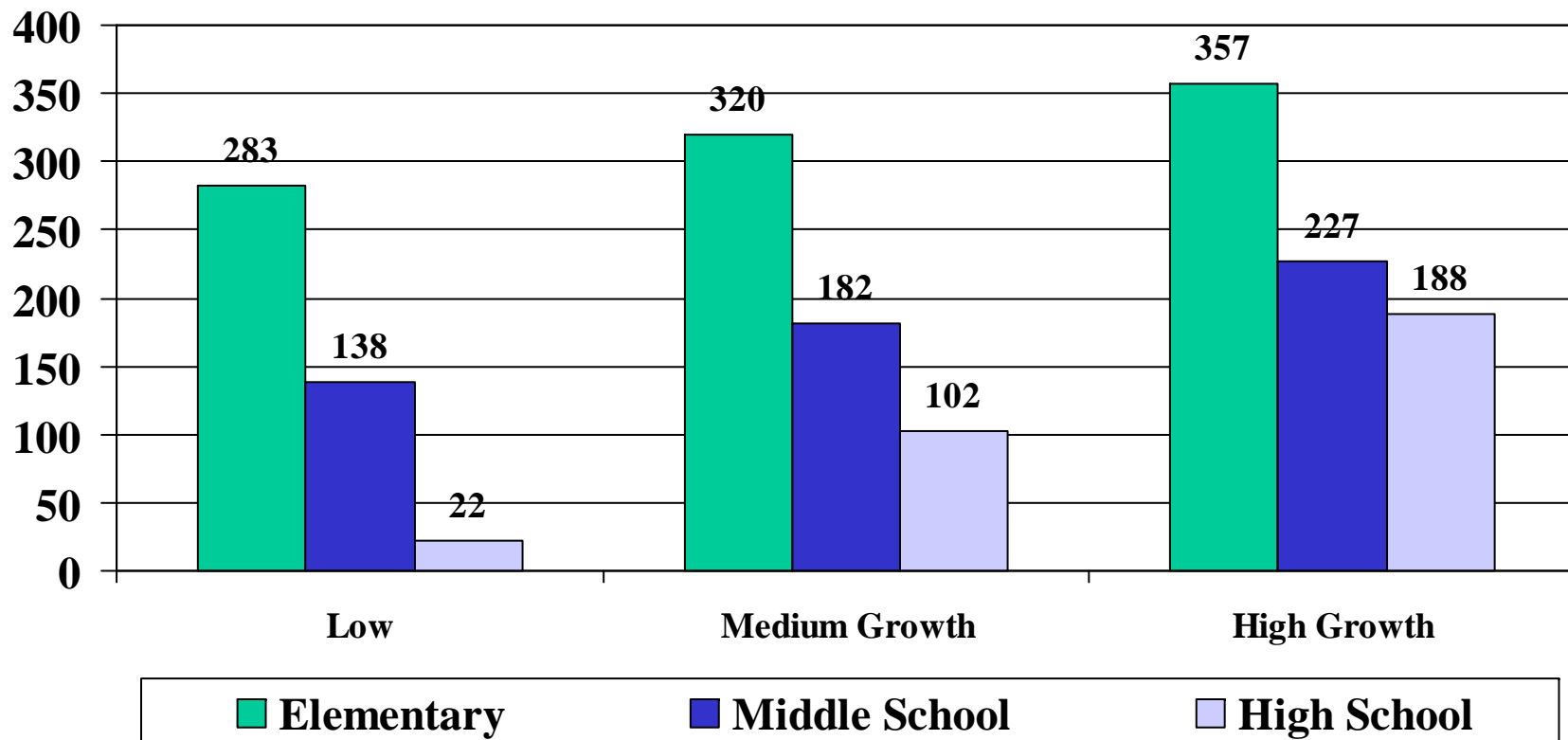
Mercer Island District Forecast

Alternative Forecasts 2009-2020



	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Oct-19	Oct-20
◆ Low	4,047	4,025	4,017	4,033	4,045	4,027	4070	4139	4202	4296	4353	4415	4490
■ Medium (Recommended)	4,047	4,045	4,056	4,090	4,118	4,115	4172	4254	4329	4434	4500	4570	4651
■ High Range Forecast	4,047	4,065	4,096	4,148	4,192	4,204	4276	4372	4459	4577	4653	4731	4819

Mercer Island Forecasts: Net Change by Level (From October 2008 to October 2020)



Appendix A

Detailed Forecast Numbers
Headcount Forecasts

Mercer Island (October Headcount Enrollment)

Births	Birth Year										
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Mercer Island	168	171	140	130	167	136	121	155	132	150	126
King County	22355	21972	21817	21573	21646	22212	22007	22487	21778	21863	22,431
K Enroll as %	1.10%	1.02%	1.20%	1.11%	1.05%	1.05%	0.95%	1.11%	1.14%	1.06%	1.13%

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
K	247	225	261	239	227	233	208	250	248	232	254
1	304	295	259	276	257	257	260	224	283	276	270
2	291	314	306	277	291	276	259	274	227	294	290
3	334	299	330	309	276	308	282	266	290	255	305
4	335	355	314	330	309	297	330	292	275	311	281
5	320	336	360	318	332	331	301	345	306	279	318
6	329	336	362	356	316	349	341	301	353	298	281
7	329	340	350	364	368	325	359	339	304	369	304
8	353	341	349	352	369	381	340	352	343	308	362
9	333	365	343	347	354	351	392	344	343	333	335
10	379	339	350	335	343	360	355	387	346	337	340
11	280	378	340	334	343	333	364	363	379	348	345
12	<u>311</u>	<u>285</u>	<u>377</u>	<u>343</u>	<u>348</u>	<u>339</u>	<u>340</u>	<u>366</u>	<u>351</u>	<u>383</u>	<u>362</u>
Tot	4145	4,208	4,301	4,180	4,133	4,140	4,131	4,103	4,048	4,023	4,047

	Cohort Change	-86	-24	-138	-116	-115	-131	-90	-118	-119	-129	
	Migration	149	117	17	69	122	122	62	63	94	153	
Growth	Change	63	93	-121	-47	7	-9	-28	-55	-25	24	
Percent	Percent	1.5%	2.2%	-2.8%	-1.1%	0.2%	-0.2%	-0.7%	-1.3%	-0.6%	0.6%	
Totals	K-5	1831	1824	1830	1749	1692	1702	1640	1651	1629	1647	1718
by	6-8	1011	1017	1061	1072	1053	1055	1040	992	1000	975	947
Level	9-12	1303	1367	1410	1359	1388	1383	1451	1460	1419	1401	1382
Change	K-5	K-5	-7	6	-81	-57	10	-62	11	-22	18	71
by	6-8	6-8	6	44	11	-19	2	-15	-48	8	-25	-28
Level	9-12	9-12	64	43	-51	29	-5	68	9	-41	-18	-19

Medium Range Forecast

				<i>Projected Births</i>												
				<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>	
				156	143	142										
				22874	22680	24244	24,425	24,615	24,749	24,939	25,110	25,479	25,794	25,992	26,130	
Rollup	Additional K-12			1.10%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%	1.11%	1.11%	1.11%	1.11%	1.11%	
Ratio	Pop. Growth	Projections														
Used	<u>09-10</u>	<u>11-15</u>	<u>16-20</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>
0.011	1.002	1.003	1.010	K	252	250	267	269	271	272	274	278	282	286	288	289
1.112				1	283	281	279	297	299	301	303	307	311	316	320	322
1.045				2	283	296	294	291	311	312	315	319	323	328	333	337
1.045	Private School Factor			3	304	296	311	308	304	325	326	331	335	340	345	350
1.045		<u>2009-11</u>	<u>2012-20</u>	4	319	318	310	325	322	318	339	343	348	353	358	363
1.045		1.000	0.997	5	294	334	333	324	339	336	332	357	361	367	371	377
1.003				6	320	296	336	334	325	340	337	336	361	365	370	375
1.010				7	284	323	300	340	338	328	344	343	342	367	371	377
1.010				8	308	288	328	303	343	341	332	349	349	347	373	377
1.018				9	369	314	294	334	308	349	347	340	358	357	356	382
1.007				10	338	373	317	296	336	310	352	352	345	363	362	361
1.007				11	343	341	376	319	298	338	312	357	357	350	368	367
1.007				12	<u>348</u>	<u>346</u>	<u>344</u>	<u>379</u>	<u>321</u>	<u>300</u>	<u>341</u>	<u>317</u>	<u>362</u>	<u>362</u>	<u>355</u>	<u>373</u>
				Tot	4,045	4,056	4,090	4,118	4,115	4172	4254	4329	4434	4500	4570	4651
				High Estim.	4,065	4,096	4,148	4,192	4,204	4276	4372	4459	4577	4653	4731	4819
				Low Estim.	4,025	4,017	4,033	4,045	4,027	4070	4139	4202	4296	4353	4415	4490
				Cohort Change	-110	-98	-79	-76	-108	-49	-26	-62	-34	-76	-74	-65
				Migration	108	109	113	104	105	106	108	137	140	142	144	146
				Change	-2	11	34	28	-3	57	82	75	105	66	70	81
				Percent	0.0%	0.3%	0.8%	0.7%	-0.1%	1.4%	2.0%	1.8%	2.4%	1.5%	1.6%	1.8%
Totals				K-5	1735	1776	1795	1814	1846	1864	1890	1935	1962	1989	2014	2038
by				6-8	912	907	964	977	1006	1010	1012	1028	1051	1079	1114	1129
Level				9-12	1398	1374	1332	1328	1263	1298	1352	1365	1422	1432	1441	1484

Appendix B

Alternative Forecasts

Based on Total Enrollment **ONLY**

Alternative Forecasts

Total Enrollment

In order to validate the accuracy of the projection model some alternative models were developed that predict total enrollment in relationship to various demographic factors. These models do not provide a breakdown by grade but they do provide a way to estimate total enrollment over time and provide an alternative way to look at enrollment. These models are based on projections of the District's future population, projections of the Age 5-19 population, and a projection of the public school county K-12 population. The assumption of each model is described below and the results are presented on the following page.

Model 1; Assume enrollment is a constant percent of the District population

Model 2: Assume that the percent of the population that is school age changes over time in accordance with projected changes in the percent of the county population that is assumed to be Age 5-19 (provided by OFM)

Model 3: Assume that the District's share of the county K-12 population remains relatively constant over time.

Long Range Forecasts

The following table shows the results of the different models. All of the models show enrollment to be relatively flat or declining in the near term with more growth projected between 2015 and 2025. This is consistent with the forecasts that predict greater K-12 growth during that time period. The final projection model that was described in the previous sections uses a different methodology than the models presented here. Nevertheless it predicts a similar trend and provides numbers that are slightly higher, but relatively close to these models.

Long Range Projection Models of Total Enrollment

	<u>2000</u>	<u>2008</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>
Constant Percent of the District Pop.	4,301 19.5%	4,047 17.9%	4,088 17.9%	4,272 17.9%	4,456 17.9%
Percent of the District population that is K-12 changes in accordance with changes in the percent of the pop. Age 5-19	4,301 19.5%	4,047 17.9%	3,997 17.5%	4,035 16.9%	4,102 16.5%
Assume the district's share of the county K-12 population remains constant over time. (Based on K-12 county enrollment projection)	4,301 1.6%	4,047 1.6%	4,057 1.6%	4,103 1.6%	4,450 1.6%

Consultant Background and Experience

Mr. 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 11 years his clients have included the following Districts: Seattle, Tacoma, Federal Way, Mukilteo, Edmonds, Northshore, Marysville, Highline, Puyallup, Bethel, Sumner, Shoreline, Bremerton, and South Kitsap. He has done work in all 4 counties in the Puget Sound and is familiar with the different trends and patterns across the region. In addition to his demographic work he is also the co-owner of Educational Data Solutions, LLC which provides analysis and evaluation of student achievement data and an Internet service that enables teachers, principals and administrators to track the progress of individual students and classes in meeting State and District achievement standards.