

Bainbridge Island School District Enrollment Trends and Projections

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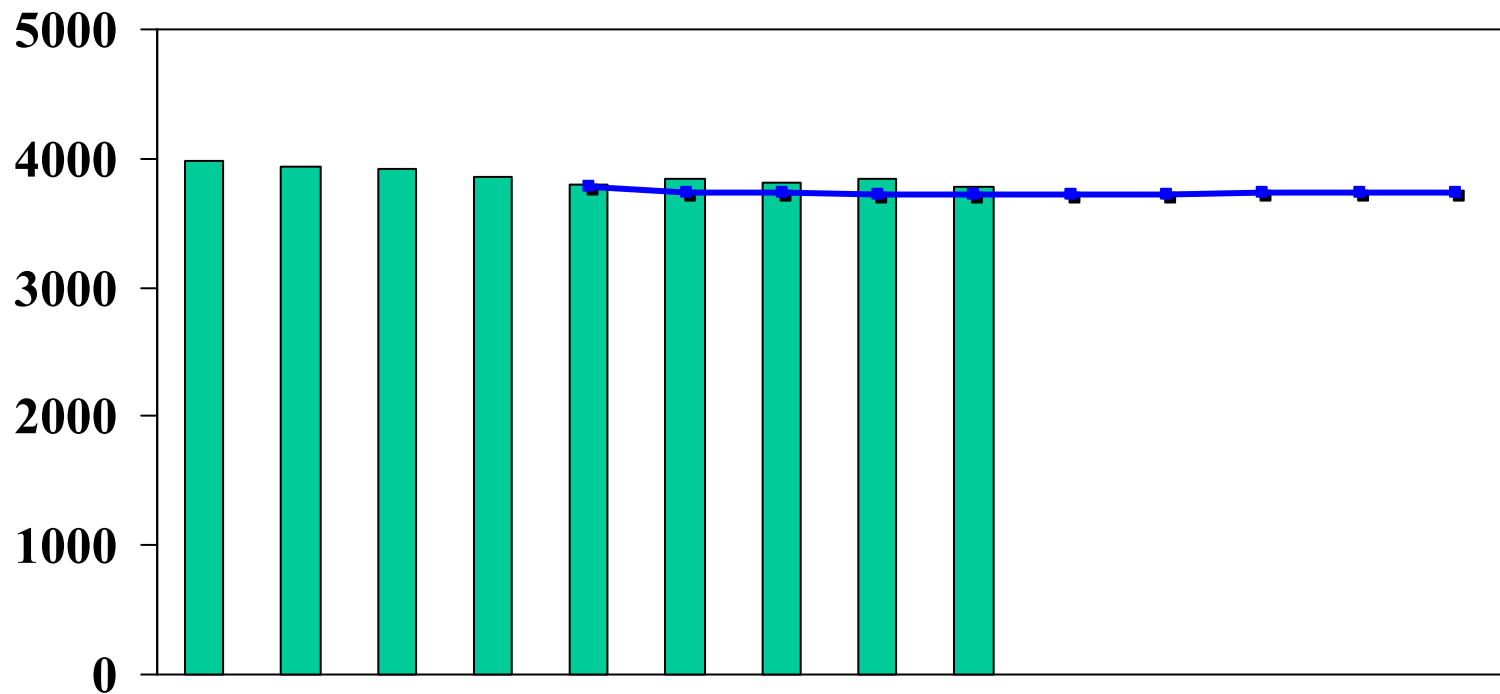
Seattle, WA 98109

April 13, 2017

Outline

- **Enrollment Trends**
- **Enrollment Patterns**
- **Demographics Trends and Enrollment**
- **Forecasts**
- **Conclusions**

Medium Range Forecast from 2012 Compared to Actual Enrollment



	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	Oct_21
Actual Enrollment	3984	3940	3920	3858	3799	3849	3809	3837	3782					
Medium Forecast 2012					3781	3742	3735	3718	3716	3722	3717	3740	3740	3738

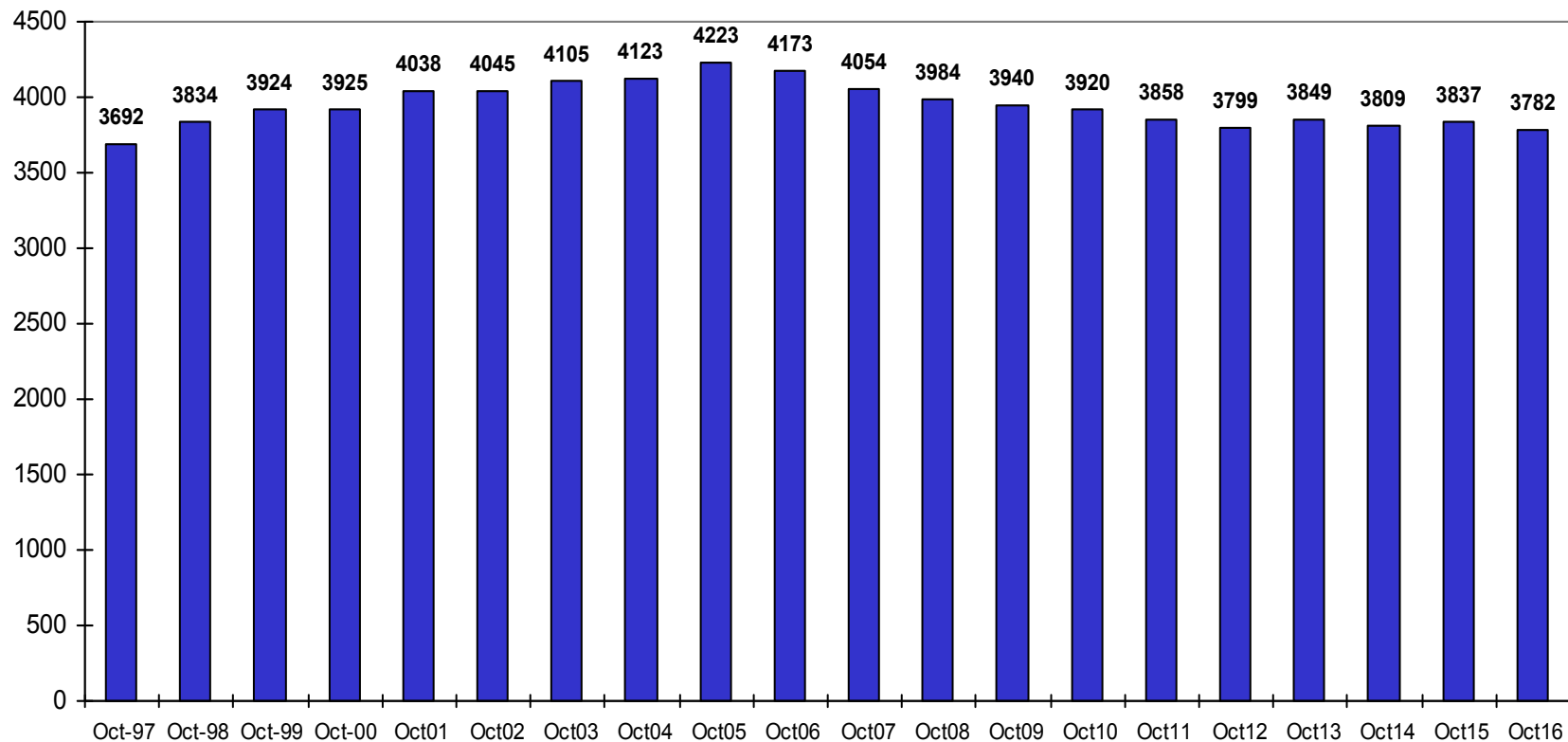
Enrollment Trends

Bainbridge Island and the Region

Bainbridge Island Enrollment Trend

October Enrollment P223

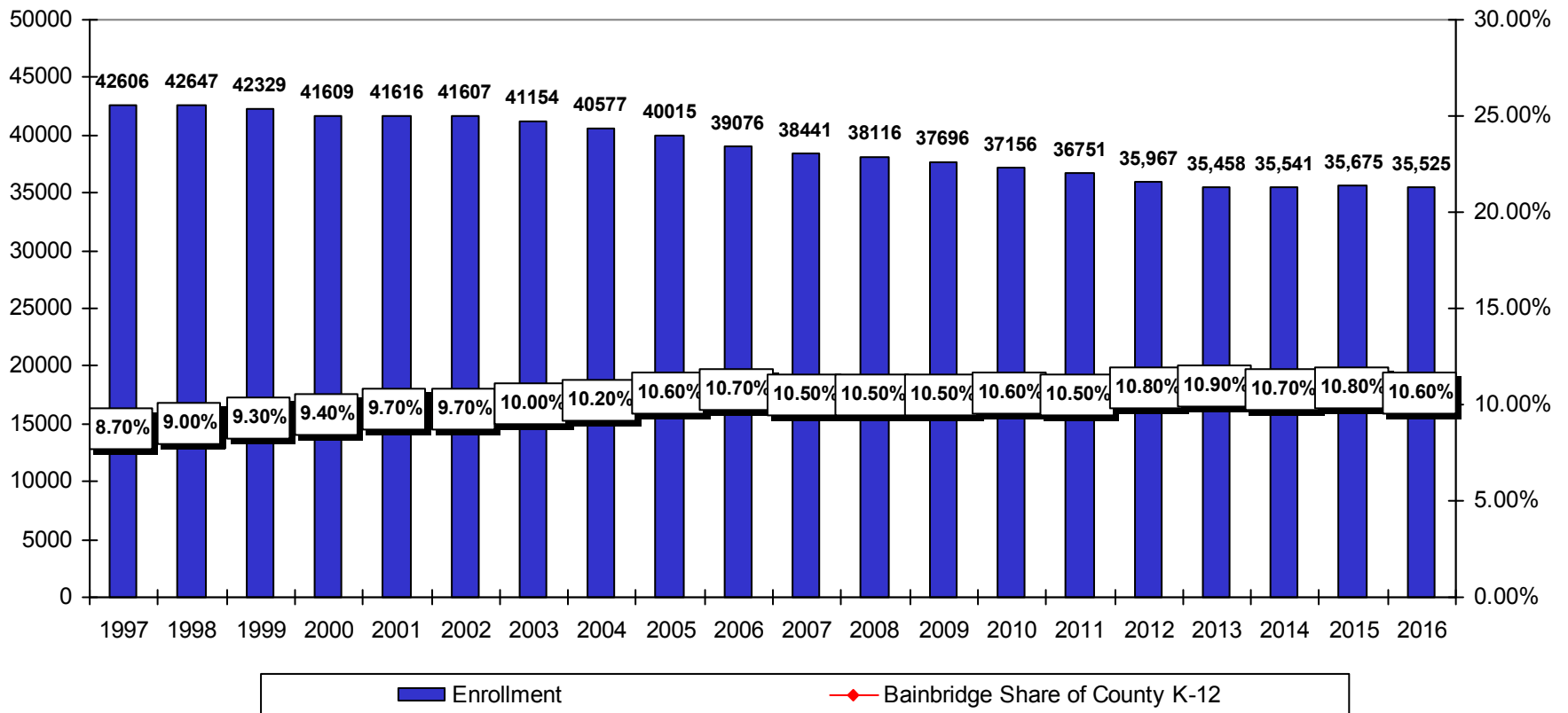
Excludes Students Who are Enrolled ONLY in Running Start



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

Market Share

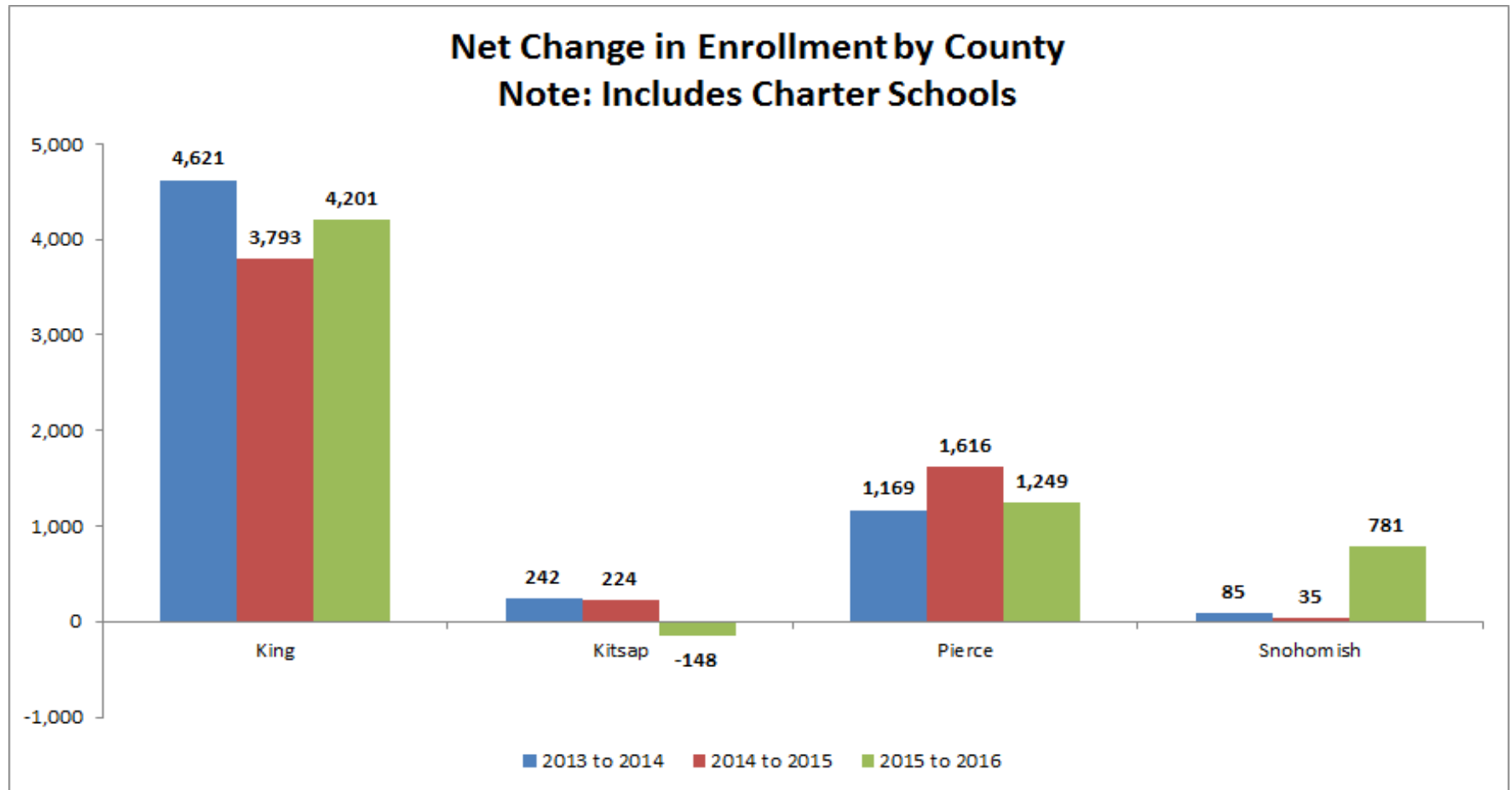
October Enrollment P223



Net Change in Enrollment by County

Three Year Trend

October to October

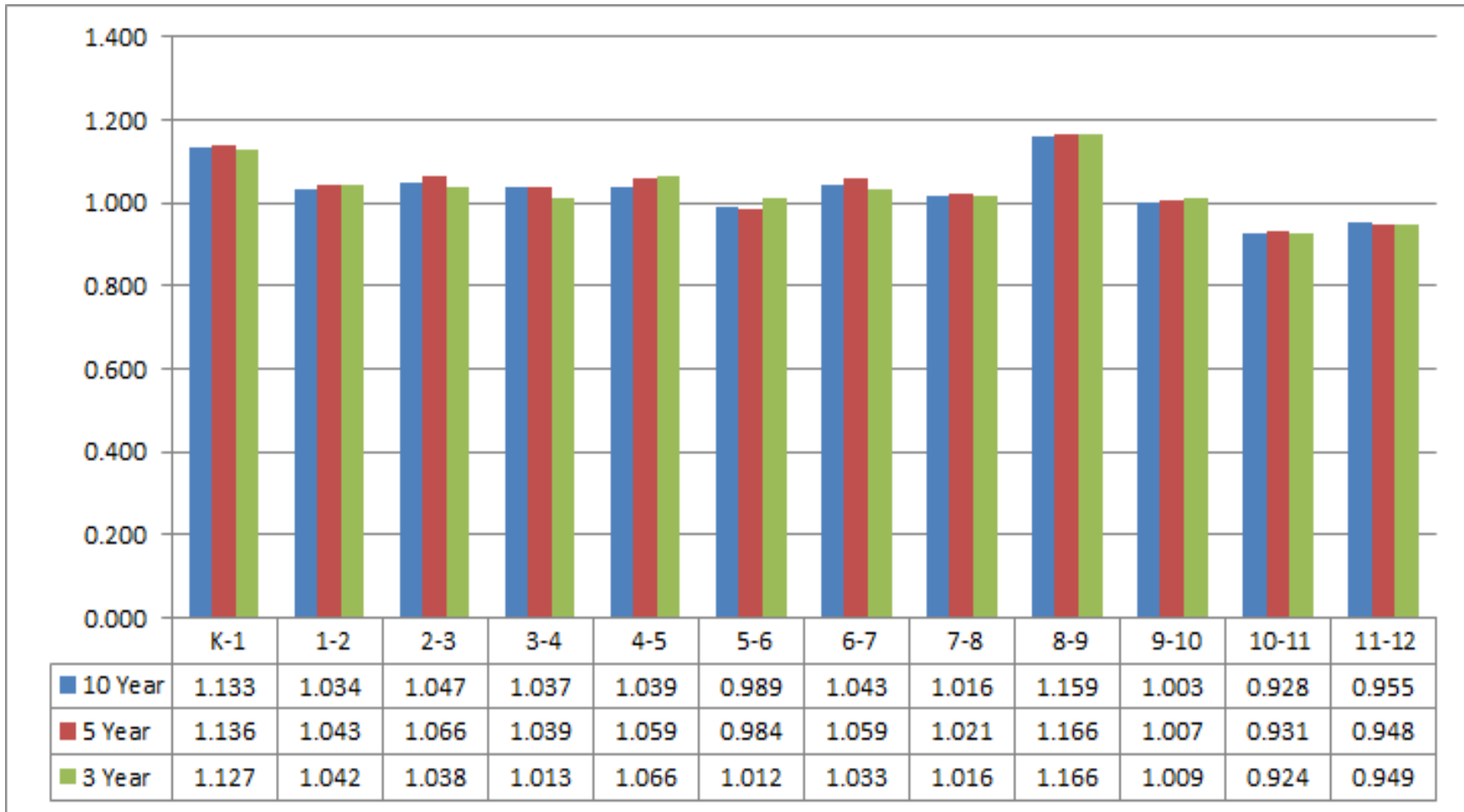


Enrollment Patterns

Bainbridge Island School District

Average Grade Progression Rates (3, 5, and 10 Year Averages)

Cohort Ratio Averages for the Bainbridge Island School District



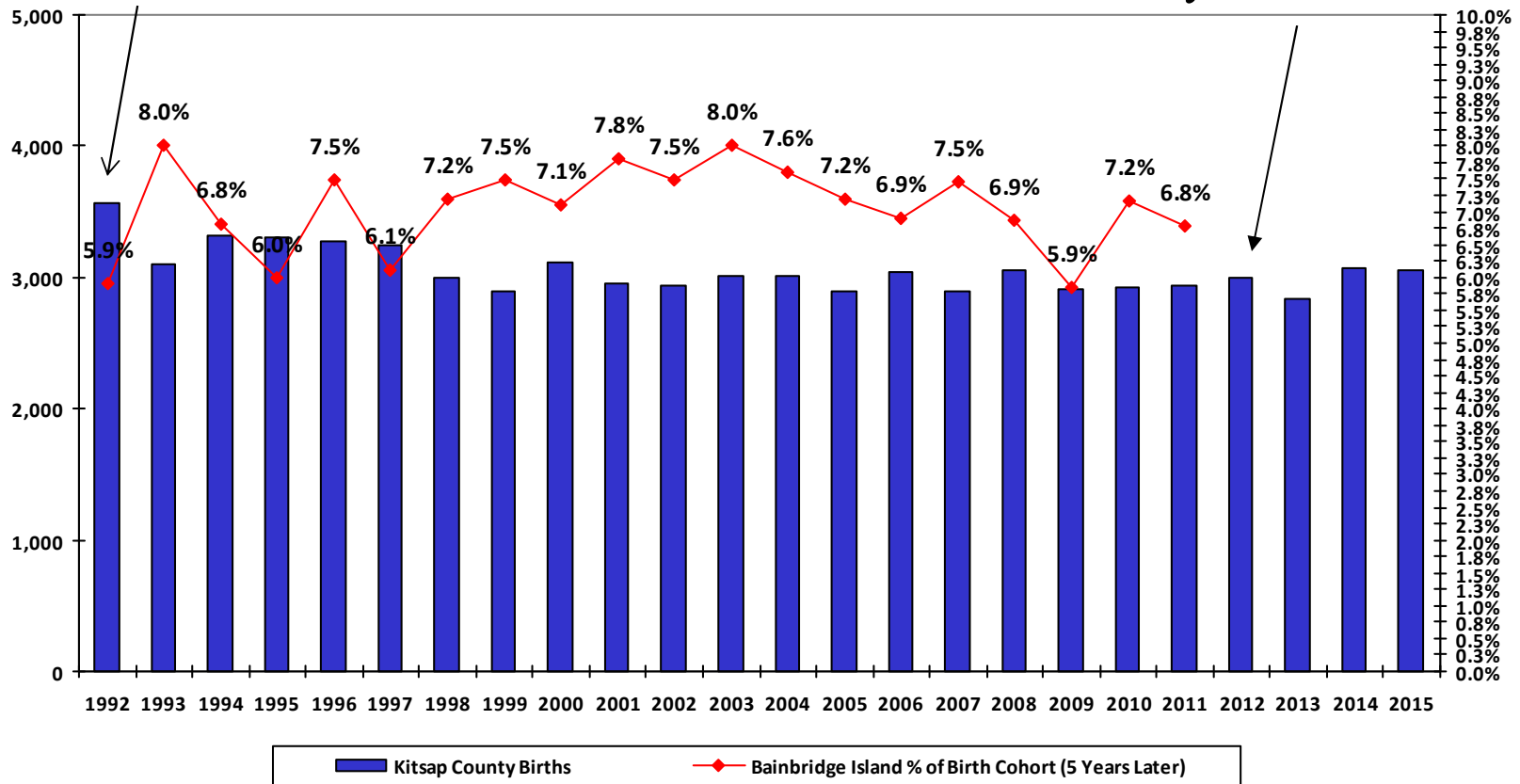
Bainbridge Island School District

K Enrollment as a Percent of County Births

% of Birth Cohort in a Given Year Enrolled in Kindergarten 5 Years Later

1992 Birth Cohort would enter kindergarten in 1997
(5 years after the birth year)

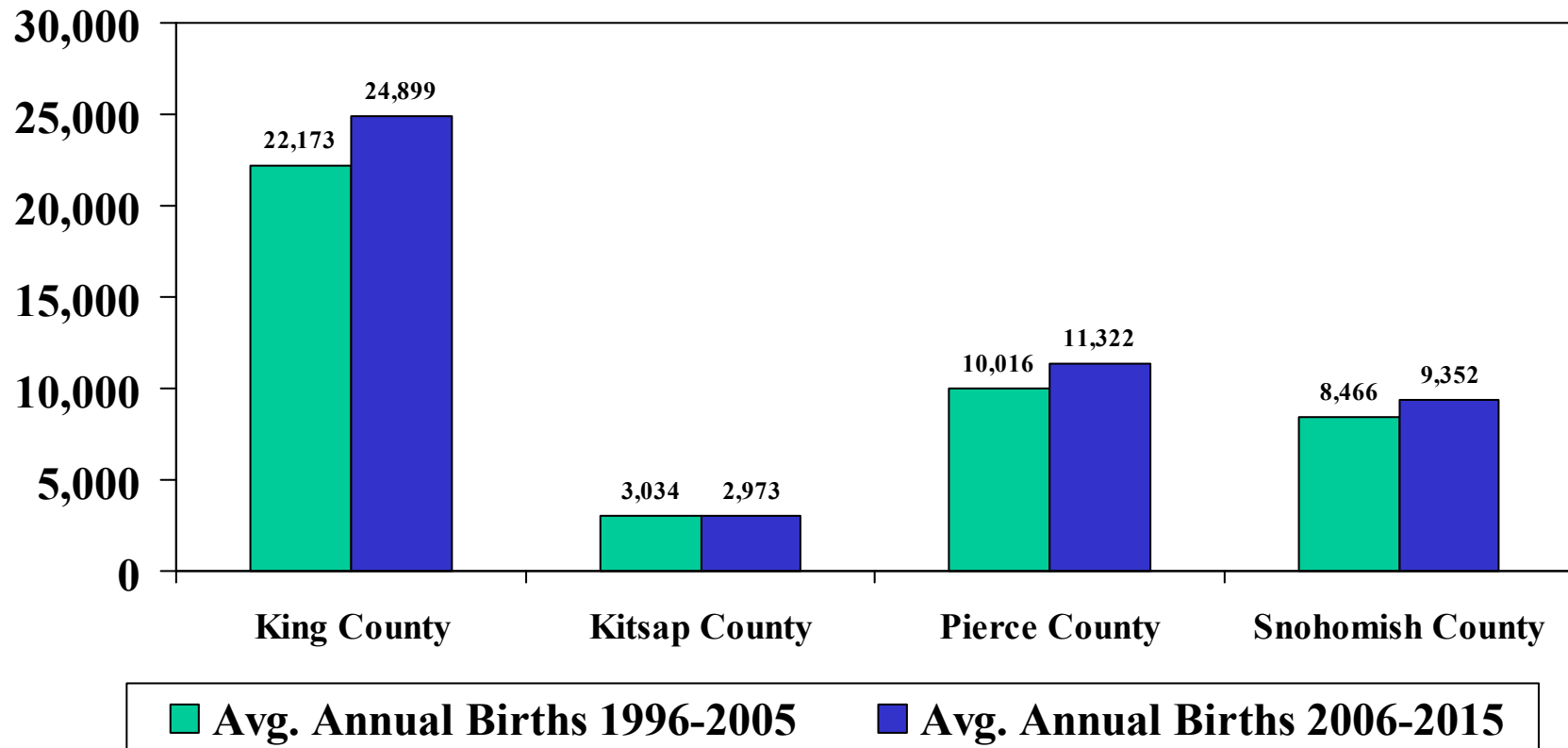
Next year's cohort



Demographic Trends

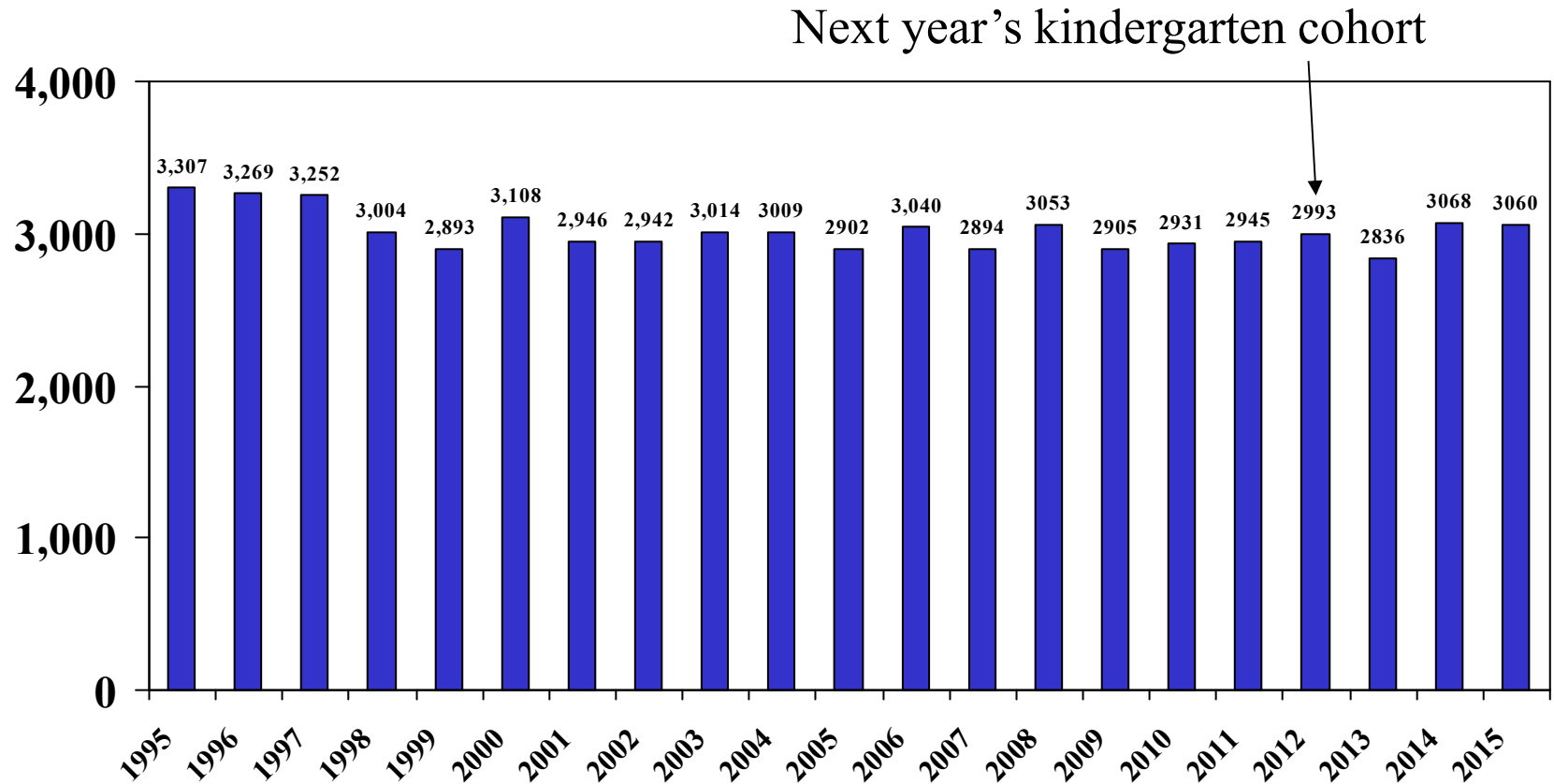
Average Annual Births by County

Source: State of Washington Department of Health Birth Files



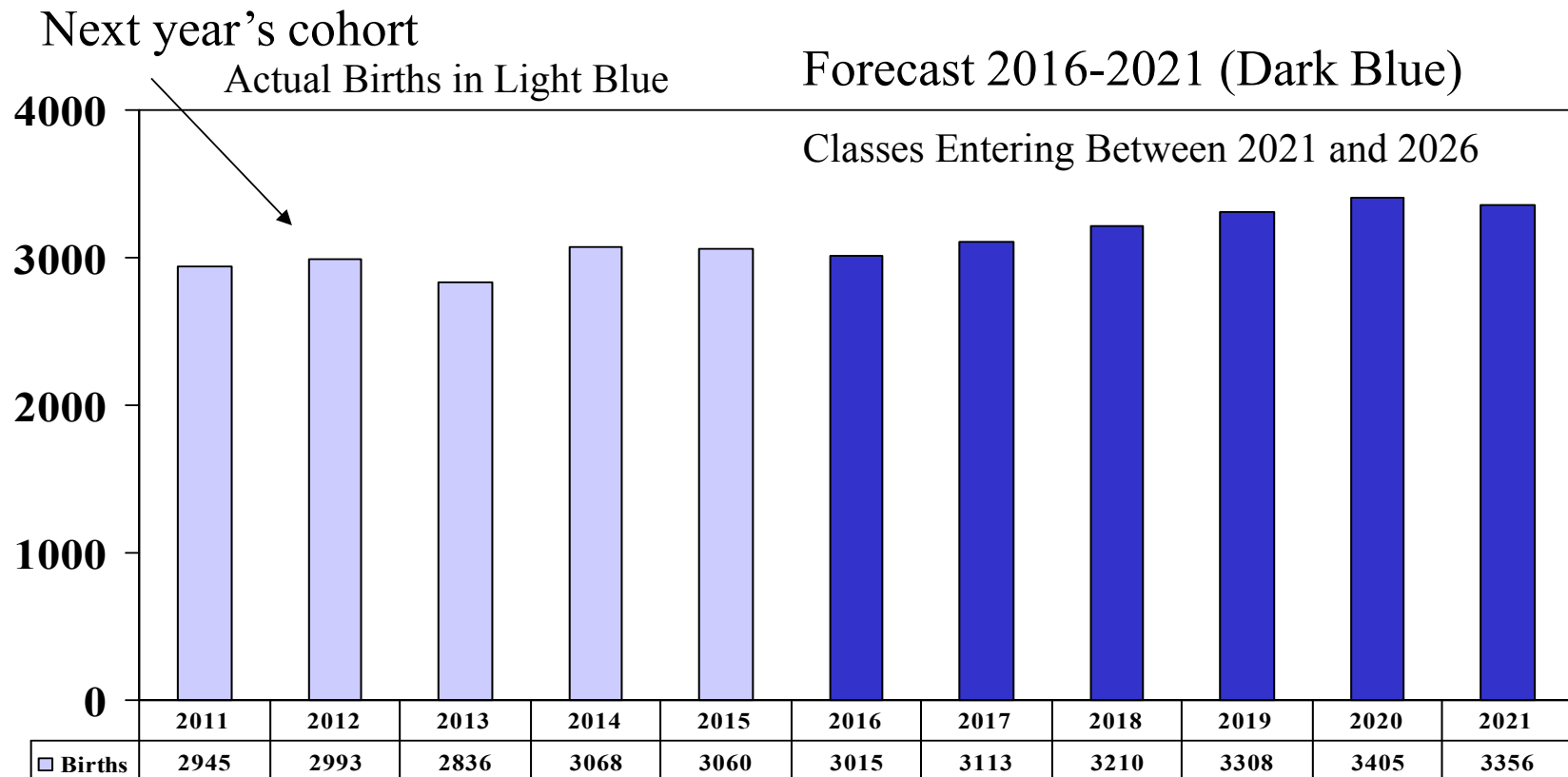
Kitsap County Births

Source: Washington State Health Department



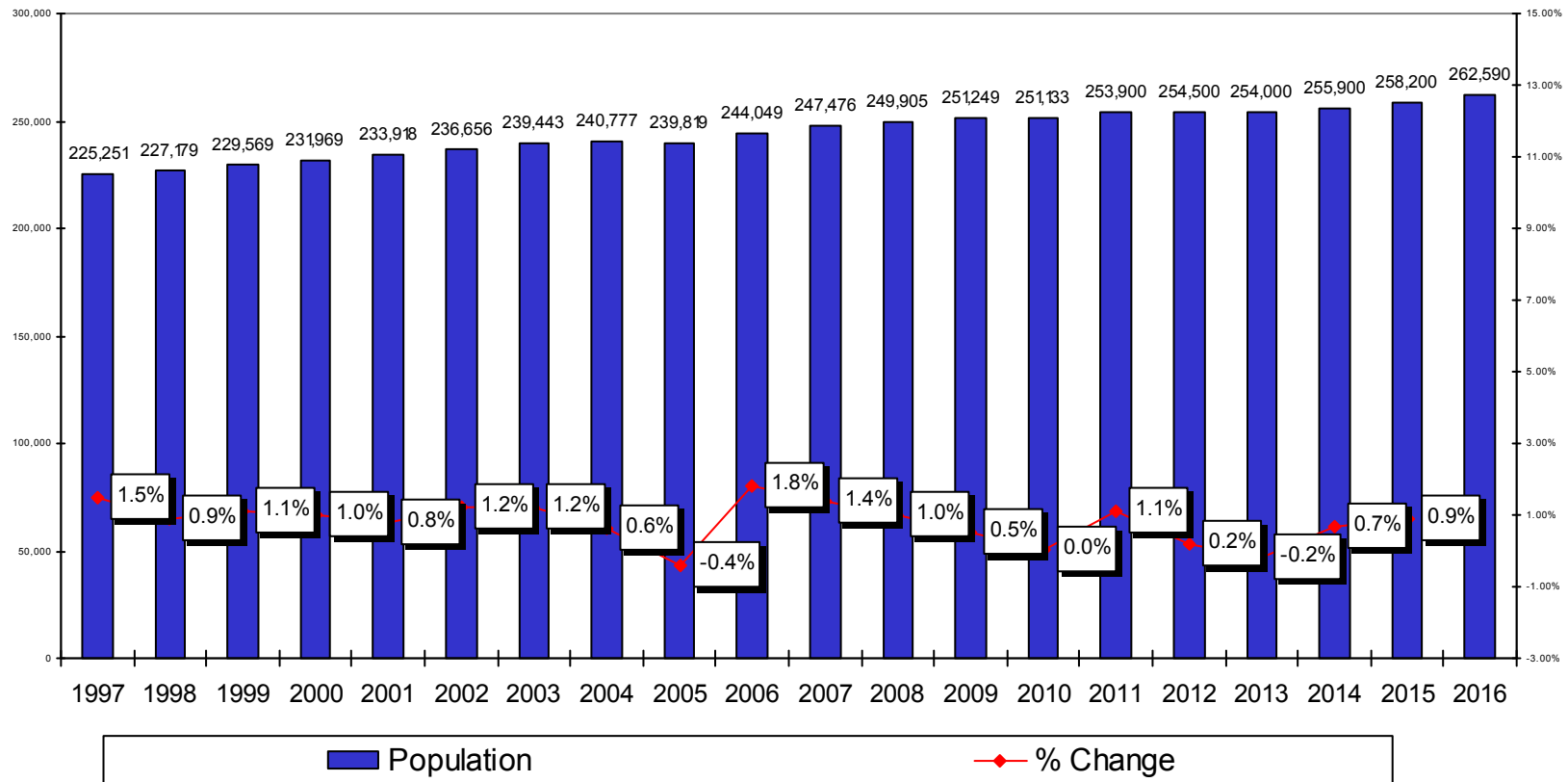
Kitsap County Birth Forecast

Forecast of Births Using the Medium Range Population Forecast of Women Age 15-44 from the Office of Financial Management for the State of Washington and the average of the fertility rates for each age group from the past two years.



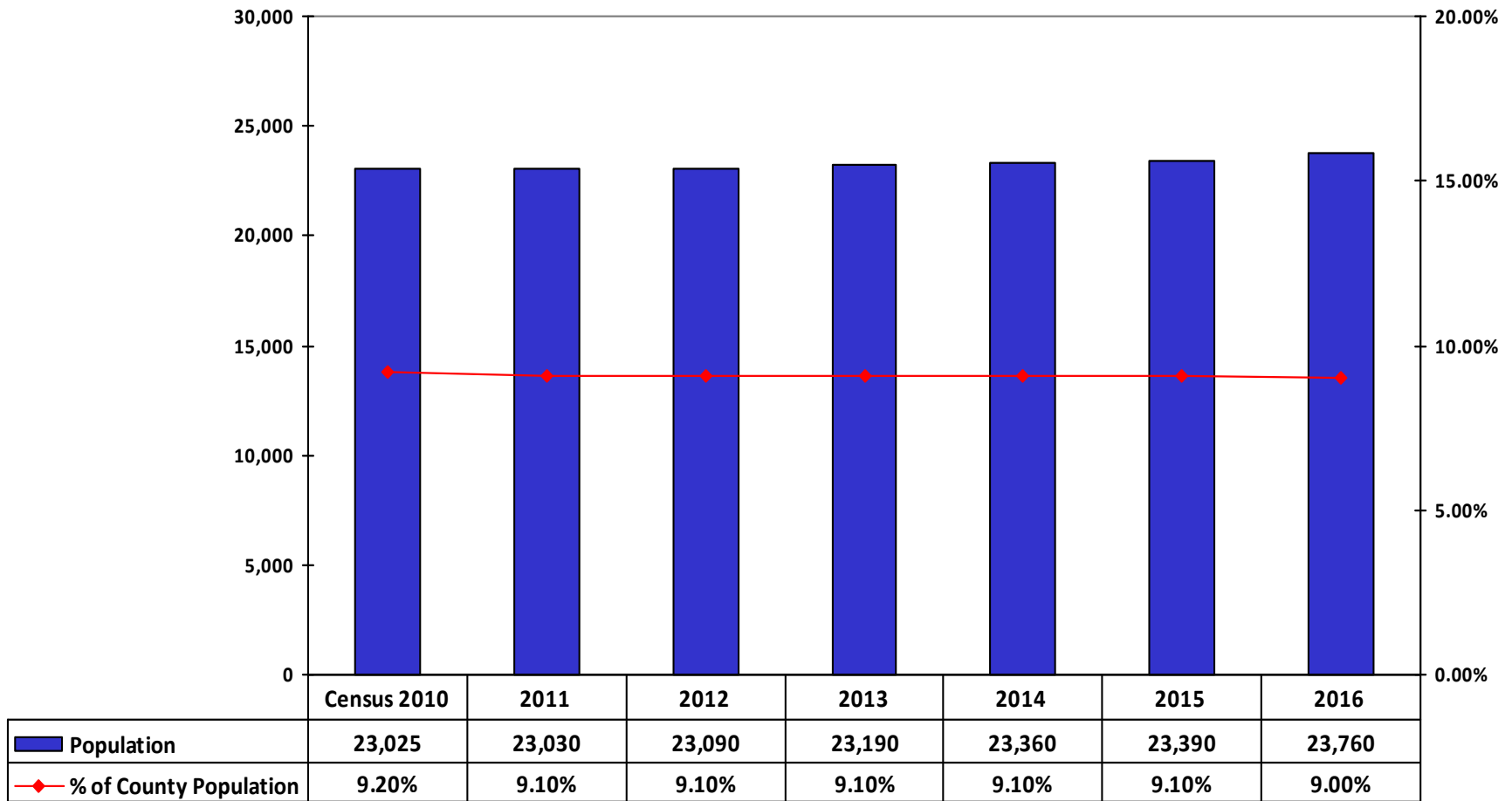
Kitsap County Population Estimates

Source: OFM State of Washington



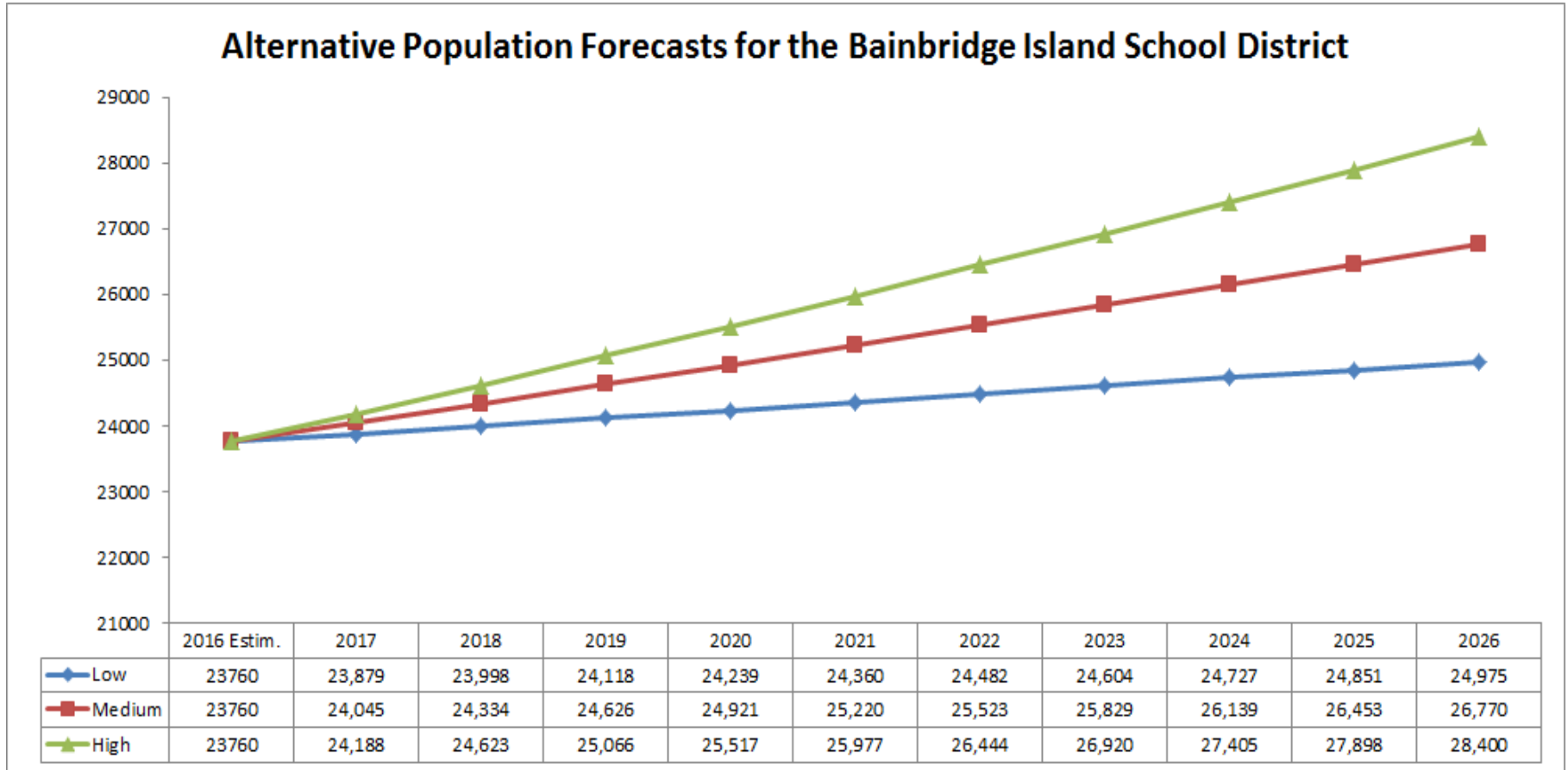
Bainbridge Island School District Population

Census and State Estimates



Bainbridge Island Resident Population Forecasts

Alternative Forecasts Based on Different Assumptions About Growth.



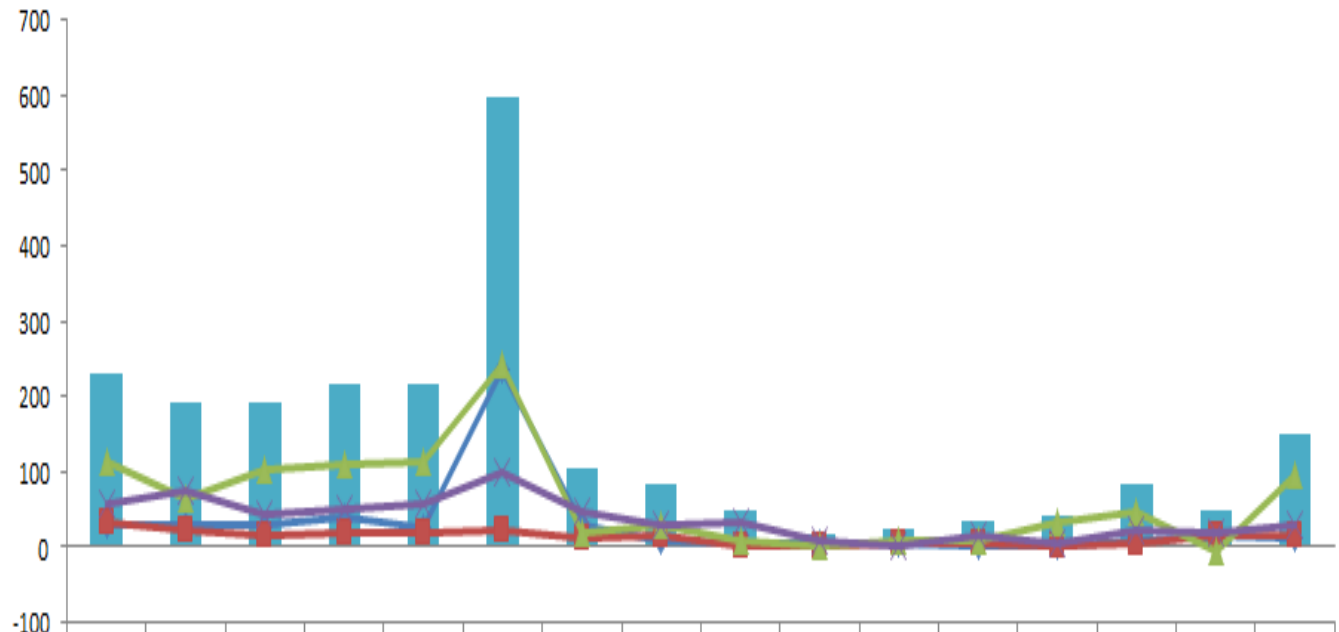
The high forecast is in line with the growth predicted by the Puget Sound Regional Council’s Land Use Baseline Forecast



Net Housing Units Added by Neighborhood

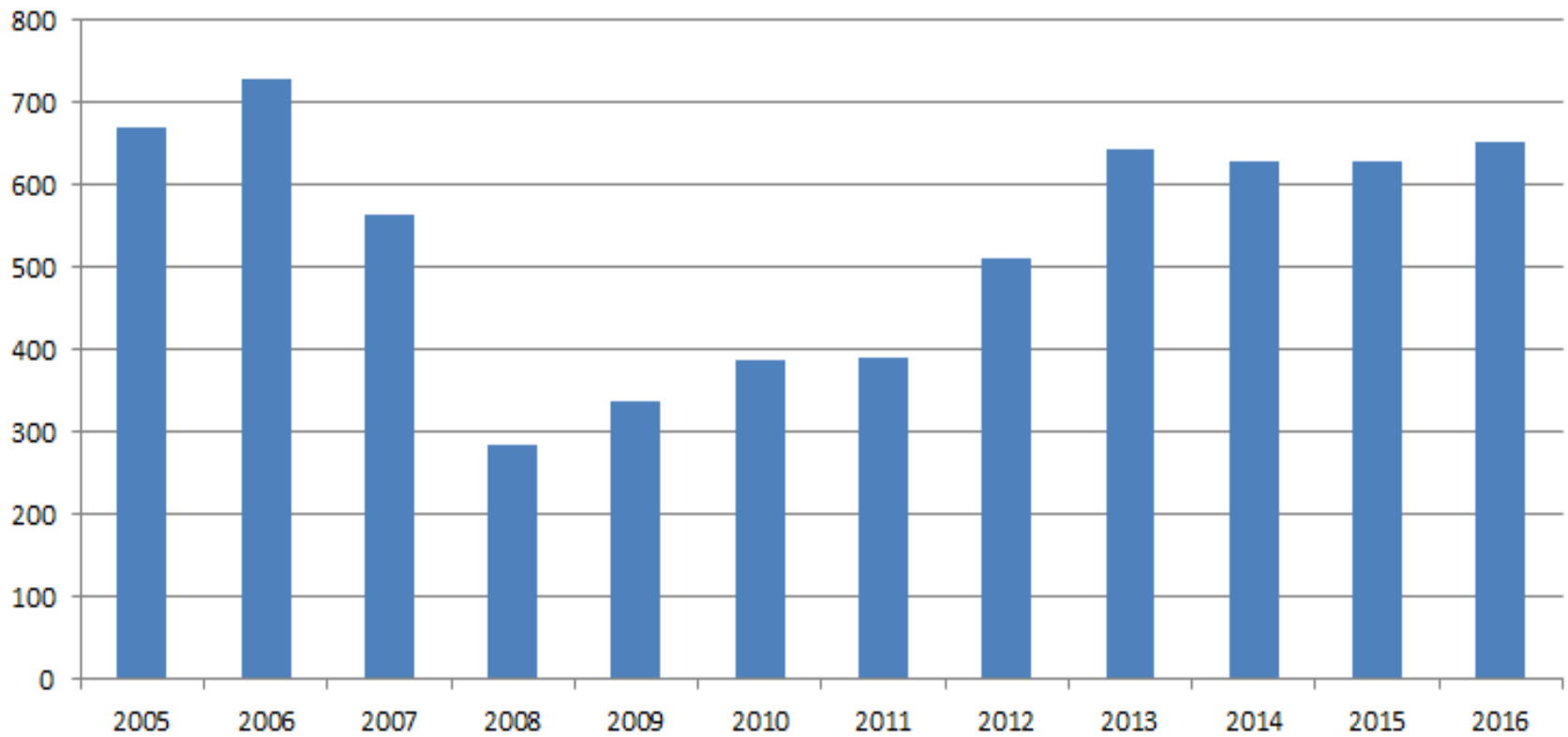
Puget Sound Regional Council Data Gathered from Jurisdictions

Net Units= (New Units - Demolished Units)



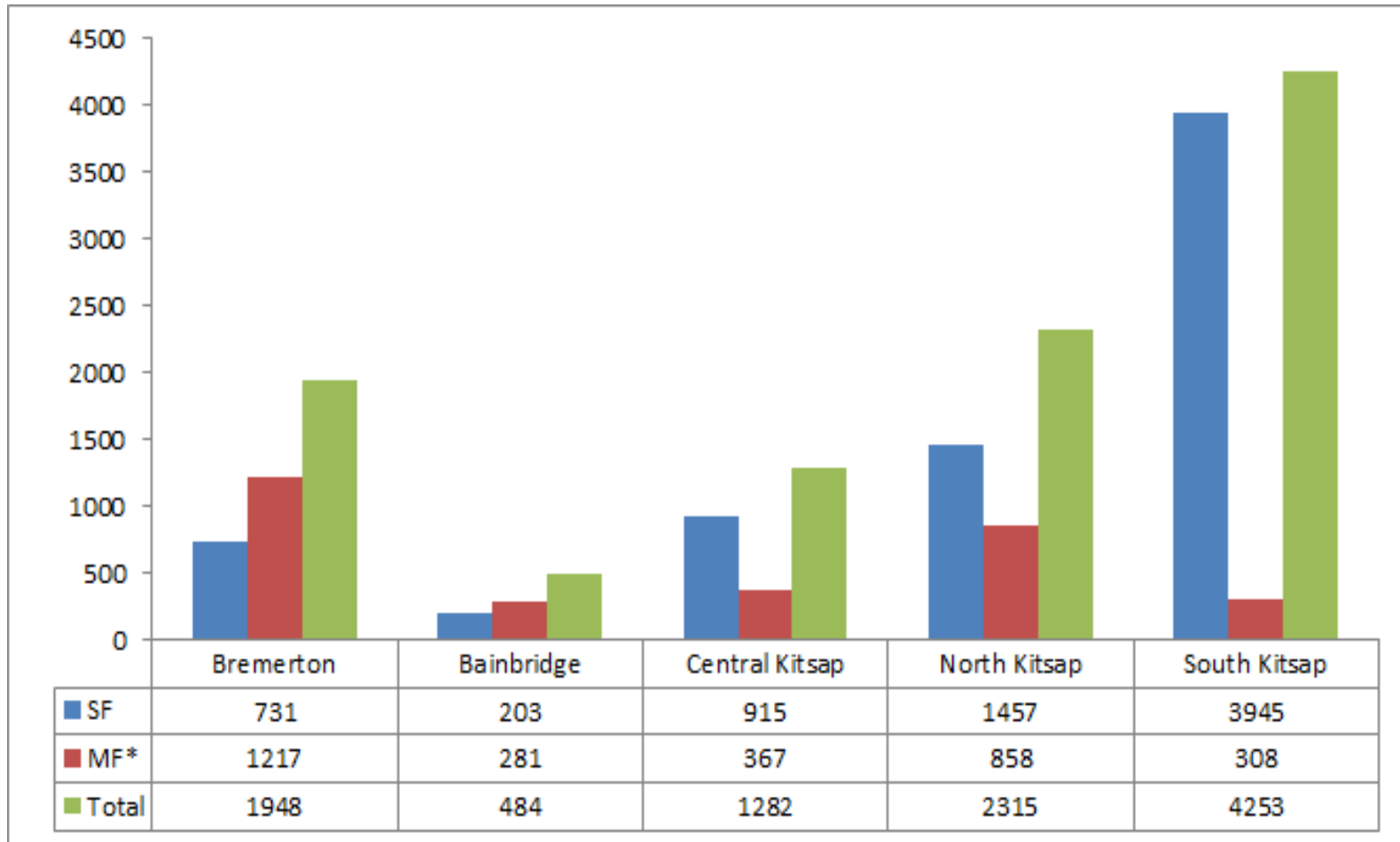
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
■ Total	232	191	192	218	215	597	105	83	48	18	24	34	41	82	47	149
◆ North Bainbridge Island Tract 907	30	29	28	40	25	235	28	10	4	5	6	3	2	8	16	12
■ North/Center Bainbridge Island Tract 908	33	24	16	18	20	21	11	14	3	3	6	6	2	4	15	15
▲ Winslow Tract 909	113	63	104	110	114	241	19	29	8	2	9	10	33	48	-4	94
× South Bainbridge Island Tract 910	56	75	44	50	56	100	47	30	33	8	3	15	4	22	20	28

Total Home Sales by Year: Bainbridge Island School District
Includes Both New and Existing Homes
Source: MetroStudy Assessor's Data



Future Housing Development by Kitsap County School District

Source: New Home Trends

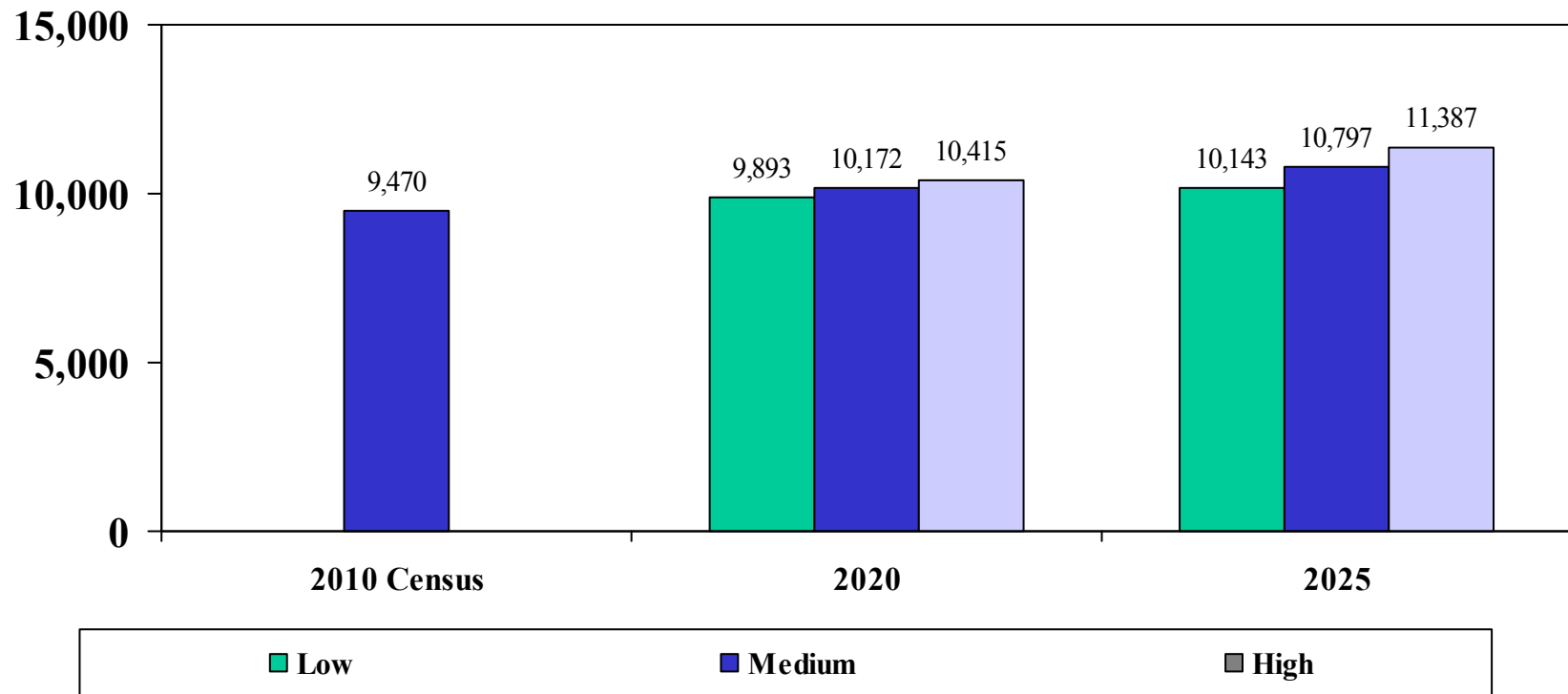


Note: Townhome developments are coded as multi-family for this table.

Future Housing Forecasts

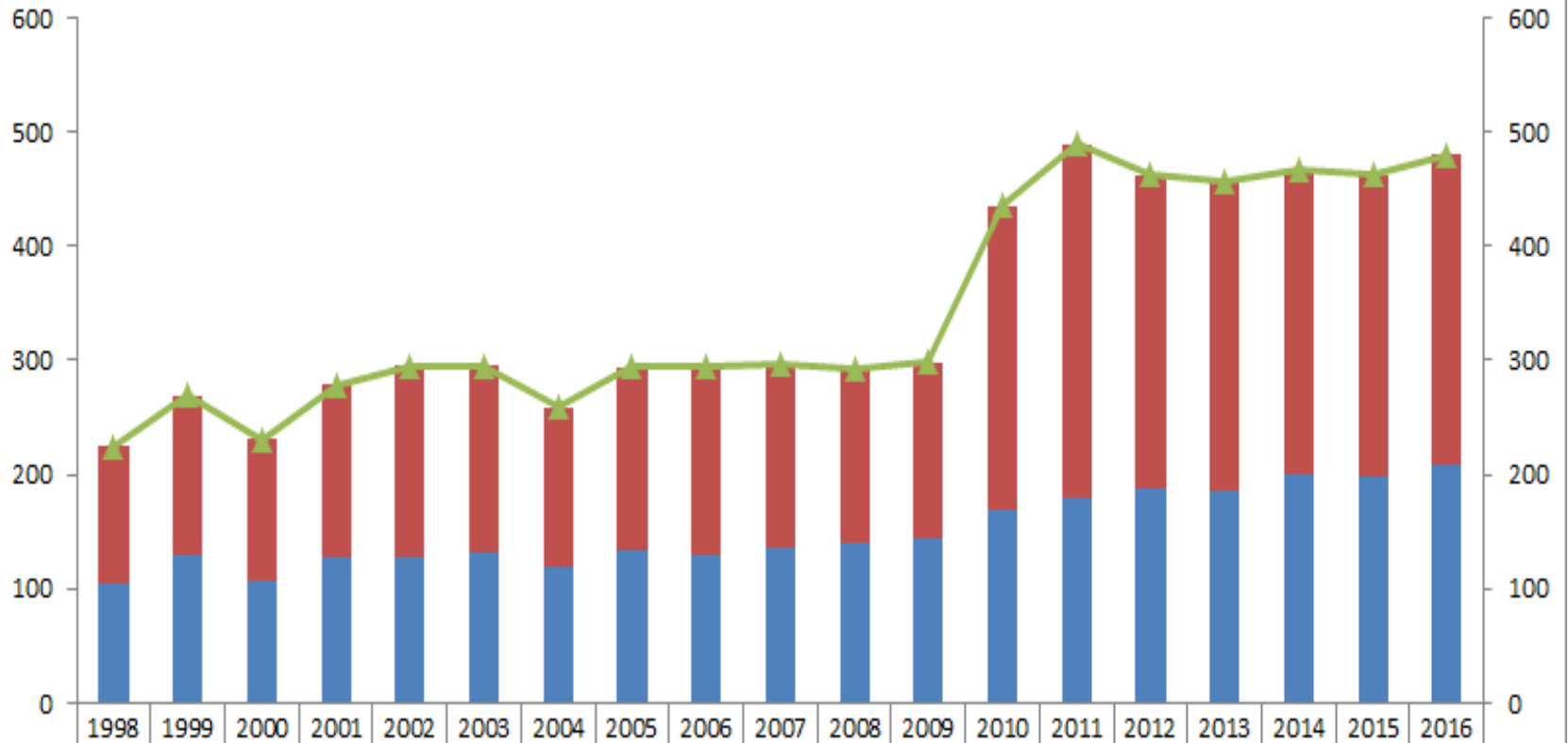
Number of Occupied Units

Assumes about 2.45 Persons Per Occupied Unit (Most Recent Estimate)
Applied to the Different Population Forecasts



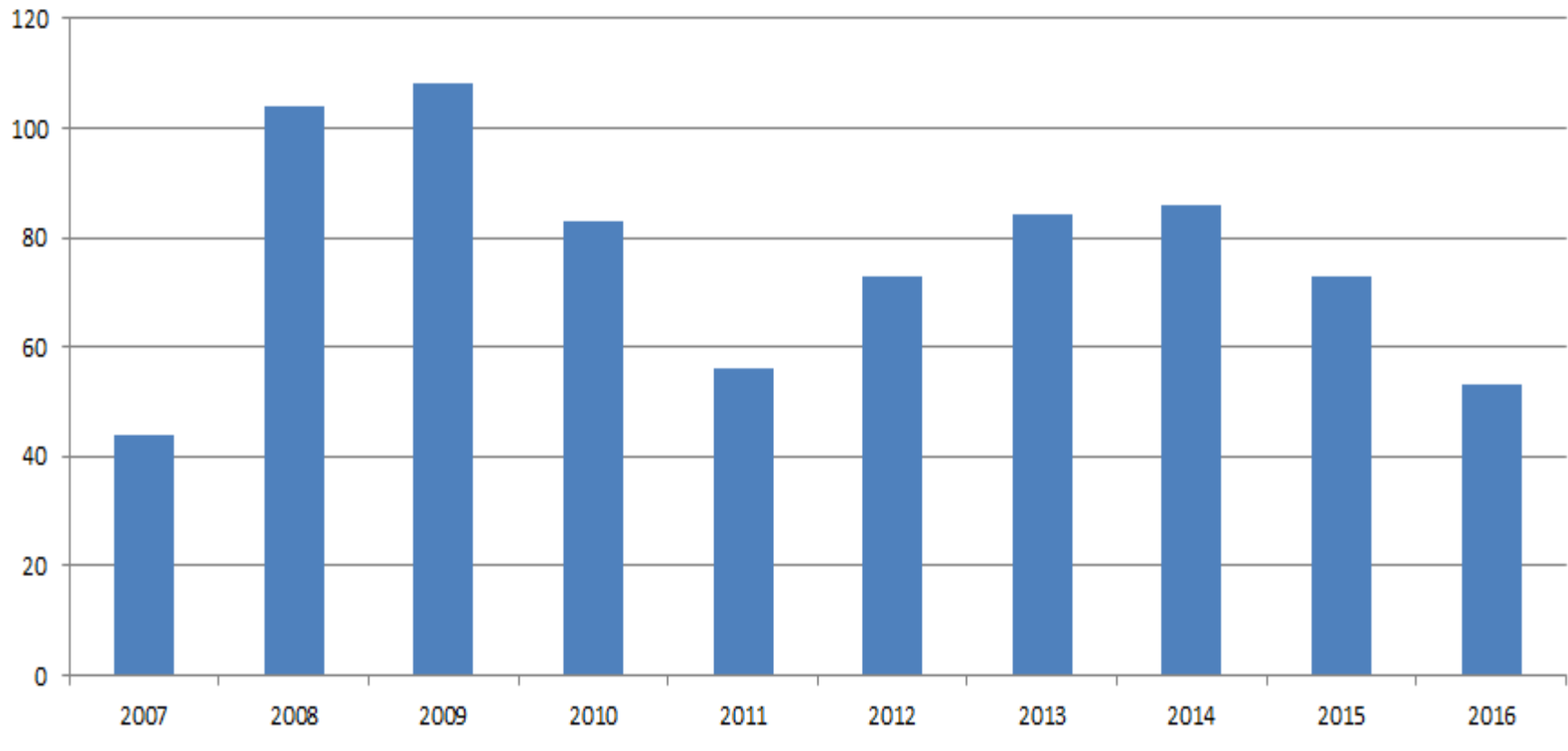
Private and Home School Trends

Private School Enrollment For Schools Located in the Bainbridge Island School District



■ K-4	121	140	125	151	168	163	140	161	165	161	152	154	266	310	274	272	266	264	272
■ 5-8	104	129	106	128	127	132	119	133	130	136	140	144	169	179	188	185	201	198	208
▲ Total	225	269	231	279	295	295	259	294	295	297	292	298	435	489	462	457	467	462	480

**Registered Home School Students
Bainbridge Island School District
Source: OSPI Home School Report**



Forecasts

Alternative Forecasts Based on Different Methods

Cohort Models*

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
3 Year Cohort	3,767	3,738	3,739	3,712	3,658	3,610	3,570	3,576	3,595	3,596
5 Year Cohort	3,786	3,775	3,790	3,780	3,742	3,710	3,678	3,699	3,738	3,747
10 Year Cohort	3,766	3,731	3,724	3,692	3,633	3,582	3,537	3,540	3,568	3,572

Housing Yield Forecasts (39 students Per Occupied House -- Recent Estimate)

Low	3,802	3,821	3,840	3,860	3,879	3,898	3,918	3,937	3,957	3,977
Medium	3,829	3,865	3,921	3,968	4,016	4,064	4,113	4,162	4,212	4,263
High	3,851	3,921	3,991	4,063	4,136	4,211	4,287	4,364	4,442	4,522

Cohort Models Adjusted for Projected Change in the Population

Low (No Change From Recent Growth)	3,767	3,738	3,739	3,712	3,658	3,610	3,570	3,576	3,595	3,596
Medium (Half a Percent Higher Annually)	3,787	3,780	3,801	3,794	3,760	3,729	3,707	3,728	3,762	3,778
High (One Percent Higher Annually)	3,755	3,823	3,892	3,962	4,033	4,106	4,179	4,255	4,331	4,292
Average of All Methods	3,790	3,799	3,827	3,838	3,835	3,836	3,840	3,871	3,911	3,927

* For the cohort models the kindergarten is assumed to be the average share of the County birth cohorts for the past three, five and ten years multiplied by the actual and projected births over the next decade.

Forecast Assumptions Summarized

- **Low Forecast**

- Birth-to-K Ratio averages 6.95% over the course of the forecast
- Annual population growth is assumed to be about half-a-percent
- About 400 new housing units will be added in the next decade.

- **Medium Forecast**

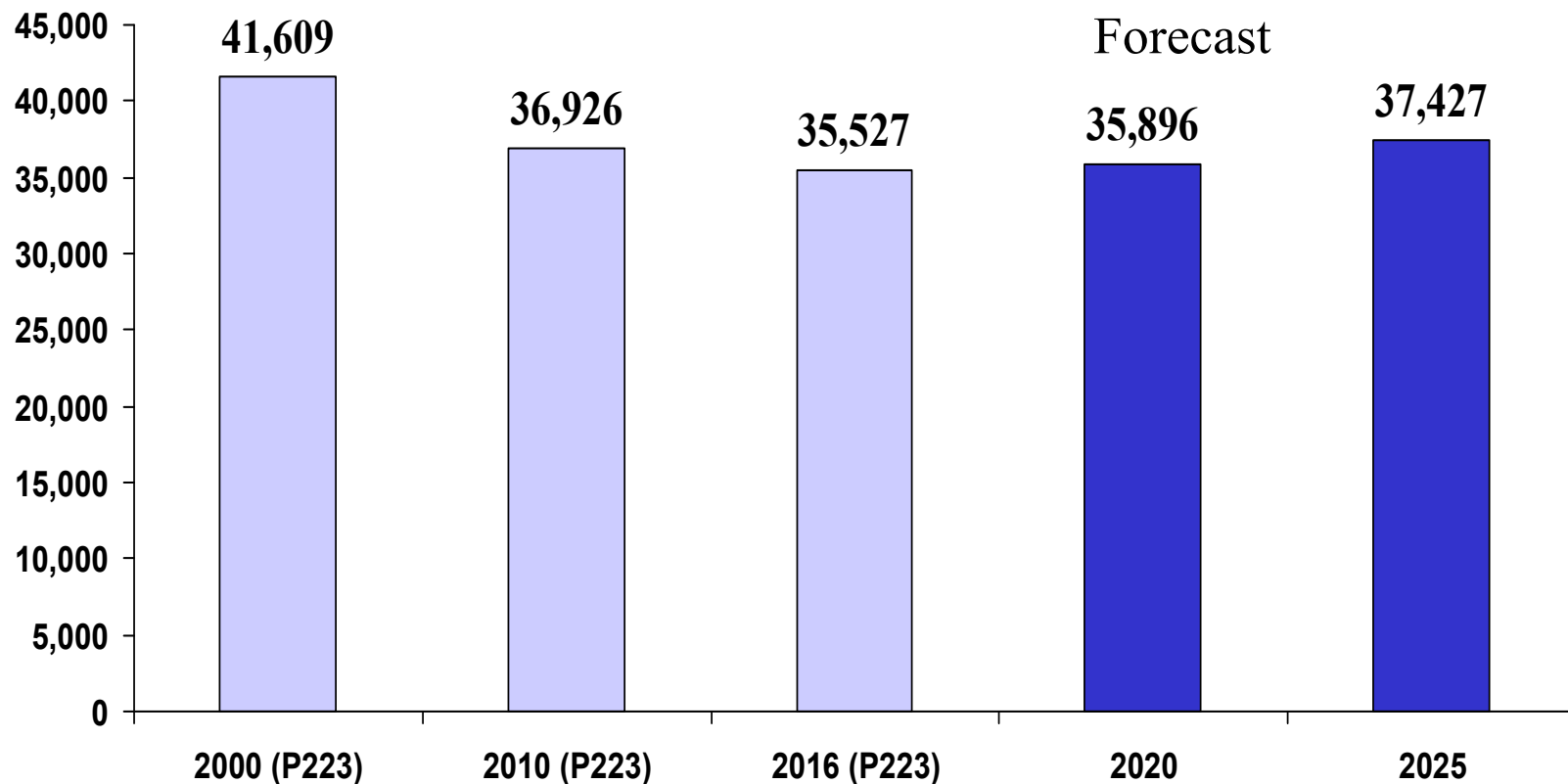
- Birth-to-K ratio averages 7.08% over the course of the forecast
- Annual population growth is assumed to about 1.12%
- About 1100 new housing units will be added in the next decade.

- **High Forecast**

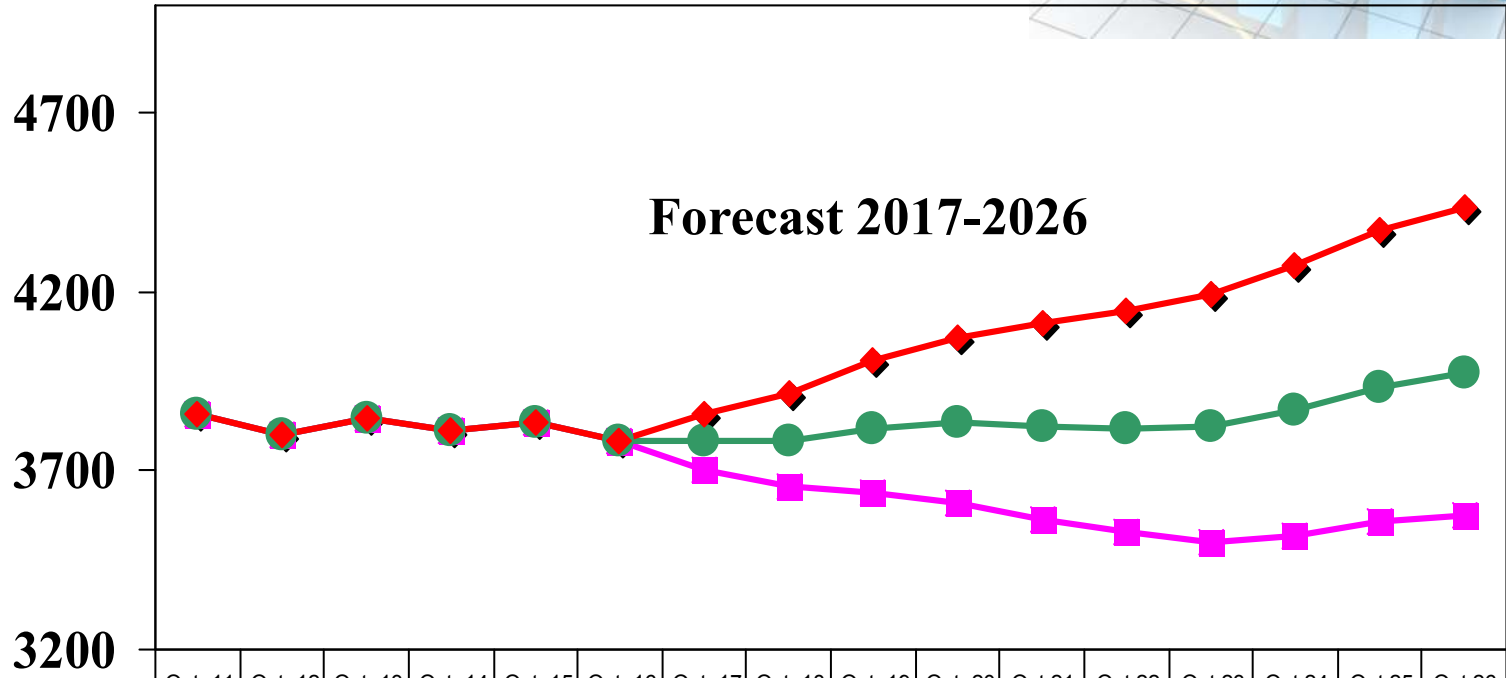
- Birth-to-K ratio is assumed to be 7.23%.
- Annual population growth is assumed to be about 1.18%.
- About 1800 new housing units will be added in the next decade.

Forecast of the Kitsap County K-12 Population

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



Low, Medium and High District Forecasts



	Oct_11	Oct_12	Oct_13	Oct_14	Oct_15	Oct_16	Oct_17	Oct_18	Oct_19	Oct_20	Oct_21	Oct_22	Oct_23	Oct_24	Oct_25	Oct_26
Low Forecast	3858	3799	3849	3809	3837	3782	3704	3656	3640	3612	3564	3529	3502	3518	3555	3573
Medium Growth Forecast	3858	3799	3849	3809	3837	3782	3780	3784	3819	3835	3825	3819	3823	3867	3930	3971
High Forecast	3858	3799	3849	3809	3837	3782	3855	3916	4006	4074	4109	4147	4190	4272	4369	4435

Enrollment Projections

Medium Range Forecast

	Projected Births									
<i>Birth Yr</i>	<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>
<i>Births</i>	2993	2836	3068	3060	3015	3113	3210	3308	3405	3356
<i>K % of Cohort</i>	6.92%	7.05%	7.07%	7.06%	7.06%	7.07%	7.13%	7.14%	7.14%	7.15%
Bainbridge Island Births	99	116	142	122	130	134	138	142	146	144
% of County Births	3.3%	4.1%	4.6%	4.0%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%

	<u>Oct17</u>	<u>Oct18</u>	<u>Oct19</u>	<u>Oct20</u>	<u>Oct21</u>	<u>Oct22</u>	<u>Oct23</u>	<u>Oct24</u>	<u>Oct25</u>	<u>Oct26</u>
K	207	200	217	216	213	220	229	236	243	240
1	226	235	227	246	246	242	250	260	268	276
2	234	238	247	239	260	260	256	264	275	284
3	216	245	249	259	251	274	274	270	278	290
4	279	221	251	255	266	258	282	282	278	286
5	279	300	238	271	275	287	279	305	305	301
6	286	282	303	241	275	279	291	283	309	309
7	325	298	294	317	252	288	292	305	297	324
8	339	334	306	302	326	260	297	301	315	306
9	387	399	393	361	357	385	308	351	356	373
10	368	394	407	401	369	365	394	315	359	365
11	314	340	364	379	373	344	341	368	294	335
12	<u>320</u>	<u>298</u>	<u>323</u>	<u>348</u>	<u>362</u>	<u>357</u>	<u>330</u>	<u>327</u>	<u>353</u>	<u>282</u>
	3780	3784	3819	3835	3825	3819	3823	3867	3930	3971
Change	-2	4	35	16	-10	-6	4	44	63	41
Percent	-0.1%	0.1%	0.9%	0.4%	-0.3%	-0.2%	0.1%	1.2%	1.6%	1.0%
K-4	1162	1139	1191	1215	1236	1254	1291	1312	1342	1376
5-8	1229	1214	1141	1131	1128	1114	1159	1194	1226	1240
9-12	1389	1431	1487	1489	1461	1451	1373	1361	1362	1355
<i>Kitsap K-12</i>	35715	35679	35802	35896	35996	36259	36583	36988	37427	37587
<i>BI % of K-12</i>	10.6%	10.6%	10.7%	10.7%	10.6%	10.5%	10.5%	10.5%	10.5%	10.6%

Summary and Conclusions

- **The medium range enrollment forecast shows a small net gain in enrollment over the next five years due to some improvement in new home sales and population growth.**
- **The reason the gains are not larger is that the incoming kindergarten classes have been smaller in recent years and are not projected to be much larger until the period between 2022 and 2026 when we expect larger birth cohorts to start entering the schools.**
- **Alternative forecasts show what might happen if population and housing growth were to be lower or higher than what we have assumed in our medium range model.**
- **It is possible that the strong population and K-12 gains in the Puget Sound might eventually spill over into Kitsap County resulting in better enrollment trends in Bainbridge Island and elsewhere. It should be noted, however, that we expect a significant share of the future K-12 growth in the County to occur in South Kitsap which has a large number of new housing units in the pipeline.**
- **These forecasts should be updated periodically to take advantage of new information.**

Consultant Background and Experience

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

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