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Beaverton School District: Population and Enrollment Forecasts 2012-13 to 2025-26

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BEAVERTON SCHOOL DISTRICT POPULATION AND ENROLLMENT FORECASTS 2012-13 TO 2025-26



APRIL, 2012

BEAVERTON SCHOOL DISTRICT POPULATION AND ENROLLMENT FORECASTS 2012-13 TO 2025-26

Prepared By

Population Research Center

Portland State University

April, 2012

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EXECUTIVE SUMMARY

This report presents the results of a demographic study conducted by the Portland State University Population Research Center (PRC). The study includes analyses of population, housing and enrollment trends affecting the District in recent years, estimates of the impacts of housing development on BSD enrollment, and forecasts of district-wide and individual elementary school enrollments for the 2012-13 to 2025-26 school years.

Enrollment Trends

Fall 2011 K-12 enrollment in all BSD schools was 37,681, which was 253 students (0.7 percent) more than in Fall 2010. This was the third consecutive year with enrollment gain, following two years (2007-08 and 2008-09) in which the District lost a small amount of enrollment. The loss of 419 students total between Fall 2006 and Fall 2008 followed 21 consecutive years of enrollment gains; since Fall 2008 growth has resumed and the BSD has added 1,481 K-12 students over a three year period.

District-wide elementary (K-5th) and middle (6th-8th) grade enrollments have both grown in the past five years. However, high school (9th-12th) grade enrollment peaked in 2006-07 and has declined by 255 students (2.3 percent) in the five years since. Statewide 9th-12th grade enrollment has also declined in the same five year period, by 3.1 percent.

Most of the District's recent growth has been concentrated at the elementary level, due to larger incoming kindergarten classes. Fall 2010 kindergarten enrollment of 2,913 was the largest in District history. In that year 40 percent of kindergarten students were enrolled in full-day kindergarten. In Fall 2011, 36 percent of kindergarten students were enrolled in full-day kindergarten and enrollment of 2,858 was the second largest in BSD history.

Potential Residential Development

Metro is now in the final stages of allocating its most recent regional forecast to small areas called Transportation Analysis Zones (TAZs). Key inputs in the allocation are residential and employment capacity based on vacant land and estimates of redevelopment and infill. We used

Metro's capacity figures for land that was within the Urban Growth Boundary (UGB) as of October 2011 to generate rough estimates of residential capacity within the BSD. Our estimate shows capacity for about 14,800 housing units on vacant residential land. About 23,500 additional units could be built on land that is currently developed or partially developed.¹ This capacity is adequate to accommodate residential development through the 2025 horizon of these forecasts at a pace similar to the 2000 to 2010 period.

Development potential was also factored into enrollment forecasts for individual elementary schools. For example, growth may occur due to developments currently underway such as Timberland (Cedar Mill) and Summer Creek (Hiteon) or future large developments such as North Bethany (Springville) and the Peterkort property (West Tualatin View).

Enrollment Forecast

In these forecasts, K-12 enrollment grows by 5,680 students (15 percent) over the 14 year forecast period, reaching 43,361 in 2025-26. The average annual growth rate is 1.0 percent. Elementary (K-5) enrollments grow by 2,760 students (15 percent) to 20,680 in 2025-26, also a 1.0 percent average annual growth rate. Similar growth is expected for secondary enrollments throughout the forecast period, amounting to 1,182 middle school and 1,735 high school students (14 and 15 percent growth rates respectively) over the 14 year period.

Kindergarten enrollments are forecast to remain relatively stable through 2016-17, reflecting two significant developments with opposite impacts. First, the recent kindergarten growth trend is expected to end due to the downturn in births locally and in Oregon and the U.S. since the beginning of the Great Recession. Second, the expectation that the State of Oregon will fund full-day kindergarten beginning in 2015-16 is incorporated into these forecasts in the form of slightly higher kindergarten "capture rates," the District's share of eligible kindergarten-age residents.

Table 1 summarizes the historic and forecast total (K-12) and elementary (K-5) growth for the District by five year increment. These forecasts are presented in Charts 1 and 2. Annual

¹ The underlying data was provided by Metro, but results included in this study are unofficial estimates prepared by the Portland State University Population Research Center.

forecasts for the District by grade level may be found in Table 18 of this report. Table 19 presents the kindergarten enrollment forecasts and Table 20 shows K-5 enrollment forecasts for each elementary school.

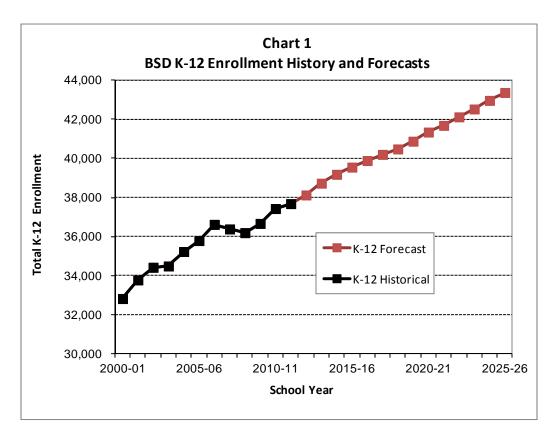
Table 1
Historic and Forecast Enrollment
Beaverton School District

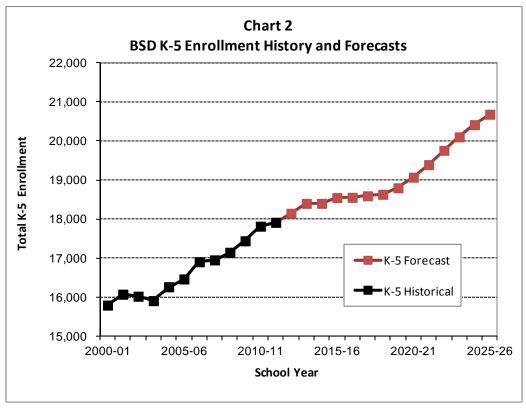
	К-	12	K	- 5
School Year	Enroll- ment ¹	5 year growth	Enroll- ment ¹	5 year growth
2000-01	32,830	-	15,801	-
2005-06	35,795	2,965	16,470	669
2010-11	37,428	1,633	17,818	1,348
2011-12	37,681	-	17,917	-
2012-13 (fcst.)	38,124	-	18,149	-
2015-16 (fcst.)	39,548	1,424	18,550	401
2020-21 (fcst.)	41,337	1,789	19,071	521
2025-26 (fcst.)	43,361	2,024	20,680	1,609
AAEG ² , 2011-12 to 2025-26	1.0	1%	1.0	3%

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

Source: Historic enrollment, Beaverton School District; Enrollment forecasts, Population Research Center, PSU. March 2012.

^{2.} Average Annual Enrollment Growth.





INTRODUCTION

The Portland State University Population Research Center (PRC) has prepared long-range enrollment forecasts for the Beaverton School District (BSD) based on historical enrollment observed through Fall 2011. This report updates BSD enrollment history and local area population, housing, and economic trends, and presents forecasts of district-wide K-12 enrollment and individual elementary school enrollments for a 14 year horizon from 2012-13 to 2025-26. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, city and county population estimates produced by PRC, economic trends from the Oregon Employment Department, housing development data from the county and cities, and residential capacity data from Metro.

The Beaverton School District has the third largest enrollment among Oregon school districts. It serves 98 percent of the City of Beaverton and portions of the cities of Tigard, Hillsboro, and Portland. The 2010 Census shows that a majority of the District's residents live in unincorporated Washington County, in communities such as Aloha, Oak Hills, Cedar Mill, and Bethany.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District and the relationship between enrollment and housing. Next are the results of the district-wide enrollment forecasts and individual elementary school forecasts, and a description of the methodologies used to produce the forecasts. The final section contains a brief discussion of the nature and accuracy of forecasts. An appendix contains a summary of demographic and housing characteristics for each elementary school and a five page census profile for the District.

POPULATION, HOUSING, AND EMPLOYMENT TRENDS, 1990 to 2010

Between 2000 and 2010, total population within the BSD grew by 18 percent, from 214,592 persons to 253,198. This growth rate was similar to the 19 percent growth experienced by Washington County and greater than the 15 percent in the Portland-Vancouver-Beaverton Metro area. However, numeric and percentage growth in the BSD as well as Washington County was smaller in the 2000s than in the 1990s. The share of the District's population living outside of the cities of Beaverton, Hillsboro, Tigard and Portland, in unincorporated Washington County,

Table 2
City and Region Population, 1990, 2000, and 2010

				Avg. Annual Growth Rate		
	1990	2000	2010	1990-2000	2000-2010	
City of Beaverton ¹	53,307	76,129	89,803	3.6%	1.7%	
BSD Portion	53,307	74,981	88,350	3.4%	1.6%	
City of Hillsboro ²	37,598	70,186	89,803	6.2%	2.5%	
BSD Portion ⁵	687	4,682	7,540	19.2%	4.8%	
City of Portland ³	438,802	529,121	586,776	1.9%	1.0%	
BSD Portion ⁵	994	1,015	969	0.2%	-0.5%	
City of Tigard ⁴	29,435	41,223	48,035	3.4%	1.5%	
BSD Portion ⁵	4,128	6,987	7,436	5.3%	0.6%	
BSD Unincorporated	93,699	126,927	148,903	3.0%	1.6%	
BSD Total	152,815	214,592	253,198	3.4%	1.7%	
Washington County	311,554	445,342	529,710	3.6%	1.7%	
Portland-Vancouver-						
Beaverton MSA ⁶	1,523,741	1,927,881	2,226,009	2.4%	1.4%	

^{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.

Sources: U.S. Census Bureau, 1990, 2000 and 2010 Censuses; Portland State University Population Research Center Estimates.

^{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.

remained about 59 percent in 2010, as in 2000. The 1990, 2000, and 2010 populations of the District, the cities and the portions of each city within BSD, the County and Metro area are shown in Table 2.

Employment

The District is part of the larger Portland Metropolitan area labor market. The Census Bureau's Local Employment Dynamics (LED) data from 2010 show data that about 28 percent of BSD residents worked within the District itself. A slight majority worked within Washington County, and 31 percent worked in the City of Portland, 16 percent worked in the City of Beaverton, and 14 percent in the city of Hillsboro. Table 3 reports the number and share of BSD residents by where their jobs are located.² Some workers, such as most federal employees, are not included. In some cases the employer's location is used rather than the actual work site. However, the data represent the home to work flow for most workers.

NATherin Bernanton Cabral District Besidents and Francisco d	Table 3
where Beaverton School District Residents are Employed	Where Beaverton School District Residents are Employed

Job Located Within	Workers	Share
Washington County	52,578	50.6%
Beaverton city	16,000	15.4%
Hillsboro city	14,207	13.7%
Tigard city	6,439	6.2%
Multnomah County	33,549	32.3%
Portland city	32,103	30.9%
Clackamas County	8,158	7.8%
Marion County	2,064	2.0%
All other locations	7,645	7.4%
Total Primary Jobs	103,994	100.0%

*Note: Indentation indicates that the area is also included within the area above it. For example, jobs in the City of Beaverton are also counted in Washington County. Portions of the City of Portland are outside of Multnomah County, but few jobs are located in those areas.

Sources: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2010). Jobs are those covered by unemployment insurance, generally excluding most federal government, agricultural, self-employed and domestic workers. Includes at most one (primary) job per resident.

² U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2010). Commute shed report for residents of BSD. Includes workers at firms covered by unemployment insurance (excludes most federal workers, agricultural jobs and self-employed). http://lehd.did.census.gov/led/.

Between 2004 and 2007 Washington County added 26,100 jobs, twelve percent over the 3 year period. Growth slowed in early 2008, and in late 2008 the county began to post year-to-year job losses. By 2009, employment had fallen close to its 2005 level, mainly due to the loss of 14,700 jobs between 2008 and 2009. Between 2010 and 2011 the county added 8,200 jobs (3.5 percent). The 4.0 percent growth in private sector jobs in 2011 was the most robust growth that the county has seen since 2006.³

Washington County's unemployment rate rose from 4.3 percent in 2007 to 9.3 percent in 2009, paralleling a similar increase in the U.S. rate from 4.6 percent to 9.3 percent. In terms of the unemployment rate, Washington County's recovery has fared somewhat better than the nation's. The county's 7.1 percent seasonally adjusted unemployment rate in March 2012 was about one percentage point below the national rate. While this rate may still be too high to encourage much in-migration into the county, the national malaise will discourage outmigration. Furthermore, job losses and the housing market crash have slowed the nation's mobility. Movement both across county lines and within counties is at an all-time low.⁴ Ironically, this trend may support enrollment growth in urban core school districts such as Portland and inner suburban districts such as Beaverton, which have gained enrollment in the past few years while surrounding districts that relied on new housing growth have lost enrollment.

Population by Age Group

In contrast with the 1990s when the District's school-age population grew by 44 percent, the District's school-age population grew only by 14 percent in the 2000s. The school age (5 to 17) population as a share of the total decreased from 18.4 percent in 2000 to 17.7 percent in 2010. Both in 2000 and 2010, the largest five-year age group consisted of young adults age 25 to 29. The leading edge of the baby boom accounted for the largest percentage growth during the decade, 100 percent for the 60 to 64 year old age group. The median age in the District

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³ "Current Employment by Industry," Oregon Employment Department, OLMIS. Average annual non-farm employment in Washington County was 251,800 in 2007, 233,900 in 2009, and 243,500 in 2011.

⁴ "Americans Still Stuck at Home," William H. Frey, The Brookings Institution, November 17, 2011.

increased from 33.3 in 2000 to 35.3 in 2010. Table 4 shows the population by age group for 2000 and 2010. Age detail by gender for 2000 and 2010 is included in the appendix.

Table 4
Population by Age Group
Beaverton School District, 1990, 2000 and 2010

				1990 to 20	00 Change	2000 to 20	10 Change
	1990	2000	2010	Number	Percent	Number	Percent
Under Age 5	11,734	16,362	18,090	4,628	39%	1,728	11%
Age 5 to 9	11,463	16,091	17,848	4,628	40%	1,757	11%
Age 10 to 14	10,211	14,820	16,892	4,609	45%	2,072	14%
Age 15 to 17	5,688	8,581	10,170	2,893	51%	1,589	19%
Age 18 to 19	3,414	4,971	5,390	1,557	46%	419	8%
Age 20 to 24	10,511	15,119	15,434	4,608	44%	315	2%
Age 25 to 29	14,715	19,043	21,027	4,328	29%	1,984	10%
Age 30 to 34	15,737	18,842	20,415	3,105	20%	1,573	8%
Age 35 to 39	15,238	18,647	20,176	3,409	22%	1,529	8%
Age 40 to 44	13,323	18,376	18,916	5,053	38%	540	3%
Age 45 to 49	9,578	16,690	18,466	7,112	74%	1,776	11%
Age 50 to 54	6,786	13,684	17,274	6,898	102%	3,590	26%
Age 55 to 59	5,454	9,082	15,558	3,628	67%	6,476	71%
Age 60 to 64	5,041	6,151	12,313	1,110	22%	6,162	100%
Age 65 to 69	4,822	4,872	8,078	50	1%	3,206	66%
Age 70 to 74	3,555	4,302	5,394	747	21%	1,092	25%
Age 75 to 79	2,597	3,995	4,122	1,398	54%	127	3%
Age 80 to 84	1,619	2,643	3,523	1,024	63%	880	33%
Age 85 and over	1,329	2,321	4,112	992	75%	1,791	77%
Total Population	152,815	214,592	253,198	61,777	40%	38,606	18%
Total age 5 to 17	27,362	39,492	44,910	12,130	44%	5,418	14%
share age 5 to 17	17.9%	18.4%	17.7%				

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

Births

The number of births to District residents increased by nine percent from 3,486 in 2000 to 3,816 in 2007, but as in the U.S. and Oregon, 2007 was a peak year for births. The decline since 2007 parallels national and state trends. Provisional and preliminary data indicated that births totals fell more than seven percent in the U.S. and Oregon between 2007 and 2010.⁵ The Pew

⁵ "Recent Trends in Births and Fertility Rates Through 2010." NCHS Health E-State, June 2011; "Month of Occurrence and County of Residence, Oregon Resident Births, 2010, Preliminary." Oregon Health Authority, Center for Health Statistics, date unknown.

Research Center's analysis of multiple economic and demographic data sources confirms the close correlation between the economic downturn and the nation's fertility downturn.⁶ Table 5 reports the number of births to BSD residents each year from 2000 to 2009. In the "Enrollment Forecasts" section of this report we examine the relationship between births, migration, and subsequent school enrollments.

Table 5 Annual Births, 2000 to 2009 Beaverton School District		
Year Births		
2000	3,486	
2001	3,520	
2002	3,535	
2003	3,608	
2004	3,458	
2005	3,621	
2006	3,716	
2007	3,816	
2008	3,616	
2009	3,700	

Housing Growth and Characteristics

During the 2000 to 2010 period, the District added over 16,700 housing units, as shown in Table 6. There was an 18 percent increase in households (occupied housing units), but only a 13 percent increase in households with children under 18. The share of households in the BSD that included at least one child under age of 18 was 35 percent in 2010, similar to previous decades. The average number of persons per household, 2.51, remained the same in 2010 as in 2000.

The City of Beaverton accounts for less than a quarter of the BSD's new housing development, but its trend in residential building permit activity is indicative of the slowdown that has occurred since 2008. Twelve years of permit data is presented in Table 7.

⁶ "In a Down Economy, Fewer Births." Pew Research Center, Pew Social & Demographic Trends, October 2011.

Table 6

Beaverton School District

Housing and Household Characteristics, 1990, 2000 and 2010

				Cha	nge
				90 to '00	00 to '10
	1990	2000	2010	Number	Number
Housing Units	64,448	89,483	106,225	25,035	16,742
Households	61,052	84,841	100,138	23,789	15,297
Households with children under 18 share of total	21,749 <i>36%</i>	30,695 <i>36%</i>	34,671 <i>35%</i>	8,946	3,976
Households with no children under 18 share of total	39,303 <i>64%</i>	54,146 <i>64%</i>	65,467 <i>65%</i>	14,843	11,321
Household Population	152,044	213,359	251,198	61,315	37,839
Persons per Household	2.49	2.51	2.51	0.02	-0.01

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

Table 7
Privately Owned Housing Units
Authorized by Building Permits

	City of B	Seaverton
Year Permit Issued	Single Family	Multiple Family
2000	225	138
2001	374	146
2002	391	175
2003	257	50
2004	392	1001
2005	289	284
2006	189	437
2007	200	180
2008	184	167
2009	172	188
2010	82	93
2011	99	34
2012(Jan-Feb)	13	0

Source: U.S. Census Bureau, Residential Construction Branch.

Data available online at

http://censtats.census.gov/bldg/bldgprmt.shtml

Metro's Regional Land Information System (RLIS) combines information from county tax assessor records with spatial features, enabling the tax lot information to be organized by various geographic areas. In Table 8 recently built single family homes are tabulated by current

(2011-12) attendance area and year built. Tax assessor data provided by RLIS – spatially aligned with the District's attendance area boundaries – indicates that during the 11 years from 2000 to 2010, about 11,250 single family homes were built in the District. The greatest numbers of new homes have been built in the past decade in the Findley attendance area, followed by Beaver Acres and Kinnaman, respectively. The City of Beaverton accounted only for 22 percent of the homes built since 2000, while unincorporated Washington County area accounts for 75 percent. Homes that are demolished, removed, or replaced are not subtracted from the number of new homes, so the net change in the District's single family housing stock may be less than the number of new homes.

Table 8
Beaverton School District
Single Family Homes Built 2000 to 2010 by Jurisdiction and Attendance Area¹

				A. I	By Jurisa	liction						
	Year Built										2000-10	
Jurisdiction	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Beaverton	193	363	339	317	361	366	193	159	114	31	33	2,469
Hillsboro	-	-	-	-	42	7	1	-	15	4	-	69
Tigard	4	2	-	44	78	11	19	27	20	7	23	235
Portland	2	6	-	7	-	-	-	-	-	-	1	16
Unincorporated Area	1,142	871	927	941	1,183	1,186	572	623	327	332	359	8,463
District Total	1,341	1,242	1,266	1,309	1,664	1,570	785	809	476	374	416	11,252

	Year Built										2000-10	
Elementary Area ²	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Aloha Huber K-8	63	44	63	3	38	47	66	34	6	28	20	412
Barnes	32	16	-	10	44	27	19	10	2	4	15	179
Beaver Acres	63	133	119	83	161	226	58	84	16	18	3	964
Bethany	157	78	205	131	57	2	-	-	-	-	3	633
Bonny Slope	65	54	55	78	112	88	65	28	24	18	23	610
Cedar Mill	70	30	27	50	22	37	15	25	26	20	54	376
Chehalem	34	16	38	16	15	26	15	3	9	16	28	216
Cooper Mountain	49	34	11	22	72	56	61	15	6	2	18	346
Elmonica	61	71	46	48	106	56	52	27	15	5	7	494
Errol Hassell	45	20	50	14	40	13	34	12	33	6	7	274

Table 8 (continued) Beaverton School District

Single Family Homes Built 2000 to 2010 by Jurisdiction and Attendance Area¹

B. By Elementary Attendance Area

					,	ear Buil	t					2000-10
Elementary Area ²	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Findley	89	124	205	182	195	215	35	20	-	1	9	1,075
Fir Grove	-	19	6	7	6	6	11	7	2	2	-	66
Greenway	-	19	20	20	-	-	-	-	1	-	-	60
Hazeldale	73	66	88	50	43	21	18	31	27	24	34	475
Hiteon	6		1	4	14	35	17	17	9		19	122
Jacob Wismer	162	56	7	1	1	15	11	103	69	41	38	504
Kinnaman	15	20	8	262	251	94	3	47	1	6	2	709
МсКа у	1	-	-	1	62	7	1	6	2	-	-	80
McKinley	4	4	4	1	42	45	3	3	15	4	22	147
Montclair	17	25	5	4	8	29	29	52	6	8	7	190
Nancy Ryles	7	29	2	55	25	3	5	12	82	12	12	244
Oak Hills	5	6	2	1	94	147	-	2	7	-	1	265
Raleigh Hills	5	7	2	25	1	-	15	6	20	24	4	109
Raleigh Park	36	7	5	12	6	33	6	5	6	3	7	126
Ridgewood	2	2	-	1	-	-	-	9	2	2	3	21
Rock Creek	26	8	-	1	19	13	33	23	1	-	-	124
Scholls Heights	91	211	48	63	26	74	10	4	-	-	-	527
Sexton Mountain	33	54	142	29	99	89	74	69	1	2	2	594
Springville K-8	84	48	3	2	7	4	54	48	60	107	57	474
Terra Linda	19	7	7	13	14	3	3	28	-	-	-	94
Vose	8	10	2	1	4	34	3	6	-	-	-	68
West Tualatin View	19	23	78	115	29	124	69	63	24	21	21	586
Wm. Walker	-	1	17	4	51	1	-	10	4	-	-	88
District Total	1,341	1,242	1,266	1,309	1,664	1,570	785	809	476	374	416	11,252

 $^{{\}it 1. Includes single family homes and mobile homes on individual parcels.}$

Source: Data compiled by PSU-PRC, using geographic shape files and attribute data from Metro RLIS Data, January 2012. Attribute data, including year built and building type, is from the Metro's RLIS Database.

^{2.} Current (2011-12) attendance areas.

ENROLLMENT TRENDS

Fall 2011 K-12 enrollment in all BSD schools was 37,681, which was 253 students (0.7 percent) more than in Fall 2010. This was the third consecutive year with enrollment gain, following two years (2007-08 and 2008-09) in which the District lost a small amount of enrollment. The loss of 419 students total between Fall 2006 and Fall 2008 followed 21 consecutive years of enrollment gains; since Fall 2008 growth has resumed and BSD K-12 enrollment has grown by 1,481 students over a three year period.

District-wide elementary (K-5th) and middle (6th-8th) grade enrollments have both grown in the past five years. However, high school (9th-12th) grade enrollment peaked in 2006-07 and has declined by 255 students (2.3 percent) in the five years since. Statewide 9th-12th grade enrollment has also declined in the same five year period, by 3.1 percent. The decline reflects the graduation of the large cohort born around 1990, the "echo" of the baby boom, who were enrolled in high school in the mid-2000s. After 1990 there was a small drop in the number of births in Oregon, and a much larger drop nationally. Another factor in the BSD high school figures may be simply related to accounting. Our historic and forecast figures do not include Self Contained Special Education, Alternative, and Early College programs, so changes in those programs may affect the traditional high school enrollment figures in this report.

Table 9 on the next page summarizes the enrollment history for the District by grade level annually from 2001-02 to 2011-12. District-wide enrollment is now 3,900 students (12 percent) more than in the 2001-02 school year.

Private School Enrollment and Home Schooling

According to the National Center for Education Statistics, there are 26 private schools in Washington County that enroll 100 or more students in grades K to 12 in the 2009-2010 school year. The largest of these are all within the BSD boundaries, though their students come from throughout the Portland metro area. They are Jesuit High School (1,220 students in grades 9-12), Oregon Episcopal School, (830 students in grades K-12), and Catlin Gabel, (710 students in grades K-12). There are also many preschools in the vicinity that also offer kindergarten. The total K-12 enrollment of private schools in the county was about 8,500 in the 2009-10 school year.

Table 9
Beaverton School District, Enrollment History, 2001-02 to 2011-12

Grade	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
K	2,500	2,490	2,503	2,567	2,641	2,644	2,607	2,775	2,754	2,913	2,858
1	2,707	2,710	2,681	2,824	2,839	2,991	2,936	2,886	3,105	2,977	3,056
2	2,756	2,698	2,690	2,760	2,832	2,867	2,957	2,873	2,916	3,115	3,001
3	2,694	2,746	2,643	2,735	2,697	2,895	2,867	2,935	2,903	2,943	3,125
4	2,677	2,747	2,678	2,680	2,755	2,743	2,856	2,849	2,910	2,924	2,936
5	2,745	2,637	2,721	2,704	2,706	2,769	2,733	2,833	2,857	2,946	2,941
6	2,756	2,788	2,647	2,768	2,797	2,785	2,748	2,785	2,837	2,894	2,993
7	2,692	2,733	2,803	2,683	2,752	2,858	2,757	2,749	2,822	2,840	2,894
8	2,520	2,741	2,722	2,818	2,701	2,782	2,820	2,714	2,746	2,833	2,847
9	2,534	2,649	2,802	2,807	2,968	2,825	2,817	2,836	2,814	2,925	2,967
10	2,527	2,583	2,627	2,819	2,868	2,970	2,750	2,760	2,828	2,807	2,802
11	2,522	2,532	2,556	2,571	2,775	2,818	2,865	2,618	2,740	2,738	2,588
12	2,150	2,373	2,421	2,499	2,464	2,672	2,674	2,587	2,437	2,573	2,673
Total*	33,780	34,427	34,494	35,235	35,795	36,619	36,387	36,200	36,669	37,428	37,681
Annual ch	anaa	647	67	741	560	824	-232	-187	469	759	253
Alliluul Cil	unge 	1.9%	0.2%	2.1%	1.6%	2.3%	-0.6%	-0.5%	1.3%	2.1%	0.7%
K-5	16,079	16,028	15,916	16,270	16,470	16,909	16,956	17,151	17,445	17,818	17,917
6-8	7,968	8,262	8,172	8,269	8,250	8,425	8,325	8,248	8,405	8,567	8,734
9-12	9,733	10,137	10,406	10,696	11,075	11,285	11,106	10,801	10,819	11,043	11,030

10 Year Change: 2001-02 to 2011-12

Pct.

11%

10%

13%

12%

Change

1,838

766

1,297

3,901

	5 Year Cl 2001-02 to	•		Change: to 2011-12
	Change	Pct.	Change	Pct.
K-5	830	5%	1,008	6%
6-8	457	6%	309	4%
9-12	1,552	16%	-255	-2%
Total	2,839	8%	1,062	3%

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

Private schools within the BSD enroll local students as well as students from beyond the BSD boundaries; conversely BSD residents attend private schools beyond the District's boundaries, so the number of students enrolled in private schools physically located within the District cannot be used to measure overall private school share. The best estimates of private school enrollment for BSD residents come from the Census Bureau – the 2000 Census "long form" and the more recent American Community Survey (ACS). In the 2000 Census, about 12 percent of 1st-12th grade students living in the District and enrolled in school were reported as private school students. The private school share estimated from 2008-2010 ACS responses is lower — 10.4 percent. However, the ACS has a smaller sample size than the census and there is 1.9 percent margin of error at the 90 percent confidence level. These private school estimates are shown in Table 10.

Table 10
School Enrollment by Type of School
Residents of Beaverton School District
Census Data, 1990, 2000 & 2008-2010

	1000	2000	200	8-10
	1990	2000	estimate	MOE*
Enrolled in 1 st -12 th grade	24,372	36,658	40,713	+/-1,714
Public Schools	21,996	32,220	36,463	+/-1,757
Private Schools	2,376	4,438	4,250	+/-732
Private Share	9.7%	12.1%	10.4%	+/- 1.9%
Enrolled in 1 st -8 th grade	N/A	25,348	27,308	+/-1,425
Public Schools		22,126	24,711	+/-1,442
Private Schools		3,222	2,597	+/-509
Private Share		12.7%	9.5%	+/- 1.9%
Enrolled in 9 th -12 th grade	N/A	11,310	13,405	+/-953
Public Schools		10,094	11,752	+/-1,004
Private Schools		1,216	1,653	+/-527
Private Share		10.7%	12.3%	+/- 4.0%

^{*}Margin of sampling error at the 90 percent confidence level.

Sources: 1990 Census, Summary Tape File 3, Table P54 (BSD area estimated by PRC); 2000 Census, Summary File 3, Table P36 (BSD area estimated by PRC);

2008-2010 American Community Survey, Table C14002 (tabulated for BSD area by Census Bureau).

⁷ Underlying data from U.S. Census Bureau, 1990 and 2000 Censuses, Summary File 3, Table P36; U.S. Census Bureau 2008-2010 American Community Survey 3 year estimates, Table C14002, with additional calculations by PSU Population Research Center.

Another difference between public school enrollment and total school age population can be attributed to home schooling. Home-schooled students age 7 to 18 living in the District are required to register with the Northwest Region Education Service District (NWRESD), though the statistics kept by the NWRESD are not precise because students moving out of the area are not required to drop their registration. Students who enroll in public schools after being registered as home students are, however, dropped from the home school registry. As shown in Table 11, the number of registered home school students was 916 in 2010-11. This registry represents about 2 percent of the BSD's school age population. The number of home-schooled students has remained in the range between 850 and 970 each year since 2005, and there is no clear trend up or down.

	Table 11
Home Schoo	Students Residing in BSD ¹
	Total
2005-06	852
2006-07	930
2007-08	853
2008-09	962
2009-10	970
2010-11	916
	18 enrolled with NWRESD.
Source: Northwest Reaion	Education Service District, Annual Reports

Neighboring Districts

Table 12 compares several facts about BSD demographics and enrollment trends in comparison to three other neighboring school districts (Hillsboro, Tigard-Tualatin, and Portland). Portland Public Schools lost enrollment between 2000-01 and 2008-09 but has grown each year since 2008-09. Conversely, Tigard-Tualatin grew from 2000-01 to 2008-09 but has lost enrollment each year since 2008-09. The Hillsboro School District grew at a similar or faster rate than the BSD between 2000-01 and 2008-09, but percentage growth in the BSD has outpaced the HSD each year since 2008-09.

Table 12
Selected School Districts
Demographic and Enrollment Highlights, 2000 to 2011

	Beaverton	Hillsboro	Tigard- Tualatin	Portland
Enrollment growth, 2000-01 to 2008-09	8%	13%	9%	-13%
Enrollment growth, 2008-09 to 2011-12	4%	2%	-2%	3%
Latino enrollment, 2011-12	23%	34%	23%	16%
Grades 9-12 enrollment, 2011-12	29%	31%	33%	26%
Population growth, 2000 to 2010	18%	20%	16%	8%
Multi-family housing share, 2000	43%	25%	41%	36%
Population age 5 to 17, 2000	18%	20%	18%	14%
Population age 5 to 17, 2010	18%	19%	18%	12%
Population under age 5, 2000	7.6%	8.7%	7.1%	5.7%
Population under age 5, 2010	7.1%	7.8%	6.9%	5.6%
Population rural, 2000	0.4%	13.2%	0.6%	1.0%
Median Household Income 2006-10*	\$63,766	\$62,353	\$50,956	\$58,697
Median Household Income - MOE*	+/- \$1,385	+/- \$1,518	+/- \$850	+/- \$2,12
Median Value of Home 2006-10*	\$324,400	\$269,400	\$323,200	\$322,200
Median Household Income - MOE*	+/- \$4,197	+/- \$3,667	+/- \$3,155	+/- \$6,16

Data assembled by PSU Population Research Center (PRC) from several sources: U.S. Census Bureau; enrollment reports from PRC; OR Dept. of Education; U.S. Dept. of Education.

Enrollment Trends at Individual Elementary Schools

Total enrollments at each of District's elementary schools from 2006-07 to 2011-12 are shown in Table 13. Enrollment change is calculated for the five year period. For many schools, the enrollment changes during the period include the effects of boundary adjustments and therefore do not accurately portray increases or decreases in student population within their current boundaries.

^{*}U.S. Census Bureau, 2006-2010 American Community Survey 5 Year Estimates. In 2010 Inflation Adjusted Dollars. ACS data needs to be interpreted along with margins of error (MOE).

Table 13

Beaverton School District

Historic Enrollment by Elementary School, 2006-07 to 2011-12

Sahaal	2006 07	2007.09	2009 00	2000 10	2010 11	2011-12	5 Year Change: 2006-07 to
School	2006-07 767	2007-08 812	2008-09 813	2009-10 776	2010-11 839	846	2011-12 79
Aloha Huber K-8	691	623	673	739	780	763	72
Barnes	760	817	803	814	867	848	88
Beaver Acres	542	572	545	485	485	519	-23
Bethany	0	0	438	473	502	554	554
Bonny Slope	368	367	207	233	245	252	-116
Chahalana	468	491	452	485	469	491	23
Chehalem Cooper Mountain	532	491	467	489	490	491	-33
Cooper Mountain	662	627	602	595	597	588	-74
Elmonica	508	528	505	498	470	481	-74
Errol Hassell	868	874	830	804	799	814	-54
Findley	514	497	502	456	493	499	-15
Fir Grove	434	415	417	421	393	439	5
Greenway	571	568	582	579	472	439	-130
Hazeldale	407	423	442	486	618	619	212
Hiteon	779	782	818	699	725	747	-32
Jacob Wismer	461	441	467	434	547	555	94
Kinnaman	354	350	343	366	372	368	14
McKay	606	613	628	611	656	625	19
McKinley	320	331	326	340	344	380	60
Montclair	640	638	661	649	573	573	-67
Nancy Ryles	611	616	608	600	617	597	-14
Oak Hills	378	367	400	369	364	328	-50
Raleigh Hills	402	390	406	418	419	427	25
Raleigh Park	430	439	425	392	384	394	-36
Ridgewood	639	650	630	520	513	506	-133
Rock Creek Scholls Heights	720	697	728	696	635	588	-132
	615	625	641	675	646	597	-132
Sexton Mountain	013	023	041	506	559	589	589
Springville K-8	466	498	423	418	416	434	-32
Terra Linda	605	616	628	631	670	691	86
Vose West Tualatin View	333	338	280	298	309	313	-20
	458	464	461	490	550	552	94
Wm. Walker Elementary School Total							
ciementary school rotal	16,909	16,956	17,151	17,445	17,818	17,917	1,008
Middle School Total	8,425	8,325	8,248	8,405	8,567	8,734	309
High School Total	11,285	11,106	10,801	10,815	11,043	11,030	-255
District Totals	36,619	36,387	36,200	36,665	37,428	37,681	1,062

HOUSING AND ENROLLMENT

How many children are expected to live in future new homes and attend BSD schools? Because each development is unique, the number of resident public school students per home may depend on factors including affordability, proximity to schools, the number of bedrooms, and the presence or absence of child-friendly amenities within the development and in the surrounding neighborhood. However, district-wide average student generation rates may be useful as a baseline for estimating potential student generation from planned and proposed developments. Furthermore, measuring the number of students in older homes helps to explain the "aging in place" phenomenon that can lead to enrollment losses as families age.

Using data from Metro, we compiled a current housing inventory in a spatial file based on parcels that differentiates single family homes, apartments, condominiums, and manufactured home parks. We then combined this file with student address points from Fall 2011 in order to quantify the number of students by housing type.

For District homes built between 2000 and 2010, the average number of BSD K-12 students per single family home was 0.51, or just over one student in every two homes. The rates are within the range of rates that we have measured for new single family homes in recent studies for other area school districts. Homes built in the 1990s also had a similar K-12 average of 0.56 students, and these homes, now 11 to 21 years old, are home to slightly older families — fewer elementary and more high school children. Homes built before 1990 have an average of just 0.35 BSD K-12 students per home.

Table 13 includes these rates by age of single family home as well as rates for other types of homes. In the most recent decade, a growing number of lots in new subdivisions are designed for attached or nearly attached row homes. We identified about 3,700 homes built between 2000 and 2010 within the BSD on parcels smaller than 2,750 square feet. On average, they were home to fewer BSD K-12 students (0.28 per home) than homes on larger parcels built at about

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⁸ For example, 0.66 in the North Clackamas School District, 0.48 in the Oregon City School District, 0.47 in the Hillsboro School District, and 0.55 in the Tigard-Tualatin School District

the same time (0.63 per home). Among multi-family homes, rental apartments had higher student generation rates (0.27) than condominium units (0.11).

These same Fall 2011 student generation rates are shown in Chart 3, illustrating the "aging in place" that occurs in single family homes. On average, the homes that are 11-21 years old are home to fewer elementary age children than homes that are less than 11 years old. However, they are home to more high school children, on average. As the children graduate from high school, the homes built in the 1990s will soon have fewer K-12 residents, much like the homes built before 1990 that are now more than 20 years old. Although younger families may eventually occupy the older homes, owner-occupied homes turn over to new owners very gradually, and the new owners will represent a diverse mix of households that may not include as many families with children as the newer tract homes.

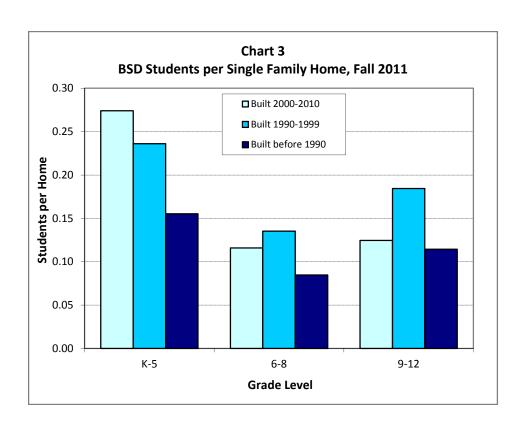
Table 14

Average Number of BSD Students per Home, Fall 2011

By Housing Type and Grade Level

		Grade	Level	
	K-5	6-8	9-12	K-12
Single family homes built 2000-2010	0.27	0.12	0.12	0.51
detached homes built 2000-2010	0.34	0.14	0.15	0.63
row homes built 2000-2010	0.14	0.06	0.07	0.28
Single family homes built 1990-1999	0.24	0.14	0.18	0.56
Single family homes built before 1990	0.16	0.08	0.11	0.35
Condominiums	0.05	0.02	0.03	0.11
Apartments	0.14	0.06	0.06	0.27
Manufactured homes in M.H. Parks	0.19	0.10	0.13	0.41

Source: Data compiled by PSU-PRC, using BSD student data, geographic shape files from Metro, tax lot attribute data from Washington County Assessor's Office, and a multi-family housing inventory from Metro.



ENROLLMENT FORECASTS

Currently, the District's greatest need is for elementary forecasts, due to the facilities requirements associated with the potential future implementation of full-day kindergarten. However, we prepared district-wide K-12 forecasts by grade level as part of our standard methodology that includes population forecasts by age groups. The district-wide forecasts for grades K through 5 were used as control totals for the required elementary school forecasts.

Potential Residential Development

The previous enrollment forecast report, published in December 2008, included a section on potential residential development, summarizing capacity in general terms for different jurisdictions within the District. The current study uses a more objective approach to district-wide capacity made possible through the use of parcel-based residential capacity data used in Metro's current regional forecast allocation.⁹

Metro is now in the final stages of allocating its most recent regional forecast to small areas called Transportation Analysis Zones (TAZs). Key inputs in the allocation are residential and employment capacity based on vacant land and estimates of redevelopment and infill. We used Metro's capacity figures for land that was within the Urban Growth Boundary (UGB) as of October 2011 to generate rough estimates of residential capacity. Our estimate shows capacity for about 14,800 housing units on vacant residential land. About 23,500 additional units could be built on land that is currently developed or partially developed. There are challenges with both types of development. Vacant land may require new services and infrastructure, and if it is currently unincorporated it may need to be annexed by an existing city or included in new or expanded service districts. Infill and redevelopment is more likely if the existing improvement is of low value compared with the land. For example, a small older home on a two acre parcel is a candidate for a new subdivision.

⁹ The underlying data was provided by Metro, but results included in this study are unofficial estimates prepared by the Portland State University Population Research Center.

An October 2011 decision by the Metro Council is likely to result in additional residential capacity within the BSD. Metro approved an addition of a 543-acre area west of Beaverton, in the vicinity of Southwest 175th Avenue and Scholls Ferry Road, for a minimum of 4,651 new housing units.¹⁰ Nearly one third of the area is within the BSD; the rest is within the Hillsboro School District. The City of Beaverton will start the planning for the South Cooper Mountain area as soon as the LCDC acts on Metro's growth management ordinance. If the expansion is approved, planning may begin as early as July 2012, and take about 16 months to a point of adoption within Beaverton's Comprehensive Plan and Development Code.¹¹

District-wide Long-range Forecast Methodology

To ensure that enrollment forecasts are consistent with the dynamics of likely population growth within the District, we combine the 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.

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 2009-10 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. In this forecast, kindergarten capture rates are increased in Fall 2015 and beyond,

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¹⁰ Metro's 2011 growth management decision. http://www.oregonmetro.gov/index.cfm/go/by.web/id/37518

¹¹ Correspondence with City of Beaverton Community and Economic Development Department.

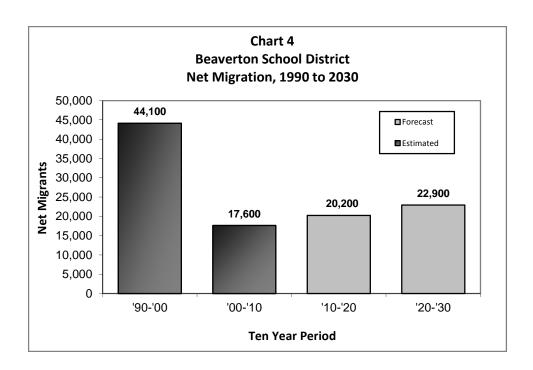
based on the expectation that the District will adopt full-day kindergarten at all schools under the State of Oregon's proposal to fund it.

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 (GPRs) are used to move students from one grade to the next. Grade progression rates are the ratio of enrollment in an individual grade to enrollment in the previous grade the previous year. Baseline 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, if appropriate) at each grade level depending on the migration levels of the overall population by single years of age.

Population Forecast

The 2000 and 2010 Census results were used as a baseline for the population forecasts. By "surviving" the 2000 population and 2000s births (estimating the population in each age group that would survive to the year 2010) and comparing the "survived" population to the actual 2010 population by age group, we were able to estimate the overall level of net migration between 2000 and 2010 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 2010 to 2030 period.

Census data reported in the "Population and Housing Trends" section showed that the District added about 23,000 fewer residents in the 2000s than in the 1990s. The difference was primarily due to a lower level of positive net migration (more people moving in than moving out). In the 1990s, we estimated that net migration contributed to population increase of 44,100. In the 2000s, net migration fell to 17,600. In spite of an aging population and lower fertility, the larger population base in the 2000s resulted in higher natural increase (births minus deaths) of about 21,000 between 2000 and 2010, compared with about 18,000 between 1990 and 2000. Chart 4 shows the 2000 to 2010 estimates and 2010 to 2030 forecasts of BSD



population growth attributable to net migration. Net migration each decade is forecast to be slightly higher than the level observed between 2000 and 2010.

We estimated the number of births to women residing within the District each year from 2000 to 2009, using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers is used to calculate fertility rates by age group for both 2000 and 2009.

State and national long term trends indicate declining fertility rates for women under 30 and increasing rates for women 30 and over, but fertility rates in the 2009 to 2010 period have been unusually low due to the poor economy. Provisional and preliminary data indicated that birth totals fell more than seven percent in the U.S. and Oregon between 2007 and 2010. The Pew Research Center's analysis of multiple economic and demographic data sources confirms the close correlation between the economic downturn and the nation's fertility downturn.

¹³ "In a Down Economy, Fewer Births." Pew Research Center, Pew Social & Demographic Trends, October 2011.

¹² "Recent Trends in Births and Fertility Rates Through 2010." NCHS Health E-Stat, June 2011; "Month of Occurrence and County of Residence, Oregon Resident Births, 2010, Preliminary." Oregon Health Authority, Center for Health Statistics, date unknown.

Because of the current unusually low rates, we increased rates gradually between 2010 and 2020 for all age groups.

The total fertility rate (TFR) 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 estimated TFR for the District fell from 2.02 in 2000 to 1.91 in 2010, and rebounds to 1.96 by 2020. Table 15 shows historic births from 2000 to 2009 as well as forecasts from 2010 until 2020, the period that will have an impact on these enrollment forecasts.

BSD Estimated and F	ı	
Year 2000	Births	
	3,486	
2001	3,520	
2002	3,535	
2003	3,608	
2004	3,458	
2005	3,621	
2006	3,716	
2007	3,816	
2008	3,616	
2009	3,700	
2010 (preliminary)	3,503	
2011 (forecast)	3,583	
2012 (forecast)	3,657	
2013 (forecast)	3,739	
2014 (forecast)	3,826	
2015 (forecast)	3,913	
2016 (forecast)	3,959	
2017 (forecast)	4,008	
2018 (forecast)	4,051	
2019 (forecast)	4,094	
2020 (forecast)	4,144	

The district-wide population forecast by age group is presented in Table 16. The forecast for 2020 population in the BSD is 291,211, an increase of 38,031 persons from the 2010 Census (1.4 percent average annual growth). School-age population (5 to 17) is forecast to increase at a slower rate than overall population. The 1,340 person growth in school-age population amounts to 9.7 percent in the 20 year period. By 2020, the fastest growing age groups are the

2011-2020 forecasts, PSU-PRC.

"baby boom" generation in its 60s and 70s. Population age 55 and older in the District is forecast to account for more than half of the District's growth between 2010 and 2020.

Table 16
Population by Age Group
Beaverton School District, 2000 to 2030

	2000	2010	2020	2030	2010 to 20	30 Change
	Census	Census	Forecast	Forecast	Number	Percent
Under Age 5	16,362	18,090	20,061	22,476	4,386	24%
Age 5 to 9	16,091	17,848	18,949	21,919	4,071	23%
Age 10 to 14	14,820	16,892	19,081	21,132	4,240	25%
Age 15 to 17	8,581	10,170	11,251	11,956	1,786	18%
Age 18 to 19	4,971	5,390	6,083	6,477	1,087	20%
Age 20 to 24	15,119	15,434	17,516	19,792	4,358	28%
Age 25 to 29	19,043	21,027	23,458	26,049	5,022	24%
Age 30 to 34	18,842	20,415	20,283	23,019	2,604	13%
Age 35 to 39	18,647	20,176	22,578	25,304	5,128	25%
Age 40 to 44	18,376	18,916	20,671	20,545	1,629	9%
Age 45 to 49	16,690	18,466	19,959	22,343	3,877	21%
Age 50 to 54	13,684	17,274	17,832	19,494	2,220	13%
Age 55 to 59	9,082	15,558	17,624	19,046	3,488	22%
Age 60 to 64	6,151	12,313	15,835	16,337	4,024	33%
Age 65 to 69	4,872	8,078	13,912	15,754	7,676	95%
Age 70 to 74	4,302	5,394	10,499	13,480	8,086	150%
Age 75 to 79	3,995	4,122	6,597	11,145	7,023	170%
Age 80 to 84	2,643	3,523	4,174	7,606	4,083	116%
Age 85 and over	2,321	4,112	4,848	6,409	2,297	56%
Total Population	214,592	253,198	291,211	330,283	77,085	30%
Total age 5 to 17	39,492	44,910	49,281	55,007	10,097	22%
share age 5 to 17	18.4%	17.7%	16.9%	16.7%		

	2000-2010	2010-2020	2020-2030
Population Change	38,606	38,013	39,072
Percent	18.0%	15.0%	13.4%
Average Annual	1.7%	1.4%	1.3%

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

District-wide Enrollment Forecast

Chart 5 compares the historic and forecast number of births in the District with the historic and forecast number of BSD kindergarten students. Births correspond to kindergarten cohorts (September to August). Although many children move into and out of the District between birth and age five, and not all District residents attend BSD kindergartens, the annual change in

kindergarten enrollment has typical followed the trend in the birth cohort, in direction if not magnitude. For example, in two of the eight school years beginning in 2003-04, kindergarten fell, corresponding with the only two decreases in the size of the corresponding birth cohorts. However, kindergarten enrollment also declined between 2010-11 and 2011-12, in spite of an increase in births between 2004-05 and 2005-06.

During the past 10 years, the gap between births and kindergarten enrollment has grown as a consequence of lower net migration, declining capture rates, or some combination of the two factors. In Fall 2000, the ratio of BSD kindergarten enrollment to the corresponding birth cohort (1994-95) was 0.87. This high ratio is consistent with the high level of net in-migration in the 1990s. Since 2003-04 the ratio has ranged between 0.73 and 0.81, reflecting the lower volume of in-migration in the 2000s. For the first three years of the forecast, 2012-13 to 2014-15, the ratio remains near recent rates, ranging between 0.76 and 0.80. From 2015-16 to 2025-26, the ratio is somewhat higher, at 0.81 to 0.82, reflecting the proposed adoption of full day kindergarten at all schools.

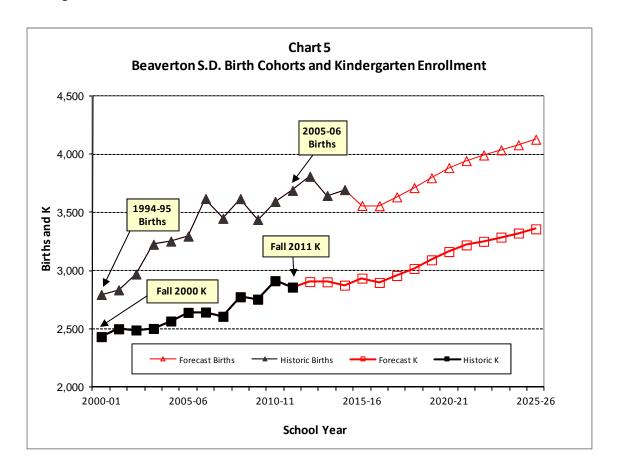


Table 17 displays Grade Progression Rates (GPRs) for individual grade cohorts, showing that the BSD experiences significant net enrollment increases at school transition years (1st, 6th, and 9th) but over the past 10 years has averaged very little growth at other grade levels. The GPR is the ratio of enrollment in a specific grade in one year to the enrollment of the same age cohort in the previous year, e.g. the number of students enrolled in second grade this year divided by the number of students enrolled in first grade last year. Higher rates for the K-1st, 5th-6th, and 8th-9th grade transitions are consistent with enrollment gains due to students entering the District from private schools. In grades 10, 11, or 12, low GPRs can indicate that students are leaving high school or being retained at lower grade levels. But for most elementary and middle grades, if the population entering and leaving the District is in balance and there is not widespread grade retention, one can expect GPRs very close to 1.00.

Historic and Forecast Grade Progression Rates							
Grade Transition	Historic Average: 2001-02 to 2011-12	Baseline (without the influence of migration)	Forecast Average: 2012-13 to 2025-26				
K-1	1.099	2	1.058				
1-2	1.002	1.00	1.008				
2-3	1.001	1.00	1.007				
3-4	1.001	1.00	1.006				
4-5	1.001	1.00	1.003				
5-6	1.014	1.01	1.011				
6-7	1.003	1.00	1.001				
7-8	1.001	1.00	1.002				
8-9	1.037	1.03	1.032				
9-10	0.995	0.99	0.991				
10-11	0.974	0.96	0.960				
11-12	0.949	0.98	0.980				

^{1.} Ratio of enrollment in an individual grade to enrollment in the previous grade the previous year.

Over the last 10 years, average GPRs for elementary and middle school grades other than the transition years ranged between 1.001 and 1.003. A GPR of 1.001 for 2^{nd} grade to 3^{rd} grade indicates that for every 1,000 2^{nd} grade students one year there were 1,001 3^{rd} grade students the following year. The average GPRs for the next 14 years derived from the enrollment

^{2.} The enrollment forecast model uses capture rates for first grade; K-1 baseline GPRs are not used.

forecasts are shown in the final column of Table 17. The K-1st forecast average (near 1.06) is lower than the historic average (close to 1.10) due to the higher capture rate assumed for kindergarten beginning in 2015-16. For most other grades the forecast rates are slightly higher than historic rates, but gains to individual cohorts outside of school transition years are below 1.01 and not a major source of growth for the District. For 12th grade, the higher forecast rates reflect recent trends of lower dropout rates and increasing numbers of students taking a fifth year at a comprehensive high school.

In these forecasts, K-12 enrollment grows by 5,680 students (15 percent) over the 14 year forecast period, reaching 43,361 in 2025-26. The average annual growth rate is 1.0 percent. Elementary (K-5) enrollments grow by 2,760 students (15 percent) to 20,680 in 2025-26, also a 1.0 percent average annual growth rate. Similar growth is expected for secondary enrollments throughout the forecast period, amounting to 1,182 middle school and 1,735 high school students (14 and 15 percent growth rates respectively) over the 14 year period. There will be annual fluctuations that no forecast can anticipate; a short term deviation from the forecast does not mean that the forecast trend will be inaccurate in the long term.

Table 18 contains grade level forecasts for the Beaverton School District for each year from 2012-13 to 2025-26. The forecasts are also summarized by grade level groups (K-5, 6-8, and 9-12).

Table 18

Beaverton School District

Enrollment Forecasts, 2012-13 to 2025-26

	Historic							Fore	cast						
Grade	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	2,858	2,905	2,903	2,875	2,935	2,898	2,957	3,018	3,092	3,163	3,220	3,251	3,287	3,322	3,358
1	3,056	3,056	3,123	3,100	3,067	3,095	3,050	3,113	3,182	3,260	3,339	3,389	3,425	3,462	3,497
2	3,001	3,080	3,082	3,150	3,124	3,093	3,116	3,071	3,140	3,209	3,290	3,362	3,415	3,452	3,486
3	3,125	3,021	3,103	3,105	3,171	3,147	3,111	3,135	3,093	3,163	3,235	3,310	3,384	3,438	3,473
4	2,936	3,142	3,039	3,122	3,122	3,190	3,162	3,126	3,154	3,112	3,184	3,251	3,328	3,402	3,455
5	2,941	2,945	3,152	3,049	3,131	3,132	3,199	3,170	3,137	3,164	3,123	3,193	3,261	3,338	3,411
6	2,993	2,975	2,979	3,189	3,084	3,167	3,167	3,235	3,207	3,173	3,201	3,158	3,230	3,298	3,376
7	2,894	2,996	2,978	2,982	3,192	3,088	3,170	3,170	3,239	3,211	3,177	3,204	3,161	3,233	3,301
8	2,847	2,900	3,003	2,985	2,988	3,199	3,093	3,176	3,177	3,246	3,219	3,183	3,210	3,167	3,239
9	2,967	2,937	2,992	3,098	3,079	3,083	3,299	3,190	3,277	3,278	3,350	3,320	3,283	3,311	3,266
10	2,802	2,939	2,909	2,964	3,069	3,050	3,053	3,267	3,160	3,246	3,248	3,318	3,289	3,252	3,279
11	2,588	2,691	2,823	2,794	2,847	2,948	2,929	2,932	3,138	3,035	3,118	3,119	3,187	3,159	3,123
12	2,673	2,537	2,639	2,768	2,739	2,791	2,890	2,871	2,875	3,077	2,976	3,057	3,058	3,125	3,097
Total*	37,681	38,124	38,725	39,181	39,548	39,881	40,196	40,474	40,871	41,337	41,680	42,115	42,518	42,959	43,361
Annual		443	601	456	367	333	315	278	397	466	343	435	403	441	402
change 2		1.2%	1.6%	1.2%	0.9%	0.8%	0.8%	0.7%	1.0%	1.1%	0.8%	1.0%	1.0%	1.0%	0.9%
K-5	17,917	18,149	18,402	18,401	18,550	18,555	18,595	18,633	18,798	19,071	19,391	19,756	20,100	20,414	20,680
6-8	8,734	8,871	8,960	9,156	9,264	9,454	9,430	9,581	9,623	9,630	9,597	9,545	9,601	9,698	9,916
9-12	11,030	11,104	11,363	11,624	11,734	11,872	12,171	12,260	12,450	12,636	12,692	12,814	12,817	12,847	12,765

*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, March 2012.

Individual Elementary School Forecasts

Forecasts for individual elementary schools are prepared under a scenario in which 2012-13 boundaries and grade configurations remain constant throughout the forecast horizon. The upcoming boundary adjustment between Beaver Acres and Kinnaman has been factored into the forecasts for those two schools. Of course, attendance area boundary changes, new schools, or program changes that will impact enrollment at individual schools are likely over such a long period. Also, if new charter or private schools open, enrollment at District-run schools may be affected. However, the individual school forecasts depict what future enrollments might be under current conditions.

Inputs to the individual school forecasts include 2010 Census data by single year of age, births to residents, and residential building capacity. All of these inputs were compiled by elementary attendance area for use in the forecast model.

The kindergarten forecast for each school was informed by census data, birth data, historic trends, and residential development potential. For example, two and three year olds at the time of the April 1, 2010 Census are potential kindergarten students in Fall 2012, as are children born between September 2006 and August 2007. Using these data explicitly may result in abrupt changes from historic enrollments, so changes are moderated based on historic trends where necessary. Growth may occur due to developments currently underway such as Timberland (Cedar Mill) and Summer Creek (Hiteon) or future large developments such as North Bethany (Springville) and the Peterkort property (West Tualatin View).

Forecasts for 1st through 5th grades rely on unique sets of GPRs for each school, based initially on recent rates and adjusted based on expected levels of housing growth. The final forecasts for individual schools are controlled to match the district-wide forecasts.

Table 19 presents the kindergarten enrollment forecasts for each school and Table 20 shows K-5 enrollment forecasts.

Table 19
Kindergarten Enrollment Forecasts for Individual Schools
2012-13 to 2025-26

	Act	tual			Fore	cast		
School	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Aloha Huber K-8	154	134	143	158	138	133	131	134
Barnes	161	120	139	131	122	137	131	133
Beaver Acres	173	131	138	133	144	137	135	138
Bethany	74	95	71	77	73	79	78	80
Bonny Slope	68	96	86	77	68	80	81	84
Cedar Mill	39	48	40	44	51	48	49	50
Chehalem	81	94	86	78	86	89	88	90
Cooper Mountain	75	68	86	84	74	79	78	79
Elmonica	100	99	103	102	102	104	103	104
Errol Hassell	70	68	69	64	73	73	72	73
Findley	108	119	110	108	97	110	112	115
Fir Grove	83	78	76	77	66	74	73	75
Greenway	58	77	68	78	76	75	75	76
Hazeldale	70	71	72	78	75	77	78	81
Hiteon	101	103	102	105	104	105	102	102
Jacob Wismer	98	100	97	87	96	97	96	96
Kinnaman	102	84	122	122	120	124	121	121
МсКау	61	59	68	67	64	65	64	65
McKinley	123	121	115	123	122	123	121	124
Montclair	55	63	65	64	78	66	64	67
Nancy Ryles	77	105	94	105	96	97	94	96
Oak Hills	101	98	98	89	95	98	96	98
Raleigh Hills	53	66	67	61	61	65	65	66
Raleigh Park	56	64	61	69	63	64	61	63
Ridgewood	63	58	55	69	61	62	61	63
Rock Creek	82	73	78	77	79	82	79	81
Scholls Heights	94	91	87	88	74	88	87	89
Sexton Mountain	81	71	75	73	81	77	76	78
Springville K-8	87	79	88	80	88	92	95	98
Terra Linda	68	75	68	68	67	70	69	71
Vose	141	129	136	133	147	125	123	126
West Tualatin View	44	37	46	47	46	45	46	46
Wm. Walker	112	84	96	87	88	95	94	95
K Totals	2,913	2,858	2,905	2,903	2,875	2,935	2,898	2,957

table continued on next page

Table 19 (cont.)

Kindergarten Enrollment Forecasts for Individual Schools
2012-13 to 2025-26

				Fore	cast				
School	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Change'
Aloha Huber K-8	138	140	143	147	147	149	150	153	9
Barnes	136	139	142	145	146	148	150	151	11
Beaver Acres	141	145	149	152	154	156	158	160	8
Bethany	81	83	85	87	88	89	90	91	7
Bonny Slope	87	89	93	96	99	100	102	104	22
Cedar Mill	51	54	55	59	60	60	61	62	19
Chehalem	92	93	95	96	97	98	98	99	12
Cooper Mountain	79	81	81	83	82	83	84	85	14
Elmonica	104	105	108	108	109	108	110	111	12
Errol Hassell	75	77	78	80	81	82	82	83	14
Findley	119	124	127	130	132	135	136	138	25
Fir Grove	76	78	80	81	82	83	84	85	5
Greenway	76	76	77	76	75	76	75	76	9
Hazeldale	84	86	88	91	94	95	97	98	28
Hiteon	102	104	106	105	106	104	105	106	4
Jacob Wismer	98	101	103	105	106	107	108	109	10
Kinnaman	123	124	125	125	125	124	125	126	33
МсКау	67	68	70	71	72	73	73	74	14
McKinley	126	128	131	131	133	134	136	137	15
Montclair	68	70	70	71	70	71	70	69	10
Fir Grove Greenway Hazeldale Hiteon Jacob Wismer Kinnaman McKay McKinley Montclair Nancy Ryles Oak Hills	98	101	103	103	104	105	106	108	17
Oak Hills	100	103	105	107	108	109	111	112	13
Raleigh Hills	67	69	69	69	68	68	69	68	9
Raleigh Park	62	64	65	67	67	68	69	69	9
Ridgewood	64	65	67	68	69	70	70	71	11
Rock Creek	83	85	85	87	86	87	86	87	10
Scholls Heights	93	96	101	106	112	117	121	126	34
Sexton Mountain	83	85	87	88	89	90	91	92	16
Springville K-8	102	107	111	115	118	121	123	123	40
Terra Linda	72	74	76	77	78	79	80	80	9
Vose	125	128	131	132	132	135	136	138	3
West Tualatin View	49	50	54	57	58	58	59	59	19
Wm. Walker	97	100	103	105	104	105	107	108	10
K Totals	3,018	3,092	3,163	3,220	3,251	3,287	3,322	3,358	473

^{*2025-26} forecast minus average of 2010-11 and 2011-12 enrollments.

Table 20
Total K-5 Enrollment Forecasts for Individual Schools
2012-13 to 2025-26

	Actual				Forecast			
School		2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Aloha Huber K-8	846	857	888	895	892	860	860	851
Barnes	763	779	770	762	747	725	738	735
Beaver Acres	848	750	749	789	800	793	818	818
Bethany	519	514	522	514	514	512	495	504
Bonny Slope	554	596	618	624	629	645	626	622
Cedar Mill	252	270	282	301	317	331	332	343
Chehalem	491	495	491	508	517	524	518	524
Cooper Mountain	499	514	534	537	533	538	549	537
Elmonica	588	583	588	586	598	608	612	608
Errol Hassell	481	484	476	464	472	465	467	470
Findley	814	805	802	782	769	767	760	769
Fir Grove	499	497	512	500	497	487	479	476
Greenway	439	452	467	482	481	488	484	488
Hazeldale	441	436	446	432	455	472	481	490
Hiteon	619	662	667	677	671	681	675	673
Jacob Wismer	747	777	790	787	773	761	746	741
Kinnaman	555	674	704	723	744	746	760	759
McKay	368	373	386	385	387	392	400	399
McKinley	625	626	624	643	658	658	657	665
Montclair	380	400	444	453	467	475	479	480
Nancy Ryles	573	573	594	603	625	642	631	634
Oak Hills	597	595	584	573	579	580	577	577
Raleigh Hills	328	327	328	318	336	347	346	346
Raleigh Park	427	438	437	434	430	429	426	427
Ridgewood	394	379	391	379	387	390	396	404
Rock Creek	506	511	514	496	513	508	512	510
Scholls Heights	588	570	566	544	553	550	552	556
Sexton Mountain	597	583	550	520	497	493	499	506
Springville K-8	589	605	624	631	634	637	658	669
Terra Linda	434	423	422	417	437	436	431	433
Vose	691	709	739	758	762	745	739	726
West Tualatin View	313	315	315	322	313	318	331	333
Wm. Walker	552	577	578	562	563	552	561	560
K-5 Totals	17,917	18,149	18,402	18,401	18,550	18,555	18,595	18,633

Table 20 (cont.)

Total K-5 Enrollment Forecasts for Individual Schools

2012-13 to 2025-26

			,	Forecast				Change
School	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	'11 to '25
Aloha Huber K-8	830	831	842	859	878	892	905	59
Barnes	740	757	766	776	788	801	813	50
Beaver Acres	828	831	847	865	882	899	914	66
Bethany	508	520	529	538	548	558	565	46
Bonny Slope	634	666	687	710	732	752	770	216
Cedar Mill	354	357	368	379	390	400	407	155
Chehalem	537	547	553	562	570	576	581	90
Cooper Mountain	529	535	539	543	547	552	557	58
Elmonica	609	613	616	623	628	633	641	53
Errol Hassell	484	487	494	503	513	518	526	45
Findley	784	818	842	866	887	905	920	106
Fir Grove	477	491	499	508	517	526	531	32
Greenway	485	485	486	485	483	480	475	36
Hazeldale	498	512	525	540	554	567	579	138
Hiteon	670	674	675	677	679	682	682	63
Jacob Wismer	760	767	776	785	797	811	821	74
Kinnaman	759	764	765	770	774	776	778	223
МсКа у	400	405	411	419	427	433	440	72
McKinley	671	679	687	695	704	713	720	95
Montclair	486	474	480	489	495	498	497	117
Fir Grove Greenway Hazeldale Hiteon Jacob Wismer Kinnaman McKay McKinley Montclair Nancy Ryles	628	634	640	650	659	667	674	101
Oak Hills	590	598	607	618	627	636	644	47
Raleigh Hills	352	358	360	361	362	364	362	34
Raleigh Park	419	421	425	431	437	444	450	23
Ridgewood	398	403	410	419	428	435	443	49
Rock Creek	520	528	534	541	547	551	551	45
Scholls Heights	565	592	610	636	666	697	729	141
Sexton Mountain	518	522	534	548	562	570	577	-20
Springville K-8	699	725	760	790	813	838	857	268
Terra Linda	437	443	452	462	471	478	482	48
Vose	721	705	712	721	729	737	745	54
West Tualatin View	335	343	361	377	388	398	410	97
Wm. Walker	573	586	599	610	618	627	634	82
K-5 Totals	18,798	19,071	19,391	19,756	20,100	20,414	20,680	2,763

FORECAST ERROR AND UNCERTAINTY

Forecasts should be understood to represent a range of outcomes even though discrete numbers are provided. Due to the nature of forecasting, there is no way to estimate a confidence interval as one might for data collected from a survey. The best way to measure potential forecast error is to compare actual enrollments with previous forecasts that were conducted using similar data and methodologies. In Table 21, actual BSD enrollment by grade level in Fall 2011 is compared with the 2011-12 forecasts that were prepared in 2008. As a measure of average error for grade levels, the mean absolute percent error (MAPE) is included in the tables.

BSD K-12 enrollment was higher than the low and mid-range forecasts prepared in 2008, and nearly identical to the high range forecast. The 2008 forecasts were prepared after two consecutive years of declining enrollment; subsequent growth was greater than expected and contrary to the regional trend. The largest grade level errors are for kindergarten enrollment, perhaps due to the introduction of full day kindergarten at many BSD schools resulting in a higher capture rate in 2011 than in 2008.

Table 21
Fall 2011 Enrollment Compared to Previous Forecasts by Grade Level

		Low-	range for	ecast ¹	Mid-ı	ange fore	ecast ¹	High-	range for	ecast ¹
Grade	Actual	Fcst.	Diff.	Error	Fcst.	Diff.	Error	Fcst.	Diff.	Error
K	2,858	2,671	-187	-6.5%	2,695	-163	-5.7%	2,716	-142	-5.0%
1	3,056	2,845	-211	-6.9%	2,945	-111	-3.6%	3,036	-20	-0.7%
2	3,001	2,890	-111	-3.7%	2,995	-6	-0.2%	3,091	90	3.0%
3	3,125	3,001	-124	-4.0%	3,032	-93	-3.0%	3,056	-69	-2.2%
4	2,936	2,894	-42	-1.4%	2,911	-25	-0.9%	2,928	-8	-0.3%
5	2,941	2,879	-62	-2.1%	2,896	-45	-1.5%	2,914	-27	-0.9%
6	2,993	2,970	-23	-0.8%	2,985	-8	-0.3%	3,005	12	0.4%
7	2,894	2,883	-11	-0.4%	2,898	4	0.1%	2,919	25	0.9%
8	2,847	2,868	21	0.7%	2,883	36	1.3%	2,903	56	2.0%
9	2,967	2,877	-90	-3.0%	2,894	-73	-2.5%	2,912	-55	-1.9%
10	2,802	2,814	12	0.4%	2,831	29	1.0%	2,847	45	1.6%
11	2,588	2,695	107	4.1%	2,712	124	4.8%	2,728	140	5.4%
12	2,673	2,599	-74	-2.8%	2,615	-58	-2.2%	2,632	-41	-1.5%
Total	37,681	36,886	-795	-2.1%	37,292	-389	-1.0%	37,687	6	0.0%
MAPE ²				2.8%			2.1%			2.0%

^{1.} Forecast for 2011-12 by PSU-PRC, baseline 2007-08 enrollment, October 2008

^{2.} Mean absolute percent error for individual grades K-12.

APPENDIX

2010 Census Summaries

Table A1

Beaverton School District

Population and Households by Elementary Area, 2010 Census

	ı	Populatio	n	Households				
						Share of	Popu-	
				Total	With	HHs with	lation in	Persons
				House-	Children <	persons <	House-	per House-
Elementary Area	Total	Age 5-17	< Age 5	holds	Age 18	Age 18	holds	hold
Aloha Huber K-8	8,742	1,715	783	3,061	1,286	42%	8,512	2.78
Barnes	11,009	1,795	888	4,432	1,389	31%	10,888	2.46
Beaver Acres	9,181	1,662	848	3,282	1,326	40%	9,136	2.78
Bethany	6,471	1,343	535	2,221	1,035	47%	6,458	2.91
Bonny Slope	6,263	1,405	448	2,272	976	43%	6,257	2.75
Cedar Mill	4,641	716	323	1,940	604	31%	4,614	2.38
Chehalem	8,897	1,353	593	3,789	1,049	28%	8,768	2.31
Cooper Mountain	7,091	1,556	476	2,316	1,112	48%	7,036	3.04
Elmonica	9,692	1,572	726	3,825	1,308	34%	9,631	2.52
Errol Hassell	6,630	1,283	498	2,288	945	41%	6,585	2.88
Findley	5,526	1,568	544	1,614	1,151	71%	5,526	3.42
Fir Grove	6,833	1,193	474	2,648	891	34%	6,806	2.57
Greenway	6,980	1,140	469	3,051	914	30%	6,980	2.29
Hazeldale	6,561	1,326	485	2,291	954	42%	6,546	2.86
Hiteon	9,769	1,651	518	4,109	1,255	31%	9,727	2.37
Jacob Wismer	6,238	1,620	513	2,113	1,164	55%	6,234	2.95
Kinnaman	9,003	1,759	751	3,167	1,305	41%	8,964	2.83
МсКа у	6,916	1,003	439	2,909	825	28%	6,690	2.30
McKinley	13,193	1,605	949	6,019	1,544	26%	13,007	2.16
Montclair	6,415	782	390	2,917	714	24%	6,301	2.16
Nancy Ryles	9,838	1,527	542	4,416	1,256	28%	9,831	2.23
Oak Hills	7,696	1,457	548	3,032	1,110	37%	7,682	2.53
Raleigh Hills	8,728	1,241	479	4,064	967	24%	8,633	2.12
Raleigh Park	7,359	1,158	454	3,155	919	29%	7,317	2.32
Ridgewood	6,420	983	346	2,787	740	27%	6,384	2.29
Rock Creek	5,263	1,017	384	2,078	761	37%	5,263	2.53
Scholls Heights	6,669	1,734	471	2,220	1,174	53%	6,669	3.00
Sexton Mountain	7,822	1,561	489	2,946	1,131	38%	7,805	2.65
Springville K-8	6,958	1,552	576	2,570	1,161	45%	6,958	2.71
Terra Linda	4,941	938	294	1,959	666	34%	4,926	2.51
Vose	9,029	1,411	819	3,494	1,156	33%	8,931	2.56
West Tualatin View	8,455	985	363	4,025	806	20%	8,334	2.07
Wm. Walker	7,969	1,299	675	3,128	1,077	34%	7,963	2.55
BSD Total	253,198	44,910	18,090	100,138	34,671	35%	251,362	2.51

 $Source:\ 2010\ Census,\ Summary\ File\ 1,\ census\ block\ data\ aggregated\ to\ approximate\ BSD\ attendance\ areas\ by\ PSU,\ Population\ Research\ Center.$

Table A2

Beaverton School District

Housing Units by Elementary Area, 2010 Census

	Housing Units										
Elementary Area	Total Housing Units	Occupied	Vacant	Vacancy Rate	Owner Occupied	Renter Occupied	Percent Owner Occupied				
Aloha Huber K-8	3,279	3,061	218	6.6%	1,081	1,980	35%				
Barnes	4,670	4,432	238	5.1%	1,752	2,680	40%				
Beaver Acres	3,494	3,282	212	6.1%	1,990	1,292	61%				
Bethany	2,290	2,221	69	3.0%	1,780	441	80%				
Bonny Slope	2,525	2,272	253	10.0%	1,764	508	78%				
Cedar Mill	2,218	1,940	278	12.5%	1,324	616	68%				
Chehalem	3,971	3,789	182	4.6%	2,188	1,601	58%				
Cooper Mountain	2,369	2,316	53	2.2%	2,092	224	90%				
Elmonica	4,023	3,825	198	4.9%	1,895	1,930	50%				
Errol Hassell	2,367	2,288	79	3.3%	1,849	439	81%				
Findley	1,646	1,614	32	1.9%	1,510	104	94%				
Fir Grove	2,769	2,648	121	4.4%	1,702	946	64%				
Greenway	3,267	3,051	216	6.6%	1,233	1,818	40%				
Hazeldale	2,391	2,291	100	4.2%	1,815	476	79%				
Hiteon	4,338	4,109	229	5.3%	2,543	1,566	62%				
Jacob Wismer	2,228	2,113	115	5.2%	1,662	451	79%				
Kinnaman	3,325	3,167	158	4.8%	1,962	1,205	62%				
МсКау	3,086	2,909	177	5.7%	1,447	1,462	50%				
McKinley	6,673	6,019	654	9.8%	1,430	4,589	24%				
Montclair	3,070	2,917	153	5.0%	1,625	1,292	56%				
Nancy Ryles	4,679	4,416	263	5.6%	2,321	2,095	53%				
Oak Hills	3,170	3,032	138	4.4%	1,952	1,080	64%				
Raleigh Hills	4,291	4,064	227	5.3%	2,031	2,033	50%				
Raleigh Park	3,325	3,155	170	5.1%	1,601	1,554	51%				
Ridgewood	2,941	2,787	154	5.2%	1,794	993	64%				
Rock Creek	2,201	2,078	123	5.6%	1,329	749	64%				
Scholls Heights	2,293	2,220	73	3.2%	1,641	579	74%				
Sexton Mountain	3,073	2,946	127	4.1%	2,360	586	80%				
Springville K-8	2,826	2,570	256	9.1%	1,521	1,049	59%				
Terra Linda	2,058	1,959	99	4.8%	1,363	596	70%				
Vose	3,731	3,494	237	6.4%	1,538	1,956	44%				
West Tualatin View	4,339	4,025	314	7.2%	2,262	1,763	56%				
Wm. Walker	3,299	3,128	171	5.2%	1,339	1,789	43%				
BSD Total	106,225	100,138	6,087	5.7%	57,696	42,442	58%				

Source: 2010 Census, Summary File 1, census block data aggregated to approximate BSD attendance areas by PSU, Population Research Center.

Approximation based on census blocks

			· · ·		ased on census blocks		
POPULATION	20	2000		10	Change		
SEX AND AGE		1					
Total population	214,592	100.0%	253,198	100.0%	38,606	18.0%	
Under 5 years	16,362	7.6%	18,090	7.1%	1,728	10.6%	
5 to 9 years	16,091	7.5%	17,848	7.0%	1,757	10.9%	
10 to 14 years	14,820	6.9%	16,892	6.7%	2,072	14.0%	
15 to 19 years	13,552	6.3%	15,560	6.1%	2,008	14.8%	
20 to 24 years	15,119	7.0%	15,434	6.1%	315	2.1%	
25 to 29 years	19,043	8.9%	21,027	8.3%	1,984	10.4%	
30 to 34 years	18,842	8.8%	20,415	8.1%	1,573	8.3%	
35 to 39 years	18,647	8.7%	20,176	8.0%	1,529	8.2%	
40 to 44 years	18,376	8.6%	18,916	7.5%	540	2.9%	
45 to 49 years	16,690	7.8%	18,466	7.3%	1,776	10.6%	
50 to 54 years	13,684	6.4%	17,274	6.8%	3,590	26.2%	
55 to 59 years	9,082	4.2%	15,558	6.1%	6,476	71.3%	
60 to 64 years	6,151	2.9%	12,313	4.9%	6,162	100.2%	
65 to 69 years	4,872	2.3%	8,078	3.2%	3,206	65.8%	
70 to 74 years	4,302	2.0%	5,394	2.1%	1,092	25.4%	
75 to 79 years	3,995	1.9%	4,122	1.6%	127	3.2%	
80 to 84 years	2,643	1.2%	3,523	1.4%	880	33.3%	
85 years and over	2,321	1.1%	4,112	1.6%	1,791	77.2%	
Median age (years)	33	.3	35	.3	2.0		
Under 18 years	55,854	26.0%	63,000	24.9%	7,146	12.8%	
18 to 64 years	140,605	65.5%	164,969	65.2%	24,364	17.3%	
65 years and over	18,133	8.4%	25,229	10.0%	7,096	39.1%	
Male population	106,377	100.0%	123,745	100.0%	17,368	16.3%	
Under 5 years	8,325	7.8%	9,227	7.5%	902	10.8%	
5 to 9 years	8,184	7.7%	9,058	7.3%	874	10.7%	
10 to 14 years	7,663	7.2%	8,672	7.0%	1,009	13.2%	
15 to 19 years	7,039	6.6%	7,915	6.4%	876	12.4%	
20 to 24 years	7,607	7.2%	7,612	6.2%	5	0.1%	
25 to 29 years	9,909	9.3%	10,372	8.4%	463	4.7%	
30 to 34 years	9,805	9.2%	10,248	8.3%	443	4.5%	
35 to 39 years	9,427	8.9%	10,092	8.2%	665	7.1%	
40 to 44 years	9,065	8.5%	9,563	7.7%	498	5.5%	
45 to 49 years	8,267	7.8%	9,030	7.3%	763	9.2%	
50 to 54 years	6,584	6.2%	8,400	6.8%	1,816	27.6%	
55 to 59 years	4,385	4.1%	7,397	6.0%	3,012	68.7%	
60 to 64 years	2,852	2.7%	5,661	4.6%	2,809	98.5%	
65 to 69 years	2,277	2.1%	3,755	3.0%	1,478	64.9%	
70 to 74 years	1,856	1.7%	2,358	1.9%	502	27.0%	
75 to 79 years	1,529	1.4%	1,739	1.4%	210	13.7%	
80 to 84 years	957	0.9%	1,357	1.1%	400	41.8%	
85 years and over	646	0.6%	1,289	1.0%	643	99.5%	
os years and over	040	0.070	1,203	1.0/0	043	23.3/0	

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1. Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

Approximation based on census blocks

			I	1	Based off certsus block			
POPULATION (continued)	200	2000		2010		Change		
Male population (continued)								
Median age (years)	32	.3	34.	.4	2.	1		
Under 18 years	28,608	26.9%	32,133	26.0%	3,525	12.3%		
18 to 64 years	70,504	66.3%	81,114	65.5%	10,610	15.0%		
65 years and over	7,265	6.8%	10,498	8.5%	3,233	44.5%		
Female population	108,215	100.0%	129,453	100.0%	21,238	19.6%		
Under 5 years	8,037	7.4%	8,863	6.8%	826	10.3%		
5 to 9 years	7,907	7.3%	8,790	6.8%	883	11.2%		
10 to 14 years	7,157	6.6%	8,220	6.3%	1,063	14.9%		
15 to 19 years	6,513	6.0%	7,645	5.9%	1,132	17.4%		
20 to 24 years	7,512	6.9%	7,822	6.0%	310	4.1%		
25 to 29 years	9,134	8.4%	10,655	8.2%	1,521	16.7%		
30 to 34 years	9,037	8.4%	10,167	7.9%	1,130	12.5%		
35 to 39 years	9,220	8.5%	10,084	7.8%	864	9.4%		
40 to 44 years	9,311	8.6%	9,353	7.2%	42	0.5%		
45 to 49 years	8,423	7.8%	9,436	7.3%	1,013	12.0%		
50 to 54 years	7,100	6.6%	8,874	6.9%	1,774	25.0%		
55 to 59 years	4,697	4.3%	8,161	6.3%	3,464	73.7%		
60 to 64 years	3,299	3.0%	6,652	5.1%	3,353	101.6%		
65 to 69 years	2,595	2.4%	4,323	3.3%	1,728	66.6%		
70 to 74 years	2,446	2.3%	3,036	2.3%	590	24.1%		
75 to 79 years	2,466	2.3%	2,383	1.8%	-83	-3.4%		
80 to 84 years	1,686	1.6%	2,166	1.7%	480	28.5%		
85 years and over	1,675	1.5%	2,823	2.2%	1,148	68.5%		
Median age (years)	34	.3	36.3		2.	0		
Under 18 years	27,246	25.2%	30,867	23.8%	3,621	13.3%		
18 to 64 years	70,101	64.8%	83,855	64.8%	13,754	19.6%		
65 years and over	10,868	10.0%	14,731	11.4%	3,863	35.5%		
AREA AND DENSITY								
Land Area - Acres ¹	35,1	35,145		35,764				
Persons per acre	6.	1	7.1		1.0	15.9%		
Persons per square mile	3,90)8	4,53	31	623	15.9%		
RACE								
Total population	214,592	100.0%	253,198	100.0%	38,606	18.0%		
White alone	172,710	80.5%	186,972	73.8%	14,262	8.3%		
Black or African American alone	3,183	1.5%	5,597	2.2%	2,414	75.8%		
American Indian and Alaska Native alone	1,258	0.6%	1,515	0.6%	257	20.4%		
Asian alone	20,115	9.4%	30,051	11.9%	9,936	49.4%		
Native Hawaiian and Other Pacific Islander ald	one 658	0.3%	1,013	0.4%	355	54.0%		
Some Other Race alone	9,349	4.4%	16,492	6.5%	7,143	76.4%		
Two or More Races	7,319	3.4%	11,558	4.6%	4,239	57.9%		

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1. Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

Approximation based on census blocks

	JANTIACIOTI D	aseu on cen	000 810011			
POPULATION (continued)	2000		2010		Change	
RACE (continued)	1					
Race alone or in combination with one or more oth	er races ²					
White	179,014	83.4%	197,277	77.9%	18,263	10.2%
Black or African American	4,435	2.1%	8,169	3.2%	3,734	84.2%
American Indian and Alaska Native	2,805	1.3%	3,996	1.6%	1,191	42.5%
Asian	23,244	10.8%	35,696	14.1%	12,452	53.6%
Native Hawaiian and Other Pacific Islander	1,487	0.7%	2,280	0.9%	793	53.3%
Some Other Race	11,603	5.4%	18,583	7.3%	6,980	60.2%
HISPANIC OR LATINO AND RACE						
Total population	214,592	100.0%	253,198	100.0%	38,606	18.0%
Hispanic or Latino	18,838	8.8%	33,537	13.2%	14,699	78.0%
Not Hispanic or Latino	195,754	91.2%	219,661	86.8%	23,907	12.2%
White alone	164,760	76.8%	172,950	68.3%	8,190	5.0%
Black or African American alone	3,021	1.4%	5,293	2.1%	2,272	75.2%
American Indian and Alaska Native alone	1,018	0.5%	1,064	0.4%	46	4.5%
Asian alone	20,022	9.3%	29,869	11.8%	9,847	49.2%
Native Hawaiian and Other Pacific Islander alone	620	0.3%	941	0.4%	321	51.8%
Some Other Race alone	372	0.2%	519	0.2%	147	39.5%
Two or More Races	5,941	2.8%	9,025	3.6%	3,084	51.9%
RELATIONSHIP						
Total population	214,592	100.0%	253,198	100.0%	38,606	18.0%
In households	213,359	99.4%	251,362	99.3%	38,003	17.8%
In family households	173,939	81.1%	204,167	80.6%	30,228	17.4%
Householder	54,959	25.6%	64,222	25.4%	9,263	16.9%
Spouse ³	43,858	20.4%	49,711	19.6%	5,853	13.3%
Child	61,985	28.9%	72,850	28.8%	10,865	17.5%
Own child under 18 years	52,669	24.5%	58,719	23.2%	6,050	11.5%
Other relatives	8,396	3.9%	11,276	4.5%	2,880	34.3%
Nonrelatives	4,741	2.2%	6,108	2.4%	1,367	28.8%
In nonfamily households	39,420	18.4%	47,195	18.6%	7,775	19.7%
Householder	29,882	13.9%	35,916	14.2%	6,034	20.2%
Nonrelatives	9,538	4.4%	11,279	4.5%	1,741	18.3%
Population under 18 in households	55,763	99.8%	62,822	99.7%	7,059	12.7%
Population 18 to 64 in households	140,249	99.7%	164,415	99.7%	24,166	17.2%
Population 65 and over in households	17,347	95.7%	24,125	95.6%	6,778	39.1%
In group quarters	1,233	0.6%	1,836	0.7%	603	48.9%

Sources: U.S. Census Bureau, 2010 Census, Summary File 1; 2000 Census, Summary File 1. Tabulated by Population Research Center, Portland State University.

Approximation based on census blocks

POPULATION (continued)	200	2000		2010		Change	
GROUP QUARTERS			•				
Total group quarters population	1,233	100.0%	1,836	100.0%	603	48.9%	
Institutionalized population	321	26.0%	685	37.3%	364	113.4%	
Male	114	9.2%	238	13.0%	124	108.8%	
Female	207	16.8%	447	24.3%	240	115.9%	
Noninstitutionalized population	912	74.0%	1,151	62.7%	239	26.2%	
Male	242	19.6%	428	23.3%	186	76.9%	
Female	670	54.3%	723	39.4%	53	7.9%	
Population under 18 in group quarters	91	0.2%	178	0.3%	87	95.6%	
Population 18 to 64 in group quarters	356	0.3%	554	0.3%	198	55.6%	
Population 65 and over in group quarters	786	4.3%	1,104	4.4%	318	40.5%	

HOUSEHOLDS	200	2000		2010		nge
Total households	84,841	100.0%	100,138	100.0%	15,297	18.0%
Family households (families) ⁴	54,959	64.8%	64,222	64.1%	9,263	16.9%
With own children under 18 years	29,220	34.4%	32,734	32.7%	3,514	12.0%
Husband-wife family	43,858	51.7%	49,711	49.6%	5,853	13.3%
With own children under 18 years	22,334	26.3%	24,216	24.2%	1,882	8.4%
Male householder, no wife present	3,221	3.8%	4,278	4.3%	1,057	32.8%
With own children under 18 years	1,723	2.0%	2,259	2.3%	536	31.1%
Female householder, no husband present	7,880	9.3%	10,233	10.2%	2,353	29.9%
With own children under 18 years	5,163	6.1%	6,259	6.3%	1,096	21.2%
Nonfamily households ⁴	29,882	35.2%	35,916	35.9%	6,034	20.2%
Householder living alone	22,426	26.4%	26,965	26.9%	4,539	20.2%
Male	10,153	12.0%	11,556	11.5%	1,403	13.8%
65 years and over	1,045	1.2%	1,778	1.8%	733	70.1%
Female	12,273	14.5%	15,409	15.4%	3,136	25.6%
65 years and over	3,975	4.7%	5,489	5.5%	1,514	38.1%
Households with individuals under 18 years	30,695	36.2%	34,671	34.6%	3,976	13.0%
Households with individuals 65 years and over	12,808	15.1%	18,231	18.2%	5,423	42.3%
Average household size	2.5	51	2.51		0.00	-0.2%
Average family size ⁴	3.0)8	3.0	8	0.01	0.2%

Approximation based on census blocks

HOUSING UNITS	20	2000		2010		Change	
Total housing units	89,483	100.0%	106,225	100.0%	16,742	18.7%	
Occupied housing units	84,841	94.8%	100,138	94.3%	15,297	18.0%	
Owner occupied ⁵	48,050	56.6%	57,696	57.6%	9,646	20.1%	
Owned with a mortgage or a loan	N/A	4	46,906	81.3%			
Owned free and clear	N/A	4	10,790	18.7%			
Renter occupied	36,791	43.4%	42,442	42.4%	5,651	15.4%	
Vacant housing units ⁶	4,642	5.2%	6,087	5.7%	1,445	31.1%	
For rent	2,506	54.0%	3,247	53.3%	741	29.6%	
For sale only	1,027	22.1%	1,256	20.6%	229	22.3%	
Rented or sold, not occupied	385	8.3%	387	6.4%	2	0.5%	
For seasonal, recreational, or occasional use	280	6.0%	452	7.4%	172	61.4%	
For migrant workers	1	0.0%	0	0.0%	-1	-100.0%	
All other vacants	443	9.5%	745	12.2%	302	68.2%	
Owner-occupied housing units	48,050	56.6%	57,696	57.6%	9,646	20.1%	
Population in owner-occupied housing units	129,9	949	152,3	366	22,417	17.3%	
Average household size of owner-occupied units	2.7	70	2.6	54	-0.06	-2.2%	
Renter-occupied housing units	36,791	43.4%	42,442	42.4%	5,651	15.4%	
Population in renter-occupied housing units	83,4	10	98,9	96	15,586	18.7%	
Average household size of renter-occupied units	2.2	27	2.3	33	0.06	2.6%	

- 1. Land area of the census blocks that approximate the area. The same boundaries were used for both 2000 and 2010; any differences in land area between 2000 and 2010 reflect changes to census block geography.
- 2. In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.
- 3. "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
- 4. "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples unless there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.
- 5. Percentage distribution of ownership categories ("owned with a mortgage or a loan" and "owned free and clear") adds to 100 percent.
- 6. Percentage distribution of vacancy categories ("for rent," etc.) adds to 100 percent.