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Beaverton School District: Population and Enrollment Forecasts 2009-10 to 2025-26

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2009-10 TO 2025-26

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EXECUTIVE SUMMARY

The Beaverton School District (BSD) enrolled 36,200 students in Fall 2008, a decrease of 187 students (0.5 percent) from Fall 2007. This was the second consecutive year with a small enrollment loss; the Fall 2007 total was 232 students (0.6 percent) lower than in Fall 2006.[1] The declines followed at least 20 consecutive years of enrollment growth. In spite of the overall losses, elementary grades (K-5) have added 238 students (1.4 percent) in the past two years, while middle school grades (6-8) have lost 177 students (2.1 percent) and high school grades (9-12) have lost 480 students (4.3 percent).

This report presents enrollment forecasts prepared by the Portland State University Population Research Center (PRC) exploring three possible scenarios for BSD enrollment during the next 17 years based on different assumptions about future net migration and fertility rates. The study includes analysis of population, housing and enrollment trends affecting the District in recent years and forecasts of district-wide enrollments by grade level for the 2009-10 to 2025-26 school years.

Although the weak economy and slow housing market may keep enrollment flat in the short run (one or two years), all three enrollment forecast scenarios indicate that overall BSD enrollment will increase in the long run. There will be less new housing construction on vacant land now that most of the District's residential land is occupied, but our analysis of vacant residential land, redevelopment and infill potential, and specific planning efforts indicates that there may be capacity for an additional 32,000 to 40,000 housing units to be added to the current stock of about 101,000 units.

In the middle, or most likely scenario, the District adds about 8,500 students in the next 17 years, reaching an enrollment of 44,660 in 2025. Enrollment growth under the middle

[1] As in previous demographic studies prepared by PSU, enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs. When all students are included, as in the "District Statistics" report prepared by BSD, there was a small enrollment gain of 102 students between Fall 2006 and Fall 2007, and Fall 2008 is identified as the first year with an enrollment loss.

series averages about 500 students annually, a significant rebound considering the downward trend of the past two years. However, the middle range growth is less than the long term average growth of 755 students annually between 1990 and 2006, and also less than in our previous study, which forecast average annual growth of about 620 students from 2004 to 2025 under the medium growth scenario.

Only the high scenario calls for numeric growth comparable to the booming 1990s. With an average of almost 800 additional students per year, total enrollment reaches 49,629 in 2025. In the low scenario, the District adds about 225 students annually, reaching 40,007 students in 2025. The alternate scenarios include different assumptions about migration and fertility. Specific assumptions are detailed in the "Enrollment Forecasts" section and in the Appendix.

Table 1 contains total K-12 enrollments under the three forecast scenarios, and includes current and historic enrollments for comparison. Following the table, Chart 1 depicts enrollment growth.

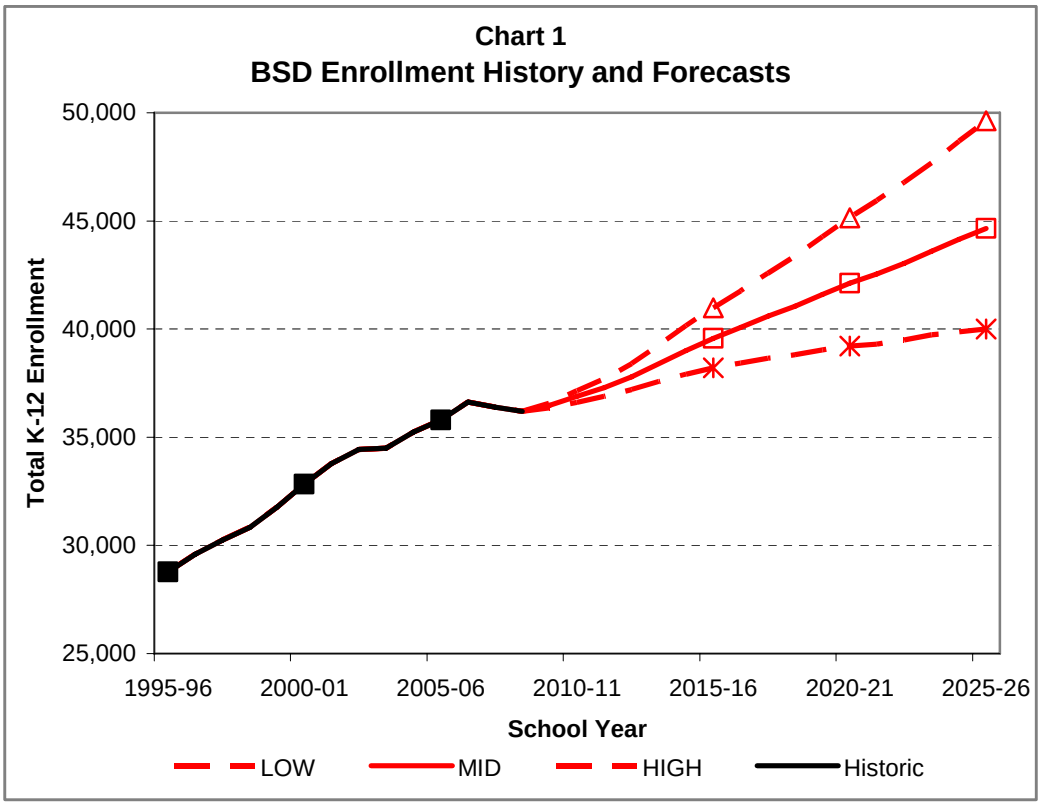
Table 1
Historic and Forecast Enrollment
Beaverton School District

	LOW		MIDDLE		HIGH	
School Year	Enrollment[1]	5 year growth	Enrollment[1]	5 year growth	Enrollment[1]	5 year growth
1990-91	24,536		24,536		24,536	
1995-96	28,771	4,235	28,771	4,235	28,771	4,235
2000-01	32,830	4,059	32,830	4,059	32,830	4,059
2005-06	35,795	2,965	35,795	2,965	35,795	2,965
2008-09	36,200	--	36,200	--	36,200	--
2010-11 (fcst.)	36,614	819	36,889	1,094	37,151	1,356
2015-16 (fcst.)	38,206	1,592	39,571	2,682	40,981	3,830
2020-21 (fcst.)	39,213	1,007	42,127	2,556	45,141	4,160
2025-26 (fcst.)	40,007	794	44,660	2,533	49,629	4,488
AAEG[2], 2008-09 to 2025-26	*0.6%*		*1.2%*		*1.9%*	

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual Enrollment Growth.

Source: Historic enrollment, Beaverton School District; Enrollment forecasts, Population Research Center, PSU. October 2008.



Enrollment by School Level

Under the middle range scenario, enrollment in elementary grades grows by an annual average of just 1.0 percent between 2008 and 2015, adding 1,269 students during the next seven years. During the same period, middle grades add 970 students, (1.6 percent annually) and high school grades add 1,132 students (1.4 percent annually).

Between 2015 and 2025, each school level is forecast to grow by 1.2 percent annually under the middle scenario. Elementary grades add an additional 2,419 students in the 10 year period, middle grades add 1,154 students, and high school grades add 1,516 students.

INTRODUCTION

The Beaverton School District (BSD) requested that the Portland State University Population Research Center (PRC) prepare *long-range* enrollment forecasts for use in the District's planning. PRC has conducted similar studies for the BSD, about once every three to five years for at least 20 years. This report includes forecasts of district-wide enrollment by grade level for each year from 2009-10 to 2025-26 under three different growth scenarios. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, small area forecasts from Metro, city and county population estimates produced by PRC, county population forecasts from the Oregon Office of Economic Analysis, employment trends and forecasts from the Oregon Employment Department, and planning documents from Washington County, Metro, and the Cities of Beaverton, Hillsboro, Tigard, and Portland.

The District serves nearly the entire City of Beaverton, with the exception of a portion of the West Slope area annexed by Beaverton in the late 1990s and 2000s that is within the Portland School District. Portions of the cities of Tigard, Hillsboro, and Portland also extend into the District. In spite of aggressive annexation by the area's municipalities, at least half of the District's residents live in unincorporated Washington County, outside the boundaries of any city.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District. Next, the "Enrollment Forecasts" section includes a discussion of methodology and summaries of the district-wide enrollment forecasts. The Appendix includes more detailed results and assumptions of the three forecast scenarios.

POPULATION AND HOUSING TRENDS, 1990 to 2007

During the decade between the 1990 and 2000 Censuses, total population within the current boundaries of the BSD grew by 41 percent, from 152,815 persons to 215,423. The District's rate of population growth during the 1990s was only slightly less than the 43 percent growth experienced by Washington County overall, and significantly greater than the 27 percent growth rate in the Portland-Vancouver-Beaverton metropolitan region.

Table 2
City and Region Population, 1990, 2000, and 2007

				Avg. Annual Growth Rate	
	1990	2000	2007	1990-2000	2000-2007
City of Beaverton[1]	53,307	76,129	85,560	*3.6%*	*1.6%*
BSD Portion	53,307	75,536	N/A	*3.5%*	
City of Hillsboro[2]	37,598	70,186	88,300	*6.2%*	*3.2%*
BSD Portion[5]	687	4,701	N/A	*19.2%*	
City of Portland[3]	438,802	529,121	568,380	*1.9%*	*1.0%*
BSD Portion[5]	994	912	N/A	*-0.9%*	
City of Tigard[4]	29,435	41,223	46,715	*3.4%*	*1.7%*
BSD Portion[5]	*4,128*	*7,483*	N/A	*5.9%*	
BSD Unincorporated	93,699	126,791	N/A	*3.0%*	
BSD Total	152,815	215,423	N/A	*3.4%*	
Washington County	311,554	445,342	511,075	*3.6%*	*1.9%*
Portland-Vancouver-Beaverton MSA[6]	1,523,741	1,927,881	2,159,720	*2.4%*	*1.6%*

1. A portion of the City of Beaverton's population growth was due to the annexation of 2,468 persons between 1990 and 2000 and 1,944 persons between 2000 and 2007.

2. A portion of the City of Hillsboro's population growth was due to the annexation of 635 persons between 1990 and 2000.

3. A portion of the City of Portland's population change was due to the annexation of 47,227 persons between 1990 and 2000 and 8 persons between 2000 and 2007.

4. A portion of the City of Tigard's population growth was due to the annexation of 1,205 persons between 1990 and 2000 and 1,111 persons between 2000 and 2007.

5. The 1990 populations of BSD within Hillsboro, Portland, and Tigard are estimated because 1990 census blocks were not delineated by school district boundaries.

6. Portland-Vancouver-Beaverton MSA consists of Clackamas, Columbia, Multnomah, Washington, Yamhill (OR) and Clark and Skamania (WA) Counties.

Sources: U.S. Census Bureau, 1990 and 2000 censuses; Portland State University Population Research Center, 2007 estimates.

In the current decade, the area served by BSD has continued to grow, but at a slower rate. Table 2 on the previous page shows that annual average growth rates in the 2000s for Washington County and each of the cities that are mostly or partly within the District are about half of what they were in the 1990s.

Regionally, the growth rate is influenced primarily by the health of the economy, and the current decade illustrates the cyclical nature of the economy. After the end of the 1990s high-tech boom that fueled much of the area's employment and housing growth, the early 2000s recession slowed employment and population growth. Washington County lost jobs in 2002 and in 2003; and by 2004 its job total had barely recovered to its 2000 level.[2] Between 2004 and 2006, Washington County added about 22,000 jobs, or nearly 10 percent. Employment growth slowed to about 4,000 jobs in 2007. The latest monthly job figures for 2008 indicate that the 2007 gain has been wiped out by the current recession, and the County is back to its 2006 employment level.[3]

In good economic times or bad, an advantage that residents of the Beaverton School District have is proximity to the region's largest employment areas. Using the results of the Census Bureau's 2007 American Community Survey (ACS), we estimated that BSD residents who worked outside of their homes had an average travel time to work of 23.2 minutes, compared with 25.0 minutes for residents of the remainder of the metropolitan region.[4] Many residents' workplaces are within the District itself. The Census Bureau's Local Employment Dynamics (LED) data from the second quarter of 2006 identifies 101,106 "primary" jobs within the BSD, not counting most agricultural employment, self-employment, and second jobs. There were 112,118 primary job holders living in the District, a ratio of 0.90 jobs per worker. Map 1 on the next page shows concentrations of BSD residents working in the District or within several miles of it in Downtown Portland, Hillsboro, or the Tigard/Lake Oswego area. More than two thirds of employed BSD residents worked in the cities of Beaverton, Portland, Hillsboro, or Tigard.[5]

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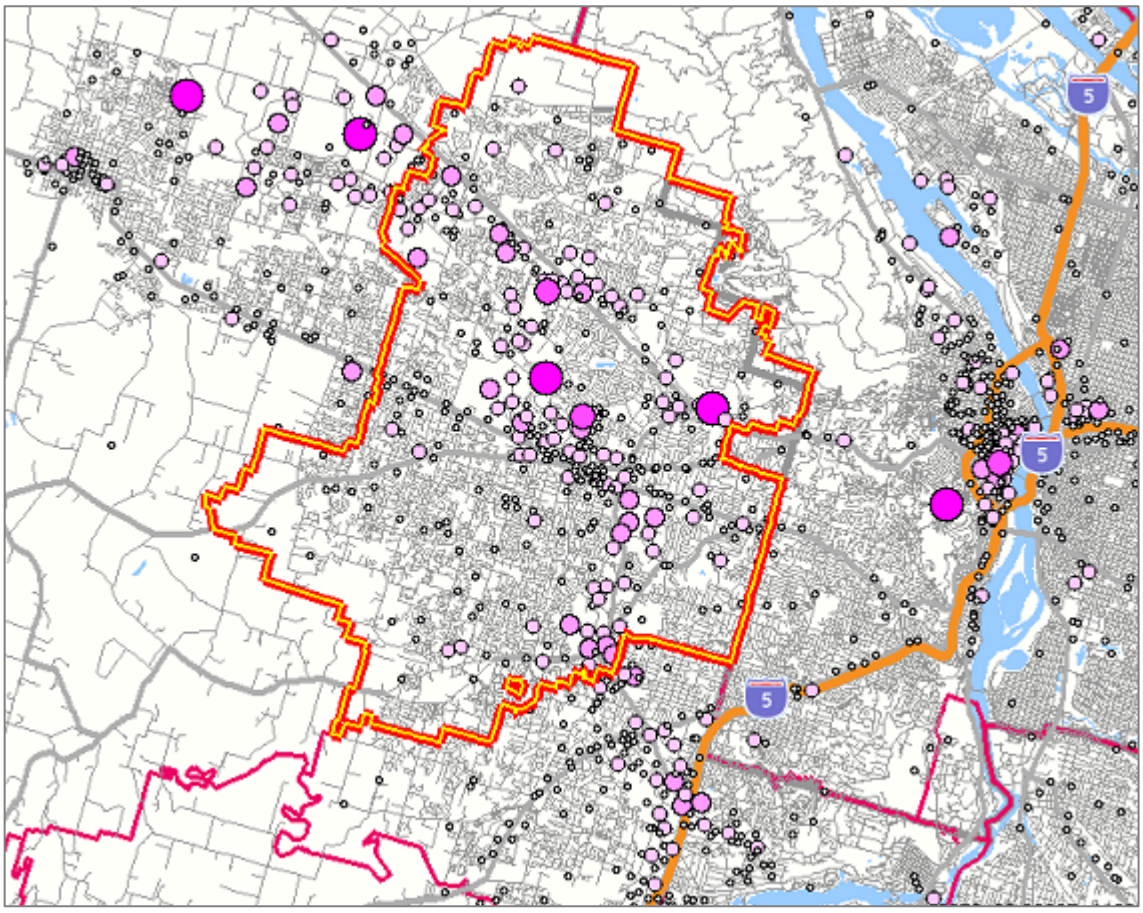
[2]"Covered Employment and Wages". Oregon Employment Department, OLMIS.
[3]"Current Employment Statistics". Oregon Employment Department, OLMIS.
[4]U.S. Census Bureau, 2007 American Community Survey one year estimates, Tables B08013 and B08303.
[5]U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2006). Reports and map created on line at http://lehdmap3.did.census.gov/themap3/.

Map 1
Place of Work of Beaverton S. D. Residents, 2006



Population and Migration by Age Group

Population by age group for 1990 and 2000 is shown in Table 3 on the next page. Every age group grew by 20 percent or more during the decade with one exception, ages 65 to 69, which grew by only one percent. The 65 to 69 year old age group lost population in Oregon and the U.S. between 1990 and 2000 because the cohort that age in 2000 was born during the depression era of the early 1930s, when births fell from previous levels. The growth rate for school-age population (45 percent) was higher than for total population (41 percent). However, the relative growth rates of the under 18 population, highest for older children (52 percent for ages 15 to 17) and lowest for children under age five (40 percent) provides a clue about one of the reasons that the pace of BSD enrollment gains slowed in the early 2000s compared with the late 1990s.

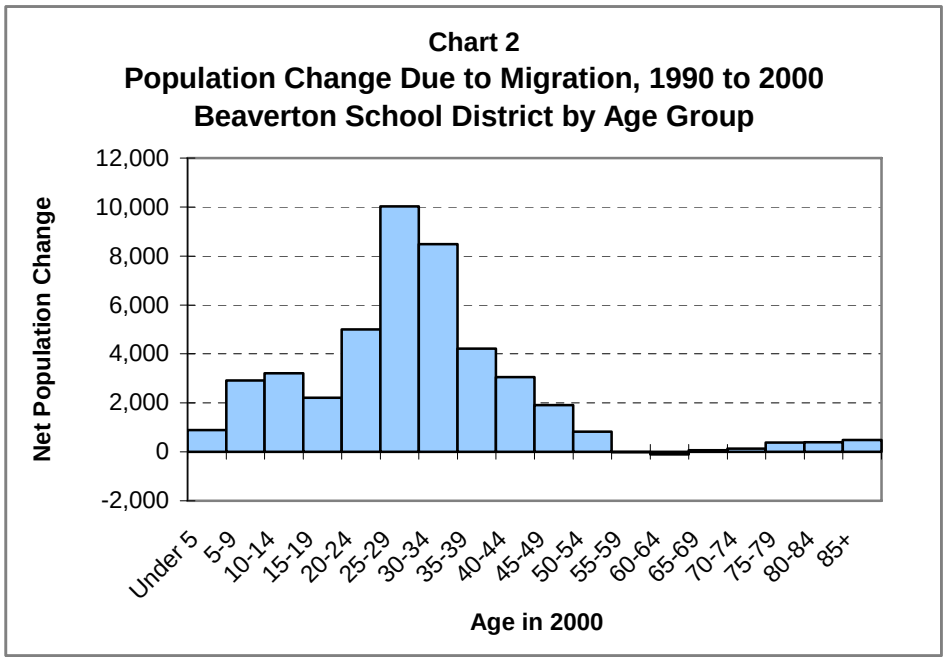
Table 3

Population by Age Group
Beaverton School District, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Under Age 5	11,734	16,405	4,671	*40%*
Age 5 to 9	11,463	16,171	4,708	*41%*
Age 10 to 14	10,211	14,914	4,703	*46%*
Age 15 to 17	5,688	8,644	2,956	*52%*
Age 18 to 19	3,414	5,000	1,586	*46%*
Age 20 to 24	10,511	15,137	4,626	*44%*
Age 25 to 29	14,715	19,042	4,327	*29%*
Age 30 to 34	15,737	18,876	3,139	*20%*
Age 35 to 39	15,238	18,699	3,461	*23%*
Age 40 to 44	13,323	18,470	5,147	*39%*
Age 45 to 49	9,578	16,795	7,217	*75%*
Age 50 to 54	6,786	13,757	6,971	*103%*
Age 55 to 59	5,454	9,129	3,675	*67%*
Age 60 to 64	5,041	6,183	1,142	*23%*
Age 65 to 69	4,822	4,891	69	*1%*
Age 70 to 74	3,555	4,327	772	*22%*
Age 75 to 79	2,597	4,004	1,407	*54%*
Age 80 to 84	1,619	2,646	1,027	*63%*
Age 85 and over	1,329	2,333	1,004	*76%*
Total Population	**152,815**	**215,423**	**62,608**	***41%***
Total age 5 to 17	27,362	39,729	12,367	*45%*
share age 5 to 17	*17.9%*	*18.4%*		

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center.

In the 1990s, about 70 percent of BSD's population growth was directly attributable to net migration (people moving in minus people moving out). By "surviving" the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the "survived" population to the actual 2000 population by age group, we are able to estimate net migration by age cohort. Chart 2 shows the estimated population change that each age group contributed due to migration between 1990 and 2000. For example, among the cohort that was 15 to 19 in 1990 and 25 to 29 in 2000, about 10,000 more people moved into the BSD than out of it in the 1990s. Nearly all age groups added population due to migration, with the largest gains among young adults ages 25 to 34. Although Table 3 showed that these age groups grew more slowly than overall population within the District, the large migration of young adults allowed BSD to counter the national decline in population aged 25 to 34.



Births and Fertility Rates

The 40 percent increase in the number of births in the District from 2,559 in 1990 to 3,571 in 2000 roughly kept pace with the 41 percent overall population increase. Since 2000 the number of births to BSD residents has stagnated; the 2006 estimate of 3,687 was only three percent higher than in 2000. With the large baby boom cohort no longer in its prime childbearing years, recent population growth has not been sufficient to generate an increase in births. Table 4 reports the number of births each year from 1990 to 2006 for the District.

Age-specific fertility rates for the BSD in 1990 and 2000 are shown in Chart 3 following Table 4. For comparison, the State of Oregon's fertility rates for 2000 are also included. The rates were calculated for each age group by dividing the number of births in the calendar year by the female population counted in the census. For example, in 1990 there were 868 births to mothers age 25 to 29 and a population of 7,476 women age 25 to 29 in the BSD, so the fertility rate in 1990 for women age 25 to 29 was 868 ÷ 7476 = 0.116 births per female, 116 births per thousand females. Chart 3 shows that BSD fertility rates for women under age 30 in 2000 were similar to those in 1990, and rates for women under 25 were below Oregon rates. For women age 30 and over, BSD fertility rates

Table 4

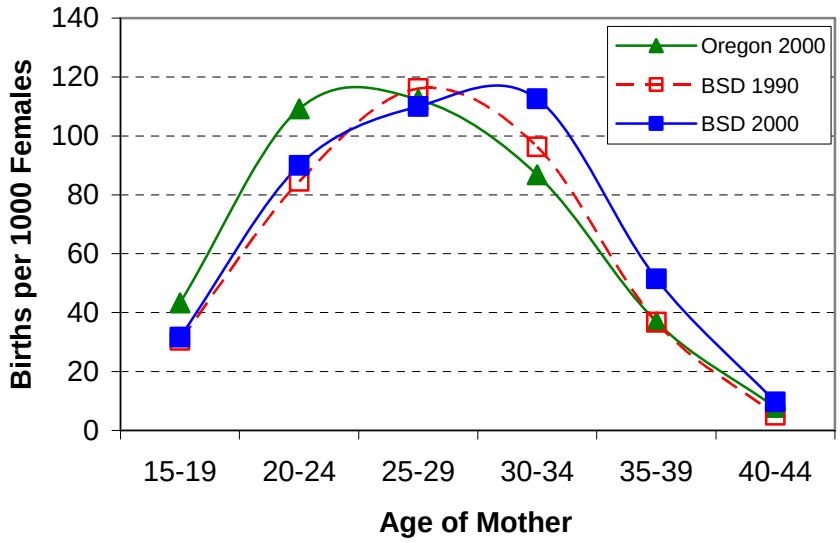
Annual Births, 1990 to 2006
Beaverton School District

Year	Births
1990	2,559
1991	2,549
1992	2,674
1993	2,716
1994	2,762
1995	2,847
1996	2,910
1997	3,112
1998	3,253
1999	3,296
2000	3,571
2001	3,536
2002	3,538
2003	3,639
2004	3,563
2005	3,592
2006	3,687

Source: PSU-PRC estimates using Oregon Center for Health Statistics data.

Chart 3

Age-Specific Fertility Rates
Beaverton S.D., 1990 and 2000



increased between 1990 and 2000 and are well above the statewide rates. The ethnic component not shown in the chart is that for non-Hispanic women, fertility rates in all age groups under 30 fell between 1990 and 2000. However, the increased share of births to Hispanic women during the decade caused overall fertility rates to increase for women under 25. In 2000, Hispanic women 30 and over had similar fertility rates to non-Hispanic women in the same age groups, but much higher rates among women under 30. Among BSD mothers under the age of 25, the Hispanic share of all births increased from seven percent in 1990 to 30 percent in 2000.

Another common measure of fertility is the Total Fertility Rate (TFR). This is an estimate of the number of children that would be born to the average women during her child-bearing years, based on age-specific fertility rates observed at a given time. The TFR for the District increased from 1.84 in 1990 to 2.03 in 2000. Total fertility rates in 2000 were 2.20 for Washington County overall, and 1.98 for the State.

Housing Growth and Characteristics

During the 1990s, the number of housing units within the District's boundaries increased by more than 25,000, as shown in Table 5 on the next page. There was a 39 percent increase in housing units as well as households (occupied housing units), and the 42 percent rate of growth of households with children under 18 exceeded the overall household growth rate. The share of households in the BSD that included at least one child under the age of 18 was 36 percent in 2000, similar to the 35 percent share in the Portland-Vancouver metro area overall. The average number of persons per household increased from 2.49 in 1990 to 2.52 in 2000.

Based on the change between the 1990 and 2000 Census, there were an average of about 2,500 housing units added in the BSD each year in the 1990s. Since 2000, annual average housing growth has been closer to 1,800 units. Our estimate is based on the information shown in Table 6, an accounting of 14,791 housing units built in the eight year period from 2000 to 2007.

Table 5

Beaverton School District
Housing and Household Characteristics, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Housing Units	64,448	89,723	25,275	*39%*
Single Family	35,904	49,849	13,945	*39%*
share of total	*56%*	*56%*		
Multiple Family	26,858	38,474	11,616	*43%*
share of total	*42%*	*43%*		
Mobile Home and Other	1,686	1,400	-286	*-17%*
share of total	*3%*	*2%*		
Households	61,052	85,082	24,030	*39%*
Households with children under 18	21,749	30,823	9,074	*42%*
share of total	*36%*	*36%*		
Households with no children under 18	39,303	54,259	14,956	*38%*
share of total	*64%*	*64%*		
Household Population	152,044	214,190	62,146	*41%*
Persons per Household	2.49	2.52	0.03	*1%*

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center.

Table 6

Beaverton School District
New Housing Units Built 2000 to 2007

	Year Built								2000-07
	2000	2001	2002	2003	2004	2005	2006	2007	Total
District Total	1,633	2,284	1,442	1,447	1,835	2,590	2,014	1,546	**14,791**

Note: New homes include single family homes and units in condos and apartments.

Source: Estimates compiled by PSU-PRC. The primary source is tax assessor parcel data. The assessor's data does not include housing unit counts, so the counts were derived from housing-related attributes, such as property code and land use. Additional sources such as residential construction permits were used to supplement and verify the estimates.

ENROLLMENT TRENDS

The Beaverton School District (BSD) enrolled 36,200 students in Fall 2008, a decrease of 187 students (0.5 percent) from Fall 2007. This was the second consecutive year with a small enrollment loss; the Fall 2007 total was 232 students (0.6 percent) lower than in Fall 2006.[1] In spite of the overall losses, elementary grades (K-5) have added 238 students (1.4 percent) in the past two years, while middle school grades (6-8) have lost 177 students (2.1 percent) and high school grades (9-12) have lost 480 students (4.3 percent).

Prior to Fall 2006, the BSD's total enrollment grew each year for 21 years. During those years there were periods of remarkable growth (annual average growth of 1,200 from 1988 to 1992 and 980 from 1998 to 2001) interspersed with moderately rapid growth (annual average growth of 670 from 1992 to 1998 and 570 from 2001 to 2006).

Notable enrollment trends from Fall 2008 include:

- Kindergarten enrollment increased by 168 students from Fall 2007, reaching a record of 2,775 students.
- The current 3rd and 5th grades and total K-5 enrollments are also the largest ever in the BSD.
- Current enrollment in grades 6-8 is the smallest since 2003-04, and enrollment in grades 9-12 is the smallest since 2004-05.

On the next page, Table 7 summarizes the enrollment history for the District by grade level annually from 1998-99 to 2008-09.

Table 7

Beaverton School District, Enrollment History, 1998-99 to 2008-09

Grade	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
K	2,352	2,378	2,433	2,500	2,490	2,503	2,567	2,641	2,644	2,607	2,775
1	2,541	2,561	2,708	2,707	2,710	2,681	2,824	2,839	2,991	2,936	2,886
2	2,629	2,669	2,635	2,756	2,698	2,690	2,760	2,832	2,867	2,957	2,873
3	2,608	2,632	2,636	2,694	2,746	2,643	2,735	2,697	2,895	2,867	2,935
4	2,628	2,654	2,708	2,677	2,747	2,678	2,680	2,755	2,743	2,856	2,849
5	2,359	2,631	2,681	2,745	2,637	2,721	2,704	2,706	2,769	2,733	2,833
6	2,380	2,413	2,676	2,756	2,788	2,647	2,768	2,797	2,785	2,748	2,785
7	2,371	2,405	2,477	2,692	2,733	2,803	2,683	2,752	2,858	2,757	2,749
8	2,330	2,363	2,427	2,520	2,741	2,722	2,818	2,701	2,782	2,820	2,714
9	2,352	2,483	2,486	2,534	2,649	2,802	2,807	2,968	2,825	2,817	2,836
10	2,339	2,387	2,503	2,527	2,583	2,627	2,819	2,868	2,970	2,750	2,760
11	2,212	2,362	2,396	2,522	2,532	2,556	2,571	2,775	2,818	2,865	2,618
12	1,736	1,825	2,064	2,150	2,373	2,421	2,499	2,464	2,672	2,674	2,587
Total*	**30,837**	**31,763**	**32,830**	**33,780**	**34,427**	**34,494**	**35,235**	**35,795**	**36,619**	**36,387**	**36,200**
Annual change		*926* *3.0%*	*1,067* *3.4%*	*950* *2.9%*	*647* *1.9%*	*67* *0.2%*	*741* *2.1%*	*560* *1.6%*	*824* *2.3%*	*-232* *-0.6%*	*-187* *-0.5%*
K-5	15,117	15,525	15,801	16,079	16,028	15,916	16,270	16,470	16,913	16,956	17,151
6-8	7,081	7,181	7,580	7,968	8,262	8,172	8,269	8,250	8,425	8,325	8,248
9-12	8,639	9,057	9,449	9,733	10,137	10,406	10,696	11,075	11,281	11,106	10,801

	5 Year Change:		5 Year Change:		10 Year Change:	
	Change	**Pct.**	**Change**	**Pct.**	**Change**	**Pct.**
K-5	799	*5%*	1,235	*8%*	2,034	*13%*
6-8	1,091	*15%*	76	*1%*	1,167	*16%*
9-12	1,767	*20%*	395	*4%*	2,162	*25%*
Total	**3,657**	***12%***	**1,706**	***5%***	**5,363**	***17%***

**Note: Enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Source: Beaverton School District

Private and Home School Enrollment and District "Capture Rate"

The Oregon Department of Education's 2008 list of private schools includes 21 schools within the BSD offering elementary and/or secondary grades, enrolling a total of 2,902 children in grades K-8 and 2,222 in grades 9-12. Eight of these schools are preschools that also have kindergartens; 13 schools include grades above kindergarten. The largest secondary schools, such as Jesuit High School, Oregon Episcopal School, and Catlin Gabel School, enroll students from throughout the region and are located near the BSD's boundary with the Portland School District, so the count of students enrolled in secondary schools within the BSD likely overstates the number of BSD residents attending private secondary schools.

Private schools within the BSD enroll local students as well as students from beyond the BSD boundaries; conversely BSD residents attend private schools located throughout the metro area. So the number of students enrolled in private schools physically located within the District can not be used to measure overall private school share. The best source of data for private school enrollment of BSD residents is Census Bureau decennial censuses and more recent ACS. In 2000, approximately 5,135 of the K-12 students living in the District were reported as private school students, a 12.8 percent share of all K-12 students. Specifically, 20 percent of kindergartners, 13 percent of 1^{st}-8^{th} grade students and 11 percent of 9^{th}-12^{th} grade students were enrolled in private schools.[6] The 2007 ACS, with a smaller sample size and therefore a greater margin of error, reported similar shares of BSD residents attending private schools. The 5,853 private school students in 2007 represented 12.2 percent of BSD residents enrolled in grades K-12.[7] Notice that these data report children "enrolled in school" so they include children in public or private schools but not those who are home schooled.

Comparing the population counted in the 2000 Census with the BSD enrollment by grade level confirms that the share of area children not attending BSD schools was similar to or

[6]U.S. Census Bureau, 2000 Census, Summary File 3, Table P36 allocated to BSD area from block group data.
[7]U.S. Census Bureau, 2007 American Community Survey one year estimates, Table C14002.

slightly higher than the private school shares. BSD kindergarten enrollment in 1999-00 and 2000-01 averaged about 74 percent of the kindergarten-age population counted in the census, and BSD 1st grade enrollment accounted for about 82 percent of the corresponding census population.

Another difference between BSD enrollment and child population can be attributed to home schooling. Home schooled students living in the District are required to register with the Northwest Regional Education Service District (NWRESD), though the statistics kept by the NWRESD are not precise because students who move out of the area are not required to drop their registration. Students who enroll in public schools after being registered as home schooled are dropped from the home school registry. In 2007-08 there were 853 BSD residents registered as home schooled, compared with 930 in 2006-07 and 852 in 2005-06.[8] The home schooled population accounts for about two percent of total BSD school age residents.

Neighboring Districts

Table 8 displays several facts about BSD demographic and enrollment trends in comparison to three other nearby large school districts. The overall enrollment growth or decline in each district is influenced by fertility trends, age structure, and housing construction. All of the districts have experienced lower growth rates in the 2000s compared with the 1990s. The BSD's growth rate between 2000 and 2007 was similar to its Washington County neighbors, the Hillsboro and Tigard-Tualatin School Districts. An interesting fact not included in the table is that preliminary enrollment figures for Fall 2008 show the Portland School District experiencing its first K-12 enrollment gain after 11 consecutive years of enrollment losses.

[8]Northwest Regional Education Service District, *Annual Reports*.

Table 8

Selected School Districts
Demographic and Enrollment Highlights, 1990 to 2007

	Beaverton	Hillsboro	Tigard-Tualatin	Portland
Enrollment growth, **1990-91 to 1995-96**	17%	13%	28%	4%
Enrollment growth, **1995-96 to 2000-01**	14%	16%	9%	-4%
Enrollment growth, **2000-01 to 2007-08**	11%	10%	8%	-12%
Latino enrollment, **2007-08**	20%	29%	19%	13%
Grades 9-12 enrollment, **2007-08**	31%	29%	32%	30%
Population growth, **1990 to 2000**	41%	49%	39%	7%
Multi-family housing share, **2000**	43%	25%	41%	36%
Population age 5 to 17, **1990**	18%	22%	17%	15%
Population age 5 to 17, **2000**	18%	20%	18%	14%
Population under age 5, **1990**	7.9%	8.5%	7.6%	7.0%
Population under age 5, **2000**	7.6%	8.7%	7.1%	5.7%
Population rural, **2000**	0.4%	13.2%	0.6%	1.0%

Data assembled by Population Research Center, PSU, from several sources: U.S. Census Bureau; Beaverton and Hillsboro S.D. reports; Tigard-Tualatin S.D.; Portland Public Schools: OR Dept. of Education; U.S. Dept. of Education.

ENROLLMENT FORECASTS

District-wide Forecast Methodology

To ensure that enrollment forecasts are consistent with the dynamics of likely population growth within the District, we combine a grade progression enrollment model with a demographic cohort-component model used to forecast population for the District by age and sex. The components of population change are births, deaths, and migration. Using age-specific fertility rates, age-sex specific mortality rates, age-sex specific migration rates, estimates of recent net migration levels, and forecasts of future migration levels, each component is applied to the base year population in a manner that simulates the actual dynamics of population change under each scenario — high, middle, and low.

The 1990 and 2000 Census results are used as a baseline for the population forecasts. By "surviving" the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the "survived" population to the actual 2000 population by age group, we are able to estimate the overall level of net migration between 1990 and 2000 as well as net migration by gender and age cohort. The net migration data was used to develop initial net migration rates, which were used as a baseline for rates used to forecast net migration for the 2000 to 2030 period. Because all three scenarios include less migration each decade than occurred between 1990 and 2000, the rates are generally lower than in the 1990s, but the relative contributions of each age group are similar in each decade. That is, migration contributes many residents between age 25 to 34 and very few residents age 55 and over.

We estimated the number of births to women residing within the District each year from 1990 to 2006, using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers enabled us to calculate fertility rates by age group for both 1990 and 2000. In the middle range scenario we adjusted the future fertility rates to reflect trends of decreasing fertility rates for women under age 25 and increases for women age 30 and older. These trends are

based on state and national observations, as well as the number of births by age of mother occurring within the District during the 2001 to 2005 period for which detailed birth data is available.

Historic school enrollment is linked to the population forecast in two ways. First, the kindergarten and first grade enrollments at the time of the most recent census (the 1999-2000 school year) are compared to the population at the appropriate ages counted in the census. The "capture rate," or ratio of enrollment to population, is an estimate of the share of area children who are enrolled in BSD schools. Assumptions for capture rates based on census data are used to bring new kindergarten and first grade students into the District's enrollment. If there is evidence that capture rates have changed since the time of the census, they may be adjusted in the forecast.

The other way that historic population and enrollment are linked is through migration. Annual changes in school enrollment by cohort closely follow trends in the net migration of children in the District's population. Once the students are in first grade, a set of baseline grade progression rates are used to move students from one grade to the next. These rates, usually 1.00 for elementary grades, represent a scenario under which there is no change due to migration. Enrollment change beyond the baseline is added (or subtracted) at each grade level depending on migration levels of the overall population by single years of age.

Future Residential Development

For several decades, explosive growth of suburban residential development on former agricultural land fueled enrollment growth. Now, most of the BSD is filled with residential, commercial, industrial, and institutional uses; opportunities for development of rural or vacant land are dwindling. Will this limit future growth of the school-age population? Will residential infill and redevelopment and new developments on the fringes of the District generate enough students to counteract the aging of households in existing homes? The current stagnant K-12 enrollment growth may have more to do with a short term economic slowdown than with longer term land use issues, but it serves as a reminder that growth will not continue forever. Urban Growth Boundary (UGB)

expansions added about 2.5 square miles to the UGB within the District, and only about three square miles (six percent) of the District remains outside of the UGB.

In order to benchmark the middle range forecast to current regional plans, we consulted Metro's 2030 population and household forecasts, which Metro allocates to Transportation Analysis Zones (TAZs). We allocated the TAZ forecasts to the BSD, deriving a 2030 population forecast of 339,831, an increase of 102,046 persons from 2005. For the 25 year period, the average annual numeric growth of 4,081 persons is significantly less than the average annual growth of 5,665 persons between 1990 and 2005. Also based on Metro's forecasts, BSD growth of 40,787 households between 2005 and 2030 averages 1,631 annually, compared with an average of 1,948 between 1990 and 2005.

Metro acknowledges that the TAZ forecast allocations "still contain many unresolved issues" and that "several jurisdictions have serious misgivings about the location and timing of prospective UGB additions and the way in which future policy developments may radically alter future UGB additions. Their concern is that these prospective UGB adds are inaccurate and will not correctly reflect future growth allocations."[9]

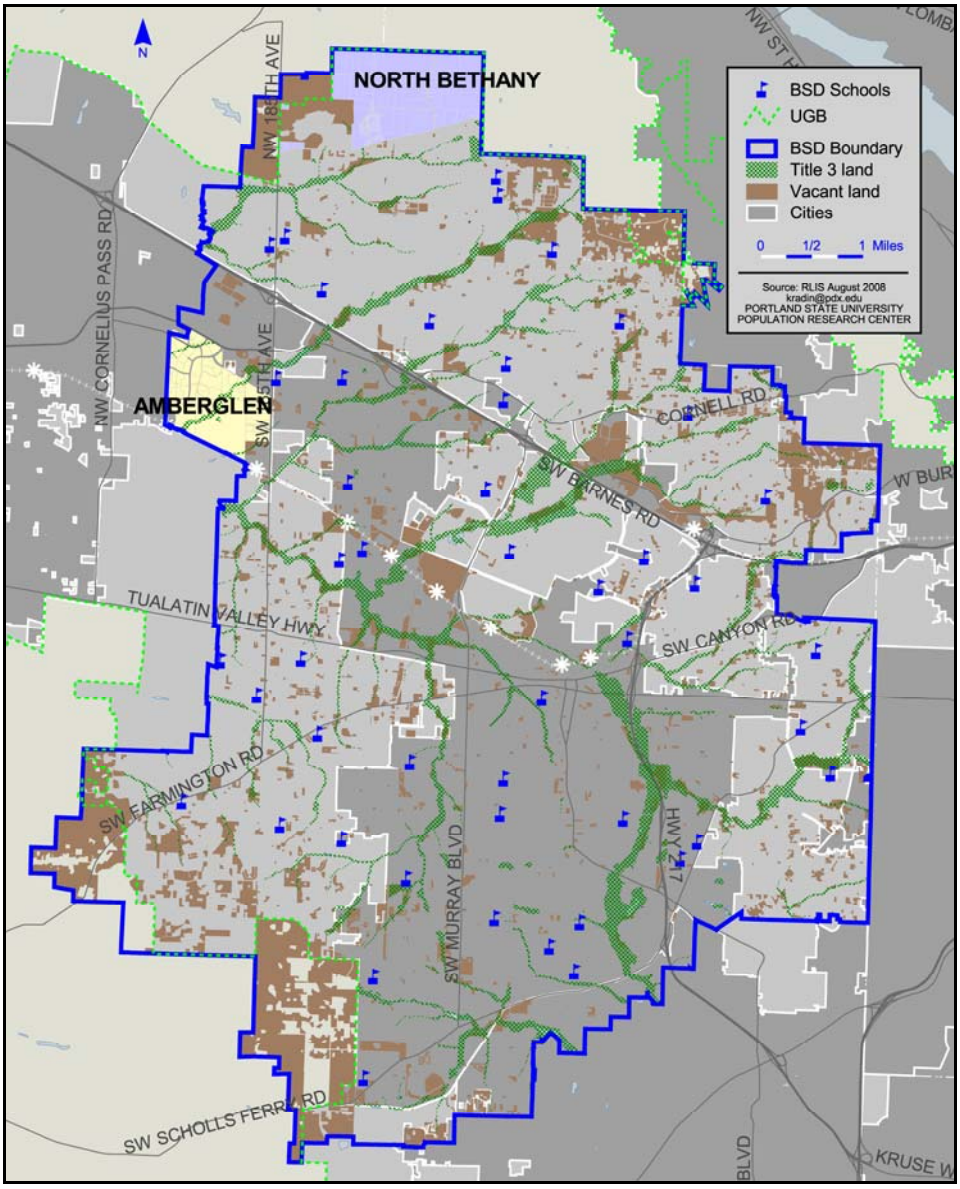
Our own analysis of residential capacity in the BSD is consistent with Metro's TAZ forecast allocation, assuming some future UGB expansion occurs. We estimate that about 32,000 housing units could be added to the housing stock if no UGB expansion occurs, or about 40,000 additional units with UGB expansion. To benchmark *back* to Metro-based 2005 numbers, we can add to our estimates the capacity used up since 2005, approximately 4,000 housing units, producing a capacity range of 36,000 to 44,000 units as of 2005. Converting Metro's household forecast to housing units implies about 42,500 units in the BSD, similar to our high end capacity estimate.

Our housing unit capacity estimate rely on August 2008 Metro RLIS spatial data layers, including land shown in Map 2 as vacant (brown), Title 3 (constrained due to water quality preservation needs; green), and delineation of areas in and out of the current UGB

[9]Metro, Metroscope Gen 2.3 – Year 2030 TAZ Allocation.

(dashed green line). Though separate in-house analyses were developed for the Amberglen and North Bethany planning areas (yellow and violet, respectively), capacities reported in other documents are utilized instead.

Map 2
Beaverton School District Residential Capacity Analysis



Methods are similar to those used by Metro in its determination of residential land capacity for purposes of growth management. Gross vacant land (either wholly or partially vacant parcels) are identified from the RLIS layer and updated to the present,

removing parcels where residential building permits and parcel attribute data identify units built since the Metro vacant land analysis was undertaken. Subtractions from gross vacant land are made for land that is vacant but not buildable, primarily portions of partially or wholly vacant parcels intersecting the Title 3 lands layer. This produces net vacant buildable land. These parcels are aggregated by zoning classes, which classes include allowable housing unit density information (i.e. density coefficients). Net vacant buildable land by zoning class multiplied by the zoning class density coefficients produces housing unit capacity by zoning. Summing these, and adding reported capacities for the Amberglen and North Bethany planning areas, produces an estimate of housing unit capacity for the Beaverton School District.

Other procedures are followed to deal with nuances beyond the general methodology, such as handling land inside and outside the current UGB separately, subtractions for infrastructure (roads, rights-of-way) on large undeveloped parcels, and using minimum, medium and maximum zoned densities to produce low and high scenario outcomes.

In addition to Metro's data, we also consulted several planning documents prepared by local jurisdictions that address potential residential development within the BSD. They are discussed briefly below.

City of Beaverton

In the Housing Element of the current Comprehensive Plan, the City reports that it "conducted a Buildable Lands Analysis and determined that Beaverton would be able to accommodate 12,194 of the 13,580 dwelling units projected by Metro to occur over the next twenty years."[10] Planning Division staff is currently in the process of producing an updated buildable lands inventory. Results will be available soon.

City of Hillsboro

Most of the current City of Hillsboro portion of the BSD is in the Tanasbourne area. It includes the Tanasbourne Town Center Planning area, where "Proposed and existing

[10]City of Beaverton Comprehensive Plan, Volume 1, Chapter 4 (Housing Element), Ordinance 4414, Effective 1/5/2007.

development now approaches 3.5 million square feet and 4000 plus dwelling units." Tanasbourne also includes the OHSU and AmberGlen area with "somewhere in the neighborhood of 80 acres of vacant land in the heart of Tanasbourne, with no clear plans for development" and additional land with potential for redevelopment.[11]

The Concept Plan prepared in 2006 for the 582 acre OHSU/Amberglen area calls for almost 5,000 new medium to high density residential units, 3 million square feet of office, 850,000 square feet of retail and hotel, and conference and entertainment uses. This plan projects that over 900 new students will be added to schools once the area is built out.[12]

One of the areas added to the UGB in 2002, known as "Area 69," consists of 248 acres south of Tualatin Valley Highway, west of SW 209th Avenue. More than half of the area is within the BSD. Although it is currently in unincorporated Washington County, the City of Hillsboro included the area in its recently adopted South Hillsboro Community Plan. The plan calls for "a diverse housing stock within Area 69, including but not limited to detached and attached single family units, courtyard clusters, Charlestown row houses, row houses, subdivided manors, garden apartments and condominiums."[13]

City of Portland

The City of Portland is currently engaged in a planning effort for another 2002 UGB expansion area, known as "Area 93," or "Bonny Slope West." This 160 acre area in unincorporated Multnomah County is entirely within the BSD. Since it is not contiguous with Portland's city limits or its Urban Services Boundary, Area 93 cannot be annexed by the City at this time, and Multnomah County no longer provides urban services, so part of the planning effort will be look at different governance and service options for facilitating urban development. The plan is expected to be complete by 2011.[14]

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[11] OHSU/AmberGlen Area Plan, Statement of Purpose, at http://www.ci.hillsboro.or.us/Planning/OHSUAmberGlen.aspx.
[12] OHSU/Amberglen Concept Plan Summary, City of Hillsboro, 2006.
[13] Resolution No. 1658-P, HCP 3-08: Area 69, South Hillsboro Community Plan. City of Hillsboro Planning Commission, 2008. Plan adopted by City of Hillsboro June 17, 2008.
[14] Area 93: Existing Conditions, Opportunities, and Constraints Report, (Draft). Prepared for City of Portland Planning Bureau by Winterbrook Planning, October 2008.

City of Tigard

According to the *Tigard 2007 Report* that was part of the City's comprehensive plan update, less than 10 percent of land within the City was considered buildable as of June 2006. Large lots for residential development were scarce, with only 49 lots greater than two acres. "Based on the June 2006 buildable lands data, if the City developed its remaining residential lands, an additional 2,902 to 3,482 units could be built."[15] These estimates include a 20% allowance for additional projects that occur on land not included in the buildable lands inventory (BLI). Using spatial data provided by the City, we estimate that about 14 percent of Tigard's buildable residential land is within the BSD.

Washington County

To the west of the City of Tigard, West Bull Mountain includes 483 acres added to the UGB in 2002, known as Areas 63 and 64. About 125 acres of Area 64 are within the BSD boundary. A team of Washington County staff and consultants is currently working on a concept plan for West Bull Mountain with extensive public involvement. Their timeline calls for public hearings on adopting comprehensive plan amendments as early as Summer 2009.

Among the various areas added to the UGB in 2002, the largest within the BSD is North Bethany. The concept planning for this 800 acre area is complete, and the current timeline anticipates public hearings in Summer 2009. Residential development alternatives in the North Bethany Strategic Programming Draft published in December 2006 ranged from 4,710 to 5,928 housing units. An earlier research paper written by PSU graduate students in May, 2005 estimated that a similar range of 4,700 to 5,280 units might generate between 2,280 and 2,824 BSD students when the residential development is complete.[16] The authors assumed that 60 percent of the development would be complete by 2015.

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[15] *Tigard 2007 Report*, February 2007. Available at http://www.ci.tigard.or.us/city_hall/departments/cd/long_range_planning/comprehensive_plan.asp

[16] Endo, S., Picarsic, J., Ramey, R., & Taylor, E. (2005). "School Enrollment Projections for Beaverton School District UGB Expansion Area, 2000-2015." Portland State University, research paper.

Population Forecasts

Since we are nearing the end of the 2000 to 2010 forecast period, we have a substantial amount of data to compare to the 1990 to 2000 baseline period, including several years of school enrollment, birth, and housing development data. All indicate that population gains within the District in the current decade will be lower than in the 1990s, and that most of the difference will be due to lower levels of net migration (people moving in minus those moving out). The population has continued to grow due to natural increase (births minus deaths). Charts A1, A2, and A3 in the Appendix show the net migration assumptions in each decade for each forecast scenario.

In all three population forecast scenarios, the young adult population will increase due to positive net migration and the larger baby boom "echo" cohort born in the 1980s and 1990s. This increase causes the number of births within the BSD to increase throughout the forecast period in all three scenarios in spite of stable fertility rates in the middle range scenario and lower fertility rates in the low range scenario. The high range scenario incorporates slightly higher fertility rates. A comparison of total fertility rates in the three scenarios is included in the Appendix in Table A1.

Our middle range forecast for 2030 population in the BSD is 339,831, matching our allocation of Metro's 2030 TAZ forecast to the BSD boundary. The 2000 to 2030 growth rate of 58 percent for the District is lower than the 75 percent growth for Washington County during the same period from the State of Oregon Office of Economic Analysis' most recent forecast for Washington County. Our current middle range growth rate for the BSD also represents slower growth than we previously forecast. The forecast 2020 population of 301,250 is less than the middle range 2020 forecasts that PRC prepared in 2005 (310,048) and in 2002 (324,410).

The low range 2030 population forecast is 319,369 (48 percent growth from 2000 to 2030), and the high range 2030 forecast is 361,302 (68 percent growth from 2000 to 2030).

The district-wide population forecasts by age group are presented in Appendix Tables A2, A3, and A4.

In Table 9 we compare the 2000 to 2030 average annual growth rates in each of the scenarios with growth rates from several other published forecasts.

Table 9
Comparison of Population Growth Rates

Area	1990 to 2000 Historic Avg. Annual Growth Rate	2000 to 2030 Forecast Avg. Annual Growth Rate[1]
Beaverton S.D. (Low)	3.5%	1.3%
Beaverton S.D. (Middle)	3.5%	1.5%
Beaverton S.D. (High)	3.5%	1.7%
Washington County (OEA, 2004)[2]	3.6%	1.9%
Washington County (Metro, 2007)[3]	3.6%	1.5%
Region 5 Counties (Metro, 2002)[4]	2.4%	1.5%
Tualatin Hills P & R (PRC, 2006)[5]	2.9%	1.4%

1. See notes 3 and 5 for caveats concerning this interval.

2. Washington County 2000 to 2030 growth rate from "Forecasts of Oregon's County Populations and Components of Change, 2000 to 2040." Oregon Department of Administrative Services, Office of Economic Analysis, April, 2004.

3. Washington County 2000 to 2035 growth rate derived from 2035 forecast in Metro, "2035 Regional Transportation Plan, Final Draft for USDOT Review", January 2008.

4. Metro, "2000-2030 Regional Forecast", September 2002. Middle growth scenario 2030 forecast for 5 county region (Multnomah, Clackamas, Washington, Yamhill, and Clark counties).

5. PSU, Population Research Center, "Tualatin Hills Park and Recreation District, Demographic Portrait and Population Forecasts 2005-2025", February 2006. Medium growth population forecast for 2000 to 2025 was extended to 2030 for this table, using the "safe harbor" approach of extending the 2020 to 2025 growth rate.

District-wide Enrollment Forecasts

In the description of methodology earlier in this section, we described the two ways that historic school enrollment is linked to the population forecast — 1) capture rates, and 2) migration rates applied to the baseline grade progression rates.

The capture rates used in the long run for each forecast scenario are 0.72 for kindergarten and 0.795 for first grade. That means that about 28 percent of kindergarten-age children and 20.5 percent of first grade age children are assumed to not be enrolled in BSD schools, accounting for students enrolled in private schools, net transfers to and from other public school districts, home schooled students, or children not yet attending school, since school enrollment is not compulsory until age seven. We could have varied

the capture rates between the high, middle, and low scenarios as an additional set of assumptions, but we held the enrollment forecast parameters constant in the alternatives; the differences between the three enrollment forecasts are purely due to different population growth assumptions.

Several years of recent BSD enrollment history were evaluated to develop baseline grade progression rates (GPRs). These are the rates used to move students from one grade to the next before migration is factored in. For students entering most of the grades 2nd to 8th, the rates are 1.00. For students progressing from 5th to 6th grade, we use a rate of 1.01, reflecting a small gain that typically occurs at the middle school level. Similarly, a higher rate of 1.03 is used for students progressing from 8th to 9th grade, as the District also gains additional students at the high school level. For 10th through 12th grade, the rates are slightly below 1.00, reflecting attrition from the regular high schools included in the historic and forecast district-wide enrollments.

Although the weak economy and slow housing market may keep enrollment flat in the short run (one or two years), all three enrollment forecast scenarios indicate that overall BSD enrollment will increase in the long run.

In the middle, or most likely scenario, the District adds about 8,500 students in the next 17 years, reaching an enrollment of 44,660 in 2025. Enrollment growth under the middle series averages about 500 students annually, a significant rebound considering the downward trend of the past two years. However, the middle range growth is less than the long term average growth of 755 students annually between 1990 and 2006, and also less than in our previous study, which forecast average annual growth of about 620 students from 2004 to 2025 under the medium growth scenario.

Only the high scenario calls for numeric growth comparable to the booming 1990s. With an average of almost 800 additional students per year, total enrollment reaches 49,629 in 2025. In the low scenario, the District adds about 225 students annually, reaching 40,007 students in 2025.

Tables 10, 11, and 12 contain grade level forecasts for the Beaverton School District for the years 2009-10, 2010-11, and five year intervals to 2025-26. The forecasts are presented annually in Appendix Tables A5, A6, and A7.

Table 10

Beaverton School District

Low Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic		Forecast							
Grade	**2007-08**	**2008-09**	**2009-10**	**2010-11**		**2015-16**		**2020-21**		**2025-26**
K	2,607	2,775	2,645	2,604		2,746		2,809		2,839
1	2,936	2,886	2,994	2,886		3,021		3,090		3,124
2	2,957	2,873	2,888	2,997		3,002		3,076		3,118
3	2,867	2,935	2,875	2,891		2,995		3,067		3,113
4	2,856	2,849	2,937	2,877		2,972		3,062		3,109
5	2,733	2,833	2,850	2,939		2,865		3,052		3,102
6	2,748	2,785	2,862	2,880		2,935		3,069		3,121
7	2,757	2,749	2,786	2,864		3,046		3,047		3,108
8	2,820	2,714	2,750	2,788		2,938		3,039		3,101
9	2,817	2,836	2,797	2,836		3,016		3,108		3,192
10	2,750	2,760	2,810	2,773		3,057		2,972		3,154
11	2,865	2,618	2,679	2,729		2,884		2,930		3,048
12	2,674	2,587	2,492	2,550		2,729		2,892		2,878
Total[1]	**36,387**	**36,200**	**36,365**	**36,614**		**38,206**		**39,213**		**40,007**
Annual change[2]		*-187* *-0.5%*	*165* *0.5%*	*249* *0.7%*		*318* *0.9%*		*201* *0.5%*		*159* *0.4%*
K-5	16,956	17,151	17,189	17,194		17,601		18,156		18,405
6-8	8,325	8,248	8,398	8,532		8,919		9,155		9,330
9-12	11,106	10,801	10,778	10,888		11,686		11,902		12,272

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

Table 11

Beaverton School District

Middle Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic		Forecast								
Grade	**2007-08**	**2008-09**	**2009-10**	**2010-11**		**2015-16**		**2020-21**		**2025-26**
K	2,607	2,775	2,715	2,675		2,912		3,091		3,246
1	2,936	2,886	3,010	2,982		3,190		3,387		3,559
2	2,957	2,873	2,891	3,019		3,153		3,358		3,537
3	2,867	2,935	2,878	2,900		3,102		3,337		3,519
4	2,856	2,849	2,939	2,886		3,049		3,320		3,501
5	2,733	2,833	2,853	2,946		3,014		3,294		3,477
6	2,748	2,785	2,865	2,888		3,091		3,298		3,484
7	2,757	2,749	2,789	2,872		3,126		3,257		3,455
8	2,820	2,714	2,753	2,797		3,001		3,201		3,433
9	2,817	2,836	2,800	2,845		3,080		3,244		3,521
10	2,750	2,760	2,812	2,782		3,120		3,180		3,462
11	2,865	2,618	2,681	2,737		2,946		3,139		3,333
12	2,674	2,587	2,498	2,560		2,787		3,021		3,133
Total[1]	**36,387**	**36,200**	**36,484**	**36,889**		**39,571**		**42,127**		**44,660**
Annual change[2]		*-187* *-0.5%*	*284* *0.8%*	*405* *1.1%*		*536* *1.4%*		*511* *1.3%*		*507* *1.2%*
K-5	16,956	17,151	17,286	17,408		18,420		19,787		20,839
6-8	8,325	8,248	8,407	8,557		9,218		9,756		10,372
9-12	11,106	10,801	10,791	10,924		11,933		12,584		13,449

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

Table 12

Beaverton School District

High Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic		Forecast								
Grade	**2007-08**	**2008-09**	**2009-10**	**2010-11**		**2015-16**		**2020-21**		**2025-26**
K	2,607	2,775	2,776	2,739		3,075		3,384		3,683
1	2,936	2,886	3,018	3,069		3,359		3,692		4,026
2	2,957	2,873	2,894	3,034		3,307		3,645		3,987
3	2,867	2,935	2,881	2,909		3,212		3,607		3,953
4	2,856	2,849	2,942	2,895		3,124		3,576		3,917
5	2,733	2,833	2,856	2,956		3,159		3,543		3,876
6	2,748	2,785	2,868	2,899		3,244		3,537		3,869
7	2,757	2,749	2,792	2,883		3,207		3,481		3,821
8	2,820	2,714	2,756	2,806		3,075		3,380		3,784
9	2,817	2,836	2,803	2,854		3,155		3,388		3,867
10	2,750	2,760	2,815	2,791		3,195		3,398		3,797
11	2,865	2,618	2,684	2,746		3,016		3,356		3,643
12	2,674	2,587	2,504	2,570		2,853		3,154		3,406
Total[1]	**36,387**	**36,200**	**36,589**	**37,151**		**40,981**		**45,141**		**49,629**
Annual change[2]		*-187* *-0.5%*	*389* *1.1%*	*562* *1.5%*		*766* *2.0%*		*832* *1.9%*		*898* *1.9%*
K-5	16,956	17,151	17,367	17,602		19,236		21,447		23,442
6-8	8,325	8,248	8,416	8,588		9,526		10,398		11,474
9-12	11,106	10,801	10,806	10,961		12,219		13,296		14,713

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

APPENDIX

POPULATION AND ENROLLMENT FORECASTS

LOW, MIDDLE, AND HIGH SCENARIOS

2008-09 to 2025-26

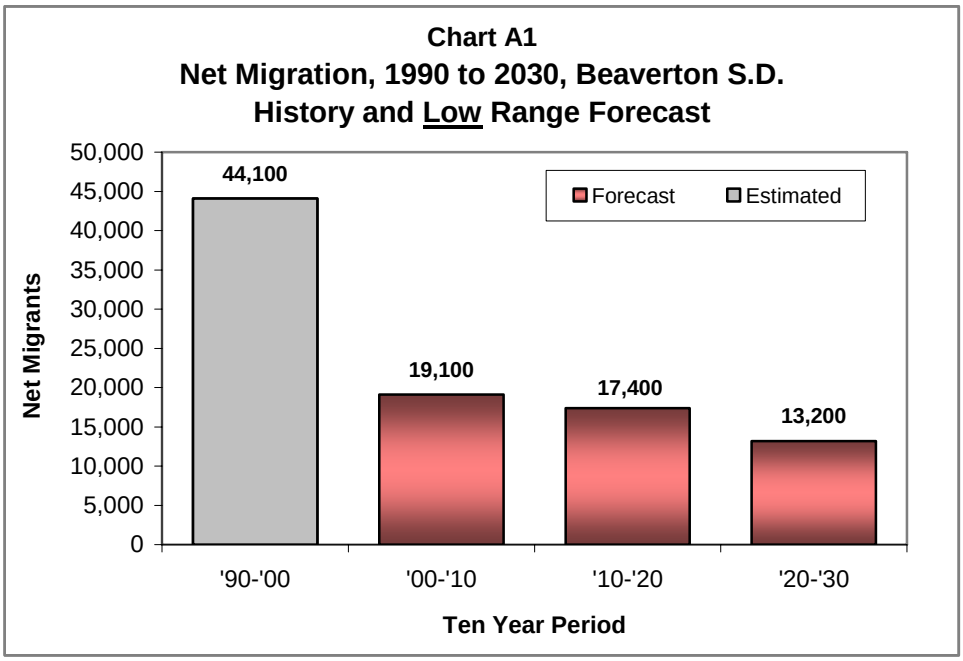


Chart A1
Net Migration, 1990 to 2030, Beaverton S.D.
History and Low Range Forecast
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Net Migrants
44,100
19,100
17,400
13,200
Forecast
Estimated
'90-'00
'00-'10
'10-'20
'20-'30
Ten Year Period

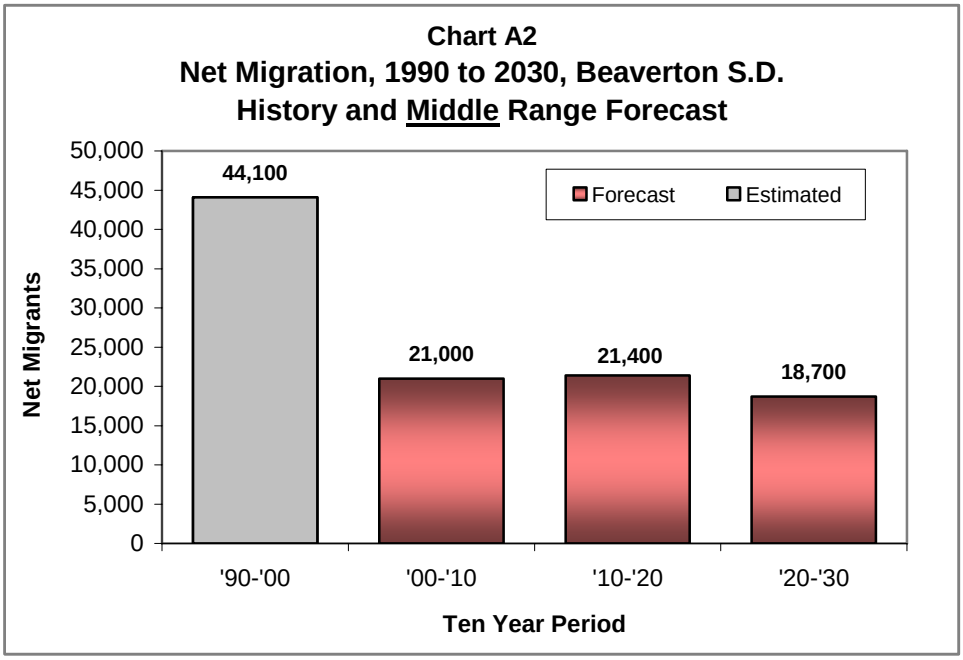


Chart A2
Net Migration, 1990 to 2030, Beaverton S.D.
History and Middle Range Forecast
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Net Migrants
44,100
21,000
21,400
18,700
Forecast
Estimated
'90-'00
'00-'10
'10-'20
'20-'30
Ten Year Period

Chart A3

Net Migration, 1990 to 2030, Beaverton S.D.
History and High Range Forecast

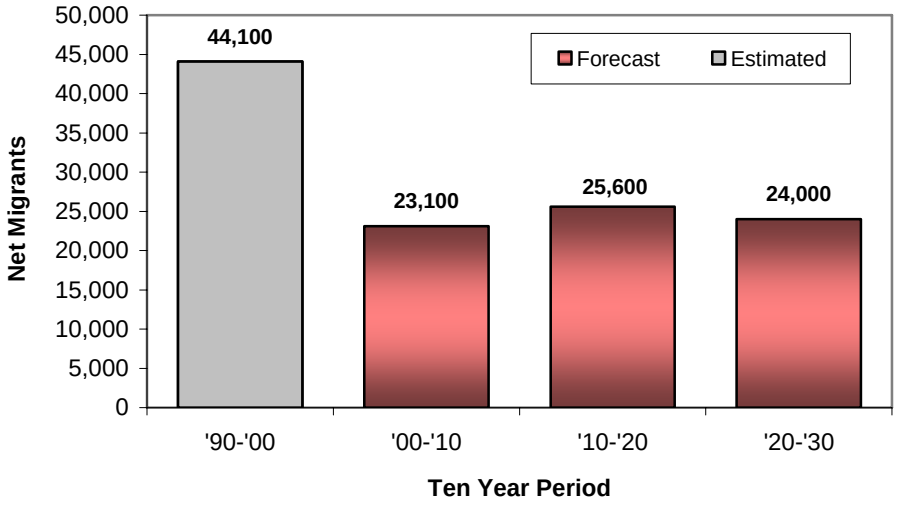


Table A1

Total Fertility Rate Assumptions*
BSD Population Forecasts

Year	LOW RANGE	MID RANGE	HIGH RANGE
1990 estimate	1.84	1.84	1.84
2000 estimate	2.03	2.03	2.03
2010 forecast	2.04	2.10	2.16
2020 forecast	1.94	2.10	2.27
2030 forecast	1.94	2.10	2.27

**The number of children that would be born to the average woman during her child-bearing years, based on age-specific fertility rates observed at a given time.*

Table A2

Population by Age Group, Low Range Forecast
Beaverton School District, 1990 to 2030

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2030 Forecast	2000 - 2030 Change	
						Number	Percent
Under Age 5	11,734	16,405	18,466	19,468	20,699	4,294	*26%*
Age 5 to 9	11,463	16,171	18,260	19,343	20,083	3,912	*24%*
Age 10 to 14	10,211	14,914	17,474	18,953	19,615	4,701	*32%*
Age 15 to 17	5,688	8,644	9,846	11,103	11,682	3,038	*35%*
Age 18 to 19	3,414	5,000	6,647	7,428	7,707	2,707	*54%*
Age 20 to 24	10,511	15,137	16,986	19,652	20,956	5,819	*38%*
Age 25 to 29	14,715	19,042	19,175	21,635	23,029	3,987	*21%*
Age 30 to 34	15,737	18,876	19,168	20,182	22,002	3,126	*17%*
Age 35 to 39	15,238	18,699	20,437	20,363	22,319	3,620	*19%*
Age 40 to 44	13,323	18,470	19,954	20,116	20,630	2,160	*12%*
Age 45 to 49	9,578	16,795	19,108	20,780	20,374	3,579	*21%*
Age 50 to 54	6,786	13,757	18,379	19,801	19,750	5,993	*44%*
Age 55 to 59	5,454	9,129	16,022	18,225	19,818	10,689	*117%*
Age 60 to 64	5,041	6,183	12,662	16,918	18,233	12,050	*195%*
Age 65 to 69	4,822	4,891	8,102	14,207	16,134	11,243	*230%*
Age 70 to 74	3,555	4,327	5,172	10,575	14,076	9,749	*225%*
Age 75 to 79	2,597	4,004	3,786	6,245	10,814	6,810	*170%*
Age 80 to 84	1,619	2,646	2,909	3,445	6,903	4,257	*161%*
Age 85 and over	1,329	2,333	3,238	3,446	4,545	2,212	*95%*
Total Population	**152,815**	**215,423**	**255,791**	**291,885**	**319,369**	**103,946**	***48%***
Total age 5 to 17	27,362	39,729	45,580	49,399	51,380	11,651	*29%*
share age 5 to 17	*17.9%*	*18.4%*	*17.8%*	*16.9%*	*16.1%*		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	**62,608**	**40,368**	**36,094**	**27,484**
Percent	*41%*	*19%*	*14%*	*9%*
Average Annual	*3.5%*	*1.7%*	*1.3%*	*0.9%*

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.

Table A3

Population by Age Group, Middle Range Forecast
Beaverton School District, 1990 to 2030

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2030 Forecast	2000 - 2030 Change	
						Number	Percent
Under Age 5	11,734	16,405	18,855	21,600	24,022	7,617	*46%*
Age 5 to 9	11,463	16,171	18,390	21,009	23,327	7,156	*44%*
Age 10 to 14	10,211	14,914	17,845	20,024	22,534	7,620	*51%*
Age 15 to 17	5,688	8,644	10,176	11,549	13,199	4,555	*53%*
Age 18 to 19	3,414	5,000	6,884	7,747	8,609	3,609	*72%*
Age 20 to 24	10,511	15,137	17,132	20,332	22,532	7,395	*49%*
Age 25 to 29	14,715	19,042	19,476	22,942	24,830	5,788	*30%*
Age 30 to 34	15,737	18,876	19,264	20,778	23,430	4,554	*24%*
Age 35 to 39	15,238	18,699	20,547	20,851	23,930	5,231	*28%*
Age 40 to 44	13,323	18,470	20,028	20,330	21,399	2,929	*16%*
Age 45 to 49	9,578	16,795	19,156	20,969	20,967	4,172	*25%*
Age 50 to 54	6,786	13,757	18,402	19,912	20,011	6,254	*45%*
Age 55 to 59	5,454	9,129	16,021	18,269	19,997	10,868	*119%*
Age 60 to 64	5,041	6,183	12,658	16,931	18,322	12,139	*196%*
Age 65 to 69	4,822	4,891	8,104	14,213	16,182	11,291	*231%*
Age 70 to 74	3,555	4,327	5,176	10,582	14,105	9,778	*226%*
Age 75 to 79	2,597	4,004	3,793	6,265	10,863	6,859	*171%*
Age 80 to 84	1,619	2,646	2,919	3,464	6,955	4,309	*163%*
Age 85 and over	1,329	2,333	3,254	3,483	4,617	2,284	*98%*
Total Population	**152,815**	**215,423**	**258,080**	**301,250**	**339,831**	**124,408**	***58%***
Total age 5 to 17	27,362	39,729	46,411	52,582	59,060	19,331	*49%*
share age 5 to 17	*17.9%*	*18.4%*	*18.0%*	*17.5%*	*17.4%*		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	**62,608**	**42,657**	**43,170**	**38,581**
Percent	*41%*	*20%*	*17%*	*13%*
Average Annual	*3.5%*	*1.8%*	*1.6%*	*1.2%*

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.

Table A4

Population by Age Group, High Range Forecast
Beaverton School District, 1990 to 2030

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2030 Forecast	2000 - 2030 Change	
						Number	Percent
Under Age 5	11,734	16,405	19,242	23,848	27,566	11,161	*68%*
Age 5 to 9	11,463	16,171	18,454	22,696	26,843	10,672	*66%*
Age 10 to 14	10,211	14,914	18,159	21,163	25,751	10,837	*73%*
Age 15 to 17	5,688	8,644	10,536	12,013	14,852	6,208	*72%*
Age 18 to 19	3,414	5,000	7,149	8,069	9,581	4,581	*92%*
Age 20 to 24	10,511	15,137	17,278	20,956	24,125	8,988	*59%*
Age 25 to 29	14,715	19,042	19,777	24,366	26,505	7,463	*39%*
Age 30 to 34	15,737	18,876	19,664	21,381	24,665	5,789	*31%*
Age 35 to 39	15,238	18,699	20,658	21,344	25,626	6,927	*37%*
Age 40 to 44	13,323	18,470	20,101	20,866	22,144	3,674	*20%*
Age 45 to 49	9,578	16,795	19,203	21,160	21,544	4,749	*28%*
Age 50 to 54	6,786	13,757	18,425	20,023	20,578	6,821	*50%*
Age 55 to 59	5,454	9,129	16,021	18,313	20,177	11,048	*121%*
Age 60 to 64	5,041	6,183	12,654	16,944	18,414	12,231	*198%*
Age 65 to 69	4,822	4,891	8,107	14,219	16,228	11,337	*232%*
Age 70 to 74	3,555	4,327	5,179	10,589	14,130	9,803	*227%*
Age 75 to 79	2,597	4,004	3,801	6,286	10,901	6,897	*172%*
Age 80 to 84	1,619	2,646	2,928	3,484	6,995	4,349	*164%*
Age 85 and over	1,329	2,333	3,270	3,520	4,677	2,344	*100%*
Total Population	**152,815**	**215,423**	**260,606**	**311,240**	**361,302**	**145,879**	***68%***
Total age 5 to 17	27,362	39,729	47,149	55,872	67,446	27,717	*70%*
share age 5 to 17	*17.9%*	*18.4%*	*18.1%*	*18.0%*	*18.7%*		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	**62,608**	**45,183**	**50,634**	**50,062**
Percent	*41%*	*21%*	*19%*	*16%*
Average Annual	*3.5%*	*1.9%*	*1.8%*	*1.5%*

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.

Chart A4
BSD Birth Cohorts and Kindergarten Enrollment
Low Range Forecast Scenario

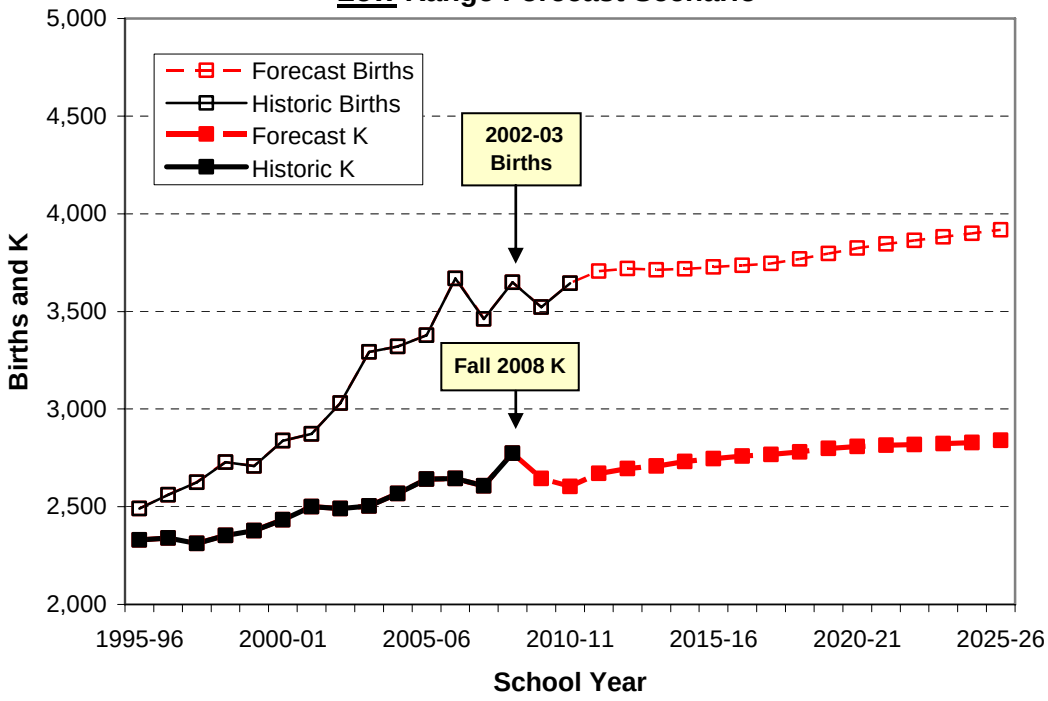
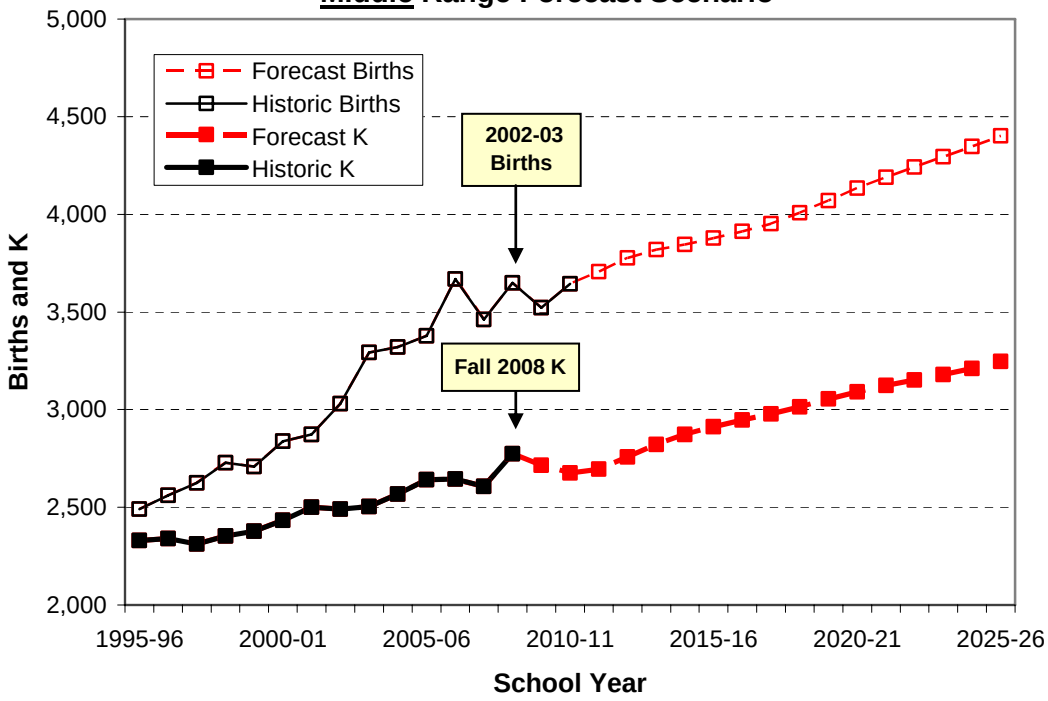


Chart A5
BSD Birth Cohorts and Kindergarten Enrollment
Middle Range Forecast Scenario



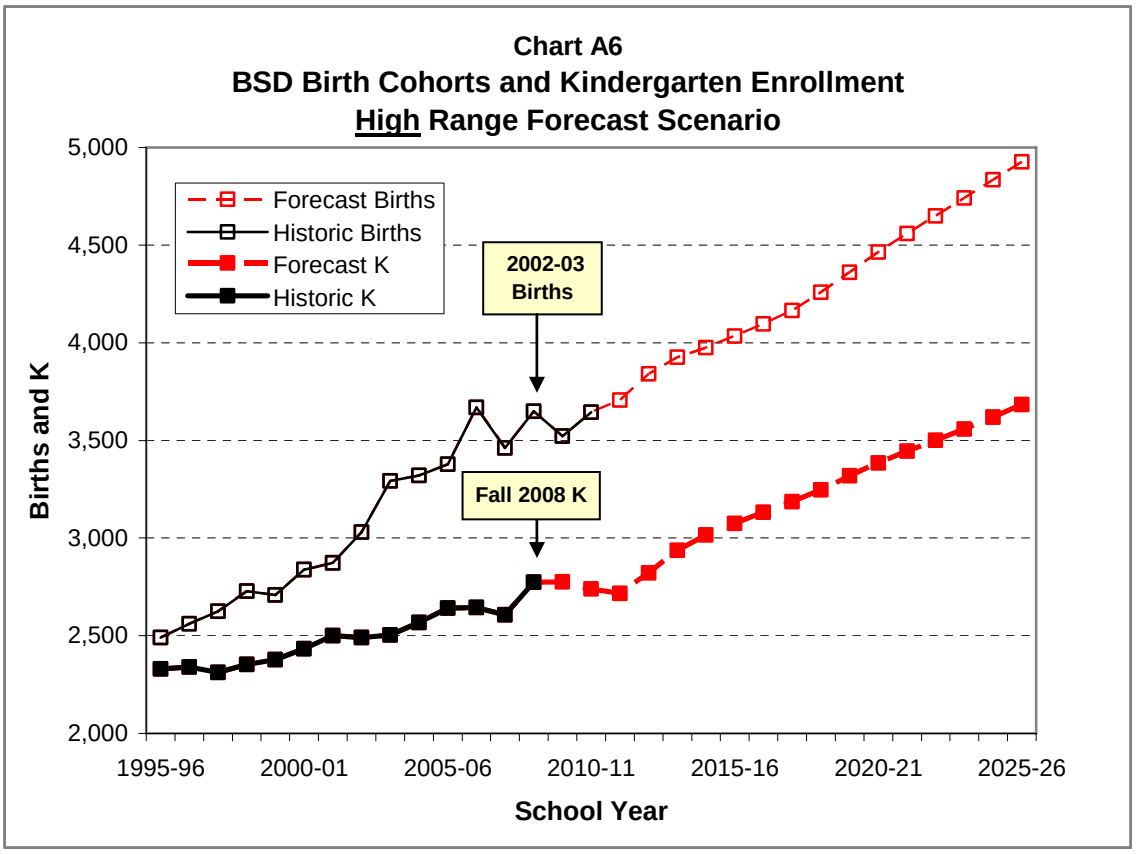


Chart A6
BSD Birth Cohorts and Kindergarten Enrollment
High Range Forecast Scenario
Forecast Births
Historic Births
Forecast K
Historic K
2002-03 Births
Fall 2008 K
Births and K
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1995-96
2000-01
2005-06
2010-11
2015-16
2020-21
2025-26
School Year

Table A5
Beaverton School District
Low Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	2,775	2,645	2,604	2,671	2,696	2,708	2,731	2,746	2,759	2,768	2,781	2,798	2,809	2,816	2,819	2,823	2,829	2,839
1	2,886	2,994	2,886	2,845	2,956	2,984	2,997	3,021	3,038	3,052	3,062	3,076	3,090	3,102	3,109	3,113	3,118	3,124
2	2,873	2,888	2,997	2,890	2,851	2,962	2,990	3,002	3,026	3,043	3,057	3,067	3,076	3,090	3,102	3,109	3,113	3,118
3	2,935	2,875	2,891	3,001	2,896	2,857	2,968	2,995	3,007	3,031	3,048	3,062	3,067	3,076	3,090	3,102	3,109	3,113
4	2,849	2,937	2,877	2,894	3,006	2,901	2,862	2,972	2,999	3,011	3,035	3,052	3,062	3,067	3,076	3,090	3,102	3,109
5	2,833	2,850	2,939	2,879	2,897	3,010	2,904	2,865	2,975	3,002	3,014	3,038	3,052	3,062	3,067	3,076	3,090	3,102
6	2,785	2,862	2,880	2,970	2,911	2,929	3,043	2,935	2,896	3,007	3,034	3,046	3,069	3,083	3,093	3,098	3,107	3,121
7	2,749	2,786	2,864	2,883	2,974	2,915	2,933	3,046	2,938	2,899	3,010	3,037	3,047	3,070	3,084	3,094	3,099	3,108
8	2,714	2,750	2,788	2,868	2,889	2,980	2,921	2,938	3,051	2,943	2,904	3,015	3,039	3,049	3,072	3,086	3,096	3,101
9	2,836	2,797	2,836	2,877	2,963	2,985	3,079	3,016	3,033	3,150	3,039	2,998	3,108	3,133	3,144	3,167	3,182	3,192
10	2,760	2,810	2,773	2,814	2,858	2,944	2,965	3,057	2,994	3,011	3,127	3,017	2,972	3,081	3,105	3,116	3,139	3,154
11	2,618	2,679	2,729	2,695	2,739	2,782	2,865	2,884	2,973	2,912	2,929	3,041	2,930	2,886	2,992	3,015	3,026	3,048
12	2,587	2,492	2,550	2,599	2,568	2,610	2,651	2,729	2,747	2,832	2,774	2,790	2,892	2,786	2,744	2,845	2,867	2,878
Total*	**36,200**	**36,365**	**36,614**	**36,886**	**37,204**	**37,567**	**37,909**	**38,206**	**38,436**	**38,661**	**38,814**	**39,037**	**39,213**	**39,301**	**39,497**	**39,734**	**39,877**	**40,007**
Annual change[2]		*165* *0.5%*	*249* *0.7%*	*272* *0.7%*	*318* *0.9%*	*363* *1.0%*	*342* *0.9%*	*297* *0.8%*	*230* *0.6%*	*225* *0.6%*	*153* *0.4%*	*223* *0.6%*	*176* *0.5%*	*88* *0.2%*	*196* *0.5%*	*237* *0.6%*	*143* *0.4%*	*130* *0.3%*
K-5	17,151	17,189	17,194	17,180	17,302	17,422	17,452	17,601	17,804	17,907	17,997	18,093	18,156	18,213	18,263	18,313	18,361	18,405
6-8	8,248	8,398	8,532	8,721	8,774	8,824	8,897	8,919	8,885	8,849	8,948	9,098	9,155	9,202	9,249	9,278	9,302	9,330
9-12	10,801	10,778	10,888	10,985	11,128	11,321	11,560	11,686	11,747	11,905	11,869	11,846	11,902	11,886	11,985	12,143	12,214	12,272

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Population Research Center, Portland State University, October 2008.

Table A6
Beaverton School District
Middle Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	2,775	2,715	2,675	2,695	2,758	2,821	2,873	2,912	2,947	2,978	3,013	3,055	3,091	3,123	3,151	3,179	3,210	3,246
1	2,886	3,010	2,982	2,945	2,996	3,065	3,136	3,190	3,233	3,272	3,306	3,345	3,387	3,426	3,462	3,493	3,524	3,559
2	2,873	2,891	3,019	2,995	2,964	3,015	3,085	3,153	3,207	3,250	3,290	3,324	3,358	3,400	3,439	3,475	3,506	3,537
3	2,935	2,878	2,900	3,032	3,014	2,983	3,034	3,102	3,170	3,224	3,267	3,308	3,337	3,371	3,413	3,452	3,488	3,519
4	2,849	2,939	2,886	2,911	3,050	3,032	3,001	3,049	3,117	3,186	3,240	3,283	3,320	3,349	3,384	3,426	3,465	3,501
5	2,833	2,853	2,946	2,896	2,926	3,066	3,048	3,014	3,062	3,130	3,200	3,254	3,294	3,332	3,361	3,396	3,438	3,477
6	2,785	2,865	2,888	2,985	2,939	2,970	3,112	3,091	3,056	3,105	3,174	3,245	3,298	3,338	3,377	3,406	3,442	3,484
7	2,749	2,789	2,872	2,898	3,001	2,955	2,986	3,126	3,105	3,070	3,119	3,188	3,257	3,310	3,350	3,389	3,419	3,455
8	2,714	2,753	2,797	2,883	2,916	3,019	2,973	3,001	3,142	3,120	3,085	3,135	3,201	3,270	3,323	3,363	3,403	3,433
9	2,836	2,800	2,845	2,894	2,991	3,025	3,132	3,080	3,109	3,255	3,233	3,196	3,244	3,312	3,384	3,438	3,480	3,521
10	2,760	2,812	2,782	2,831	2,887	2,984	3,018	3,120	3,069	3,097	3,243	3,221	3,180	3,227	3,295	3,367	3,420	3,462
11	2,618	2,681	2,737	2,712	2,767	2,822	2,916	2,946	3,045	2,995	3,023	3,165	3,139	3,099	3,145	3,212	3,282	3,333
12	2,587	2,498	2,560	2,615	2,594	2,646	2,699	2,787	2,816	2,910	2,863	2,889	3,021	2,996	2,958	3,002	3,066	3,133
Total*	**36,200**	**36,484**	**36,889**	**37,292**	**37,803**	**38,403**	**39,013**	**39,571**	**40,078**	**40,592**	**41,056**	**41,608**	**42,127**	**42,553**	**43,042**	**43,598**	**44,143**	**44,660**
Annual change[2]		*284* *0.8%*	*405* *1.1%*	*403* *1.1%*	*511* *1.4%*	*600* *1.6%*	*610* *1.6%*	*558* *1.4%*	*507* *1.3%*	*514* *1.3%*	*464* *1.1%*	*552* *1.3%*	*519* *1.2%*	*426* *1.0%*	*489* *1.1%*	*556* *1.3%*	*545* *1.3%*	*517* *1.2%*
K-5	17,151	17,286	17,408	17,474	17,708	17,982	18,177	18,420	18,736	19,040	19,316	19,569	19,787	20,001	20,210	20,421	20,631	20,839
6-8	8,248	8,407	8,557	8,766	8,856	8,944	9,071	9,218	9,303	9,295	9,378	9,568	9,756	9,918	10,050	10,158	10,264	10,372
9-12	10,801	10,791	10,924	11,052	11,239	11,477	11,765	11,933	12,039	12,257	12,362	12,471	12,584	12,634	12,782	13,019	13,248	13,449

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

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Table A7
Beaverton School District
High Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
K	2,775	2,776	2,739	2,716	2,822	2,937	3,015	3,075	3,132	3,186	3,247	3,318	3,384	3,445	3,501	3,558	3,619	3,683
1	2,886	3,018	3,069	3,036	3,032	3,150	3,278	3,359	3,426	3,489	3,549	3,618	3,692	3,765	3,832	3,895	3,958	4,026
2	2,873	2,894	3,034	3,091	3,069	3,065	3,184	3,307	3,389	3,457	3,520	3,581	3,645	3,719	3,793	3,860	3,924	3,987
3	2,935	2,881	2,909	3,056	3,124	3,102	3,098	3,212	3,337	3,419	3,488	3,551	3,607	3,672	3,747	3,821	3,889	3,953
4	2,849	2,942	2,895	2,928	3,087	3,155	3,133	3,124	3,239	3,365	3,448	3,517	3,576	3,633	3,698	3,774	3,848	3,917
5	2,833	2,856	2,956	2,914	2,957	3,117	3,186	3,159	3,149	3,265	3,392	3,476	3,543	3,602	3,660	3,725	3,802	3,876
6	2,785	2,868	2,899	3,005	2,972	3,016	3,179	3,244	3,217	3,207	3,325	3,454	3,537	3,606	3,666	3,725	3,791	3,869
7	2,749	2,792	2,883	2,919	3,036	3,003	3,048	3,207	3,272	3,245	3,235	3,354	3,481	3,565	3,635	3,695	3,755	3,821
8	2,714	2,756	2,806	2,903	2,950	3,068	3,035	3,075	3,235	3,301	3,273	3,263	3,380	3,508	3,593	3,663	3,724	3,784
9	2,836	2,803	2,854	2,912	3,024	3,073	3,196	3,155	3,197	3,363	3,432	3,403	3,388	3,510	3,642	3,731	3,803	3,867
10	2,760	2,815	2,791	2,847	2,917	3,030	3,079	3,195	3,154	3,196	3,362	3,431	3,398	3,383	3,504	3,636	3,725	3,797
11	2,618	2,684	2,746	2,728	2,794	2,863	2,974	3,016	3,129	3,089	3,130	3,293	3,356	3,324	3,309	3,427	3,556	3,643
12	2,587	2,504	2,570	2,632	2,619	2,682	2,749	2,853	2,893	3,001	2,963	3,002	3,154	3,214	3,184	3,169	3,283	3,406
Total*	**36,200**	**36,589**	**37,151**	**37,687**	**38,403**	**39,261**	**40,154**	**40,981**	**41,769**	**42,583**	**43,364**	**44,261**	**45,141**	**45,946**	**46,764**	**47,679**	**48,677**	**49,629**
Annual change[2]		*389* *1.1%*	*562* *1.5%*	*536* *1.4%*	*716* *1.9%*	*858* *2.2%*	*893* *2.3%*	*827* *2.1%*	*788* *1.9%*	*814* *1.9%*	*781* *1.8%*	*897* *2.1%*	*880* *2.0%*	*805* *1.8%*	*818* *1.8%*	*915* *2.0%*	*998* *2.1%*	*952* *2.0%*
K-5	17,151	17,367	17,602	17,741	18,091	18,526	18,894	19,236	19,672	20,181	20,644	21,061	21,447	21,836	22,231	22,633	23,040	23,442
6-8	8,248	8,416	8,588	8,827	8,958	9,087	9,262	9,526	9,724	9,753	9,833	10,071	10,398	10,679	10,894	11,083	11,270	11,474
9-12	10,801	10,806	10,961	11,119	11,354	11,648	11,998	12,219	12,373	12,649	12,887	13,129	13,296	13,431	13,639	13,963	14,367	14,713

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

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